

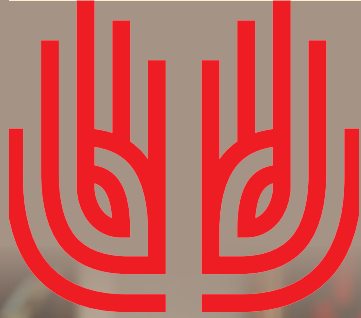
WHAT BRINGS SUCCESS IN R&D IS FAITH, NOT BUDGET

Arzum Chairman of the Board Murat Kolbaşı explained that although innovation is an important criterion for reaching customers, other criteria are also necessary in terms of creating brand loyalty.

Noting that R&D is not just a budget-related job, Kolbaşı reminded that many young people have accomplished successful projects in their homes with small budgets.



Murat Kolbaşı
Arzum
Chairman
of the
Board



MAY/JUNE 2023

IHBİR NEWS

İSTANBUL CEREALS PULSES OIL SEEDS AND PRODUCTS EXPORTERS ASSOCIATION



'TURKISH BRANDS ARE ALL AROUND THE WORLD'

Stating that Türkiye exports to 226 countries in 2022, Turkish Exporters Assembly (TIM) President Mustafa Gültepe said that Turkish brands are located all over the world. Making special statements to IHBİR Haber, Gültepe said, "The Far Countries Strategy has made a great contribution to our brands. As TIM, we will always stand by our exporters," said.



Cereals Pulses Oil Seeds
and Products Exporters'
Association (İHBİR)
Chairman of the Board
Kazım Taycı

Let's reach distant markets with support

Dear İHBİR family,

We are halfway through another difficult year. During this period, we succeeded in increasing our exports with your outstanding efforts. We expect the global demand to revive a little more in the coming period. In addition, in order to be resilient to shocks, we must not be content with our traditional markets. The visa crisis we have been experiencing on the European Union front is the best example of this.

Within the scope of the Remote Markets Strategy determined by the Ministry of Commerce, we have to increase the range of our exports. When we look at the USA, Australia, Brazil, People's Republic of China, Indonesia, Philippines, South Africa, Republic of Korea (South Korea), India, Japan, Canada, Malaysia, Mexico, Nigeria, Pakistan, Chile, Thailand, Vietnam within the scope of Remote Markets, India Apart from the losses in Nigeria and Vietnam, we managed to increase our sector exports to these countries.

Our exporters need more support in order to be successful in distant countries. Of course, serious incentives and supports are provided within the scope of the strategy. However, while some problems in the domestic market continue, no matter how much support is given to the outside, the factors that bind us here from time to time dominate.

When we talked to the banks before the elections, they stopped the loans. We expect credit channels to be reopened with the end of the elections, the determination of the new economy management and the adoption of an interest rate policy compatible with inflation, because

our companies need resources in terms of working capital and investment.

On the other hand, a new minimum wage was determined. The increase in labor costs is a factor that reduces our competitiveness in foreign markets. Of course, the well-being of the employees is above all else. However, there is no employment without a job. Based on this fact, we, as exporters, expected an increase in exchange rates. We see that the exchange rates have reached somewhat more competitive levels. As you know, when the exchange rate stops and inflation rises, this time we have difficulty in fixing the price. We can't keep up with the costs.

One of our most important problems is not being able to find staff. Our industrialists cannot find staff. To give an example, we exported 255 billion dollars last year with a population of 85 million. Germany exports 1.7 trillion dollars with roughly the same population. We need to fight harder to get to their level. Instead of social aid, we need to encourage the society to work.

Our President has set the 2028 export target as 400 billion dollars. As exporters, we are waiting with our luggage ready to reach this goal. Wherever there is a fair or event where we can sell goods, we are there. Our society should also be encouraged to work collaboratively for the macroeconomic goals of our country. In addition to financing and competitive exchange rates, I think this is the most important support that can be given to exports and our exporters.



Kazım TAYCI
Chairman Of The Board



Kadir Kürşad GÜLBAHAR
Vice Chairman Of The Board



Şemsettin MEMİŞ
Vice Chairman Of The Board



Hüseyin EVİZ
Member



İsmail GÜL
Member



Fırat OKTAY
Member



Ahmet Ergin OKANDENİZ
Member



Sabahattin FİDAN
Member



Muzaffer Hikmet TONBİL
Member



Mehmet Suat ÇİÇEK
Member



Mehmet TAŞ
Member



Coşkun MİCİK
Member of the Audit Board



Kübra Ceren KOÇLAR
Member of the Audit Board



Medayin EROL
Member of the Audit Board



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Prof. Dr. Nevzat Konar



'Turkish flavors' left their mark on the USA p64



"The most important step is to become a brand in order to increase our competitiveness." p69
Kadir Kürşad Gülbahar



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frozen foods
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Export was 5.5 billion dollars in the first 6 months p63

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İSTANBUL CEREALS PULSES OIL SEEDS AND PRODUCTS EXPORTERS ASSOCIATION

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"With small R&D budgets innovative product can be created" p70
Murat Kolbaşı,
Arzum
Chairman of the Board



Turkish delight export to 25 countries p57



Venezuela market step by step p75



We visited our Minister of Agriculture

Kazım Taycı, Chairman of the Board of İHBİR, Kadir Kürşad Gülbahar, the Vice Chairman of the Board of Directors, Sabahattin Fidan

and Muzaffer Hikmet Tonbil, the Members of the Board of Directors, visited Ibrahim Yumaklı, the Minister of Agriculture and Forestry. During

the visit, information about the sector was conveyed and projects related to the new period were shared.



İHBİR Visited the Grand National Assembly of Türkiye

İHBİR Chairman of the Board Kazım Taycı, Vice Chairman of the Board Kadir Kürşad Gülbahar and Member of the Board of Directors Sabahattin Fidan visited the Head of the Justice Commission Cüneyt Yüksel in the Parliament. During the visit, the latest situation in the sector was evaluated and future plans were shared.

Our association continues its activities with export seminars

Our association continued its activities with the export seminar held in May without interrupting its activities. Organized in AYTOP Industrial Site Conference Hall in cooperation with İHBİR-AYTOP, the seminar was held with the intense participation of exporters operating in AYTOP.

The seminar, which was opened by Şemsettin Memiş, Vice Chairman of İHBİR, was concluded with a question-and-answer session after the presentations by İsmail Bozdemir, Deputy Secretary General of Istanbul Exporters' Associations and the

officials from the General Secretariat regarding Membership, Government Support, Market Entry Documents, Foreign Market Research, E-export Support, and Exhibition Incentives.

In the seminar, where the participants showed great interest, the participants stated that they found answers to questions about membership to Exporters' Associations, benefiting from state aids, obtaining a Inward Processing Permit, ensuring continuity in exports, and many other subjects, conveying their satisfaction and demanding the continuation of the trainings.



WE HOSTED CHINESE GUESTS

China Qingdao Federation of Industry & Commerce Qingdao General Chamber of Commerce officials Liu Qinglin, Ms. Wang Chao and Ms. Dong Bin visited Istanbul Cereals, Pulses, Oilseeds and Products Exporters' Association (IHBIR). Mutual consultations were held on how to increase exports to the People's Republic of China.



We were at the TIM General Assembly

Kazım Taycı, Chairman of the Board of IHBIR, attended the 30th General Assembly of the Turkish Exporters Assembly (TIM) and the Champions of Export Award Ceremony, which was held with the participation of

President Recep Tayyip Erdoğan, Minister of Trade Ömer Bolat, TIM President Mustafa Gultepe and TIM Board Members. He congratulated all companies that contributed to Türkiye exports.



IHBIR Board of Directors convened

As the Istanbul Cereals, Pulses, Oil Seeds and Products Exporters' Association (IHBIR), the Board of Directors meeting was held with the participation of Chairman

Kazım Taycı and Members of the Board of Directors. At the meeting, evaluations were made about the situation of the sector and its future plans.*

Exclusive organization to Peru

Peru Special Qualified Purchasing Delegation Organization, which was held with the organization of IHBIR, was completed. In the meetings held with the participation of the representatives of Golosinas Trome, one of the largest distributors and marketing companies in the field of confectionery and snack products in Peru, meetings were held between the company, which has an



important position in the production and distribution of snack products in Peru and its surroundings, and IHBIR member companies.



Delegation came from Malaysia

IHBIR, within the scope of the Purchasing Committee organized under the coordination of the Turkish Republic Ministry of Commerce and the Turkish Exporters' Assembly, Malakat Group, which operates in various sectors in Malaysia, brought together its members and representatives on May 9th, 2023. At the end of the program, IHBIR Deputy Board of Directors Kadir Kürşad Gülbahar met Malakat Group representatives and presented them with Iznik Tiles.



GPC participation request

Şemsettin Memiş, Vice Chairman of IHBIR Board of Directors, attended the World Pulses Confederation (GPC) conference held in Sydney, Australia. At the conference, ways to increase production and consumption in the pulses market and special market information were discussed. Meeting with GPC President Vijay Iyengar, Şemsettin Memiş shared the contributions of Turkish companies and exporters to the sector. The President of GPC emphasized that they expect Turkish producers to participate more intensively in the World Pulses Confederation in the coming years.



WE TALKED ABOUT PROBLEMS AND SOLUTIONS AT ITO

Kazım Taycı, Chairman of IHBIR Board of Directors, and members of the Board of Directors attended the sector meeting on 'The Role and Importance

of Baklava, Pastry, Chocolate, Confectionery in Tourism and Export' organized by the 72nd Baklava, Pastry and Confectionery Professional

Committee of the Istanbul Chamber of Commerce. At the meeting, current problems experienced by the industry and solutions were discussed.



We presented an award at the EGD ceremony

Kazım Taycı, Chairman of the Board of IHBIR, attended the award ceremony organized by the Association of Economic Journalists (EGD). Presenting the Bulent Assistant Special Award to Aksam newspaper reporter Arzu Kurum at the ceremony, Taycı said in his speech, "We once again thank our members of the press for delivering accurate and objective news about Türkiye and the world economy."

ENTREPRENEURIAL WOMEN AT IHBIR

Gülsüm Üstün, Öznu Alkan and Burcu Eren, one of our women entrepreneurs, visited Kazım Taycı, Chairman of the Board of IHBIR. In the meeting, President Taycı gave information about the fairs and export targets and talked about the projects of the union.



Sector Board convened

Cereals, Pulses, Oilseeds and Products Sector Board Meeting was held in Istanbul, hosted by the Istanbul Exporters' Associations and IHBIR, with the presence of Tayfun

Kılıç, Deputy General Manager of Exports at the Turkish Republic Ministry of Commerce, and Çağlar Göksu, Head of Agricultural Products Department.

Company visits continue

IHBIR visited Yörpaş Local Foods Ind. Inc.(Komagene), Fellas Food and Health Products Industry and Trade Inc., Furkan Natural Products Trade and Industry Ltd. Co., Bakers Food Industry. Inc., Phora Animal Health Products Industry Trade

Inc., Yuteg Biotechnology Pharmaceutical and Food Supplements Ltd. Co., Burhan Cicek, Cicek Food Production Manufacturing Wholesale and Ind., Farina Foods A .Sh. (Mely Chocolate), Katmer Börek Baklava Food Industry and Trade. Ltd. Co., Bilge Medicine

Trumps Herbal Products Ind. Trade Inc., Kutluer Food and Machine Industry Foreign Trade Ltd. Co., Bayram Pak, Decorative Cake Decorations, Ingredium Gıda Industry and Trade Inc. and Orion Trade Food Machine Industry and Trade Ltd. Companies.







TÜRKİYE'S GRARIN SECTOR IN JUNE
2022 EXPORTS

994 MILLION DOLLAR

TÜRKİYE'S GRAIN SECTOR IN JUNE
2023 EXPORTS

781 MILLION DOLLAR

TÜRKİYE- GENERAL GRAIN SECTOR
2022 JANUARY-JUNE EXPORTS

5,3 BILLION DOLLAR

TÜRKİYE- GENERAL GRAIN SECTOR
2023 JANUARY- JUNE EXPORTS

5,5 BILLION DOLLAR

THERE IS AN INCREASE OF 2,07%

İHBİR JUNE 2022 EXPORTS

298 MILLION DOLLAR

İHBİR JUNE 2023 EXPORTS

268 MILLION DOLLAR

İHBİR 2022 JANUARY - JUNE EXPORTS

**1 BILLION 575
MILLION DOLLAR**

İHBİR 2023 JANUARY- JUNE EXPORTS

**1 BILLION 782
MILLION DOLLAR**

THERE IS AN INCREASE OF 13%

OVER TÜRKİYE - 10 PRODUCTS WITH THE HIGHEST ADDED VALUE IN JUNE 2023

THE MAIN CLASSIFICATION	Subclassification	JUNE		
		2022 (\$/KG)	2023 (\$/KG)	Change
Cereals Pulses Oil Seeds and Products	Cocoa Product	3,335483763	3,967795064	18,96%
	Spices	3,374972934	3,085854802	-8,57%
	Oil seeds and fruits	1,346544137	2,212236443	64,29%
	Cereals	1,110947144	2,064174442	85,80%
	Sugar and sugar products	1,475954761	2,005658023	35,89%
	Other Food Preparations	1,433159435	1,767957978	23,36%
	Vegetable oil	2,05593536	1,350786483	-34,30%
	Pastry products	1,236813294	1,183012948	-4,35%
	Pulses	0,834140843	0,904071022	8,38%
	Milling products	0,551768808	0,400119786	-27,48%
	Grand total	1,202775899	1,01188596	-15,87%



İHBİR - 10 PRODUCTS WITH THE HIGHEST ADDED VALUE IN JUNE 2023

THE MAIN CLASSIFICATION	Subclassification	JUNE		
		2022 (\$/KG)	2023 (\$/KG)	Change
Cereals Pulses Oil Seeds and Products	Spices	3,557777689	6,898427906	93,90%
	Cocoa Products	3,775384255	4,527290433	19,92%
	Other Food Preparation	3,121109013	3,605425988	15,52%
	Pastry Products	2,357255875	2,796254008	18,62%
	Sugar and Sugar Products	1,976134156	2,522832496	27,67%
	Oilseeds and Fruits	2,056231138	2,197018076	6,85%
	Cereals	1,729748019	1,574201813	-8,99%
	Vegetable Oils	1,9008541	1,434752475	-24,52%
	Cereals	0,62886872	1,351647935	114,93%
	Milling Products	0,559412599	0,384808194	-31,21%
	Grand total	1,982707517	1,773751236	-10,54%



GRAIN SECTOR IN TÜRKİYE OVER 2023

TOP 10 PRODUCT GROUPS EXPORTED IN JUNE (THOUSAND \$)

THE MAIN CLASSIFICATION	Subclassification	JUNE		Change	Share
		2022	2023		
Cereals Pulses Oil Seeds and Products	Pastry Products	237.266	205.510	-13,38%	26,30%
	Milling Products	141.575	141.404	-0,12%	18,09%
	Vegetable Oils	137.252	129.717	-5,49%	16,60%
	Other Food Preparations	221.903	92.671	-58,24%	11,86%
	Sugar and Sugar Products	91.574	88.295	-3,58%	11,30%
	Cocoa Products	66.897	72.860	8,91%	9,32%
	Pulses	45.570	27.486	-39,68%	3,52%
	Oilseeds and Fruits	44.481	10.268	-76,92%	1,31%
	Cereals	4.523	9.244	104,39%	1,18%
	Spices	3.732	4.040	8,26%	0,52%
	Grand total	994.772	781.494	-21,44%	100,00%



İHBİR - TOP 10 PRODUCT GROUPS EXPORTED IN JUNE 2023

THE MAIN CLASSIFICATION	Subclassification	JUNE		Change	Share
		2022	2023		
Cereals Pulses Oil Seeds and Products	Other Food Preparations	57.800	65.170	12,75%	27,64%
	Sugar and Sugar Products	59.648	58.990	-1,10%	25,02%
	Pastry Products	54.575	40.266	-26,22%	17,08%
	Cocoa Products	35.471	37.482	5,67%	15,90%
	Milling Products	17.473	24.150	38,21%	10,24%
	Vegetable Oils	32.726	5.657	-82,71%	2,40%
	Oilseeds and Fruits	2.618	1.904	-27,27%	0,81%
	Cereals	370	1.427	286,22%	0,61%
	Spices	416	608	46,33%	0,26%
	Pulses	99	104	4,97%	0,04%
	Grand total	298.326	268.628	-9,95%	100,00%





TÜRKİYE GENERAL-GRAIN SECTOR 2023

10 PRODUCTS EXPORTED THE MOST IN JUNE

Products	JUNE			
	2022	2023	Change	Share
Bread and Spa (Red) Wheat Flour	111.191	110.712	-0,43%	28,73%
MAKARNA-PIŞİRİLMEMİŞ.SADE OLANLAR.DOLDURULMAMIŞ	53.162	51.089	-3,90%	13,26%
SUNFLOWER SEED OIL	143.299	48.588	-66,09%	12,61%
GUMMY CANDIES	47.128	48.177	2,23%	12,50%
Food Immunity Not Elsewhere in the Tariff-Milk Fat <1.5%; Sucrose And Glucose=5%	25.362	28.113	10,85%	7,30%
CONTAINING 5% OR MORE BY WEIGHT OF SUCROSES, INVERT SUGAR OR ISOGLUCOSE - OTHERŞ	34.134	26.555	-22,20%	6,89%
OTHERS	29.704	20.945	-29,49%	5,44%
WAFFLE AND WAFER VARIETIES BELOW 85 GR. READY PACKAGE. (PARTLY OR WHOLLY COATED OR COVERED WITH CHOCOLATE OR OTHER PREPARATIONS CONTAINING COCOA)	21.819	18.735	-14,13%	4,86%
BREADER'S YEAST - DRY. LIVE	21.165	16.875	-20,27%	4,38%
OTHER FOOD REFERENCES THAT DON'T EXIST IN OTHER PLACES OF THE TARIFF (LEZZO)	14.158	15.550	9,83%	4,04%
Top 10 Products Total	501.122	385.338	-23,10%	49,31%
Other products	493.650	396.155	-19,75%	50,69%
Grand total	994.772	781.494	-21,44%	100,00%

İHBİR - 10 PRODUCTS EXPORTED THE MOST IN JUNE 2023

Products	JUNE			
	2022	2023	Change	Share
Gummy Candies	40.512	42.974	6,08%	18,23%
Food Additive, Not Elsewhere in the Tariff-Milk Fat <1.5%; Sucrose and Glucose=5%	21.618	25.168	16,42%	10,68%
Bread and Spa (Red) Wheat Flour	14.687	22.565	53,63%	9,57%
Baker's Yeast-Dry. Live	14.311	14.819	3,55%	6,29%
Containing 5% or More by Weight of Sucrose, Invert Sugar or Isoglucose-Others	10.946	9.245	-15,54%	3,92%
STUFFED	4.595	7.637	66,20%	3,24%
Not Elsewhere in the Tariff, Other Food Ministry (Lezzo)	4.742	5.733	20,90%	2,43%
OTHER SUGAR PRODUCTS - NO COCOA	4.459	5.458	22,41%	2,31%
COCOA POWDER (WITHOUT ADDITIONAL SUGAR OR OTHER FLAVORING AGENTS)	4.439	5.127	15,50%	2,17%
DOUBLE LAYERED FILLED BISCUITSR	5.681	4.057	-28,60%	1,72%
Top 10 Products Total	125.989	142.780	13,33%	60,56%
Other products	135.207	92.979	-31,23%	39,44%
Grand total	298.326	268.628	-9,95%	100,00%

TÜRKİYE GENERAL-GRAIN SECTOR 2023

10 COUNTRIES THAT IT EXPORTED THE MOST IN JUNE

Countries	JUNE		Change	Share
	2022	2023		
Iraq	191.124	130.810	-31,56%	16,74%
United States	58.205	56.111	-3,60%	7,18%
Syria	45.685	35.203	-22,94%	4,50%
Djibouti	29.944	26.209	-12,47%	3,35%
Libya	27.477	23.084	-15,99%	2,95%
Yemen	29.644	22.531	-23,99%	2,88%
Russian Federation	21.404	21.099	-1,42%	2,70%
Germany	20.686	19.144	-7,45%	2,45%
Somali	8.398	19.140	127,90%	2,45%
United Kingdom	14.919	18.651	25,01%	2,39%
Top 10 Countries Total	447.487	371.983	-16,87%	47,60%
Other countries	547.285	409.510	-25,17%	52,40%
Grand total	994.772	781.494	-21,44%	100,00%



İHBİR-TOP 10 COUNTRIES THAT IT EXPORTED THE MOST IN JUNE 2023

Countries	JUNE		Change	Share
	2022	2023		
United States	26.967	28.281	4,87%	12,00%
Iraq	23.330	14.452	-38,05%	6,13%
United Kingdom	7.947	11.773	48,13%	4,99%
Yemen	8.489	8.478	-0,13%	3,60%
Russian Federation	6.170	7.690	24,64%	3,26%
Germany	10.300	7.355	-28,59%	3,12%
Israel	10.039	6.756	-32,70%	2,87%
Çekya	4.516	6.693	48,21%	2,84%
Libya	4.171	6.258	50,05%	2,65%
Saudi Arabia	108	5.479	4.974,62%	2,32%
Top 10 Countries Total	102.036	103.215	1,16%	43,78%
Other countries	159.160	132.544	-16,72%	56,22%
Grand total	298.326	268.628	-9,95%	100,00%





TÜRKİYE GENERAL-GRAIN SECTOR

THE 10 COUNTRIES IT HAS EXPORTED THE MOST IN THE LAST 12 MONTHS

Countries	01 JULY - 30 JUNI (12 Months)			
	2021-2022	2022-2023	Change	Share
Iraq	2.039.570	2.236.377	9,65%	19,32%
United States	631.539	745.954	18,12%	6,44%
Syria	573.560	512.665	-10,62%	4,43%
Libya	287.815	346.956	20,55%	3,00%
Russian Federation	148.921	343.679	130,78%	2,97%
Yemen	291.765	313.481	7,44%	2,71%
Germany	239.594	287.301	19,91%	2,48%
Israel	261.954	280.345	7,02%	2,42%
CIBUTI	267.901	268.449	0,20%	2,32%
Djibouti	230.848	262.986	13,92%	2,27%
Top 10 Countries Total	4.973.466	5.598.195	12,56%	48,37%
Other countries	5.429.914	5.975.997	10,06%	51,63%
Grand total	10.403.380	11.574.192	11,25%	100,00%



İHBİR MOST EXPORTS TO 10 COUNTRIES IN THE LAST 12 MONTHS

Countries	01 JULY - 30 JUNE (12 Months)			
	2021-2022	2022-2023	Change	Share
United States	300.146	347.992	15,94%	11,02%
Iraq	205.452	240.824	17,22%	7,63%
Russian Federation	63.792	136.362	113,76%	4,32%
Germany	112.458	121.882	8,38%	3,86%
United Kingdom	89.994	119.468	32,75%	3,78%
Israel	102.715	108.015	5,16%	3,42%
Yemen	68.425	92.408	35,05%	2,93%
Algeria	77.083	79.134	2,66%	2,51%
United Arab Emirates	54.946	72.104	31,23%	2,28%
Libya	60.378	69.026	14,32%	2,19%
Top 10 Countries Total	1.135.389	1.387.216	22,18%	43,92%
Other countries	1.469.715	1.770.974	20,50%	56,08%
Grand total	2.605.104	3.158.190	21,23%	100,00%



Turkish delight export to 25 countries

Stating that they established their own factory after working in a Turkish delight factory for 15 years, Kral Kardeşler Marshmallow official Batıkan Usanmaz said, "We established our own factory in 2019. We have worked for the best every day since the day it was founded, keeping our goals high and making the best quality product, and now we have a factory with a daily production capacity of 3 tons. Demand for Turkish delight is high from almost every country, and some of the countries with which we cooperate intensively are Libya, Ukraine, Moldova, Russia, America, Uzbekistan, Dubai, Germany, respectively. We are currently exporting to about 25 countries."

Let's ask the story of your company. What would you tell our readers?

I was born in 1992 in Ardahan Gole. My father Dilaver Usanmaz, my mother Nejla Usanmaz grew up in a family of 9 children, five boys and four girls. My mother was a housewife and my father was a farmer. We lost my father when I was 12 years old. My father was 45 years old. We were alone with my mother when the eldest of my siblings was 20 and the youngest was 3 years old. On the one hand, we were trying to make a living and on the other hand, we were trying to continue our education. We started boarding school with my sister. During my 3 years of boarding education, I was participating in running races in many cities of Türkiye on behalf of Ardahan Athletics and getting degrees. Meanwhile, it was getting harder and harder to support ourselves. In order for our family to hold on to life and for my siblings to study, someone in the family had to make sacrifices and work. For this reason, we decided to come to Istanbul with my two older sisters after graduating from the 1st grade of High School. We set off from Ardahan with a suitcase. We rented a house for ourselves in Catalca, Istanbul. We didn't even have curtains in our house. Spouse, we settled in the house with the help of a friend. I was enrolled in school from abroad and started looking for a job. Since I was 14 years old, the factories did not employ me, so I started to work as a night shift apprentice in a bakery in the first year. The work was very heavy, but we had to work with my sisters. Our eldest sister had been both mother, father and friend to us in Istanbul. We laid back to back and reminded each other each time that we had to overcome all difficulties. After working at the bakery for a year, I started to work in a Turkish



delight factory, thinking that it would not make sense to continue working day and night without any permission in the bakery profession. I started to work in this factory, which I entered as an apprentice, and I saw that I was able to reach higher levels by gradually getting the reward of my efforts. I predicted that I could take this job as a profession and be useful to my mother and siblings in the future.

GREAT TARGETS, QUALITY PRODUCTION

I started to build my goals and dreams on this idea. Even dreaming it was very exciting and made me embrace more profession. For years, I worked in this factory as if it were my own business and I always tried to do my best. While my peers were going to school, I graduated from open high school and became a foreman at the age of 17 at the head of 50 personnel. My bosses no longer saw me as an employee, but as part of their family. Meanwhile, my mother and 6 siblings were still in Ardahan. My brother was a farmer and 5 of our brothers were studying. We took the high school students to Istanbul with us and made sure that they could study in better conditions. My belief was so high that one day I would set up my own business and take my whole family to Istanbul that I knew I would experience the promise that believing is half of success. After working in the Turkish delight factory for 15 years, I no longer needed to set up my own manufacturing facility. We established our own factory in 2019 with the encouragement of my family standing behind me. We have worked for the best every day since the day it was founded, by keeping our goals high and making the best quality product, we now own a factory with a daily production capacity of 3 tons. We want to go further without compromising our quality and goals. We continue to be a company that is happy to develop itself by offering new flavors, taking risks that

do not stay in the background, making future investments, aiming to provide more employment, and taking further steps towards increasing the number of personnel and capacity.

THERE IS HIGH DEMAND FOR TURKISH DELIGHT

Turkish delight is a brand in the world. Which countries demand our Turkish delights the most?

Demand for Turkish delight is high from almost every country, countries with which we cooperate extensively are Libya, Ukraine, Moldova, Russia, the United States, Uzbekistan, Dubai, Germany, to name a few. We are currently exporting to about 25 countries.

Where do you see your company in a decade?

Our company is located in the best position it can come in a short time. I believe that ten years later, regardless of the country, region, our brand will be a well-known company, and we will be the first name that comes to mind when Turkish delight is mentioned.

FAIRS ARE OF GREAT IMPORTANCE

What was the contribution of the fairs to our exports and to your production of innovative products?

Fairs are very important for every company. The promotion of our brand is increasing in the field of Turkish delight. Both domestic and international fairs are of great importance for increasing the production capacity. Our aim is to reach more countries through fairs and to have Turkish delight tasted.

What are your expectations from our union so that companies like you can increase their exports even more?

First of all, it will be enough to make you feel their moral support, to exchange ideas, and to know that you can help in every field and that you are ready for this.

Preference criteria for health in the consumption of vegetable oils: Saturated and unsaturated fatty acids

Prof. Dr.
**Nevzat
KONAR**



The chemical structures called triglycerides and triacylglycerol, in which the fatty acids found in their structures and different combinations of these fatty acids are found in lipids as a broader concept, have both technological and health-related properties, are determinative. At the beginning of the determining factors for these properties are the source and how the edible oil is produced. One of the areas where conceptual and information pollution is common is oils, oil technology and edible oils. Chief among these is about cholesterol, a lipoprotein that is also produced in our body.

SHOULD NOT BE CONSIDERED AS A SOURCE

Cholesterol, triglycerides and high-density lipoproteins are important components of the lipid fraction of the human body. Cholesterol is an unsaturated alcohol of the steroid family of compounds; it is essential for the normal function of all animal cells and is an essential element of cell membranes. It is also the precursor of various critical substances such as adrenal and steroid hormones, vitamin D and bile acids. Triglycerides are fatty acid esters of glycerol and represent the main lipid component of animal dietary fat and fat stores. Cholesterol and triglycerides, which are non-polar lipid substances (insoluble in water), must be transported in plasma in conjunction with various lipoprotein particles. Plasma lipoproteins are grouped on the basis of their size and protein content as well as their density; chylomicrons, very low-density lipoproteins (VLDL), medium-density lipoproteins (LDL), low-density lipoproteins (LDL), and high-density lipoproteins (HDL). It is the concentration, or level, of low-density lipoprotein, which is seen as a risk for cardiovascular health problems, in other words, for

cardiovascular health. The phrase "bad cholesterol" is also a common term for these lipoproteins. In this case, the risk is not the presence of cholesterol, but the level of cholesterol contained in a food item. In addition, vegetable oils should not be considered a source for cholesterol, given that cholesterol is of animal origin. That is, vegetable oils contain no or negligible levels of cholesterol.

NO REALISTIC APPROACH

Another health-oriented criterion in the consumption of edible oils is the amount of saturated-unsaturated fatty acids and the unsaturated feature of some fatty acids and the positions of the carbon-carbon double bonds in the chemical structure that give this feature, which omega group fatty acid is. Just as it is not a very realistic approach to completely remove sugar from our daily diet, it is neither possible nor correct to remove all fats from the diet. For example, since vitamins A, D, E and K, which are essential for our vital activities, are fat-soluble, these vitamins must be taken into our body through fat-based or fat-containing foods and then take part in metabolic processes.

Sunflower (*Helianthus annuus* L.) is an important oilseed crop widely grown all over the world. The seeds of this plant contain 22-55% oil. This oil contains high amounts of polyunsaturated fatty acids. By-products such as sunflower meal obtained from sunflower oil extraction; it is a source of important components such as carbohydrates, proteins and polyphenols that can be used in the food industry. Sunflower meal remaining after oil extraction contains approximately 25-50% protein, 29-52% carbohydrates and 3% polyphenols. Among these polyphenols, chlorogenic acid can be mentioned as the major component. Sunflower is one of the five most important oil crops produced worldwide. Sunflower oil generally contains linoleic acid (C18:2) and oleic acid (C18:1). These two fatty acids make up about 90% of the total fatty acid content of sunflower oil. The remaining 8-10% fatty acids are generally composed of stearic (C18:0)

and palmitic acid (C16:0).

PROTECTION AGAINST DISEASES

Vegetable oils that are widely consumed in our country and other western societies are sunflower, corn and olive oil. Corn oil is obtained from corn germ (*Zea mays* L. embryos). It is technically possible to extract the oil directly from the grains, but it would be costly to produce "corn kernel oil" due to the low oil levels in the kernels. Corn germ is rich in oil (>30%) and is the source of all commercial corn oil, which might be more accurately called corn oil. Corn oil is obtained from the recovered germ during starch production. The germ obtained from the corn flour industry contains 20% oil. The quality of corn oil depends on pre-treatment and germ separation. Traditionally, corn oil is obtained from wet-milled seed using a heating process. Crude corn oil mainly contains nonpolar (triglycerides and free fatty acids, phytosterol fatty acyl esters, free phytosterols, phytosterol ferulate esters, tocopherols, tocotrienols) and nonpolar (glycolipids, phospholipids, pigments, volatile compounds, waxes, etc.) lipid components. This vegetable oil consists of approximately 95% triacylglycerol, containing 1.5% phospholipids, 1.7% free fatty acids and 1.2% sterols. Cooking oils are often compared by examining their fatty acid profiles. Corn oil contains linoleic acid (C18:2), which is one of the essential fatty acids at a high rate. As it is known, essential fatty acids are fatty acids that are needed by humans but cannot be biosynthesized and therefore must be obtained through food. Linoleic acid has many positive effects on human health. Some of these effects are prevention of various cancer diseases, management of rheumatoid arthritis, protection against cardiovascular diseases. Another of the compositional advantages of corn oil is that it contains low levels of saturated fatty acids (<15%) and has a profile of very low levels of linolenic acid (18:3). It is known that linolenic acid is a fatty acid with low stability, especially against oxidation leading to acidity. Another important free fatty



acid found in corn oil is oleic acid. One of the fatty acids associated with some positive health effects such as lowering low-density lipoprotein (LDL) levels, lowering blood pressure, and reducing the risk of breast cancer is oleic acid.

THERE SHOULD NOT BE CHOLESTROL CONCERNS

For optimum intake of total and unsaturated fatty acids, recommendations have been made by various international public and scientific authorities, including the World Health Organization, and by nutrition organizations. Accordingly, dietary fat intake should ideally constitute 15% to 30% of the energy provided by the total diet. Recommendations have been developed for the consumption of certain fatty acids, taking into account the total energy (calorie value) and their distribution based on food components (carbohydrates, proteins and fats). Accordingly, more than 10% of the calorie intake should be from saturated fatty acids (SFAs) and 6-10%

from polyunsaturated fatty acids (PUFAs). Among polyunsaturated fats, the recommended ratio for omega-6 fatty acids is 5-8%, and for omega-3 fatty acids 1-2%. It should also be about 10-15% monounsaturated fatty acids (MUFAs) and less than 1% trans-fatty acids. It has been suggested to limit cholesterol intake to 300 mg/day. For example, the cholesterol level of crude palm oils was determined in the range of 2.7-13.0 mg/kg (ppm). This value is even lower for processed palm oil products (Gunstone, 2011). With an approximate calculation, daily consumption of 23.1-111.1 kg of palm oil would exceed the limit for cholesterol. This supports that there should be no cholesterol concerns in the consumption of vegetable oils, and that the existing concerns are due to information pollution.

There is ample evidence to suggest that regular consumption and/or dietary supplementation of long-chain omega-3 polyunsaturated fatty acids (for example, eicosapentaenoic – EPA, 20:5 and docosahexaenoic – DHA) provides a range of health benefits. Since

the health consequences of fat consumption are determined by ratios between fatty acids, some recommendations are still made on the basis of specific fatty acid ratios. Accordingly, the recommended PUFA/SFA ratio is between 0.4 and 1.0, and the omega-6/omega-3 PUFA ratio should not exceed 4. Excessive omega-6 PUFA and very high omega-6/omega-3 PUFA ratios increase the risks of certain diseases, including cardiovascular disease, cancer, and inflammatory and autoimmune diseases, while increased omega-3 PUFA levels and low omega-6/omega-3 PUFA ratios show a suppressive effect on these health problems. Recently, there are scientific studies revealing that the biggest risk factor for arteriosclerosis and ischemic heart disease is not hypercholesterolemia or high cholesterol intake, but high omega-6/omega-3 PUFA ratio. Thus, although it is often claimed that less fat is better in the diet, the qualitative aspects of fat need to be considered, including the fact that some fatty acids are essential to our diet.



Biodiversity, climate change and food security

"Humanity is facing a perfect storm of climate change, loss of biodiversity and multiple forms of malnutrition (underdevelopment, wastage, micronutrient deficiencies and obesity) coexisting in the same country, community, home and even the individual." (FAO 2021). Indeed, despite the achievements of human societies in many areas such as science, technology and social organization, food security is still a fundamental condition for both security and development worldwide. In the context of globalizing dynamics, a health crisis, increasing environmental degradation, loss of biodiversity and climate change, it is an important challenge to increase food and nutrition security in a sustainable and durable way. This is exacerbated by the complex interconnections between various factors that influence nations' ability to secure a future free from hunger and malnutrition. According to FAO (2021), food remains the strongest lever for optimizing human health and environmental sustainability on Earth, but time is currently working against both. Changing this will require

changes in food demand to increase biodiversity in environmentally and socially sustainable and climate change resilient production systems.

"A TRUE EXISTENTIAL THREAT"

The challenges of each of these areas are well known and recognized. Climate change is increasingly perceived as a "direct existential threat" and the scientific community is already calling for swift and effective action to limit further warming of the world's atmosphere. In addition, while the loss of biodiversity has been well documented, work and measures in this area tend to largely overlook the loss of genetic diversity in crops, livestock, poultry and farmed fish, focusing more on the major species at risk of extinction.

RESPONSIBLE AND SUSTAINABLE PRODUCTION

Food security is one of the main issues among the United Nations Sustainable Development Goals

(UN, 2015). Meeting the future needs of a growing human population while staying within the confines of our planet requires the evolution of food systems with the transition to environmental sustainability. In fact, food production and consumption are among the major drivers of environmental degradation and biodiversity reduction. This requires responsible and sustainable production and consumption at all different steps of food supply chains. For example, while sustainable agriculture responds to human needs, it must be able to reduce associated environmental pressures and impacts, ultimately impacts on biodiversity. In fact, food security and biodiversity conservation are closely linked challenges and imperatives. While food production is heavily dependent on biodiversity and the possibilities provided by ecosystems, it puts great pressure on the environment. There is growing evidence that the food supply is becoming more vulnerable and unsustainable as the biodiversity that sustains food production and agriculture declines.

Achieving sustainable development goals requires a systematic evaluation and improvement of supply chains. One method frequently used in systematic assessments is the Life Cycle Assessment (LCA). After the LCA studies, it was determined that wheat, rice and corn (due to high land use) as well as sugar cane, palm oil, coconut, cassava, rubber and coffee are among the main crops affecting biodiversity in the areas where they are grown despite low land occupation at the global level.

BIODIVERSITY HAS A GREAT IMPACT

The concept of ecosystem differs in terms of economic, cultural and social needs, of which biodiversity is one of the central components. "Biodiversity" refers to the variability between living organisms in terrestrial and aquatic ecosystems, also known as "biodiversity". It also includes ecological complexes within and between species in an ecosystem. Biodiversity has enormous effects on agriculture and food production. It covers not only cultivated agricultural products and livestock, but also other plant, animal and microorganism species. These components of biodiversity can be found in various ways, such as maintaining or restoring fertile soils as trees or herbaceous plants protect the soil from erosion, contributing to the propagation and propagation of plants by pollination, purifying water, protecting against extreme weather events, and enabling ruminant animals to digest fibrous plant material. has a significant impact on critical issues.

Ecosystems used in agricultural activities for the production of food and non-food products are known as 'agro-ecosystems', which includes all biological resources and their biodiversity, including the physical environment and human-managed practices. The words 'agricultural diversity' and 'agricultural biodiversity' can be used interchangeably to denote the biodiversity of lands used for agricultural purposes. Agricultural biodiversity, as defined by FAO, is the combination of the diversity and variability of different biological components directly or indirectly related to food and agriculture. These components include crop and animal production, forestry and aquaculture and constitute the diversity of their genetic resources. Sustainable management of biological resources in agricultural



biodiversity is vital for the food security of living things in an ecosystem.

DEPENDING ON THE PROTECTION OF ECOSYSTEMS

Agricultural biodiversity has a vital role as a food source for humanity and also provides a healthy environment for better living and sustainable development. Adaptation to changing environmental conditions by reducing exposure risks depends on the richness of agricultural biodiversity and genetic diversity of plant products. Increasing the quantity and nutritional quality of food products through more effective use of the functions performed by the biological components of the local agro-ecosystem is the focus of sustainable approaches. Sustainable agricultural biodiversity contributes to greater benefits from biodiversity components without any adverse effects. It also preserves the current and future potentials of biodiversity for better agricultural production. Sustainable use of biological components and their conservation are interrelated. Four key themes are based on ecology, governance, nutrition-health and global change to explain the impact of complex human-environment interactions on agricultural biodiversity. The sustainability of an agricultural biodiversity depends on the preservation of neighboring or distant ecosystems that provide essential services to it.

Sustainable use of agricultural biodiversity is inevitable in providing a 50% increase in food production for the world population, which is estimated to reach 9.8 billion by 2050. Smallholder farmers own the majority of the rural population and the lives of the 2.7 billion poor people who live on less than two dollars a day depend on locally grown food. When agricultural biodiversity is threatened by changes in production systems, food safety and security for these people is put at risk. As part of their agricultural production systems in the 1990s, developing countries adopted around 90%, 70% and 60% of modern wheat, rice and maize varieties respectively, which threatened agricultural biodiversity in the respective regions. Over the last few decades, modern rice varieties have seen dramatic increases from 4% to 58% in Latin America and from 12% to 67% in Asia. FAO reports that over 90% of the crop varieties on farmers' fields have been lost in the last 100 years. Crop varieties and livestock species are lost annually at a rate of 2% and 5%, respectively. Modern cultivation practices simplify the crop production system, leading to a less resilient agro-ecosystem. For example, more than 50 pollinator species are at risk of extinction, and wild honeybee populations in the USA have declined by 25% since 1990. Maintaining a sustainable agricultural biodiversity through a traditional crop production system can contribute to increased productivity. Extensive studies and research call for greater attention to agricultural biodiversity along the food chain in these conditions.



DEVELOPMENT AND POLICY ENVIRONMENTS

Biodiversity supported by healthy ecosystems is highly linked to food security in many ways. Thus, ensuring food security while preserving biodiversity and ecosystem exploitation are two strongly interlinked challenges that are fundamental to securing global sustainability. More specifically, through the services provided by ecosystems, nature contributes to the survival and well-being of humans and is the main basis for food systems. In addition to mitigating the effects of climate change, biodiversity also contributes to regulating the nutrient cycle and providing clean water and a diverse food supply. However, despite these vital roles, biodiversity at all levels, including the diversity of genes, species and ecosystems, is disappearing at alarming rates due to natural and anthropogenic factors. When assessing impacts on biodiversity, the focus is often on the conversion and use of natural areas for agricultural purposes or urbanisation, as habitat change represents one of the main sources of biodiversity loss. Critical factors include overexploitation, land use change, habitat destruction, uncontrolled spread of alien species, pollution, nitrogen deposition,

changes in precipitation and temperatures, and extreme climate events. This loss of biodiversity has many implications for nations' future capacities to ensure sustainability, resilience and human security.

Likewise, what seems lacking in many development and policy circles is the recognition that food is at the center of climate and biodiversity issues as it currently threatens both people and the planet. Crop production and livestock activities cover about half of the world's habitable land surface and consume about three-quarters of the world's freshwater resources. About three-quarters of deforestation, currently at around 5 million hectares per year, is due to agriculture, specifically clearing forests for crop production or raising animals, causing biodiversity loss and contributing to climate change (FAO 2021).

HAVE A COMPLETE FRAMEWORK

A recent study by FAO found that most tools and policies related to climate change, biodiversity or food and nutrition security focus on only one or two of these areas, and few explicitly address all three. However, if biodiversity in and throughout terrestrial, marine and other aquatic ecosystems is protected and promoted through agro-ecological,

human-centred approaches as the foundation of food systems and healthy diets, then wider sustainable production systems (agriculture, forestry and fisheries) can be fostered. This will make a variety of safe and nutritious foods more accessible and affordable throughout the year. Moreover, the food system has a complex framework that requires multi-sectoral thinking and collaboration. Adding biodiversity and climate change to such a framework can be sources of more complexity, but ignoring these two factors can also result in greater vulnerabilities and inefficiencies.

From a scientific point of view, while traditionally the issues of food, biodiversity and climate change have been dealt with separately, the importance of the connections between them has recently attracted more attention and has been the focus of attention. Linking these fields from a research and policy perspective, managing their respective interactions, and seeking synergies between them is likely to generate multiple shared benefits from the perspectives of sustainability, resilience, development and security. Response mechanisms developed from such a perspective will help protect and enhance biodiversity and improve food and nutrition security.

Prof. Dr. Nevzat Konar

Export was 5.5 billion dollars in the first 6 months

The increase in exports of cereals and pulses continues. The first 6-month exports of the grain industry in Türkiye reached 5.5 billion dollars with an increase of 2 percent compared to the same period of the previous year. January-June period exports of Istanbul Cereals, Pulses, Oilseeds and Products Exporters' Association (IHBIR) reached 1 billion 782 million dollars with an increase of 13 percent compared to the same period of the previous year. In June, the first three countries to which the grain industry exports the most were Iraq, the USA and Syria, respectively, while the USA, Iraq and the United Kingdom took the first three places in IHBIR.

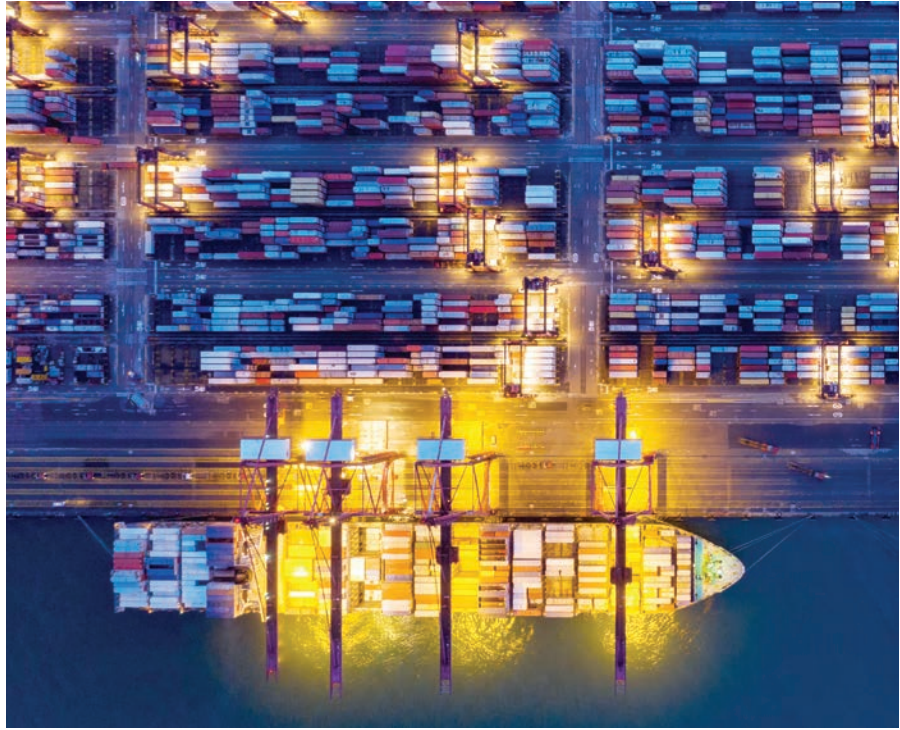
Istanbul Cereals, Pulses, Oilseeds and Products Exporters' Association (IHBIR) announced the export figures for the first 6 months of June and 2023. According to this; IHBIR's exports in the January-June period increased by 13 percent compared to the same period of the previous year and reached 1 billion 782 million dollars, while the exports of the grain sector in Türkiye reached 5.5 billion dollars with an increase of 2 percent. IHBIR's exports in June, on the other hand, decreased by 11 percent compared to the same period of the previous year and amounted to 268 million dollars. The exports of the grain sector in Türkiye in June were recorded as 781 million dollars with a decrease of 21 percent compared to the same months of the previous year.

MOST EXPORTS TO THE USA IN JUNE

In June, the top three countries to which the grain industry exports the most were Iraq, the USA and Syria, respectively; on the other hand, the top three export destinations in IHBIR were the USA, Iraq and the United Kingdom. In terms of goods groups, the highest export was made in bread and spa wheat flour with 110.7 million dollars, pasta (uncooked plain and unfilled) group ranked second with 51 million dollars, and sunflower seed oil ranked third with 48.5 million dollars.

PRODUCTION AND EXPORT FOR GROWTH

Evaluating the announced figures, Kazım Taycı, Chairman of the Board of IHBIR, stated that they will continue to



work at full speed to increase exports, with the stability environment created after the election of the new cabinet. Touching on the importance of production and exports, Taycı said, "As Istanbul Exporters' Associations, we continue our purchasing committees, sectoral visits and activities at full speed in order to expand our market share abroad and to establish our strategy for distant countries. Our expectation from the authority in this regard is that we demand that producers and exporters be supported more with incentives that can be given on different subjects within this new economic model."

FINANCE REQUEST FROM THE AUTHORITY

Stating that the growth rate continues to increase in the case of Istanbul Exporters' Associations, Taycı said, "The issue of access to finance is still on our agenda as our most important and first item. Unfortunately, our companies cannot expand their business because they are faced with long-term loans and high interest rates. In order to meet the incoming demands and increase our exports, our producer exporter companies' access to finance should be facilitated. We demand the



support of the authority in this matter." Stating that the fixed exchange rate for a long time put a lot of pressure on the producers in the face of increasing cost increases, Taycı also stated that the current exchange rate level is important in increasing the chance of competition and that it gives a breath of fresh air.

'Turkish flavors' left their mark on the USA

Confectionery, chocolate, biscuit, snack products, ready-to-eat foods and ice cream manufacturers from all over the world participated in the fair in the USA; Turkish companies made a landing. Turkish brands, whose effectiveness is increasing day by day on the US shelves; Kazım Taycı, Chairman of the Board of Directors of the Istanbul Cereals, Pulses, Oilseeds and Products Exporters' Association (IHBIR), who stated that he was welcomed with interest at the Sweets & Snacks Expo 2023, the Confectionery and Snack Products Fair held in Chicago, USA, said: "We exported 708 million dollars. Our target this year is between 800-850 million dollars. Seeing that the interest in Turkish products in the USA is increasing day by day, I believe that we can easily reach this goal."



Turkish companies left their mark on the International Confectionery and Snack Products Fair "Sweets & Snacks Expo 2023," which was held for the 26th time this year in Chicago, USA. Türkiye organized a national participation organization for the 13th time in the fair where companies operating in the chocolate, confectionery, biscuit, snack products, ready-to-eat foods and ice cream sectors participated. At the fair held in the USA, which is the second country to which Türkiye exports the most in the grains, pulses, oilseeds and products sector with 708 million dollars in 2022, 23 Turkish companies took part. Kazım Taycı, Chairman of the Board of Istanbul Cereals, Pulses, Oilseeds and Products Exporters' Association (IHBIR), who draws attention to the increasing interest in Turkish products in the USA, said; he said that they expect an increase of 15-20 percent in exports to the USA for 2023, and that exports can reach between 800-850 million dollars. Pointing out that they have achieved an average of 15-20 percent growth in trade with the USA for the last 7 years, Kazım Taycı said, "The interest of the American people towards our products is increasing day by day. Our producers and industrialists respond to this interest in the same way and take positions accordingly. They highlight the tastes and flavors that the American people love. They even determine their packaging designs

accordingly and change the way they are presented. We also say to our manufacturers who want to export more to the USA, 'Make your products more Americanized.' Thus, Turkish products can come to the fore more in the US market. Turkish products also increase the effectiveness on the US shelves." said.

WE LEARN CULTURE AND INCREASE TRADE

Pointing out that they, as IHBIR, continue their efforts to increase trade with the USA, Kazım Taycı continued his words as follows: "We organize events for our members in order to improve our trade with the USA. We bring purchasing delegations from the USA to Türkiye, and bring together sectoral buyers with our manufacturers. Then we take our manufacturers and companies in Türkiye and take them to the USA. We bring our Turkish companies together with big buyers in the USA. As IHBIR, we take part in all food-related organizations in various regions of the USA such as Chicago, New York, Las Vegas and Miami, and we share the information we get from here with our members. We make referrals for our members to participate in these organizations. Because we know that we can do more trade if we learn the culture of that country. We believe that the more contacts are made, the more countries are



visited, the more we will increase our trade. In this context, we continue our work." Stating that the work done has begun to bear fruit, Taycı said, "The interest of Turkish companies in the USA is increasing day by day. There was also a lot of demand for the International Confectionery and Snack Products Fair 'Sweets & Snacks Expo.' Nearly 30 Turkish companies could not participate because there was no place in the fair area." Taycı also stated, "We contacted the fair administration in order to resolve the situation. However, we could not expand the section reserved for Turkish companies for this year. Our contacts continue for next year. Next year, we aim to take part in a much larger area as Turkish companies."

31 MILLION TONS OF PRODUCT PASSED THROUGH THE GRAIN CORRIDOR

Kazım Taycı, who also made evaluations about the 'Grain Corridor' created by Türkiye initiatives after the Russia-Ukraine war at the fair held

in the USA, said, "The Grain Corridor is one of Türkiye very important political and bureaucratic victories. If the 'Grain Corridor' had not been opened, mankind would not have access to the products of Russia and Ukraine, which constitute 30 percent of the world's production in grain and grain, that is, the most basic food. If the products of the two countries were withdrawn from the market, it would not be difficult to predict how much prices would rise. Currently, approximately 31 million tons of cereals and grain products have been supplied to the world markets by approximately 600 ships with the latest figures. Far Eastern countries buy 30 percent of these products, while Europe buys 40 percent. 13 percent of them come to Türkiye." Finally, Kazım Taycı reminded that the "Grain Corridor" agreement was extended for 2 more months and said, "Our desire was to extend at least 8 months or 1 year. However, we expect this process to continue under the coordination and organization of Türkiye"

\$11.4 BILLION

EXPORT OF CEREALS, PULSES, OILSEEDS AND PRODUCTS IN 2022

\$708 MILLION

EXPORTS OF THE INDUSTRY TO THE USA IN 2022

28,49%

INCREASE IN EXPORTS TO THE USA COMPARED TO 2021

6,18%

THE SHARE OF THE USA IN THE TOTAL EXPORTS OF THE SECTOR

\$850 MILLION

THE EXPORT TARGET OF THE SECTOR TO THE USA IN 2023

\$56.1 MILLION

EXPORTS OF THE INDUSTRY TO THE USA IN JUNE 2023

\$746 MILLION

EXPORTS OF THE INDUSTRY TO THE USA IN THE FIRST 6 MONTHS OF 2023

18,12%

THE INCREASE IN EXPORTS IN 2023 COMPARED TO THE FIRST 6 MONTHS OF 2022



Mustafa Gültepe, President of the Turkish Exporters Assembly (TIM), made special statements to IHBIR News. Stating that Türkiye exports to 226 countries in 2022, Mustafa Gültepe said that Turkish brands reach all parts of the world. Pointing out that the role of the “Far Countries Strategy,” which continues under the Ministry of Trade, plays a great role here, Gültepe said, “We organize delegations with exporters to both near and far countries. We can state that these delegations also made an important contribution within the scope of the Far Countries Strategy. In the light of all these developments, I believe that we will achieve our goals regarding the Far Countries Strategy in the next few years.”

TURKISH BRANDS ‘FAR AWAY’

1 How do you foresee how the range of our exports will be affected by the Remote Markets Strategy?

In 2022, we exported to 226 countries. Today, our exporters deliver the Turkish brands to every region of the world. The role of the Far Countries Strategy, carried out within the body of our Ministry of Commerce, is also great in this. Within the scope of the “Far Countries Strategy,” it is planned to increase our export range, which is 3,089 kilometers, by the end of 2022, above the world average of 4,744 kilometers. I think this goal will be achieved. While exporting products to every corner of the world, we need to improve our product range and brand identity. In this context, as TIM, we organize trade delegations. We organize delegations with exporters to both near and far countries. We can state that these delegations also made an important contribution within the scope of the Far Countries Strategy. In the light of all these developments, I believe that we will reach our goals regarding the Far Countries Strategy in the next few years. Of course, as all exporters, we need to continue to work in cooperation towards this goal. At this point, as TIM, we will continue

to stand by our exporters with all the means at our disposal.

2 The share of high-tech products in Türkiye exports is brought up from time to time. At this point, we think that the public has as much work to do as our enterprising exporters. What are your expectations and demands?

According to TUIK data last year, we have an export of 240.4 billion dollars in manufacturing industry products. 6.4 billion of this is high technology, 82.2 billion dollars is medium high, 74.1 billion dollars is medium low and 77.7 billion dollars is low technology products. The share of medium-high and high-tech products in our exports is 36.9 percent in 2022. In the first six months of this year, there is an increase of 16.4 percent in exports of high-tech products and 11.6 percent in exports of medium-high-tech products compared to last year. The increase in the share of high and medium high technology products in our exports is certainly pleasing. It is extremely important that value-added products that require technology, especially in our defense industry, are manufactured and exported in our country. But we cannot be satisfied with this level. We need to raise this share to higher levels together. In

this context, we carry out important activities to support R&D and innovation activities in cooperation with our public institutions. Türkiye Innovation Week is actually one of the most important organizations supporting the innovation and technology ecosystem in our country. We support our exporters with our mentoring programs. Of course, increasing the level of technology is a costly and long-term process. For this reason, it is very important that our relevant public institutions financially support our exporters both in their production processes and in developing innovative products. There is support for this, but we expect it to continue to increase. On the other hand, the increase in technology density is directly related to the quality of human resources. I think that our country's education system and social welfare level should be the support of our exporters at this point. Our exporters should not think small and should not be content with their level; it should display a willing and visionary attitude to increase its technologies day by day.

3 The stagnation observed in our main markets brought down our exports. How long do you expect this trend to last?

When we look at the OECD economies, which constitute our main export markets, we see that the growth in these economies has come to a standstill in the first quarter of 2023. Although the second quarter growth data has not been announced yet, we see a slight decline in the production and sales index in this region in April 2023. Although this situation did not reduce our exports, it caused a slight decrease in the high momentum we achieved. I think that the interest rate hike process of the FED and European Central Bank, which has been on the agenda for a while, is slowly coming to an end and this pause will not last long. As the interest rate hike process in our main markets comes to an end, economic activity will increase. This makes an increasing contribution on behalf of our exports.

4 We would like to receive your evaluations on the impact of monetary policies of global central banks on world trade.

The FED started its ongoing tightening monetary policy in March last year. Again, the European Central Bank started to increase interest rates in July 2022. When we look at global trade, we see a decline since the second quarter of 2022. As this broad global tightening monetary policy directly reduces domestic and foreign



demand, it naturally has a negative impact on both economic growth and trade around the world.

5 TIM is working intensively in the field of innovation and the first step to export. We see that we are starting to reap the fruits of these efforts. Could you give us some information about these projects?

We believe that innovation is very important for high value-added production and export. Based on this, we, as TIM, carry out our innovation activities under the roof of TIM Academy. With the InovaLIG project, which we have implemented since 2014 and to which 8,642 companies have applied, we give our companies the opportunity to compare their innovation competencies with those in Europe. With our InoSuit program, which started in 2016, we are running the mentoring program to create corporate innovation systems of our companies and to increase the cooperation between the academy and the business world. Within the scope of InoSuit, a total of 750 company applications from 55 different cities and a total of 1,044 mentor applications from 145 universities in 63 different cities have

been received in 14 terms. In addition, a total of 175 companies located in 31 different cities and 68 mentors from 43 universities in 18 different cities have successfully completed the program.

Through TIM-TEB Startup House, we host Türkiye most developed entrepreneurship ecosystem and pave the way for our entrepreneurs. Within the scope of TIM-TEB Entrepreneurship Houses, 7,500 hours of consultancy service have been provided to more than 1,800 entrepreneurs through 694 programs of 14 different types. 33 S2C events where 160 technology startups and 75 corporate companies came together for the purpose of cooperation, more than 360 meetings with over 175 entrepreneurs and over 40 mentors were held. Over 120 entrepreneurs were given the opportunity to stand at national/international events, and 125 entrepreneurs were promoted on online/offline channels. 17% of the 1,800 entrepreneurs participating in our programs, which continue with a mission that cares about increasing the female employment rate, are women entrepreneurs. To further increase this rate, the Women Entrepreneurship Program was designed.



Creating synergy between these activities is as important as putting these activities into practice. Based on this idea, we brought together InovaLIG, our companies that successfully completed the InoSuit program, and TIM-TEB Venture House entrepreneurs with the S2C event on July 10th, and provided the opportunity to lay the foundations of new cooperation areas. In addition, we continue our preparations for the Türkiye Innovation Week, which we will organize on October 26th-28th, 2023 in order to take the cooperation between our activities one step further.

6 Mr. President, you have production facilities in Malatya and Sakarya, which there are earthquake victims in two cities. How did the disasters we experienced affect your work and what kind of work did you do?

Since it has been a long time since the earthquake in our factory in Sakarya, there was no special situation caused by natural disasters. Malatya, on the other hand, is one of the provinces most affected by the earthquake disaster we experienced in February. Of course, our factory and our employees were also affected unfortunately.

Although we did not encounter any material damage both in our factory and in other production facilities,

there were problems that would transfer things for a while. These are things that can be compensated quickly, but repairing the process experienced by our employees requires an all-out struggle.

In this context, we, as TIM and Exporters' Associations, have tended to revive production in the region under the coordination of AFAD. There is no revival of life in the earthquake zone without the recovery of production and trade. We are building 1000 containers and prefabricated houses in 4 provinces for earthquake victims in the first stage until permanent houses are built. Production was interrupted immediately after the earthquake. Sanliurfa, Gaziantep, Diyarbakir, Adana recovered quickly. Although the recovery process in Malatya took some more time, capacity utilization has reached good levels. Kahramanmaras, Adiyaman and Hatay need a little more time to return to pre-earthquake levels.

Together with our public institutions, we contribute to both the physical and mental health of our personnel and to produce solutions for the needs in the region.

7 TIM President Mustafa Gültepe has been at the heart of exports for many years. If we were to tell you about Gültepe apart from its industrialist and

exporter identity, what would you say?

I am from Trabzon. Famous thinker Ibn Khaldun said, "Cities also have a soul. People living in a city become characteristically identified with the spirit of the city in which they live." In this sense, I can say that Trabzon, the city where I was born and grew up, had a great influence on the formation of my personality and the maturation of my character. I put my energy and my always diligent nature to this. I'm not much of a sleeper either. I make sure to wake up at 6.30 every morning. I really like to do sports. In particular, I made walking a routine. I take a walk every morning, five days a week. Breakfast is very important to me. That's why I have my breakfasts healthy and strong. I am also very fond of my family. I care about spending time with my children and grandchildren. Whenever possible, I go to the highlands of my village. Because in the place where I was born and raised, being alone with my family and nature gives me peace. Of course, because of the city I was born in, I am also very interested in football. I'm trying to follow Trabzonspor's matches. I have been involved in export, industry and production for many years. Now, as the President of TIM and IHKIB, I am happy and proud to serve my country and our export family.

“The most important step is to become a brand In order to increase our competitiveness.”



Kadir Kürşad Gülbahar, Deputy Chairman of the Board of Directors of IHBIR, drew attention to the need to be effective in all processes from the guarantee of food to its transportation, and said, “Products with high added value, the inclusion of new products in the production range, quality and timely delivery are very important factors for customer satisfaction. Türkiye, today, stands out as a country that either produces or processes every food and raw material. However, market conditions oblige first of all to bring quality production to a sustainable position. The most important step to increase our competitiveness is to become a brand.”

As the Vice Chairman of the Board of IHBIR, you took part in many international fairs. What are the factors that make Turks stand out in these fairs?

Fairs play an important role in increasing exports. We stand out with our presentation and service quality. Advertisements of Turkish associations and companies in the fairgrounds attract the attention of visitors. As IHBIR, Turkish products are served at the fairs. We draw attention with the preparation and catering shows of national products such as Turkish delight, baklava and confectionery. Despite the great competition, another prominent element in terms of promotion of Turkish brands is our product range.

SERVICE QUALITY MUST BE INCREASED

As much as producing a product, it is critical to deliver it to the customer on time and at the quality it left the factory. What would you say about the processes and the expectations in the world if we were to ask your opinions on this matter?

In this regard, timely delivery is as important as product quality. First of all, it is necessary to understand the customer demand well and to analyze the production or sales processes of the customer. While balancing production and demand, manufacturers should increase service quality in order to maintain product quality. Products with high added value, the inclusion of new products in the production range, quality and timely delivery are very important factors for customer satisfaction. In other words, we should strive to be effective in all processes from the guarantee of food to its transportation.

Food in the world is an area where there is always a need, but where there are many competitors. What should Türkiye do to move its place to higher ranks as a strong producer and exporter?

Today, Türkiye stands out as a country that either produces or processes every food and raw material. However, market conditions oblige first of all to bring quality production to a sustainable position. The most important step to increase our competitive power is to become a brand. In this context, in order to make quality and innovative products more visible, advertisements in various media and stronger and more effective participation in sector fairs should be ensured.

The Middle East market is critical

for us. In addition, Asian and African economies are growing rapidly. What are you doing as union management so that we can get a significant share in these markets as well?

We organize private sectoral procurement committees for our valuable association, where I continue my duty as the Vice President. We bring together senior purchasing and market chain officials operating in the food industry covering the whole world with exporting companies. As IHBIR, we organize national participation organizations and participate in the fairs with info stands. We inform companies to apply for government support and incentives to increase their share in these markets. We also provide training to our members. Participation in fairs, purchasing committees are very important for our exporting companies in Türkiye. At this point, we encourage our members that fairs are a door opening to the world.

What is the motivation that drives Kursad Bey to serve exports in the Exporters' Association?

We export to more than 80 countries in our company. While we export to many countries, we also encounter many problems and deficiencies. We set out with the idea that the best contribution to the solution of these problems is the one who experiences this situation. We are doing our best to increase the share of our country in the world export market with this motivation. Since the first day we came to our union, we have been continuing our efforts to achieve our goals. With our innovative and visionary perspective, our exporters continue to add strength to the country's economy as they do every month.

WE ARE WORKING WITH ALL OUR STRENGTH

If we wanted to introduce Kursad Bey to our readers. Can you tell us about yourself?

Listening to the problems of our exporters and producing solutions, even worrying about their problems, I work with all my strength to be a solution to the problems. I am a Board Member at Eurasia One Foundation and Eurasia Strategic Research Center. I am the President and Board Member of Global Natural and Ustun Plastic Packaging Company. We will continue to increase our exports by putting stone on stone for our country and working with all our strength. I present my love and respect to our esteemed export family.

“With small R&D budgets innovative product can be created”

Stating that an innovative product that will be offered to the right market and target audience at the right time will strengthen the hand of the companies in entering the market, Murat Kolbaşı stated that R&D is not just a budget-related job, based on successful projects.

We talked to Arzum Chairman of the Board, Murat Kolbaşı, about Turkish coffee and the contribution of the Arzum brand to the promotion of our country. Answering our questions as IHBIR NEWS, Kolbaşı also shared with us the developments and activities in the field of innovation.

Do you believe that innovation is the driving force in penetrating markets?

Although innovation is the most important need of today for manufacturers and users, I think it is necessary to open a point in terms of penetrating the markets. Although innovation strengthens your hand in many areas such as competition, preference and recommendability, brand awareness, innovation in terms of penetrating the markets; it should be suitable for the market and today's conditions, and most importantly, it should meet the needs in the markets you target. To give an example, if you offer an innovative product with 5G infrastructure to a market that doesn't provide this connection infrastructure, or if you offer a product that doesn't meet the needs of users, it will be entirely up to a miracle to achieve successful sales figures, no matter how innovative your product is. However, an innovative product that you will present to the right market and target audience at the right time will definitely strengthen your hand in entering the market.

ATTENTION TO AFTER SALES SERVICE

Do innovative products help in capturing customers in every sector?



First of all, I should underline that the product's capture of the customer doesn't depend on only one criterion. Although innovation is an important criterion today in terms of reaching the customer, many criteria must be met at the same time in terms of creating brand loyalty – especially in the small home appliances sector, where dozens of local and international brands compete intensely in many areas such as product, quality, after-sales services.

In this sense, in addition to innovation, your brand awareness, history in the market, future plans, guarantees and services you offer after sales are very important, especially in catching customers. In addition, we can count many criteria such as the quality of your products, service life, meeting the user and today's trends, practicality of use, and

repairability.

MARKET ANALYSIS REDUCES RISK

What are the risks of bringing an innovative product to market?

As with every new investment, it is a fact that there are risks in new products introduced to the market. However, you can minimize these risks with the right market analysis and feasibility studies. Although all your reports and studies reveal risks, one thing you should not forget is that risks are always waiting for you. However, the important thing here is not the risks, but how you can manage these risks. Especially in the last few years, we have faced many crises such as pandemics, production, chip and supply. While many companies continued to enter new



markets and develop new products during this period, many companies stopped their production. The difference between companies that stopped production and continued to grow during this period is the way they manage risks.

BELIEF IN R&D IS IMPORTANT

Can small-scale companies create innovative products without creating huge R&D budgets?

If a company has accepted that R&D is a necessity for its survival in the future, it can create innovative products with small R&D budgets. Today, we see that many young people in our country and abroad have accomplished successful projects with small budgets at home. From these emerging projects, it is clear that R&D is not just a matter of budget. What matters is the company's belief and passion for R&D.

SOUTH KOREA SHAPES COMPETITION

If we were to ask the countries that stand out in innovation in the world, would you list the first ones that come to your mind?

As soon as you say technology, I can put Japan first. In the world today hâlâMany products, especially entertainment, music and game technologies in use, have the signature of Japan and Japanese technologies; next comes the United States. In addition to space technologies, the US's world-leading achievements in the defense industry as well as telecommunications, electric and autonomous vehicles cannot be ignored. Another country I can count is South Korea. Today, South Korea shapes the competition in the global market with the world's best brands in many sectors. Many countries such as Germany, China and Israel are among the indispensables of this list.



Turkish coffee from world squares to festivals

You, as a company, have made many innovations. Could you tell us about your efforts to promote Turkish coffee in terms of setting an example for exporting companies?

As Arzum, we have been giving life to many projects for many years within the framework of our mission to spread the Turkish coffee culture to the world. We proudly carried Turkish coffee to New York twice, the first in December 2020 and the second in 2021. With Arzum OKKA, we said 'The Square belongs to Arzum OKKA' with the dressing work we did in 2021 on the NASDAQ building, one of the most famous buildings in Times Square in New York. We have cooperation with Turkish Coffee Lady in the mission of spreading Turkish coffee culture to the world. In 2022, we made great efforts to make everyone watch the documentary "The Beginning: Stories of Turkish Coffees from Anatolia", shot by the Foundation in 2021 in eight different cities of Türkiye and of which we are one of the main sponsors. The documentary was screened in Hollywood, the heart of the American film industry. The documentary was introduced with events held in Los Angeles and San Diego during the "Turkish Cuisine Week" as part of its world tour. On May 20, we held a launch hosted by the Los Angeles Consulate. Our documentary met with American coffee lovers at the Turkish Festival in Long Beach on May 22 and in San Diego in cooperation with House of Türkiye on May 24-25. All documentary screenings

were enriched by the cultural presentations of Hasan Kale, the famous micro-art and miniature artist, who associates Turkish coffee with art. With the documentary, we had the opportunity to tell all coffee lovers how Turkish coffee, the first method of cooking coffee in history, spread from Istanbul to Europe and the world 600 years ago. In 2022 and 2023, we took our place at the London Coffee Festival with our Arzum OKKA brand.

We held many special events on 2022 World Turkish Coffee Day. Together with Turkish Coffee Lady, we tasted Turkish coffee cooked with Arzum OKKA. In addition to the three-day coffee tasting at ICoffee branches in Jordan, our special event in Germany where world-renowned German chef Alex Wahi made tiramisu with Turkish coffee attracted great attention. Within the framework of World Turkish Coffee Day, we brought together the famous model Tulin Sahin and Maye Musk, the mother of Tesla, SpaceX and Twitter CEO Elon Musk, on social media. The posts of two famous names on the social media platform Instagram, accompanied by Arzum OKKA, received thousands of likes from the followers, accompanied by Turkish coffee. In addition, we organized the event "A Pledge of Allegiance to Turkish Coffee" in Beta Han, the place where Turkish coffee was first roasted in Istanbul. At the Arzum OKKA tasting stand, we offered our guests a full-fledged, foamy Turkish coffee with OKKA and revived the "Ottoman Coffee Ceremony".



frozen foods

Frozen foods constitute one of the largest sectors in the food industry because freezing is a well-known and widely used long-term food preservation process. For consumers, frozen foods represent a practical and simple way to quickly access ready-to-eat products and/or food products and ingredients, providing a year-round supply of seasonal produce. This is because changes in nutritional or sensory properties of foods are low, and sometimes even negligible, if proper freezing and storage procedures are followed. Therefore, the frozen food industry constantly offers opportunities for new and improved products to keep up with consumer demand for safe and convenient foods.

MEETING MARKET EXPECTATIONS

From the point of view of export, it can offer sales and marketing opportunities for products with low commercialization capacity for foreign markets due to shelf life. In particular, IHBIR uses this technology to meet global market demands and expectations, especially for frozen bakery products. An important segment in the bakery sector is traditional and regional foods. Therefore, it is possible to state that

exports of frozen food, especially for the demands of ethnic markets, come to the fore. However, it is important to understand the basic principles of this process, its effects on the possible quality and food safety characteristics of the final product, and the perceptions and expectations of consumers towards frozen products, for meeting market expectations and for the effectiveness of our country's exporters in this market. In addition, frozen food raw materials are also used in other product segments. Therefore, frozen food technology and principles are becoming a remarkable issue for organizations engaged in these fields.

HIGH FOOD SAFETY

The freezing process is mainly used in food technology for two purposes; (i) preservation, (ii) drying. The main principle in both is to render the water contained in the composition "unusable" or "inactive". Because water is an element that facilitates the degradation of foods by biochemical means. Dry foods are much more stable in wet ones, because the water in their composition has a low level of activity. Freezing removes water from the food matrix by forming ice crystals. Although the ice crystals remain in

the structure of the food, the water remaining in contact with the food matrix becomes concentrated with the solutes and the activity of the water remaining in the composition decreases. Therefore, the freezing process is similar to drying, and this is the logic of freezing food. The vital activities or development of most microorganisms stop in environments below the water activity value of about 0.65. Freezing is a food preservation method that can potentially provide a high degree of food safety, nutritional value, and sensory quality. The main advantages of freezing over other preservation methods are that it provides better quality and nutritious products at times and places far from the point of harvest and slaughter. In addition to its importance as a preservation method, freezing can also contribute to improving the sensory properties of some foods. In the past, most frozen foods were cooked before consumption, making an important contribution to microbiological safety. Today, more "modern" frozen foods also appear as pre-cooked meal ingredients and ready-to-eat products that must be reheated before consumption. Additionally, many frozen cakes and desserts (including ice cream) are designed to be eaten directly

from the freezer or while thawing, without any consumer cooking steps. Therefore, the removal of any consumer cooking steps has made microbiological safety an important prerequisite before freezing, determining processes before and during freezing. However, nutritional quality is a growing concern for consumers. The challenge for the frozen food industry is therefore the freezing and preservation of products with optimum sensory and nutritional composition without compromising microbiological safety.

PHYSICAL AND CHEMICAL CHANGE

The basic step of freezing is to lower the temperature of food in order to prevent or at least minimize microbial and chemical changes. However, freezing natural and processed foods causes complex physical and chemical changes. In summary, when the temperature drops below 0°C, the water in the food starts to turn into ice. As a result, the dissolved substances become more and more concentrated in the remaining liquid water, thereby further lowering the freezing point. Frozen natural foods may contain up to 8% water in the liquid phase, depending on their physical structure and chemical composition. This liquid phase contains a complex mixture of cellular metabolites in a concentration that is not physiologically high. Also, as ice crystals grow in natural food structures, they can break down the intercellular and intracellular walls and membranes, causing the release of previously compartmentalized substrates and enzymes and aggregation to participate in reactions. Thus, although storing foods at sub-zero temperatures potentially reduces the rate of reaction with potentially detrimental consequences for safety, quality and nutrition, changes in substrate concentration and access to enzymes can increase the rate of such reactions. Because of the physical and chemical changes that can continue to occur in the frozen state, many foods, especially vegetables, need to be heat treated before freezing to ensure they have an acceptable shelf life. Pre-freezing heat treatment, commonly known as "scalding", is primarily designed to inactivate enzymes responsible for detrimental changes in sensory quality. However, boiling also carries the goal of preserving certain nutritional components, such as ascorbic acid (vitamin C), which is



susceptible to enzymatic oxidation and degradation.

SENSITIVITIES DIFFER

Apart from beneficial ones such as probiotics, microorganisms that are important in food can generally be grouped into those that cause spoilage and those that have the potential to cause disease in humans (pathogens). Food preservation systems tend to aim at preventing the growth of spoilage organisms and ensuring that harmful levels of pathogens (or their toxins) are not present. Because freezing essentially stops the activity of microorganisms, it can control microbiological spoilage indefinitely, provided the temperatures are low enough (e.g. below -10°C). However, many microorganisms, like many other biological systems, can survive freezing conditions and retain their ability to multiply when conditions become relatively more favorable.

Although there are no generally applicable rules for the survival of pathogens below freezing, some groups of organisms vary widely in their susceptibility or resistance to the effects of freezing. Higher organisms, such as protozoan parasites, are very sensitive to freezing and cryopreservation. Gram-negative bacteria are more resistant than protozoa. But they tend to be more susceptible than Gram-positive bacteria. Viruses retain their ability to infect host cells after freezing, and bacterial spores are completely resistant to the effects of freezing. Molds and yeasts differ in their susceptibility to freezing and freezing. The survival of pathogens is an important consideration for consumer health. In general, if frozen food has the potential to harbor pathogens at risky levels prior to freezing, it will require further processing (for example, cooking) to reduce these pathogens to safe levels.

SOME OF THESE ARE HIGH FROST RESISTANCE

Factors influencing freezing effects include freezing rate, food formulation, packaging material and dimensions, storage temperatures/ time, thawing conditions, and the physiological state of the microorganism during cooling (e.g. growth stage). The first stage of the process, where the product is cooled to freezing temperatures, can destroy or damage sensitive organisms through cold shock. Intracellular or extracellular ice crystal formation physically damages cells, and further cooling to final storage temperature may cause further damage. Here, slowly freezing ice crystals affect the stability of proteins within the microorganism cells, increasing the proportion of soluble solids. Physical damage usually occurs as cell membrane damage. Cell membrane damages, freezing and thawing cause a loss of integrity in the membrane glycoprotein structure. Under certain conditions, it can cause cell death as a result of the increase in extracellular osmotic pressure and the outflow of water from the cell due to the membrane-lipid phase transition. Some microorganisms have high frost resistance. These creatures have evolved mechanisms to minimize frost damage. These organisms produce ice nucleation proteins, antinucleation proteins, and antifreeze proteins that minimize frost damage.

Living cells, biological materials (plant and animal tissues) in their natural state can typically hold up to 80% water by mass on a wet basis. Therefore, the foods obtained from them contain similarly high proportions of water. After cold storage, thawed food products should ideally be indistinguishable from fresh produce. This condition is easier to achieve in some foods than in others.

THREE MECHANISMS THAT CAN REDUCE QUALITY

The formation of ice crystals can reduce the quality of food by one of three mechanisms:

(a) Mechanical damage to the food structure. The specific volume of ice is about 10% greater than that of water. Therefore, the expanding ice crystals compress the food matrix. Ice crystal expansion in some fruits, such as strawberries, severely damages them due to their delicate structure, and the fruits become "wet" as they thaw. On a macroscopic scale, during rapid cryogenic freezing, thermal stresses from expansion cause cracks in the food structure.



(b) Cross-linking of proteins, especially in meat and its products. During the freezing process, the decrease in the amount of fluid water available to the proteins and the increase in the electrolyte concentration lead to the aggregation and denaturation of actomyosin.

(c) Limited reabsorption of water during dissolution. This is related to the mechanism in item b. During thawing, the tissue may not be able to reabsorb the melted ice crystals back to the water content before they were completely frozen. This leads to undesirable "trickle loss" and tissue stiffness in thawed muscle, which are the main qualities that determine quality.

The mechanisms in the last two items are often the main causes of deterioration in the quality of frozen food. In other words, it means that

deterioration in quality is mainly caused by processes occurring in frozen storage rather than initial freezing.

Both the possible harm to the food and its consequences on the quality assessed by the consumer depend on the type (biological structure and structure) of the food. In the quality analysis of frozen foods, it is of great importance to perform the application quickly in their frozen state without the need to thaw the food. In, consumers often question whether thawing and refreezing is risky for food quality and safety. With the right applications, hygienically, in other words, by preventing microbial contamination during thawing, the effect of multiple freezing on quality is generally tolerable.

Prof. Dr. Nevzat Konar

Venezuela market step by step

The current constitution in Venezuela is the Bolivarian Constitution, which was adopted by popular vote on December 15, 1999. According to the Constitution, Venezuela; it is a democratic, federal, social state based on justice and law. The principle of separation of powers is applied in Venezuela. However, unlike conventional systems, there are 5 powers instead of 3. These are legislative, executive, judicial, citizenship and electoral powers. Venezuela is a Federal Republic governed by a presidential system (federal presidential republic). Administratively, it consists of 23 federal states, the Capital Federal District, 2 federal territories and 1 dependency covering 72 islands. Caracas is the capital of Venezuela.

OVERVIEW OF THE VENEZUELA ECONOMY

The GDP, which is estimated to be 97 billion dollars in 2023 according to current prices, is expected to be 101 billion dollars in 2024. According to current prices, Venezuela is the world's 70th largest economy among 196 countries as of 2023. [USA #1 (\$27 trillion), Türkiye 19th (\$1 trillion)]. GDP, which is expected to increase by 5% in 2023 compared to fixed prices, is estimated to increase by 4.5% in 2024. According to current prices, Venezuela ranks 132nd in the world with a per capita income of \$3,641 in 2023. [Luxembourg 1st (\$132,372), Türkiye 75th (\$11,932)] (IMF-2023)

According to consumer prices, which was 400% in 2023, the annual average inflation rate is estimated to be 200% in 2024. The ratio of current account balance to GDP, which is estimated to have a surplus of 5% in 2023, is expected to yield a surplus of 6% in 2024. (IMF-2023)

The strongest aspect of Venezuela's economy is its rich oil reserves. However, its oversensitivity to oil prices is also the weakest aspect of its economy. Thus, the decrease in oil prices due to its economy, which is dependent on oil revenues, affects the country's economy negatively. In the evaluations of the credit



rating agencies made in the past regarding the Venezuelan economy; In terms of the economic structure, the government's unpredictable decisions, lack of transparency and excessive dependence on oil, and banking and exchange rate risk were emphasized. High (hyper) inflation is a long-standing chronic problem of the Venezuelan economy. Inflation has increased its rate of increase since 2013, reaching triple digits in 2015 and four digits in 2017. The new currency, which was introduced by adding 5 zeros in August 2018, is rapidly losing value in the hyperinflationary environment.

FEATURES OF THE VENEZUELA MARKET

The brand of the processed product must be registered with the Ministry of Internal Trade of Venezuela (El Ministerio del Poder Popular de Comercio Nacional) Intellectual Property Autonomous Services (SAPI-El Servicio Autónomo de la Propiedad Intelectual).

The franchising system is quite common in the country. It is estimated that more than 500 franchising companies operate, of which approximately one third is in

the food field.

A significant part of the sales, especially in food and basic consumer goods, is carried out by supermarket and pharmacy chains. In addition to supermarkets, most of which are privately owned, a small number of public supermarket chains operate. Central Madeirense, Excelsior Gama, Unicasa and El Patio are the largest private supermarket chains. Farmatodo, Locatel, SAAS, Farmahorro are the most common pharmacy chains. Supermarket and pharmacy chains mostly work with a local distributor, and the main supply is made by domestic or foreign distributors.

Due to the recent reduction of import and price controls, a large number of grocery-style small businesses called bodegon (their number is estimated to be over 100 thousand) have become widespread especially to sell imported products. These businesses, especially the products imported from the USA, sell in foreign currency without registering them.

HIGH CONSUMPTION TENDENCY

Since Venezuela has been under the influence of the USA for many years, consumption patterns have



been shaped by the US culture and this effect still continues. Propensity to consume is extremely high at every income level. Brand habits are common. Especially middle and high-income groups show great interest in shopping malls (AVM) where global brands are very common. In this sense, it is important that well-known brands take place in these shopping malls.

As a result of the brand and consumption culture that is dominant in the country, it is important for the brands in the middle and upper segments that have just entered the market to engage in face-to-face promotion and advertising activities. Since Venezuelan consumers prefer the Venezuelan brand instead of a foreign brand they do not know, another option for our exporters is to work in the form of private label production.

It is not possible to talk about a public procurement tender open to everyone, since public procurements are mostly made by public companies with the effect of domestic and foreign economic conditions in the country.

TIPS AND SUGGESTIONS

Supermarket chains are the main way to reach middle and high income consumers in Venezuela. Our country's exporters can reach grocery stores and markets through large local suppliers (wholesalers/



distributors). Large food importers/wholesalers supply products to some supermarket chains and especially to provincial retailers, depending on product brands and quantities. Distributors tend to take over the sourcing of smaller niche markets rather than large supermarket chains.

Some large supermarket chains may also have sales departments that supply some small markets. Local importers can obtain consultancy services from well-known international auditors on obtaining quality certificates for the product offered by the exporter.

COUNTRY ADVANTAGES

- Private sector can freely import food products from any origin and seller.
- The public authority is no longer the dominant power in agriculture and food imports, and free market principles have increased their validity.
- Venezuelan consumers consider imported products to be of high quality.
- There are increasing opportunities to export products to higher-income consumers through bodegons.
- Local retailers can see our country's products and suppliers as a reliable source in terms of volume, standards and quality.
- There are good and warm relations between the media and public authority in Venezuela and our country, and consumers are partially aware of Turkish brands and products.
- Private label production facilities are available.
- Venezuelans have a positive attitude and perception towards imported ready-to-cook food products.
- The Venezuelan economy is increasingly dollarized and the US dollar circulates freely in the country.

DISADVANTAGES OF THE VENEZUELAN MARKET

- Oil sanctions imposed on Venezuela limit importers' access to foreign currency and international credit.
- Imported products are expensive for most price sensitive consumers.
- Some countries, especially Middle Eastern countries, have trade agreements with Venezuela that give preferential taxes for some countries and are allowed to receive payment through the exchange of products or oil.
- Obtaining an import permit and food registration number can be difficult for some products.
- Hyperinflation and devaluation harm consumers' ability to pay for goods, with only 15% of the population able to afford US dollars.
- Problems in the supply of energy and utilities cause problems with effective export procedures and electronic transactions.
- Consumption decreases may be encountered in Venezuela.

FOOD STANDARDS APPLIED IN THE COUNTRY

The Venezuelan government implements the United Nations' Custom Computerized System



(SIDUNEA) in most Venezuelan ports of entry. With this system, customs clearance takes about five to eight business days. However, importers may report delays in this process. By law, only companies with local Venezuelan staff and special customs agents have the right to clear shipments through customs. A private agent evaluates customs, port fees and taxes and fills out the paperwork. Generally, the special agent's fee is one percent of the CIF value plus any other expenses incurred at the time of discharge.

- All imported goods presented at ports of entry must be formally declared to the National Integrated Tax Administration Service (SENIAT) authorities within five days of arrival. A fine may be imposed on any shipment if customs clearance is made more than five days from the date of arrival.

- If an importer delays or refuses to claim a product arriving at Venezuelan ports, SENIAT seizes the unclaimed goods and sells the goods at auctions unless high fines and storage fees are paid promptly. All shipments must be made on a direct shipment basis. Customs regulations stipulate that the buyer owns the shipment and is responsible for all customs payments. Importers must register all their products with the Ministry of Health's Food Inspection Unit before placing the product on the Venezuelan market.

TIPS AND SUGGESTIONS FOR FOOD EXPORT

- Exporters can contact importers, wholesalers/distributors or supermarkets through the Venezuelan Association of Supermarkets (ANSA), Venezuelan Chamber of Food

Industry (CAVIDEA) or Venezuelan American Chamber of Commerce (VENAMCHAM). When choosing a partner (an agent or representative), the potential partner's business history can be checked through local food and/or trade associations before signing perpetual contractual arrangements.

- Supermarket chains are strong negotiators and may demand exclusivity, especially if they can maintain high volumes of product offered. If the product price set by the exporter is outside the local market standards, importers may instead decide to approach local distributors who can offer a better price or the same price with lower logistics loads. It should not be forgotten that competition is based on quality, price and service.

- Establishing relationships with major importers and wholesalers/distributors is important. Personal visits/meetings are highly recommended and local food importers are willing to travel to meet exporters eventually. However, given the situation in Venezuela and the restrictions on direct flights to Venezuela and the distance, sometimes these meetings need to be held virtually.

Investing in developing your own market intelligence to identify the relevant needs of buyers and consumers. Local companies (including Venezuelan survey companies) and food associations can provide relevant information/data to identify niche markets, consumer trends, market development opportunities and recommended business practices.

- Consider consolidation when exporting small quantities of products.

- Trade events such as the National Restaurant Association Show or the Americas Food and Beverage Show, which offer opportunities to meet and train Venezuelan importers, can be attended. Local trade shows in Venezuela are not currently held.

- Many retailers tend to display promotional and marketing materials at the point of purchase for their Turkish origin brands and products, as long as the marketing/communication materials are in Spanish.

- It is important to work closely with local importers to comply with food import regulations to facilitate registration and import of food products and to minimize port of entry risks.

RETAIL TRENDS OF THE COUNTRY

- Venezuela has been through a deep economic, political and social crisis that has had a significant impact on consumers. The loss of purchasing power of the average Venezuelan, a product of hyperinflation, by seeking alternatives to earn additional income; In order to overcome the crisis, they changed their purchasing and consumption habits and led them to reinvent themselves.

- Even before the coronavirus pandemic, Venezuela's deep economic crisis had a crippling effect on the country's children, with an entire generation at risk of starvation and malnutrition. Although food consumption per capita is low in Venezuela, food consumption per capita, which was 13 kilograms in 2018, increased to 25 kilograms in September 2021, driving the growth of the food and beverage market.

- According to the information obtained from the "Venezuela Retail Radiography 2021" study organized by the National Association of Supermarkets (ANSA), as of 2019, approximately 5,884 supermarkets and 98,307 corner-stores (abastos) are active in the country. ANSA's (currently being updated) estimates reflect a growth of 14% in the supermarket chain format and 9% in hypermarkets. In addition, the sector recorded a total growth of 7.4% by opening 5 new stores in 2020 and 44 new stores in 2021.

- Traditional corner-stores dominate retail sales predominantly in middle- and low-income neighborhoods, but the Bodegon type of retailer has also emerged and expanded in Venezuela. Bodegon's only offers consumer-

oriented products imported from abroad, particularly the United States and Europe. Market dynamics in the country are changing. Today, Bodegons are visited more often than traditional supermarkets, with consumers spending about \$10 more per month than they do in traditional supermarkets. Product prices in Bodegonlar are very competitive compared to supermarkets. The reason for this is the tax exemption applied to food imports in the country. These products are offered for sale in US dollars, but payments can be made with VES at the current exchange rate.

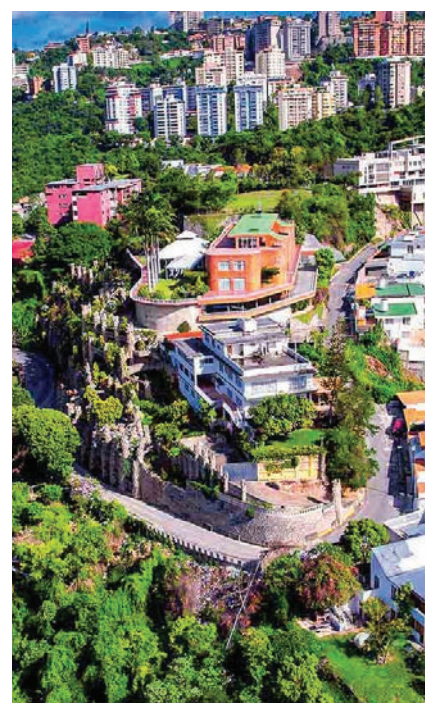
- According to ANSA, the most shopping days in traditional supermarkets are Friday and Saturday; Most shopping for bodegons is done on Wednesday, Thursday and Friday. Online commerce with delivery services has also become a good option for consumers to purchase mainly food and basic cleaning supplies. Retailers have begun to adapt to new consumer habits by expanding their private label portfolios, incorporating regular special offers, improving logistics to provide delivery service, adopting digital tools to better connect with customers, and even expanding business hours.

INTEREST IN LOW PRICE PRODUCTS INCREASED

COVID-19 has forced food manufacturers to adapt to new consumer trends. These trends include greater consumer interest in healthier lifestyles and a growing preference for lower-priced food products for individual consumption and including smaller packaging. New trends for manufacturers make it necessary to use innovative sales and communication channels and develop new products to communicate directly with final consumers. Based on a research conducted by ANSA, the Table below shows the distribution of food products that a consumer buys in that month when he enters a traditional supermarket.

VENEZUELA

Official Name	: Bolivarian Republic of Venezuela
Officially No	: Spanish
Surface Area	: 916,445 km2
Population	: 28.2 million
Currency	: Venezuelan Bolivar
Capitol	: Caracas
Government	: Presidential system, Federal Republic



CONSUMER TRENDS IN VENEZUELA

- Canned products, especially peas, corn and mushrooms, are indispensable in the country due to their longevity.
- Frozen foods such as frozen french-fries are very popular. Local potatoes are not ideal for french-fries, and there is little potato cultivation in Venezuela.
- In 2021, Zelle and Pipol Pay platforms became widespread as payment instruments.
- Consumers prefer retail points within walking distance to save fuel costs.
- Retailers focus on improving supply, quality and convenience to strengthen consumer loyalty. This includes investing in store lighting and customer service quality.
- Retailers develop their own in-house brands. For example, Excelsior Gamma Supermarkets has produced its own ice cream brand.
- Packaging styles are changing in terms of size and manufacturing materials. For example, some canned foods can now be found in solid plastic containers or cardboard packaging, or some products, such as drinking milk, can now be sold in bags.
- Supermarkets are developing store sections dedicated to entrepreneurs to support local production. In Venezuela, most of the new businesses currently operate in food-related activities.
- 23% of households work from home and conduct product information and research through social networks.
- Stores implement product efficiency strategies, including displaying in-store products that provide proven turnover and profitability.
- For some wealthier Venezuelan consumers, trends are more important than price. These consumers are highly influenced by food trends in other countries.

INVESTMENT OPPORTUNITIES FOR TÜRKİYE

- Even though the economic, political and social situation in Venezuela causes foreign investors to flee the country, the potential of the country is in a position to provide high profitability for investments.
- Venezuela, which has the world's largest oil reserves and underground riches such as natural gas, gold, iron, bauxite and coal, is very attractive in terms of energy and mining investments. Considering that our country is dependent on foreign sources for most of the products



that depend on natural resources, investment in these sectors will not only provide a ready market, but also contribute to our country's input supply security.

Considering the favorable climate, large arable land, and unlimited water resources, the agricultural sector is one of the areas that can be invested. The Government, which could not revive production in the areas it had expropriated before, wants to increase production by renting agricultural lands to foreigners. In addition, it is possible to pay land rental expenses with the produce produced. Venezuelan Minister of Agriculture, during our various meetings and meetings with him, stated that 10 million hectares of land in the country are suitable for plant agriculture and 50 million acres are suitable for animal husbandry; according to the current reports, 150 thousand acres of land is reserved for cotton, 50 thousand acres of black beans, 3 million acres of corn, 1.7 million acres of soybean, 800 thousand acres of rice, 200 thousand acres of sunflower and 300 thousand acres of sugarcane. The government wants to carry out production with foreign investors through strategic partnership or mixed company models. According to the proposed model, the Venezuelan side will provide land, legal and physical security, purchase guarantee, fuel, machinery and labor, while foreign investors will provide seeds, fertilizers and chemical inputs, know-how, technology and consultancy. The product obtained will be shared depending on the partnership structure at the time of the agreement and the foreign investor will be able to sell their share to the state or to the domestic and foreign market.

- Forest areas concentrated especially in the states of Bolivar and Amazon are waiting for investments, especially timber production. The region is very suitable for tropical tree species, especially Caribbean pine, acacia mangium and eucalyptus. The Venezuelan Government is opening the sector to foreign investors by considering ecologically sustainability.

The beaches and islands stretching along the Caribbean, forests and nature stretching towards the Amazon, lakes and rivers make Venezuela an attractive country for tourism investments. Small and large islands

of Venezuela are open to sea-sand-sun tourism 12 months of the year. In addition, the inner parts of the country are quite suitable for nature tourism. As the country has an important infrastructure in terms of hotel and transportation, tourism will revive with the opening of the country again. With the development of tourism, THY will also increase the number of flights and serve both Turkish tourists and especially the countries around Türkiye.

- Venezuela, which has traditionally been an important production infrastructure in the textile and footwear industry, has the potential to develop exports to Caribbean countries. This potential can be evaluated with additional investments to be made in the sector.

The petrochemical industry is also developed in Venezuela, which has an oil-based economy. By making use of the technical and physical capacity of the country with the investments to be made in the sector, export opportunities can be provided both to the domestic market and to other country markets, including Türkiye.

The metal industry is an attractive investment area in Venezuela, which is very rich in mining resources. In addition to cheap raw materials, the fact that energy, which is one of the most important cost items of the sector, is incomparably cheaper than other countries, and increases the profit margin in the sector.

There are thousands of companies and factories in the country that are inoperable or working with low capacity. Government officials plan to transfer them to foreigners through profit sharing. According to the agreement to be made, the foreign investor will make the necessary investments, 55% of the production profit will be given to the state, and 45% will be left to the investor.

- If the country regains its former wealth, the profitability of investments in wholesale and retail trade will also be high.

- According to the news reflected in the media, many infrastructure projects planned to be completed so far are still ongoing. Considering the material and equipment shortage, especially the financing that the country is in, it is seen that the housing project, in which limited resources are channeled, will continue to be the most important business opportunity in the sector in the coming period. It is reported that infrastructure investments will be increased in order to eliminate the problems experienced in the provision of basic public services, especially electricity and water. In this sense, it has been announced that the electricity infrastructure will be renewed first.

