



Green Schools Network

ACTIVITY SHEET

April 2009

Why talk about Food Miles?



As the world is getting aware of the concept and consequences of climate change, more and more people are stopping to consider the impact that everyday goods - including food - have on the environment. Food miles, the distance food travels from field to plate, is a way of indicating the environmental impact of the food we eat.

The concept of Food Miles has been motivated by two prime concerns:

1. The environmental concern argues that the further that a food product(s) travels from where they are produced to where they are consumed, the greater the emissions of Greenhouse Gases (GHGs).
2. The regional development concern argues that sourcing food close to where it is produced can generate important benefits to the local economy and lead to 'regional development'.

Name.....

School Name

Class..... Date.....

Gobar Gyan:

Food production, distribution and consumption patterns have undergone a major transformation over the past 50 years. As the retailers continue to develop more extensive and sophisticated outlets and distribution systems and import an increasing volume of produce, the consumers are getting used to convenient, comfortable shopping facilities, and a large range of quality produce to chose from. How do you think you get all kind of fruits and vegetables all year through? It takes thousands of miles (food miles) to import these from the country where they are being seasonally produced.



Supermarkets have national distribution systems, so even food grown near a particular branch may have traveled by lorry to a central depot and back to its place of origin. Recent findings indicate that it is not only how far the food has traveled but the method of travel that is important to consider. The positive environmental effects of organic farming might be completely reversed with increased transportation, unless it is produced by local farms. Also, the fact that the food we eat clocks up extra miles on the drive to the supermarket and back. Each of these processes lead to enormous amounts of energy consumption and GHG emissions.

Activity 1: In this section we will try to understand the relationship between our food choices and global warming. The criterion is the distance the food commodity travels to reach you and the energy consumed in making of the









Ten liters of orange juice needs a liter of diesel fuel for processing and transport, and 220 liters of water for irrigation and washing the fruit.



Hi! I am Pandit Gobar Ganesh. You will find me in Gobartimes—a magazine that tells you how your everyday life is linked to the world around you. Hooked, huh? If you want to know more about me and Gobartimes visit us at: www.gobartimes.org

commodity. It's primarily processed food v/s raw food, vegetarian food v/s non-vegetarian food and imported food v/s local food.

Individual

Food combinations	Tick box		Colour
Local, vegetarian raw / cooked food	<input type="checkbox"/>	50 Greens	
Imported, vegetarian raw / cooked food	<input type="checkbox"/>	30 Reds	
Local, Vegetarian processed food	<input type="checkbox"/>	30 Greens	
Imported, Vegetarian processed food	<input type="checkbox"/>	40 Reds	
Local, non-vegetarian raw / cooked food	<input type="checkbox"/>	40 Greens	
Imported, non-vegetarian raw / cooked food	<input type="checkbox"/>	40 Reds	
Local, non-vegetarian processed food	<input type="checkbox"/>	20 Greens	
Imported, non-vegetarian processed food	<input type="checkbox"/>	50 Reds	

Example:

Account for the food habits (occasional eating will be counted) of the four members separately. The reds will add to the total of Reds earned in other sections and the same will apply for Greens.

Person 1: Local vegetarian processed food = 30 Greens

Person 2: Local non-vegetarian raw / cooked food = 40 Greens

Person 3: Imported, non-vegetarian raw / cooked food = 40 Reds

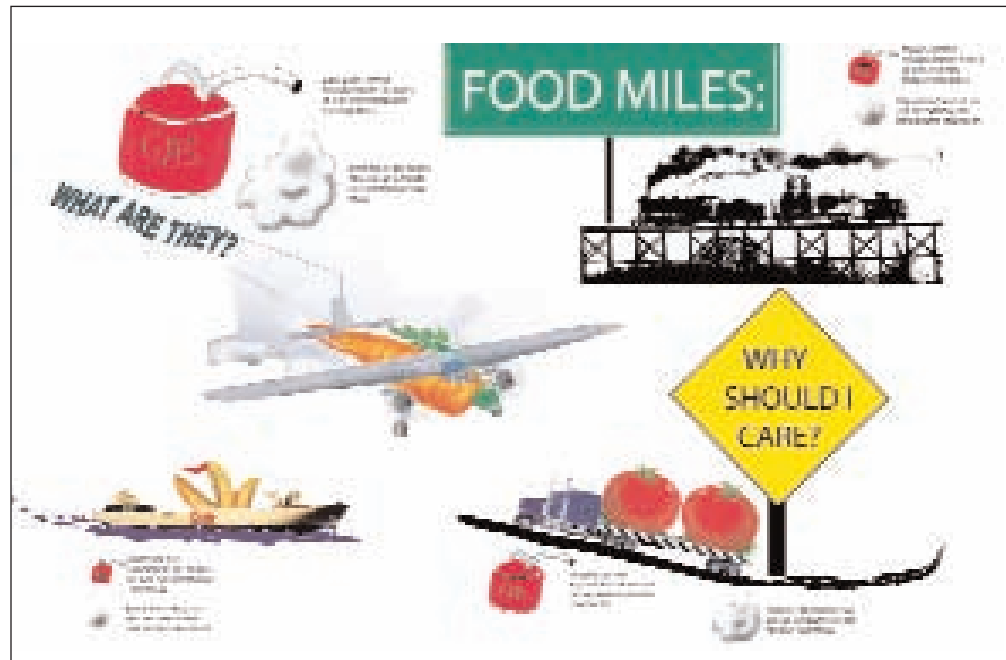
Person 4: Local, non-vegetarian processed food = 20 Greens

Now, calculate your individual score and write it down here: _____.

Carbon 'foodprint': The computation of all the carbon emissions produced in the growing, processing and distribution of our food starts in the field. Measuring the environmental impact, from fork to plate, is known as the life cycle. Organic farming uses less energy because it relies much less heavily on fertilizers and chemicals used in intensive farming, the manufacture of which creates greenhouse gases. Meat is the most energy-intensive of all foods to produce, taking up larger amounts of water than any other food production. Livestock rearing generates more greenhouse gases than transport.

Activity 2

The more food miles that attach to a given food, the less sustainable and the less environmentally desirable that food is. The next time you go to the supermarket or your grocery store, read behind the packet to find out the place of its manufacture. You can visit the following links to find out the distance your food has traveled to reach your supermarket shelf and calculate the total amount of CO₂ emissions:



Calculate the distance: <http://www.organiclinker.com/food-miles.cfm>
Calculate the CO₂ emissions: <http://www.fallsbrookcentre.ca/cgi-bin/calculate.pl>

Why buy local?



1. Locally grown fruits and vegetables are usually sold within 24 hours of being harvested. Produce picked and eaten at the height of ripeness has exceptional flavor and, when handled properly, is packed with nutrients. Fruits and vegetables shipped from distant states and countries can spend as many as seven to fourteen days in transit before they arrive in the supermarket.



2. Many local growers are getting out of business in the face of competing with imported produce. By supporting them you also strengthen your economy.
3. Safeguard your family's health and protect your environment.



In UK, the carbon trust is helping organizations work out a way of measuring the CO₂ emitted at every stage of production. One can find the pilot label showing carbon emissions in grams on a variety of products such as cheese and wafers.



Prepared by: Khadija Mariam

If you found the activity sheet interesting, E-mail us at eeu@cseindia.org or write to:
Activity Sheet, Centre for Science and Environment, 41 Tughlakabad Institutional Area,
New Delhi-110062 or Call 29955124 Extension 219