

Our Food Waste Prevention Practices

Performance Indicator	Target Year	Target	Performance of 2021	Status by Target	Base Year / Status
Our food waste tonnage/food sales tonnage	2030	50% ↓	22% ↓ (4.21)	Ongoing	2018/5.36

As the leading retailer of our country, we support sustainable agriculture considering that we are responsible for preventing waste of food products that produced by many people with great efforts. Approximately 1/3 of the food produced in the world goes to waste, and to prevent the waste arising from our own operations and to ensure reuse of consumable foods in accordance with the food recycling hierarchy, we carry out measurement, analysis, categorization and improvement, and make collaborations throughout our value chain. In addition to these, we raise awareness of our customers in this respect, and give them ideas to prevent waste, that they can easily implement in their own life. In order to prevent post-harvest losses in the cropland, we started to implement a model where the whole crop is used, we sell those products which are in compliance with our sales criteria and use other products preserving their nutritional value in other production areas such as jam, sauce and fruit juice.

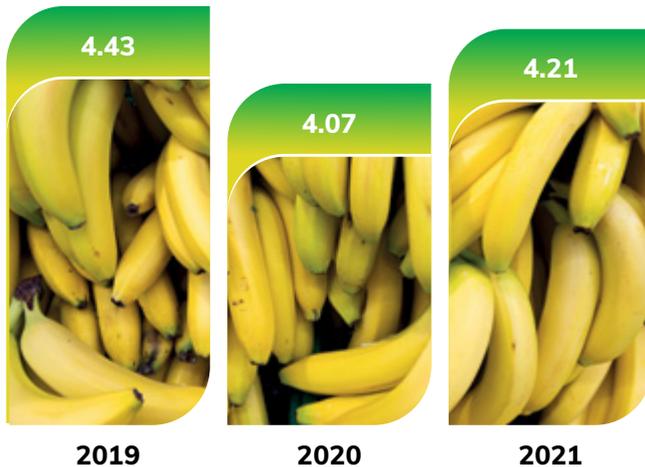
As Migros, we made a collaborated work with the Turkish Food Safety Association (GGD) to determine the consumer perception and behaviors causing food loss, titled "Food Loss and Label Reading Research". The results of the research carried out by Nielsen Research Company, revealed that the difference between the Expiry Date and Best Before Date (BBD) appearing on food labels is not accurately known by consumers, and as a direct result of this confusion, 72% of consumers stated that they would throw away food that is suitable for consumption. According to the results of the research, we inform and raise awareness of consumers regarding the difference of the consumption date, and in order to prevent food waste, we share the documents for informing our consumers on the practices to be carried out in daily routine, through our social media platforms. Moreover, we have ongoing works to publish guidance needed by the industry on the legislation side, in order to put up the product for sale after the Best Before Date.



Our Performance and Targets

In parallel with Sustainable Development Goals and as a member of the Food Waste Coalition of Consumer Goods Forum (CGF), we committed to reduce our food waste ratio by 50% by 2030. Accordingly, we set it a goal to reduce the ratio of our food waste tonnage to our food sales tonnage, by 36.6% by 2025 compared to the base year of 2018 in mid-term, and by 50% by 2030 in long-term. Our food waste ratio was 5.36 in our base year and became 4.21 in 2021 with a reduction of 22% in 3 years. It was due to the Covid-19 pandemic that we had less waste rate in 2020 compared to 2021.

Our food waste tonnage/ Our food sales tonnage (%)



Our projects to minimize food losses and wastes are as follows:

- › Operational improvements
- › Extending product shelf life by technological methods
- › Raising the awareness of our consumers
- › Delivering such food to those in need
- › Donating such food to feed animals
- › Energy production from organic waste
- › Reducing food waste of our suppliers

Ratio of our food waste tonnage to our food sales tonnage, which we aim to reduce by 50% by 2030, was reduced by 22% in 3 years.



Extending The Awareness of Consumers

Besides our projects and practices to reduce food waste, we also make efforts to ensure that the matter of food loss is understood by our consumers.

As a first step to make efforts to reduce food waste globally, awareness of consumers should be raised, and consumer attitudes should be changed. Accordingly, we participated in the Save Your Food campaign launched by the United Nations Food and Agriculture Organization (FAO) and our Ministry of Agriculture and Forestry, to raise public awareness of food waste. We have started to provide information with infographics and videos through our stores and social media channels, on issues such as the difference between the Expiry Date and Best Before Date, use of residual food with different recipes and storage of food under proper conditions. Also, we supported the workshops organized for consumers.

In addition, we provided online training 'Expiry Date Discount Application' to 865 employees, 'Save Your Food' training to 13,985 employees and 'Migros Store Zero Waste Practices' training to 29,848 employees.

Under the leadership of the Ministry of Agriculture and Forestry and with the support of FAO, we prepared an important guideline to support retailers on food waste. In this guideline, we share recommendations aimed at reducing food loss and waste that may arise during the operations in the industry as well as detailed information on the exemplary practices to save unsold food and for transforming organic wastes into energy and compost. Our important guideline will assist enterprises in creating a successful food management strategy.

We pioneered the research on consumer perceptions and behaviors leading to food loss, organized by the Turkish Food Safety Association (GGD) and conducted by Nielsen, with the contributions of leading companies in the retail and FMCG industry.

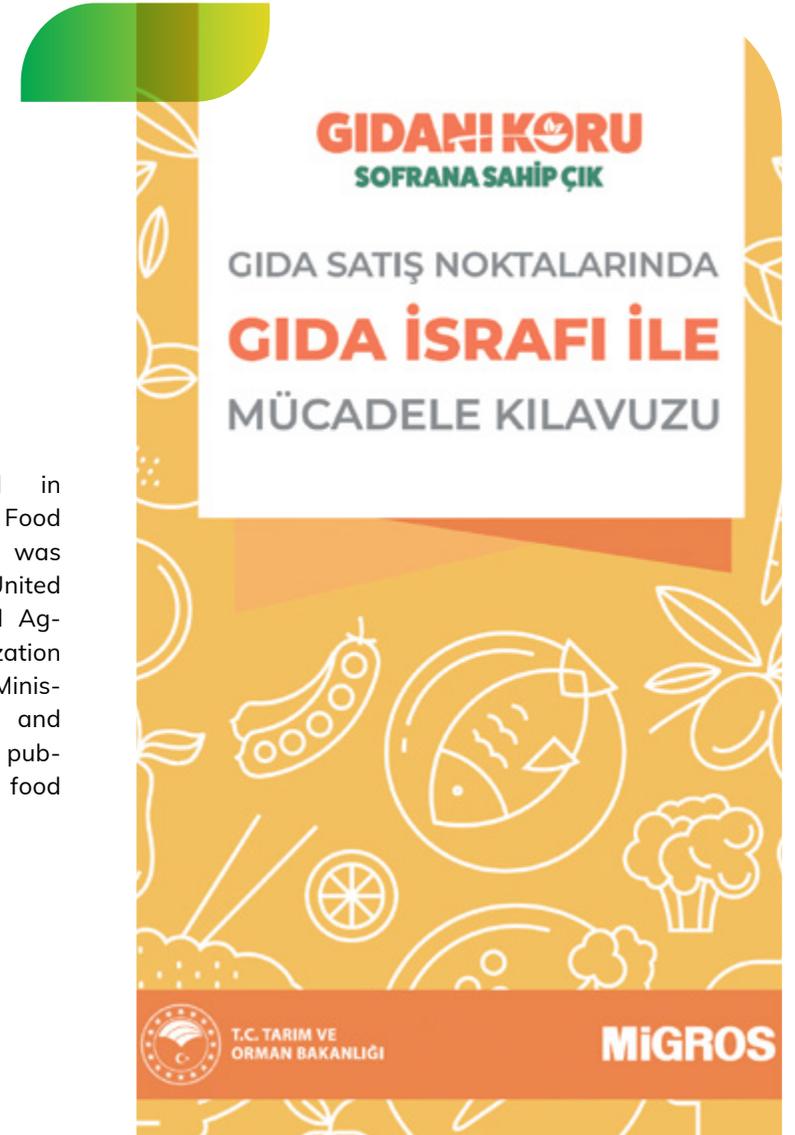
2018

We participated in the Save Your Food campaign, which was launched by the United Nations Food and Agriculture Organization (FAO) and our Ministry of Agriculture and Forestry, to raise public awareness of food waste.

2020

We prepared the Guide to Combating Food Waste at Food Points of Sale.

2021



Our Respecting Food Project

To prevent the waste of the food products that do not satisfy the sales standards in appearance but remain nutritious and suitable for consumption, we deliver these products to those in need with “Whole Surplus (Fazla Gıda)”, a web-based donation platform. With this next generation application that we started to use for the first time in 2017, we again act as a trailblazer in Türkiye and deliver donatable food products to those in need. Thus, we ensure delivery of foods to correct addresses in appropriate amounts.

With a donation of 2,781 tons in 2021, we have been supporting the delivery of more than 12.78 million meals to those in need since the beginning of our project. You can watch the detailed video of our project on our **YouTube channel**.



Within the scope of our “Respecting Food” project, we put up for sale our fresh products and ripe fruits and vegetables with close Expiry Dates at a discount of 25 to 50%, and we endeavor to prevent them from going to waste. With these discounts, we prevented the waste of 3,967 tons of fresh products such as fruits, vegetables, meat, and chicken in 2021, and saved a food equivalent to the annual turnover of 10.7 MigrosJet stores.

With our Respecting Food project, we delivered more than 12.78 million meals to those in need.

By delivering our products with close Expiry Dates to our consumers at discounted prices, we prevented 3,967 tons of food loss.



Our Surprise Box Project

With the “Surprise Box” project, which resounded all around the world, we both prevent food waste and offer many products to our consumers at advantageous prices. Within the scope of the project on the mobile application “Surplus (Fazla)” for “Whole Surplus (Fazla Gıda)”, a web-based donation platform, our Surprise Boxes with two price options of TRY 25 and TRY 50 were delivered many products such as fruits and vegetables, non-durable meat products and fresh and dried foods, to our customers at a discount of 50%. Our customers who place an order through the mobile application can receive their Surprise Box from respective stores. The project started in 3 stores, then adopted by 14 stores, 7 Migros and 7 Macrocenter stores, and we aim to make this beneficial project widespread in other stores as well. In addition, we again maintain our industrial leadership as the first retailer to have applied in Türkiye the Surprise Box project which attracted too much attention abroad as well. In 2021, we prevented the waste of 536 kg of food and earned TRY 3,050 on a potential waste with our Surprise Box project.



Operational Improvements and Discounted Sales

As Migros, we carry out our projects to reduce food waste due to food spoilage, following our goal of reduction at source, which is one of our preferred methods. We identified that vegetables and fruits comprised 71% of our food waste and we carried out various studies for this perishable product group.

In order to prevent losses arising from overstocking, we use an automated ordering system. We use a smart algorithm that can calculate the order, previous orders, stock status and sales of fruits and vegetables, and guarantee a sufficient amount of shipment with the assistance of artificial intelligence image processing system. With this organization, we prevent overstocking and ensure correct ordering. In addition, we made this system widespread in all our stores to get efficiency most from our efforts.

Our Right on Time Project

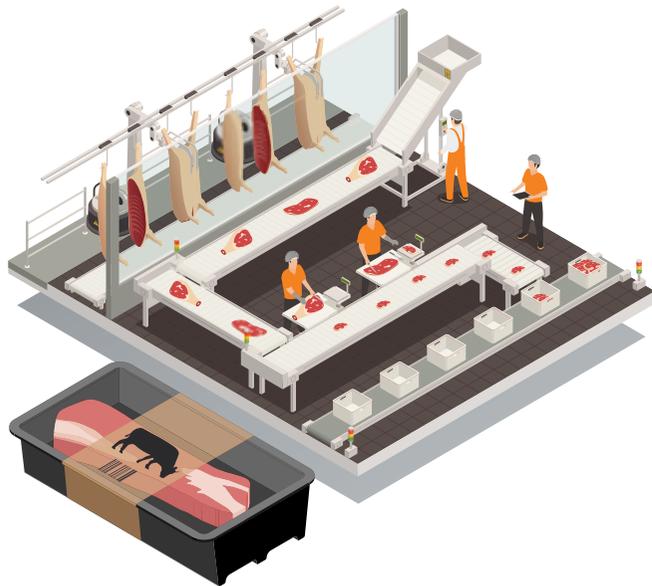
After announcement of this year as the “International Year of Fruits and Vegetables” with a decision of The United Nations General Assembly, we supported the campaign carried out by FAO. With our “Right on Time” project, we pointed out the importance of seasonal consumption of fruits and vegetables, and every month we carried out awareness-raising efforts for products appropriate for consumption in the then current period. In this regard, we encouraged reduction of food waste by sharing the proper conditions to preserve fruits and vegetables and tips to extend food life as well as delicious and practical meal recipe suggestions.



Extending the Product Life of Red Meat

Thanks to our innovative production line and expert butcher staff, MİGET makes efforts to use our products in the most effective way possible, minimizing loss and extending the shelf life of our products. With a new investment of 4 million Euros, we increased our annual production capacity of packaged meat by 66 percent, while reducing the plastic material used by 25 percent.

By using Skinpack Packaging Technology, we completely deaerate our red meat products by using vacuuming during their packaging, and by this means our products are both protected from environmental effects and their shelf life is doubled. We also continue with our efforts aimed at making widespread this technology in our stores to prevent food losses.



- We have implemented robust cold chain practices. This allowed us to extend the shelf life of our products by about 30%.
- The aim is to reduce food loss in the entire process with standard end-product production through MAP (Modified Atmosphere Packaging) packaging technique.
- As of 2019, we switched to “Zero Inventory” program for our goal to 40% extend the shelf life of calf carcass, which is used as a raw material in production, but this program halted due to Covid-19.
- 5.400 kg of Mono Material were recycled by being converted to mono material in MAP (Modified Atmosphere Packaging) packaging material.
- We also recycled 40 tons of packaging materials used in our products apart from Mono material.

Our “Fresh Leftovers to Our Four-Legged Friends” Project

We have been carrying out the “Fresh Leftovers to Our Four-Legged Friends” project since 2014. We donate food products that are still consumable but have close Expiry Dates to HAYTAP (Turkish Animal Rights Federation) to be fed to forest and stray animals. Within the scope of the project, we contributed to feeding of animals with a total of 4,423 tons of food aid up until today. In addition, we placed specially-designed animal food containers in front of our 227 stores so that stray animals living around the stores can be fed in a clean and healthy environment. In our stores located in regions where street animals are abundant, we allocate food containers to our relevant stores in line with the demands. In addition, with the donations we made during the year from our warehouses, we contributed to feeding of farm animals with 255.8 tons of food.

We donate food for feeding of stray animals in collaboration with HAYTAP.

Our Black Soldier Flies Project

With the “Black Soldier Flies” project, we ensured the waste of 13.6 tons of food in a way that causes less emission, in collaboration with Whole Surplus (Fazla Gıda). By this means, we prevented a CO₂ emission equal to 1-year consumption of 7 houses by avoiding an emission of 48 tons.

Our Energy Generation Production from Organic Waste

With the efforts we carried out, we support the transformation into biocompost of non-consumable organic wastes and their use for energy recycling. We separate at the source the food waste generated by our Gebze, Esenyurt, Bayrampaşa and Torbalı Distribution Centers and Izmir Fruit and Vegetable Warehouse.

Energy Generation from Organic Waste	2019	2020	2021
Biogas (dm ³)	520	425	580
Electricity (kWh)	1,012	899	1,223
Compost (tons)	2,851	2,458	2,610
Organic waste sent to biogas plant (tons)	5,200	4,255	5,800

In 2021, we obtained energy from biogas obtained from our food waste, to run a 100-watt lightbulb for 507,036 days.



Reducing Food Waste of Our Suppliers

In addition to our fighting to reduce food wastes created after our operations, we also raise awareness of and support our suppliers in reducing their food wastes. Accordingly, we participated in the “10x20x30”, launched by World Resources Initiative (WRI), as the first Turkish retail company, with 23 volunteer suppliers which was. This initiative, in which 10 retailers invite 20 supplier companies globally, is aimed at supporting throughout the supply chain the goal of reducing food waste 50% by 2030, which is included in the Sustainable Development Goals 12.3. We, as Migros, provided information and training on the efforts carried out globally to reduce food waste and started to work to measure and reduce food waste rates of our companies. We support our suppliers in recording food waste, with the use of the Global Food Loss and Waste Prevention Protocol and within the scope of the ATLAS program which was created by WRI.

We are the first Turkish company among the 10 retailers that participated in the WRI 10x20x30 initiative.

We lead the way for everyone in the retail industry with our guideline.

TAGEM Project

As Migros, we became a supporter of the project carried out by the Ministry of Agriculture and Forestry General Directorate of Agricultural Research and Policies (TAGEM). To ensure that fresh fruits and vegetables can be transported from cropland to shelves under suitable conditions without rotting or spoilage, hand or skin disinfectants that contain no chemical substances are tested for use in agriculture. If the project succeeds, including the disinfectant product of our production, natural substances can be used in agriculture to eliminate the harmful effects of bacteria, viruses and insects, instead of chemicals, and thus, shelf life of fruits and vegetables will be extended and approximately 26 tons of an annual food loss will be prevented.

Harvesting All Products of Field

We make efforts to purchase and use crop from the fields in various regions of Türkiye.

Throughout the year,

- › We purchased 620 tons of apple from Antalya, 68% of which to be sold in our stores and 32% of which to be sold to fruit juice companies.
- › We purchased 758 tons of kiwi in Eastern Black Sea region from Rize to Hopa, to be sold for fruit juice or animal feed.

SOURCE REDUCTION:

With the developed automated ordering system, we designed the product stocks in our stores to prevent food waste. We offer discounts of 25% to 50% on meat and dairy products, dry food, and ripe fruit and vegetables with close the expiry dates.



FOOD AID TO THOSE IN NEED:

We deliver foods that do not meet the sales standards visually but remain nutritious and suitable for consumption to people who them need on the donation platform.



FEED ANIMALS:

We feed street animals with food that is not suitable for sale but remain suitable for consumption.



INDUSTRIAL USES:

We enable the conversion of waste vegetable oils delivered by our customers into biodiesel.



COMPOSTING:

We ensure that organic wastes that cannot be consumed are converted into biogas and fertilizer.



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