**Chapter 12: International Comparison: Food Waste and Policies to Reduce It**

1. **Food Waste Around the World**

**UN Report 2021: Consumer Food Waste is Significantly Higher than Previous Estimates**

The United Nations Environment Programme (UNEP) *Food Waste Index Report* states that they had underestimated the extent of global food waste during the consumption stage (residential and institutional).[[1]](#footnote-1) Ten years before, they estimated that globally 1.3 billion tons of food was wasted per year; about a third of all the food produced in the world. According to the more recent report, the first update in a decade, about 1.7 billion tons of food are wasted per year; 30% more than the previous estimate.

The Food and Agriculture Organization (FAO) of the United Nations defines food waste as: “the decrease in the quantity or quality of food resulting from decisions and actions by retailers, food service providers, and consumers.”

**The UN Food Waste Index cites findings from the *Food Waste and Rescue in Israel Report* by Leket Israel, the Israel Ministry of Environmental Protection, and BDO.**

The United Nations set a Sustainable Development Goal[[2]](#footnote-2) of reducing global food waste per capita by 50% by 2030. Toward this end, they developed the Food Waste Index.[[3]](#footnote-3) This complements the FAO’s *Food Waste Index*, which primarily addresses food waste in the agriculture, sorting, packaging, and industrial processing stages.

The UN report states that they did not previously understand the full extent of global food waste because their earlier estimates relied on often outdated information from a small number of countries. The new UN report presents a picture of global food waste at the retail and consumption stages, both institutional and domestic, based on up-to-date and comprehensive data. The new report cites 84 studies about food waste in various countries; 52% of these are academic studies, 33% were carried out by government institutions, 10% by nonprofit organizations, and 6% by other agencies. In referring to Israel, the UN report cites and relies on the findings of the *Food Waste and Rescue in Israel Report* by Leket Israel, the Israel Ministry of Environmental Protection, and BDO.

**Figure 1: International Comparison of Food Waste Per Capita, (kg per year)**



Source: BDO estimates based on data from FAO, UNEP, and BDO estimates based on Israeli data

The findings of the UN report presented in Figure 1 indicate that food waste per capita in the **consumption** segment in Israel is similar to that in the USA, lower than in Africa, and higher than in Europe.

The UN report does not offer any explanation for the international differences in food waste per capita. However, a study on factors affecting food waste conducted by Israeli researchers found that household food waste is lower in countries where garbage is separated at the source. Unlike the prevailing trend in Europe, there is no source separation of household waste in Israel, which may explain the country’s high level of waste in the consumption sector. [[4]](#footnote-4)

The UN considers reducing food waste a key issue for sustainable development and reducing food insecurity around the world. Its recent report notes that there are untapped opportunities to address this problem, since estimates of the extent of global food waste are still not sufficiently reliable. The UN report concludes that countries around the world must measure and monitor their own food waste and promote systematic policies to reduce it.

This recommendation is in line with work already being done in the *Food Waste and Rescue in Israel Report.* Leket Israel and BDO have issued these reports for the past eight years; the Israel Ministry of Environmental Protection became a partner in the project for the past four annual reports, and recently the Israel Ministry of Health has joined this effort as well. The reports include annual estimates of the extent of food waste in Israel and policy recommendations for reducing it. In this sense, Israel is a pioneer.

The cost of living is high in Israel, and food expenses represent a significant component of household spending. Therefore, addressing the problem of food waste is doubly important.

Moreover, discarding or destroying food that has an alternative economic value indicates a market failure. A supportive government policy to enable more efficient utilization of this resource is needed.

Against this background, it is appropriate to examine the main policy tools being used around the world to reduce food waste.

1. **Policy Tools for Reducing Food Loss and Waste Globally and in Israel**

In collaboration with the Global Food Donation Policy Atlas[[5]](#footnote-5)

**OECD Countries use Integrated Policy Tools to Reduce Food Waste**

Given the growing global recognition of this problem, the FAO and UNEP are striving to develop international indicators to produce a unified quantitative baseline of data on food waste, which can help countries formulate policies to reduce it and to monitor their progress. Various policy tools have been used around the world to reduce food waste, such as measures to minimize food surpluses at the source, to rescue food surpluses, and to encourage treating organic waste through composting and anaerobic digestion rather than landfilling.

Efforts are being made around the world to disseminate information about food waste and the policy tools available to reduce it. The European Commission, under the European Union’s Food Loss and Waste Prevention Hub (FLWPH), reviews and shares information regarding relevant policy and legislation in European countries. The Harvard Law School Food Law and Policy Clinic (FLPC)[[6]](#footnote-6) and the Global FoodBanking Network (GFN)[[7]](#footnote-7) launched the Global Food Donation Policy Atlas[[8]](#footnote-8) in February 2019. This project focuses on countries that are not members of the EU and aims to promote policies, legislation, and regulations to rescue food, reduce waste, and remove the barriers to doing so.

The Atlas partnership’s activities include:

1. Locating and providing accessibility to legislation related to food rescue and donation, among an updated and expanding list of countries;
2. Analyzing the most common barriers to food rescue and donation in these countries;
3. Sharing best practices to overcome these barriers.

Within this broad framework, in-depth reviews are being published for individual countries regarding their policies and regulatory activities related to reducing food waste and rescuing food. The Atlas partnership has identified key relevant policy tools and which countries are implementing them in an optimal way (best practices).

The *Report on Surplus Food Donation in Israel: Legal Guide and Policy Recommendations* was published in June 2023, in collaboration with Harvard’s FLPC, the Global Food Donation Policy Atlas partnership, the Israel Ministry of Environmental Protection, GFN, and Leket Israel.

Best practices according to the Atlas Partnership and the European Commission include:

1. **Safety regulations for food donations**: Creating a legal framework that provides clear guidelines regarding safety standards for rescued or donated food.

**India** - Food Safety and Standards (Recovery and Distribution of Surplus Food)[[9]](#footnote-9)

* + Details the responsibility of food donors and surplus food distribution organizations, and clearly designates the Food Safety and Standards Authority of India as the guiding entity.
  + Defines labeling requirements for donated food.
  + Requires registration of surplus food distribution organizations in order to monitor them.

**Israel** - Public Health Protection Law (Food), 2015[[10]](#footnote-10)

* + Section 11 of the Law regulates the use of leftover food.
  + Section 159 exempts nonprofit food distribution organizations from needing production, transport, or storage licenses. This exemption was extended as part of the Arrangements Law for 2021-2022, but the law’s regulations have not yet been amended.[[11]](#footnote-11)
  + Section 162 permits food distribution organizations to use certain types of food after the “best before” date if they receive written permission from the manufacturer confirming that it is safe to consume after this date.

1. **Protection from legal liability in food donations**: Legislation exempting organizations that store, transport, and distribute donated food from criminal or civil liability for damage caused as a result of these activities, provided that they acted lawfully and were not negligent.

**USA: Good Samaritan Food Donation Act (1996)[[12]](#footnote-12)**

* + Federal protection against civil and criminal liability for food donors and nonprofit organizations that distribute food donations, under certain conditions: the food must be donated in good faith to an association that distributes food to needy people free of charge, and the food must meet safety standards.
  + Some states provide more extensive protection for other types of donations: Arizona, California, Massachusetts, Minnesota, Nevada, New Hampshire, New Mexico, Vermont, Rhode Island, and Tennessee protect donations made directly to needy people; Alaska, Arizona, Hawaii, Kentucky, Maine, Massachusetts, New Hampshire, New Jersey, Ohio, Rhode Island, and Tennessee protect donations of food that have passed their expiration date.
  + In 2021, a proposal to amend the law was submitted to the Senate and the House of Representatives which would expand options for food donations throughout the US by allowing direct donations to individuals by food service businesses and institutions such as grocery stores, school cafeterias, etc., but the amendment has not yet been passed.

**Israel: Encouragement of Food Donations Law, 2018**

This law encourages the rescue of surplus food by stating that donors to food distribution organizations and the employees and volunteers for organizations that collect, store, or distribute food donations, will not be held civilly or criminally liable for damage caused by the food donation, if they acted in accordance with the provisions of any applicable law and did not act negligently.

1. **Labeling expiration dates:** To reduce the confusion regarding the meaning of the date on food product labels and to ensure the safety of the donated food, the complementary use of three policy tools is recommended:

* Regulations defining two types of labels for food products: a safety-based label and a quality-based label. In the first case, consuming food after the date shown on the label may involve risk, and in the second case it does not.
* Legislation that allows donations of food after the date on the quality-based label.
* Launching consumer education campaigns to reduce confusion about expiration date labels.

**United Kingdom:** Expiration date labeling guidelines - “Label better, less waste”[[13]](#footnote-13)

* In accordance with the recommendations of the UN Codex Alimentarius, the UK adopted a mandatory policy to divide food products into two groups; for one, products have a safety-based (“use by” expiration date) label, and the other has a quality-based label (“best before” date).[[14]](#footnote-14)
* This policy prohibits the donation of food after the safety-based date (“use by”) but permits the sale or donation of food after the quality-based “best before” date.
* The UK government, in collaboration with the Waste and Resources Action Programme (WRAP), launched several public education campaigns to reduce food waste, including explanations of the types of expiration dates.

**Israel**

* There are two different types of expiration dates for food, safety-based (“use by”) and quality-based (“best before”).
* The law prohibits selling or donating food after either type of expiration date, whether it indicates safety or quality.
* Section 12 of the Public Health Protection Law allows food to be used after its expiration date under certain circumstances.
* Section 162 discusses the possibility of nonprofit organizations distributing past-date food.
* In 2017, standards for labeling packaged foods in Israel were re-assessed. The Ministry of Environmental Protection and the Ministry of the Economy proposed updates to the labeling in order to reduce food waste. Updates included:
* comparing the list of products that are exempt in Israel from having an expiration date marked on them to the list of such products in the European directive;
* marking the expiration date with both month and year or only the year, depending on the product type and its perishability;
* educating the public to clarify the labels used.

Some of these proposed updates were accepted, but in practice a manufacturer can mark a full expiration date on all products and there has been no apparent change in the labeling customarily used.

1. **Tax incentives:** Tax benefits produce an economically competitive alternative to discarding food that is safe for human consumption. Granting exemptions from VAT on food donations to food banks addresses a potential barrier to donations.

**USA** – Internal Revenue Code (IRC)[[15]](#footnote-15)

* Tax incentives for businesses to encourage donations of surplus food.
* The law allows a double tax credit for food donations:
* A general tax deduction at the rate of the cost of purchasing the food;[[16]](#footnote-16)
* An increased tax deduction that provides an incentive by allowing food donors to deduct the lower of these two options: (a) twice the cost of purchasing the donated food or (b) the cost of purchasing the donated food plus half of the expected profit on the sale of the food, if it had been sold at fair market value. This deduction may reach twice the amount of the general deduction, in which each business is allowed to deduct up to 15% of its taxable income for food donations.[[17]](#footnote-17)

**Israel:** Income Tax Ordinance

* A food donation worth over NIS 190 will be given an income tax credit at a rate of 35% of the value of the donation.

1. **Obligation to Donate Surplus Food**

Food suppliers may be required to contract with organizations that will distribute unsold food that is fit for human consumption.

**France**: Legislation to Prevent Food Waste

* + Food Waste Prevention Legislation 2016: large marketing chains (over 400 m2) are required to donate surplus food to food banks.[[18]](#footnote-18) Violators may be fined between €3,750 - €75,000. [[19]](#footnote-19) Following passage of this law, food donations from marketing chains increased by 20%.
  + The EGalim Law of 2019[[20]](#footnote-20) extended this obligation to large institutional caterers (serving more than 3,000 meals per day); and food manufacturers and large wholesalers (with a turnover of over €50 million).

**Israel**

* + Food suppliers have no obligation to contract with organizations to distribute unsold food that is fit for human consumption.
  + The Government Companies Law (Amendment - Obligation to Donate Excess Food), which would obligate government companies in Israel to donate surplus food, was passed in a preliminary reading by the Knesset in July 2023.

1. **Prohibitions Against or Taxation of Landfilling Organic Waste**

**USA**: Legislation to prohibit large waste generators from landfilling organic waste

* California, Connecticut, Massachusetts, Rhode Island, and Vermont have laws prohibiting landfilling food waste.
* In 2012, Vermont enacted the Universal Recycling Law, which prohibits the landfilling of food waste. The law establishes a graduated ban, leading to a total ban by 2020, both for businesses and residents. According to the Vermont Food Bank, following the enactment of this law, food donations increased by approximately $40 million. [[21]](#footnote-21)
* In Massachusetts, there is a ban on landfilling food waste by businesses that produce over a ton of food waste per week.[[22]](#footnote-22) A 2016 study found that this ban generated $175 million in economic activity and created over 900 jobs for organizations and businesses that remove, transport, process, and recover waste.[[23]](#footnote-23)

**Scotland**: Scottish Landfill Tax[[24]](#footnote-24)

* This graduated tax aims to reduce the landfilling of food waste by establishing a hierarchical system with two fees for waste disposal in landfills: a standard fee (currently £102.10 per ton); and a lower fee (currently £3.25 per ton) for waste that is less polluting waste and has a lower potential for greenhouse gas emissions (low organic content, non-biodegradable, non-hazardous materials, etc.).

**Israel**

* There is no ban on landfilling organic waste in Israel.
* Since 2007, landfill operators must pay a levy for each ton of landfilled waste.[[25]](#footnote-25) This levy (NIS 111.34 per ton of waste as of January 2022) is very low, both compared to what is accepted in other countries and relative to other waste treatment methods. **The landfill levy in Israel applies equally to all types of waste and therefore does not encourage diverting organic waste from the landfill.**
* Local authorities may voluntarily collect a fee from businesses for collecting “excess” commercial waste,[[26]](#footnote-26) but neither the criteria for what comprises excess commercial waste nor the fee to be charged for it are regulated.

1. **Government grants and incentives**: Funding through grants or incentive programs at the national or local level provide important resources for promoting food donation and rescue.

**USA**

* Federal support from The Emergency Food Assistance Program provides approximately $500 million per year for local food rescue organizations, with up to $100 million of this for administrative support.
* Federal grant programs support food banks and food rescue efforts.
* In several states, funds are allocated to emergency programs for the purchase of food.

**France**

* + €60 million was allocated to the Better Nutrition for All program, designed to provide needy people with access to healthy, high-quality food.
  + The fund enables food banks and other nonprofit organizations to purchase and rescue food, with an emphasis on fresh produce (fruit, vegetables, legumes, unprocessed products) with quality-based labels, as defined in the EGalim Law.

**Israel**

* + The 2022 National Food Security Initiative recognizes rescuing food as an alternative to purchasing it.
  + The text of the initiative defines “rescued food” as edible food with nutritional and health value that has been saved from being destroyed, such as agricultural produce that was not been harvested, food that was not sold in supermarkets or stores, and agricultural produce that is misshaped or has aesthetic flaws.

1. **Setting national goals to reduce food waste:** In accordance with the UN Sustainable Development Goals for 2030, each country should set a national goal to reduce food loss by 50% by 2030.

* This goal has been adopted in the USA, Canada, most European countries, and Australia.
* In 2015, Israel adopted the UN Sustainable Development Goals, including the goal to reduce food waste, but no official and specific national goal to reduce food waste has been defined.

1. **Setting a national strategy to reduce food waste**

A comprehensive national strategy may be adopted to reduce food waste along the supply chain. Such a strategy should dictate a clear and comprehensive policy aimed at reducing food waste and promoting food rescue. The strategy may include all the policy tools mentioned above, and more.

**Australia**: National Food Waste Strategy, 2017[[27]](#footnote-27)

* A study was carried out regarding the feasibility of reaching the stated national goal of reducing food waste by 50% by 2030. The study found that this goal could be achieved within seven years, given the following conditions:
* Making significant investments in innovations
* Providing incentives
* Adopting strict regulations
* Encouraging voluntary commitments to reduce food waste
* Involvement of the food industry and civil society organizations
* A national strategy for reducing food waste was written and published by the Australian Department of Agriculture, Water and Environment, focusing on four areas: promoting supportive policies, improving performance in the business sector, market development, and behavior change.
* Supportive policies were formulated for the following four areas:
* Creating a national baseline of data on food waste and a methodology for measuring its reduction in relation to the goal;
* Identifying relevant areas for targeted investment;
* Encouraging voluntary commitments to reduce food waste;
* Promoting legislation supporting food waste reduction and food rescue.
* So far, progress compared to the baseline has not been measured.

**Israel**: No comprehensive national strategy for reducing food waste has yet been formulated. However:

* In October 2021, the government approved a 100-step action plan to deal with the climate crisis. It includes a section on food systems, with a specific reference to reducing food loss and waste.
* In January 2021, the Ministry of Environmental Protection published its new waste strategy, which includes a reference to reducing waste, including food waste, at the source. The Ministry of Environmental Protection is currently formulating an implementation plan for this strategy.

Notably, the Israeli Climate Forum, an initiative of the Office of the President, set the following goals:

* making a commitment for the State of Israel to be at the forefront of the global discussion on the climate crisis;
* raising awareness among the Israeli leadership regarding all aspects of the climate crisis;
* promoting cooperation between the various groups and sectors of Israeli in addressing the climate crisis;
* promoting regional and international cooperation to address the climate crisis.

The forum includes representatives from the Office of the President, the national government, the Knesset, local governments, academia, and civil society organizations operating in this field. Leket Israel is a member of the Israeli Climate Forum, and rescuing food has been accepted as one of the initiatives to be promoted as part of the solution to the climate crisis.

**Summary of Key Policy Tools for Reducing Food Waste and Rescuing Food in Selected Countries, according to the Atlas Partnership and the European Commission**

part A

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | % of countries from the list implementing each policy | France | Canada | Germany | Italy | UK | Denmark | Belgium | Holland |
| **Number of policy tools in use (out of 8)** |  | 8/8 | 7/8 | 7/8 | 7/8 | 6/8 | 6/8 | 6/8 | 6/8 |
| **Protection from legal liability** | 44% | √ | √ |  | √ |  |  |  |  |
| **Food safety for donations** | 56% | √ |  | √ | √ | √ | √ |  |  |
| **Government incentives** | 61% | √ | √ | √ | √ | √ | √ | √ | √ |
| **Requirement to donate food / tax on food waste** | 67% | √ | √ | √ | √ | √ | √ | √ | √ |
| **Goal to reduce food loss** | 72% | √ | √ | √ |  | √ |  | √ | √ |
| **Tax incentives to reduce food waste** | 78% | √ | √ | √ | √ |  | √ | √ | √ |
| **National strategy to reduce food loss** | 78% | √ | √ | √ | √ | √ | √ | √ | √ |
| **Labeling expiration dates** | 89% | √ | √ | √ | √ | √ | √ | √ | √ |

Part B

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | % of countries from the list implementing each policy | Australia | USA | Spain | Portugal | Austria | Mexico | Chile | Israel | Finland | Sweden |
| **Number of policy tools in use (out of 8)** |  | 5.5/8 | 5/8 | 5/8 | 5/8 | 5/8 | 4.5/8 | 3.5/8 | 3.5/8 | 3/8 | 3/8 |
| **Protection from legal liability** | 44% | partial | √ |  |  | √ | partial |  | √ |  |  |
| **Food safety for donations** | 56% |  | partial |  | √ |  | √ |  | partial | √ |  |
| **Government incentives** | 61% | √ | √ |  |  | √ |  |  |  |  |  |
| **Requirement to donate food / tax on food waste** | 67% |  | √ | √ |  |  | √ | √ |  |  |  |
| **Goal to reduce food loss** | 72% | √ | √ | √ | √ | √ |  |  |  | √ | √ |
| **Tax incentives to reduce food waste** | 78% | √ | partial | √ | √ |  | √ | partial | √ |  |  |
| **National strategy to reduce food loss** | 78% | √ |  | √ | √ | √ |  | √ |  |  | √ |
| **Labeling expiration dates** | 94% | √ |  | √ | √ | √ | √ | √ | √ | √ | √ |

Source: Global Donation Policy Atlas,[[28]](#footnote-28) FLWPH,[[29]](#footnote-29) Food redistribution in the EU[[30]](#footnote-30) with BDO data processing

Among the countries surveyed, 94% have regulations for labeling expiration dates on food products; 78% offer tax incentives for food donations; 78% have developed a national strategic plan to reduce food loss; 72% have set a goal to reduce food waste by 2030; 67% require businesses to donate food and/or tax food waste; 61% have government incentives to promote food donations; 56% have safety regulations for food donations, and 44% protect food donors against legal liability.

By implementing these various policy tools, the United Kingdom reduced food waste per capita (after the agricultural phase) by 27% by 2018, as compared to 2007 (the baseline year of measurement). In the Netherlands, food waste was reduced by 29% (during the consumer phase) by 2019, as compared to the baseline year 2010. An interim report about all European countries is expected to be published by the European Commission later this year.

A 2020 study by the Wageningen Food & Biobased Research[[31]](#footnote-31) commissioned by the Dutch Ministry of Agriculture, Nature and Food Quality, examined the impact of policy and regulatory measures in Europe on reducing food waste. It found that among the policy tools discussed above, financial tools have the most extensive impact on reducing food waste. In terms of reducing barriers to reducing food waste, the tool with the most widespread impact is setting tariffs for landfilling organic waste, followed by exempting food donations to food banks from VAT.

In Israel, the issue of food waste has received attention in recent years, particularly with the enactment of the Encouragement of Food Donations Law in 2018. However, in the absence of a systematic government policy, Israel remains far from realizing its potential for reducing food waste, promoting food rescue, and thereby reducing malnutrition and food insecurity among the population.

1. **Developments in Israel Governmental Activity in the Field of Food Loss and Waste**

Although Israel remains far from realizing its potential for reducing food waste and rescuing food, since it lacks a systematic government policy, some government ministries are working to promote the issue within their areas of responsibility:

The **Ministry of Environmental Protection** works to reduce food loss and waste. In the past two years it has undertaken the following actions:

* This Ministry led an inter-ministerial Committee for Preparing Food Systems for Climate Change, with representatives from the Ministry of Agriculture and Rural Development, Ministry of Health, Ministry of Intelligence, Ministry of Education, and the Institute for National Security Studies. The purpose of this committee is to formulate mid-range goals (for 2030) and an action plan to prepare food systems in the State of Israel for climate change, while integrating issues of acclimation (adaptation) and reducing greenhouse gas emissions (mitigation). The committee addressed reducing food waste, and one of its conclusions was that it is necessary to set goals for reducing food waste and to include this issue as part of the concept of resilience for the country. The committee’s report is published on the Ministry of Environmental Protection’s website.
* The Ministry was a leader in preparing the State of Israel for the UN Food Systems Summit. Within this framework, the Ministry held dialogues with government ministries, civil bodies, academics, agriculturalists, food manufacturers, and more.
* In June 2023, the Ministry partnered with Leket Israel in publishing *Surplus Food Donations in Israel: Legal Guide and Policy Recommendations*. This Report presents a comprehensive view of the legal and practical aspects of donating food in Israel, while comparing it to what is happening in 20 other countries around the world.
* Together with the Ministry of Health, the Ministry of Environmental Protection promotes implementing criteria for healthy and sustainable food in food catering services and public procurement in Israel. The criteria include reducing food waste and rescuing food.
* Through a call for proposals to environmental organizations, the Ministry is supporting activities to reduce food waste, and in this framework is supporting a series of activities for the general public, households, and local authorities to raise awareness of this issue, change behaviors, develop policy tools to reduce food waste, develop local food rescue systems, and more. The Ministry also supports policy studies on reducing food waste.
* Publicity: The Ministry produced and published several videos on social media that dealt with various aspects of reducing food waste including: information about the phenomenon and its scope, related activities of organizations, and tips for consumers.
* The Ministry of Environmental Protection’s waste strategy advocates reducing food waste at the source.
* Starting in 2019, the Ministry partnered with Leket Israel in publishing the annual Food Waste and Rescue in Israel Report, which includes a chapter on environmental impacts.

In 2017, the **Ministry of Labor, Welfare and Social Services** launched the National Food Security Initiative in collaboration with Eshel Jerusalem-Colel Chabad and Leket Israel. Renewable cards with a value of NIS 500 are distributed to approximately 11,000 families suffering from severe food insecurity. The pilot program was launched in February 2017 in 36 municipalities across the country, with a total annual cost of approximately NIS 65 million. Families accepted into the program receive a card worth NIS 500 every month from the Ministry of Labor, Welfare and Social Services via Eshel Jerusalem-Colel Chabad. The family can use this card to purchase NIS 250 worth of food products (not including tobacco or alcohol) in selected chain supermarkets and local stores and they receive an additional NIS 250 worth of rescued fruit and vegetables (NIS 180) and dry foods (NIS 70), which are delivered to their homes.

In May 2021, a tender for operating the National Food Security Initiative was published, after several changes were made to it. The number of families participating in the project has increased to approximately 26,000 families, who receive a card worth NIS 350 and a basket of fruit and vegetables worth NIS 150 delivered to their homes. The tender specifically refers to distributing rescued agricultural produce. The project continues to operate under the auspices of Eshel Jerusalem-Colel Chabad, in cooperation with Leket Israel.

The **Ministry of Agriculture** promotes initiatives to reduce food waste during the production, distribution, and consumption stages, including:

* The Ministry of Agriculture stated that from September 2023, producers and importers must ascertain the shelf life of animal products that pose a health risk if they become contaminated. They extended the valid shelf life of fresh chicken from five days to seven days; of frozen meat from 15 months to 24 months, and of frozen internal organs from six months to a year. This will help reduce food waste.
* The Ministry of Agriculture’s extension services offers professional training to promote the adoption of methods of growing and climate control to reduce waste in the fields, orchards, and in agricultural production process.
* These initiatives are supported by grants to agriculturalists offered through the Ministry’s investment department.
* Researchers with the Agricultural Research Organization offer assistance to food packing houses and sorting stations in the use and implementation of storage technologies to reduce food waste during the storage phase, and advanced methods for identifying and removing damaged produce during the sorting and distribution phase.
* To reduce food waste in the marketing and consumption phases, the Ministry began conducting a Life Cycle Assessment to examine the use of special packaging that creates a controlled environment around produce to extend its shelf life. The results of this experiment will help implement a dramatic change in the marketing and sale of fresh agricultural produce.

1. United Nations Environment Programme (2021). *Food Waste Index Report 2021*, Nairobi [↑](#footnote-ref-1)
2. United Nations Environment Programme (2021). *Food Waste Index Report 2021*, Nairobi [↑](#footnote-ref-2)
3. Goal 12.3, see <https://www.fao.org/sustainable-development-goals/indicators/1231/en/>; <https://www.fao.org/sustainable-development-goals-data-portal/data/indicators/1231-global-food-losses/en> [↑](#footnote-ref-3)
4. Elimelech, E. Ert, E. & Ayalon, O. (2019). Exploring the drivers behind self-reported and measured food wastage. *Sustainability*, 11(20), 5677. doi:10.3390/su11205677 [↑](#footnote-ref-4)
5. <https://atlas.foodbanking.org/atlas.html> [↑](#footnote-ref-5)
6. Harvard Law School Food Law and Policy Clinic <https://hls.harvard.edu/clinics/in-house-clinics/food-law-and-policy-clinic/> [↑](#footnote-ref-6)
7. The Global FoodBanking Network <https://www.foodbanking.org/> [↑](#footnote-ref-7)
8. <https://atlas.foodbanking.org/> [↑](#footnote-ref-8)
9. <https://www.fssai.gov.in/upload/uploadfiles/files/Gazette_Notification_Surplus_Food_06_08_2019.pdf> [↑](#footnote-ref-9)
10. <https://www.nevo.co.il/law_html/law01/049_062.htm#med1> [↑](#footnote-ref-10)
11. The Economic Plan (Arrangements Law), amendments to legislation for implementation of the economic plan for the budget years 2021-2022. [↑](#footnote-ref-11)
12. <https://www.law.cornell.edu/uscode/text/42/1791> [↑](#footnote-ref-12)
13. <https://wrap.org.uk/sites/default/files/2020-07/WRAP-Food-labelling-guidance.pdf> [↑](#footnote-ref-13)
14. Expiration dates are set during product design and development and pertain to sale/distribution. [↑](#footnote-ref-14)
15. <https://www.law.cornell.edu/uscode/text/26/170> [↑](#footnote-ref-15)
16. I.R.C. § 170(e)(1); 26 C.F.R. § 1.170A–4(a)(1) (2018) [↑](#footnote-ref-16)
17. 26 C.F.R. 1.170A-4A(b)(2)(ii)(A) (2019) [↑](#footnote-ref-17)
18. <https://www.legifrance.gouv.fr/loda/id/JORFTEXT000032036289/> [↑](#footnote-ref-18)
19. <https://chlpi.org/news-and-events/news-and-commentary/food-law-and-policy/webinar-review-waste-bans-penalties/> [↑](#footnote-ref-19)
20. <https://www.legifrance.gouv.fr/loda/id/JORFTEXT000037547946/2021-03-25/>

    [↑](#footnote-ref-20)
21. <https://dec.vermont.gov/waste-management/solid/universal-recycling> [↑](#footnote-ref-21)
22. <https://www.mass.gov/guides/commercial-food-material-disposal-ban> [↑](#footnote-ref-22)
23. <http://www.mass.gov/eea/docs/dep/recycle/priorities/orgecon-study.pdf> [↑](#footnote-ref-23)
24. <https://www.gov.scot/policies/taxes/landfill-tax/> [↑](#footnote-ref-24)
25. According to amendment 9 of the Maintenance of Cleanliness Law. [↑](#footnote-ref-25)
26. According to this principle, the polluter should pay according to uniform criteria regarding 'excess waste' as defined by the Ministry of the Interior. [↑](#footnote-ref-26)
27. *National Food Waste Strategy: Halving Australia’s Food Waste by 2030*, Department of the Environment and Energy (2017) <https://www.environment.gov.au/system/files/resources/4683826b-5d9f-4e65-9344-a900060915b1/files/national-food-waste-strategy.pdf> [↑](#footnote-ref-27)
28. <https://atlas.foodbanking.org/country-research.html> [↑](#footnote-ref-28)
29. <https://ec.europa.eu/food/safety/food_waste/eu-food-loss-waste-prevention-hub/> [↑](#footnote-ref-29)
30. *Food Redistribution in the EU: Mapping and Analysis of Existing Regulatory and Policy Measures Impacting Food Redistribution from EU Member States*, European Commission. [↑](#footnote-ref-30)
31. <https://edepot.wur.nl/529888> [↑](#footnote-ref-31)