**ZERO HUNGER**

**Goal**: SDG 2 aims to end hunger, achieve food security and improved nutrition, and promote sustainable agriculture. This goal addresses several pressing issues related to hunger, malnutrition, and food production worldwide. The main objectives of SDG 2 include:

* Ending hunger and ensuring access to nutritious food for all.
* Addressing all forms of malnutrition, particularly in vulnerable populations (e.g., children, pregnant women).
* Increasing agricultural productivity and ensuring sustainable food production systems.
* Enhancing the resilience of food systems to shocks such as climate change.

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### Problem to Address: ****Food Waste in Urban Areas****

#### Problem Overview:

**Food waste** is a major issue within SDG 2, particularly in urban areas where high amounts of food are wasted at multiple points in the supply chain — from production and retail to consumption in households and restaurants. While food waste directly undermines the goal of Zero Hunger, it also strains resources, contributes to environmental issues (such as methane emissions from landfills), and represents a massive inefficiency in the global food system.

Globally, about one-third of food produced for human consumption is wasted, amounting to approximately 1.3 billion tons per year. Reducing food waste in urban areas could play a key role in alleviating food insecurity, optimizing resource usage, and contributing to more sustainable urban food systems.

#### Why is this a Significant Problem?

1. **Hunger and Food Security**: While millions of people suffer from hunger and food insecurity, large quantities of edible food are discarded. Reducing food waste can help redirect food to those in need, improving access to nutrition.
2. **Environmental Impact**: Food waste contributes to unnecessary greenhouse gas emissions. The energy, water, and resources used to produce food are also wasted, further contributing to environmental degradation.
3. **Economic Loss**: Both businesses (such as supermarkets and restaurants) and consumers lose significant money through wasted food. Reducing waste can help businesses optimize operations and consumers save money.
4. **Sustainability**: Reducing food waste aligns with the larger goals of sustainable consumption and production (also covered by SDG 12) by promoting efficient resource use.

### Specific Problem to Address:

**Food Waste in Urban Areas Due to Consumer Behavior and Inefficiencies in Distribution**

In cities, where food is abundant, a significant amount of waste comes from:

* **Households**: Consumers buying too much food, improper storage, or discarding edible food due to confusion over "best before" labels.
* **Restaurants**: Overproduction of food, unsold meals, and leftovers that cannot be reused.
* **Supermarkets**: Food waste generated by stock management practices, damaged packaging, or unsold items reaching expiration dates.

#### Why Urban Areas?

Urban areas contribute significantly to global food waste due to higher population densities and greater food consumption. Targeting cities provides an opportunity to tackle the issue where it is most prevalent, helping reduce hunger and inefficiencies on a large scale.

#### Key Data Points to Collect:

* Amount of food wasted per household, restaurant, or supermarket.
* Types of food most commonly wasted (e.g., perishable goods like fruits and vegetables).
* Reasons for waste (e.g., overbuying, spoilage, confusion over expiration dates).
* Geographic areas where food waste is highest (e.g., neighborhoods within a city).

### Potential Solutions:

1. **Data-Driven Waste Monitoring**: Implementing a data tracking system in urban areas to identify sources of waste and understand consumption patterns. This could help pinpoint specific areas or behaviors contributing to food waste.
2. **Redistribution Networks**: Establishing networks to redistribute surplus food from supermarkets, restaurants, or households to local food banks and shelters.
3. **Public Awareness Campaigns**: Educating consumers about proper food storage, understanding food expiration labels, and encouraging responsible purchasing.
4. **Technological Solutions**: Using apps or online platforms that connect consumers or businesses with surplus food to people in need.