

Smart STEM Challenge

The Environmental Impact of Food Waste

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Category:

- 1. Environmental Science

Age Group: Junior (Grade 7-9) Senior (Grade 10-12)

ABSTRACT:

Organic waste is biodegradable waste such as biodegradable plastics, food waste, green waste, paper waste, manure, human waste, sewage, and slaughterhouse waste. In the United States, food waste estimates to be around 30-40% of the food supply. Unlike plastic, when dumped in landfills it stays there for more than 400 years but **organic waste** releases

harmful gases to the atmosphere, landfill gases are released when bacteria break down organic waste. Methane and carbon dioxide makes up 90 to 98% of landfill gas. So, before this problem starts going out of hand and becomes too late, we must start taking action now. Our objective is to inform people about the quantity of food wasted globally and the dangers of unwanted goods as to how harmful it is to the environment. My approach to investigating this issue is through the internet, from online research papers to news and documentary. With this knowledge at hand, we can start tackling this problem by implementing the following steps, firstly the 3Rs principle **reduce, reuse, and recycle, plan out your meals, shop smart and don't overbuy, store your produce suitably and learn to preserve it. Unwanted**

produce from supermarkets that are safe for consumption but thrown out because of bruise or cosmetic reasons can be donated to homeless shelters or families in need, using leftovers from restaurants to feed farm animals. Restaurants and hotels can track how much food is wasted using the [food waste tracking scale](#) so they can buy what they need without losing much money.

Biodegradable waste won't stay for 400 years in landfills but it will produce toxic gases increasing the global temperature, so to slow down global warming we must minimize our organic and food waste. We aim to get more people to look into this problem as it is happening globally, even though some organizations are already tackling this problem not everyone understands how bad food waste is. And if you care about the environment don't be picky with your food or be scared of weird-looking fruits or vegetables as they all taste the same.

Waste in Phnom Penh - The key numbers



CAUSES OF FOOD WASTE

