

## WebQuest

**Title:** Food waste to stop world hunger?

**Keywords:** food waste, world hunger, climate change, wonky veg, taking action

**Ages:** Can be adapted to an age range from 10 – 18 years

## Introduction:

Every year around the globe 1.3 billion tonnes of food is lost or wasted, that is a 1/3 of all food produced for human consumption. This contrasts heavily when you consider that 66 million primary school-age children attend classes hungry across the developing world, with 23 million in Africa alone.

Food losses represent a waste of resources used in production such as land, water, energy and inputs, increasing the green gas emissions in vain, thereby contributing to climate change.

This tool investigates the phenomenon of **food waste**.



Photo: <https://olioex.com/food-waste/the-problem-of-food-waste/>



Photo: <https://democracychronicles.org/end-world-hunger/>

## Objectives of the WebQuest:

For students to learn about food waste around the world and what can be the reasons for food waste.

For students to understand why food waste is impacting the world and therefore a global concern.

For students to understand the link between food waste and climate change.

For students to take action on a personal level as well as for advocacy in a larger context.

Learning to Use media to deliver the message they would like.

## Main Text

With the world's population projected to reach 9.6 billion by 2050, and with most of this growth taking place in the developing world (more than half of it in Africa), the challenge for governments around the world is, how do we produce enough food for everyone?

The answer, according to the United Nations, is *not* to produce more food, but to stop wasting so much of what we already have. The Food and Agriculture Organization of the United Nations (FAO) estimates that, each year, one-third of all food produced for human consumption in the world (around 1.3 billion tons) is lost or wasted. This includes 45% of all fruit and vegetables, 35% of fish and seafood, 30% of cereals, 20% of dairy products and 20% of meat.

Despite the fact that food production is a major contributor to global carbon emissions, people keep throwing it out! In fact, about 7 percent of global carbon emissions are directly related to food we don't even eat. This places food waste as a perpetrator of Climate Change.

One of the reasons why food is wasted is that some agricultural produce does not conform to 'cosmetic standards'. This results in huge quantities of fruits and vegetables being thrown away, resulting also in loss of profit for the farmer.

## Task

Find different percentages for different countries on food waste. Who are the most countries that waste most and least food? The 2017 Food Sustainability Index found that globally, some of the most wasteful countries on earth were the US, Australia and — surprisingly — Sweden.

Why is food waste considered to be a global concern? (Include world hunger and climate change in your answer).

List 4 reasons why food is wasted.

List 4 possible solutions.

## Suggestions for action

*Actions ideally to be worked out in groups.*

Search photos from the internet for the weirdest fruit or vegetable. Make an advert with this photo to convince friends and/or people in a supermarket that this food item is also nutritious.

Search for campaigns that have been carried out in order to minimise food waste.

Create your own campaign. This can include a video/ infograph or presentation. Identify your audience.

Make a list of recommendations for students/parents and businesses for less food waste and disseminate your ideas.

## Process

The process for this webquest runs through the following cycle:

1. Researching for information on the web
2. Discussions with teacher and among peers
3. Reporting tasks
4. Disseminating findings
5. Making personal changes in lifestyle
6. Advocating for action from the general public

## Resources

Statistics on food waste:

<http://www.fao.org/resources/infographics/infographics-details/en/c/317265/>

Food waste by country:

<https://www.care2.com/greenliving/which-countries-waste-the-most-food.html>

World poverty: <https://www.freedomfromhunger.org/world-hunger-facts>

Photographs (Optional according to students' choice)



Photo from: trnd.com



Photo from: digitalfoodlab.com

## VIDEO (Optional according to students' choice)

For ideas on food waste videos for a school campaign - videos produced by different schools on the theme of food waste:

<https://www.youtube.com/watch?v=BCBItWRuj6o>

<https://www.yremalta.org/past-entries/avoiding-food-waste/>

Video that shows local and global statistics, produced by a school:

<http://www.yremalta.org/past-entries/food-is-precious-dont-waste-it/>



## Evaluation

Acquired competences	Social Skills	Knowledge
Researching on the internet for relevant and reliable information	Working in a team; pooling ideas; accepting other persons' point of view	Facts of world hunger and food waste
Using tools for making a better presentation	Public speaking and presentation skills	Making informed decisions on personal lifestyle and being able to explain confidently why this action is being taken.
	Empathising and sensitisation for other people in the world who are suffering unjustly	

## Further information for teachers using this resource:

According to a [paper](#) by researchers at the University of Minnesota, food goes to waste for a variety of reasons, including:

- **Overproduction by farmers** — farmers need to guarantee the supply of food, and often overproduce in order to ensure they can meet these demands
- **Contamination of food during the food supply chain process**, including during the harvest, storage, processing and transportation of the food
- **Stores catering to consumer desires to have all produce available at all times**; this leads stores to overstock their shelves, which means that foods sometimes go unpurchased
- **Inconsistent and sometimes premature [expiration dates](#)** that cause customers to throw food out when it has not yet turned

- **Desire from consumers to have all produce look perfect**, and an aversion to eating irregularly shaped, colored or heritage-breed produce

## **TIPS FOR REDUCING YOUR PERSONAL FOOD WASTE**

Everyone can do their part to help reduce food waste. Here are a few tips for doing what you can.

- **Buy “ugly” produce!** Services like [Imperfect Produce](#) deliver unwanted fruits and veggies to your door.
- **Shop at farmers’ markets.** Reduce wasteful behaviors like grocery store overstocking by purchasing your food directly from the source.
- **Avoid commodity crops.** Farmers are paid to overproduce goods like soy, peanuts, wheat and corn. Avoid these products so you’re not supporting the way commercial growers are overproduced.
- **Shop daily.** Do as the French do! Instead of buying your groceries once a week, head to the market on your way home from work to pick up the day’s dinner.
- **Eat leftovers the next day.** People often neglect their leftovers the day after they’re made, assuming they’ll eat them later in the week. But the longer you wait, the less appetizing those leftovers are going to seem. Eat them right away to make sure they don’t go to waste

[http://www.fao.org/save-food/;](http://www.fao.org/save-food/)

Tips for building the webquest:

Reliable sources (e.g. FAO)

Work related to website, this was a challenge

Give examples of other work by students so that they don’t feel it’s an impossible task

Innovative tasks which use their creativity, media which is very much liked so that they will not be bored.

Credit photos/videos that were used