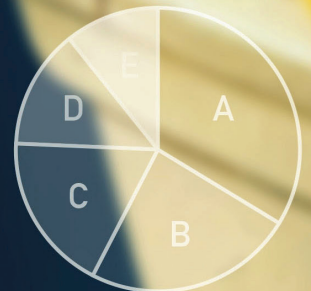


# THE TRAGEDY OF WASTE - HOW FOOD NOT EATEN IS HURTING OUR PLANET

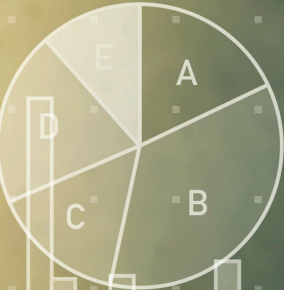
ESTIMATED READ TIME: 10 MINUTES

1,822	12,349,000
3,680	238,681,000
1,062	85,678,000
485	8,369,000
8,569	189,301,000
6,602	102,698,000
890	24,697,000
6,280	76,002,000
2,436	57,610,000





# ON THE GREEN AGENDA



## KEY TAKEAWAYS

*Around 1/3 of all food produced globally is lost or wasted, while over 10% of the world's population goes hungry*

*Reasons for waste include inefficient agricultural practices, market pressures and consumer dumping*

*Food waste contributes to food insecurity, trillions of dollars in economic losses and global carbon emissions that rank third behind the carbon emissions output of the US and China*

*With more than half of all waste happening at the retail and consumer levels, simple adjustments to purchasing and consumption practices can make a big difference*

Once upon a time, uncooperative children at the dining table would be shamed into finishing their meals with a simple reprimand – clear your plate because there are children in the world who have nothing to eat. Underneath the irony of leveraging global hunger to encourage eating, these mealtime lectures taught us that it was unconscionable to throw food away when others were going hungry.

Somewhere along the way, due to a confluence of economic, technological and cultural factors, food waste stopped striking a moral nerve. Today, with hardly a regret, we discard half-eaten meals from restaurants, we dump perfectly safe foods that are just past their ‘sell-by’ dates, we leave produce to rot in our refrigerators (only to purchase the same neglected items again the next



week). This waste extends further up the value chain - around the world, millions of dollars' worth of food items are lost daily before they even make it to market.

The reasons for this loss and waste are manifold, as are its impacts. Where the average person might have framed food waste as a moral issue in the past, it has today become a more complex problem, with economic, environmental and developmental implications that we cannot afford to ignore.

The United Nations Environmental Programme (UNEP) Food Waste Index Report 2021<sup>1</sup> lists Trinidad and Tobago as one of the most wasteful countries in Latin America and the Caribbean when it comes to food. UNEP estimates that Trinbagonian households dump a staggering 103,127 tonnes of food each year. Tackling food waste is therefore a pillar of the partnership that NGC forged with Nutrien in June 2022, which is aimed at boosting local food and nutrition security.

### A CLOSER LOOK AT THE PROBLEM

Food waste refers broadly to food that is produced for human consumption but is not eaten. Depending on the stage at which food is removed from the value chain, it can be categorised as ‘lost’ or ‘wasted’. UNEP explains the distinction as follows:

**FOOD LOSS** refers to food that gets spilled, spoiled or otherwise lost, or incurs reduction of quality and value during its process in the food supply chain before it reaches its final product stage. Food loss typically takes place at production, post-harvest, processing, and distribution stages in the food supply chain.

**FOOD WASTE** refers to food that completes the food supply chain up to a final product, of good quality and fit for consumption, but still doesn't get consumed because it is discarded, whether or not after it is left to spoil or expire. Food waste typically (but not exclusively) takes place at retail and consumption stages in the food supply chain.<sup>2</sup>

<sup>1</sup> <https://www.unep.org/resources/report/unep-food-waste-index-report-2021>

<sup>2</sup> <https://www.unep.org/thinkeatsave/about/definition-food-loss-and-waste>



# FOOD WASTE

IN NUMBERS

Around **1/3**  
of all food produced globally



**1.3Bn**  
tonnes



Globally, around **14%**

of food produced is **lost** between harvest and retail



An estimated **17%**

of total global food production is **wasted**  
**11%** household  
**5%** food services  
**2%** retail<sup>4</sup>

FOOD THAT IS NEVER EATEN ACCOUNTS FOR

**25%**  
of all freshwater consumption globally.



## THE CARIBBEAN AND LATIN AMERICA WASTE

**78Mn** tonnes of food annually

**6%**  
of global food production



Trinidad and Tobago is the most wasteful country in the region<sup>5</sup>

FRUITS AND VEGETABLES CONSTITUTE MORE THAN

**40%**

of the food waste in the region and according to a 2015 FAO report, the volume of fruit wasted in Latin America and the Caribbean is the



**4th** highest of all commodities wasted globally<sup>6</sup>

The FAO estimates that if food waste from all sources in T&T can be eliminated, the roughly



**7.5%**

of the national population that is undernourished could be fed<sup>7</sup>

According to the FAO, cassava experiences **losses** of up to **20%** in T&T (worth US\$500,000).<sup>8</sup>



**Losses** of mangoes can reach



**17%**



For tomatoes, the figure is

**27%**

LATIN AMERICA AND THE CARIBBEAN HAVE A FOOD WASTE CARBON FOOTPRINT OF

**540kg**

of CO<sub>2</sub> per capita

**4th** highest carbon footprint associated with food waste in the world, and the highest in the developing world.<sup>9</sup>



<sup>3</sup> <https://www.unep.org/news-and-stories/story/how-feed-10-billion-people#:~:text=There%20is%20enough%20food%20for%20everyone.&text=Rather%2C%20it%20is%20a%20problem,is%20used%20for%20livestock%20grazing.>

<sup>4</sup> <https://www.un.org/en/observances/end-food-waste-day>

<sup>5</sup> <https://borgenproject.org/hunger-in-trinidad-and-tobago/#:~:text=Lystra%20Fletcher%2DPaul%20reported%20that,wasteful%20country%20in%20the%20region>

<sup>6</sup> <https://www.forbes.com/sites/daphneewingchow/2019/03/29/foodwaste/?sh=77a03f9072e6>

<sup>7</sup> <https://borgenproject.org/hunger-in-trinidad-and-tobago/#:~:text=Lystra%20Fletcher%2DPaul%20reported%20that,wasteful%20country%20in%20the%20region.>

<sup>8</sup> <https://www.forbes.com/sites/daphneewingchow/2019/03/29/foodwaste/?sh=77a03f9072e6>

<sup>9</sup> Ibid



## WHY ARE WE WASTING SO MUCH?

*There are many reasons why so much edible food does not get consumed, and they vary from country to country.*

Looking first at food loss, agricultural practices bear some of the blame. Inefficient mechanical harvesting can leave crops unpicked, or damage produce and make them unfit for sale. To protect against possible crop failure or losses, some farmers may plant more than they can sell, which leads to dumping if the anticipated production losses do not occur. During transportation, storage, processing and packaging, more food is lost due to improper handling and poorly regulated environments which accelerate spoilage.

*Market pressures are another major contributing factor.*

The 'paradox of plenty' in agriculture is that excess production falls prices. If market prices are lower than harvest and transportation costs, farmers often choose to leave crops in the field. Depressed demand prompts similar action. A poignant illustration - during the COVID-19 pandemic, US farmers dumped thousands of gallons of fresh milk, ploughed acres of ripe vegetables back into the soil and destroyed hundreds of thousands of unhatched eggs, due to the sharp decline in retail demand with the closure of food businesses.<sup>10</sup> In some countries, the problem is exacerbated by state interventions - ill-conceived



“  
UNEP estimates that Trinbagonian households dump a staggering **103,127 tonnes** of food yearly.

agricultural subsidies, for example, can encourage overproduction.

*No matter the country, at the end of the value chain, consumers contribute to both food loss and waste.*

Consumers' preference for unblemished produce leads producers to discard perfectly edible food crops on the basis of cosmetic imperfections. Then, of course, there is the waste that occurs when food is ultimately purchased. Whether raw or cooked, mountains of food are dumped into landfills because people purchased more than they could or wanted to consume. Excessive portion sizes, incentivised overeating through buffets and restaurant 'supersizing', poor understanding of 'sell-by' dates versus 'expiry'

dates, and even the psychological devaluation of food that goes into the fridge (relative to 'fresh' food), all encourage consumer wastage.

## THE IMPACT OF WASTE

This waste exacts a high cost. For most, the social impact comes first to mind. Despite Malthusian fears that the world will soon be unable to feed its growing population, entities such as UNEP insist that we are producing more than enough food to meet global demand.<sup>11</sup> The problem is distribution.

*We are wasting more than a third of the food we produce, while over 10% of the world's population goes hungry.<sup>12</sup>*

<sup>10</sup> <https://www.nytimes.com/2020/04/11/business/coronavirus-destroying-food.html>

<sup>11</sup> <https://www.unep.org/news-and-stories/story/how-feed-10-billion-people>

<sup>12</sup> <https://www.who.int/news-room/detail/15-07-2019-world-hunger-is-still-not-going-down-after-three-years-and-obesity-is-still-growing-un-report>

The tragedy of waste – how food not eaten is hurting our planet | CONTINUED

“ The economic impact of food waste is equally shocking. The UN Food and Agriculture Organisation (FAO) estimates that impact to be around **US\$1 trillion** each year.



*In Trinidad and Tobago, a survey conducted by the World Food Programme in 2021 found that nearly **25%** of respondents were forced to cut food consumption due to financial pressures during the pandemic, with **4%** going without food for an entire day in the week prior to the survey.<sup>13</sup>*

This alarming rate of food insecurity is replicated across the world, and casts food waste as a moral crime against humanity.

The economic impact of food waste is equally shocking. The UN Food and Agriculture Organisation (FAO) estimates that impact to be around US\$1 trillion each year.<sup>14</sup> Factor in externalities associated with lost resources, environmental degradation and imbalanced access to nutrition - among others - and that cost multiplies to US\$2.6 trillion.<sup>15</sup>

Looking at available data for Trinidad and Tobago, the millions lost to food waste from crops such as cassava and tomatoes represent missed financial opportunities for hundreds of food industry stakeholders. Lost

sales income and inputs such as fertilisers and pesticides, and the opportunity costs of time spent planting and harvesting, add to the list of challenges farmers face. As we look to diversify our economy and reduce our food import bill through agriculture, these are losses we cannot afford to continue enduring.

A third and increasingly important dimension of impact is environmental. Rotting food in landfills emits methane - an extremely potent greenhouse gas which is accelerating climate change. Its contribution to global emissions is so high, in fact, that the FAO has stated: "If food waste was a country, it would be the third largest carbon emitter, after the United States and China."<sup>16</sup>

*Viewed from another angle, food waste accounts for 38% of total energy usage in the global food system.<sup>17</sup> This means that emissions associated with two-fifths of the energy used in our food value chain currently have no productive trade-off – we are generating those emissions in vain.*

## HOW CAN I HELP?

The UN has brought this issue to the fore through elaboration of a special target under Sustainable Development Goal 12 (Responsible Consumption and Production) which speaks directly to food waste. Target 12.3 aims to “halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses” by 2030.

Concerted efforts along the value chain are needed to achieve this target, including more efficient food production systems, state-supported market mechanisms that discourage waste, and effective apparatus for connecting excess food supply with demand.

However, if more than half of all food waste happens at the retail and consumer levels, then we as individuals must bear much of the burden of change. Simple actions can make a world of difference.

<sup>13</sup> <https://docs.wfp.org/api/documents/WFP-0000129030/download/>

<sup>14</sup> <https://www.fao.org/nr/sustainability/food-loss-and-waste/en/>

<sup>15</sup> Ibid

<sup>16</sup> <https://www.fao.org/3/i3347e/i3347e.pdf>

<sup>17</sup> <https://www.un.org/en/observances/end-food-waste-day>



# HOW CAN I HELP?

## SHOP PURPOSEFULLY



**Plan** your meals where possible to ensure you only purchase items you are going to use.

## SELL BY VS USE BY

Pay attention to **'sell by'**, **'use by'**, and **expiry dates**. 'Sell by' dates are a guide for inventory management, and not indicators of food quality. Items past their 'use by' or expiry dates, however, may not be safe to consume.



## SUPPORT LOCAL

**Buy** locally grown produce to help clear the local market and reduce losses to farmers.

**Patronise** farmers in your community where possible – reducing the distance from farm to market means fewer losses of perishable items during handling and transportation.

## EAT WISELY

At home, **try using smaller plates**. We are conditioned to fill our plates when serving, and this can sometimes mean taking more than we can finish.

**Cook just enough** to serve your household or guests, and consume any leftovers within a short timeframe.

If dining out, **ask about portion sizes** before you buy. Share where possible.



## ORGANISE YOUR FOOD



Before going to the grocery or market, **take stock of what you have** in your pantry or fridge so you do not purchase unnecessarily.

In your refrigerator, **arrange produce and leftovers** in such a way that items with a short shelf life are prominently in view.

In your cupboards, **bring items close to expiration to the front** of shelves so they can be used first.



## DONATE

If you have a surplus of food, **share** with a neighbour or someone in need (once it is safe to consume).

**Donate** unwanted canned or dry goods to food banks, shelters etc. once they are safe to consume.

If you own a food business, **partner with organisations** that coordinate food donations if you have food to spare (eg. Nourish TT).

If the world is to achieve its sustainability targets by the year 2030, we need more individual accountability. Food waste is one of society's biggest yet unrecognised problems, but fortunately, it can be addressed with relatively simple solutions. Much of it boils down to consumer awareness and resolve to

take action. We must recognise that our consumption practices have externalities, and that for better or worse, our choices have the power to effect change. So, the next time you go grocery shopping or sit down for a meal, take only what you need and **please, clean your plate.** ■