

# Introduction

Food is essential to sustain human life. As the global population heads toward 9 billion in 2050, the question of how we are going to feed the planet is absolutely key and has implications on our ability to achieve sustainable development. Goal 2 of the Sustainable Development Goals aims to eliminate hunger globally. It is more than making sure that everyone has enough to eat. We have to analyze and even restructure our entire food system in order to feed a growing population in sustainable and equitable ways. To achieve the goal of zero hunger - how can you help out? Let's find out!

# Mission 1 – Food system

You will take a look at what you eat, find out where your food come from and begin to understand what food system is.

# Objective 1 – What We Eat

We eat to survive, basically. Food keeps us healthy and active. Let's start this mission by looking at what people around the world eat.

#### **Explore**

**Hungry Planet** 

http://time.com/8515/hungry-planet-what-the-world-eats/

#### What the world eats

http://www.fao.org/resources/infographics/infographics-details/en/c/285629/

#### Create

Now show us what you and your families typically eat in a photo like that in Hungry Planet! Each person should go home and take a picture, then make a collage of all group members' pictures and upload it here!

## Objective 2 – Where Your Food Comes From

# Create

Where do you get your food? In your backyard? From the market or grocery shop? From the photo collage you showed, pick five food items for this exercise.

- 1. What did you pick?
- 2. Where are their places of origin? Check the packaging, ask your grocer there are different ways to find out.
- 3. Take a look the food packaging again. Besides place of origin, does it say where the food is processed? Give examples of food originated and processed in different countries.

# Objective 3 – The Food System

A lot of the food we eat are not from our own farm or garden. They are produced, processed, packaged and transported from elsewhere to our local grocery shop. All these steps make up the Food System.

# Explore

What are food systems? https://youtu.be/RImKj-oyiDs

The food system



https://ctfoodalliance.files.wordpress.com/2014/12/web3.jpg

Local food system

http://www.nourishlife.org/wp-content/uploads/2011/03/LocalFoodSystem-640x483.png

#### Create

Briefly describe your community/city's role in the food system, and give examples.

# Mission 2 – Food Production

How did agriculture begin? How do food production and natural systems impact each other? You'll finish this mission with better understand of such questions.

# Objective 1 – A History of Feeding

To feed billions of people, the world needs systematic food production. How do we do that?

## Explore

Agriculture rocks our world

https://youtu.be/IVHD9wGlbho

Why is agriculture so important?

https://youtu.be/Hx6-m510hjU

### Create

Use your imagination. Describe a typical day in your life IF agriculture never happened in human history.

## Objective 2 – Food Production/Agriculture

Agriculture was possible because the Earth's climate changed many years ago. Ironically, today some of the biggest challenges faced by agriculture are also due to climate change.

# Explore

Climate impact on production

https://ccafs.cgiar.org/bigfacts/#theme=climate-impacts-production

How to feed the world in 2050

https://youtu.be/gjtll5B1zXI

## Create

Now let's flip the coin around, and think about how agriculture has affected other systems.

- 1. How has agriculture affected the climate?
- 2. How has agriculture affected natural resources?
- 3. How has agriculture affected our economic and social lives?

# Objective 3 – Sustainable food production

There are strategies to mitigate both the emissions from agriculture and the effects of climate change on agriculture.

#### **Explore**

**Understanding Climate-Smart Agriculture** 

https://youtu.be/IUdNMsVDIZ0



5 ingredients to sustainable food production

https://youtu.be/LrntnLDTIR4?list=PLzp5NgJ2-dK49POTzCR9RF95e9xSZZvXY

#### Create

Earlier you have described your local community's role in the food system. Now it's time to look at them again.

- 1. In what ways could local food system be affected by climate change and other changes in natural systems? How will the consequences affect local economy and social life?
- 2. What can be done to make local food system more sustainable and resilient?

# Mission 3 – Food Consumption

We do not all produce or process food, but we are all consumers of food. How good are we as sustainbale food consumers?

# Objective 1 – Food Waste

Nearly a third of the food produced globally is wasted. This is an economic and environmental challenge that we can address as consumers.

#### Explore

Food Waste infographic

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

Food Wastage Footprint

https://youtu.be/loCVrkcaH6Q

Food waste: a story of excess

https://youtu.be/EwVuz0UJI2A

#### Create

Let's start by looking at the food waste situation at home.

- 1. Discuss in your group and name 5 food items that are often thrown away.
- 2. What are the reasons that these food items are thrown away?

### Objective 2 – Food Miles

Earlier you've looked at where some food items come from. Now you will find out how long they have travelled to reach you.

# Explore

Food mile calculator

http://www.foodmiles.com/

## Create

Use the Food Mile Calculator to find out how far the 5 items you listed in Mission 1 have travelled.

- 1. How far has each item travelled? (e.g. Tomato, XXX km)
- 2. Suggest items with shorter foodmiles to replace them.

### Objective 3 – Food packaging

Many food items we buy today are packaged in some way. Let's think about this from a sustainability perspective.



#### Create

Many food items we buy today are packaged in some way. How is this done where you live?

- 1. Give several examples of food items that are always sold packaged.
- 2. What are the most commonly used materials for food packaging?
- 3. What are the benefits of packaging food items?
- 4. What are some reasons to not use food packaging?

## Objective 4 – Cooking with food wastes

Create a dish from ingredients that you usually throw away! It can be leftover food, or raw ingredients. Let's start with planning first.

#### Create

Create a dish with ingredients that you usually throw away! It can be leftover food, or raw ingredients. Let's start with planning first.

- 1. What ingredients are you going to use?
- 2. Explain briefly how this dish will be prepared.
- 3. Give your dish a unique name! What will you call it?

# Objective 5 – Show and Eat!

Now, cook that dish and take a photo to show us! You can make a collage or a single photo of the finished dish.

# Mission 4 – Food and Nutrition

In this mission, we will explore the issue of nutrition and the extremes of hunger and obesity.

## Objective 1 – Under- and Overnutrition

Nutrition is about eating the right foods so that your body gets all the nutrients it needs to survive. Hunger and obesity are two extremes of malnutrition. There's a lot of materials to explore here, so reserve enough time to understand these issues together.

#### **Explore**

What is chronic hunger?

https://youtu.be/LSw-3zratF8

Hunger and Malnutrition

http://www.fao.org/resources/infographics/infographics-details/en/c/238873/

Healthy food, healthy children

https://youtu.be/b9BE6RfxF\_I

Obesity and overweight increasing worldwide

http://www.healthdata.org/sites/default/files/files/infographics/Infographic\_IHME\_GBD2013\_Obesity.jp

Which country has the biggest obesity problem?

https://youtu.be/mjR6KRMPQGw

## Create

1. Briefly describe the malnutrition situation in your community: do people suffer more from hunger or obesity? Do they belong to any particular age or income group, or gender etc?



# Objective 2 – The Double Burden of Malnutrition

If your community/country faces huge problems with both hunger and obesity, this is known as the the double burden of malnutrition, and it poses a unique challenge to those countries.

## Explore

What is the double burden?
<a href="https://youtu.be/zN5QxUitACs">https://youtu.be/zN5QxUitACs</a>
The Double Burden of Malnutrition in Indonesia https://youtu.be/E2a IsR5E68

#### Create

- 1. In your community, what kind of help do the hungry get?
- 2. In your community, what kind of help do the obese get?
- 3. What kind of help do you think the hungry and the obese should get?

## Objective 3 – A Customised Nutrition Pyramid

You might have heard of the Nutrition Pyramid? It's a visual guide to help us eat the right food.

### Explore

**Nutrition Pyramid** 

http://www.h3daily.com/wp-content/uploads/2010/08/h3 nutrition pyramid.jpg

#### Create

Create a customised Nutrition Pyramid using local food as examples! Take a photo of your drawing and share with us.

# Objective 4 – The Nutritional Challenge in Your Community

No problem is so big that it cannot be solved bit by bit. Here's an example of what a teenager like you has done.

#### Explore

A teenager's bold idea to end hunger <a href="https://www.youtube.com/watch?v=C\_ZloyMe5Pk">https://www.youtube.com/watch?v=C\_ZloyMe5Pk</a>
FAO 100 facts in 14 themes linking people, food and the planet <a href="http://www.fao.org/fileadmin/user-upload/mdg/100">http://www.fao.org/fileadmin/user-upload/mdg/100</a> facts/100facts EN.pdf

#### Create

- 1. What will be your bold idea to tackle a food related problem in your community?
- 2. Which local group do you need to collaborate to make your bold idea a reality?

# Mission 5 – A Sustainable Development Goal on Food

In this mission, you will use what you know now about agriculture, food systems, and malnutrition to think about the options for improving sustainable development and achieving SDG 2!



# Objective 1 - Looking back on food and hunger in the MDG era

Addressing global hunger was a big part of the Millennium Development Goals. Take a look at the MDGs. What are the MDGs for food and hunger? What progress did we make in the past fifteen years? Where were the gaps?

## Explore

MDG 1 Eradicate extreme poverty and hunger <a href="http://www.un.org/millenniumgoals/pdf/Goal\_1\_fs.pdf">http://www.un.org/millenniumgoals/pdf/Goal\_1\_fs.pdf</a> 2015 MDG Progress Report

http://www.un.org/millenniumgoals/2015 MDG Report/pdf/MDG%202015%20PC%20final.pdf

#### Create

- 1. What do you think is the most impressive achievement of the MDGs in food and hunger?
- 2. What do you think is the most disappointing food and hunger goal where we should have done more?
- 3. What is missing in the MDGs with respect to food and hunger?

## Objective 2 - Looking forward to the SDGs in food and hunger

As a global community, we have taken stock of the progress made in the MDGs and the areas where more work is needed. After several years of reflection, we have one core goal in agriculture and many other goals and targets that affect the way we think about agriculture.

## Explore

Hunger/Agriculture SDG Overview

http://www.un.org/sustainabledevelopment/hunger/

List of the SDGs

http://www.un.org/sustainabledevelopment/sustainable-development-goals/

#### Create

- 1. What do you think this SDG means, in your own words?
- 2. Looking at the other SDGs, which ones do you think are also important to achieving the food and hunger goal?

## Objective 3 – Achieving the food and hunger SDGs in our own community

Each person has a role to play in their own communities to make sure that the food and hunger SDG is a reality. So, we need to figure out what this goal means for our own countries and communities.

### **Explore**

Zero Hunger

https://youtu.be/Zyh0QpRKHfc

#### Create

- 1. As a group, read the SDG for food and hunger (Goal 2) out loud. Brainstorm what you think that looks like in your own community. That community could be your school, your town/city, or even your country. In one sentence, describe what that it would look like in your community to achieve that goal?
- 2. With that community picture in your mind, what are three things that the community can focus on to help achieve that goal?



3. Achieving a goal starts with the efforts of a single person. What are three things that YOU as individuals can do to help the community achieve that goal?