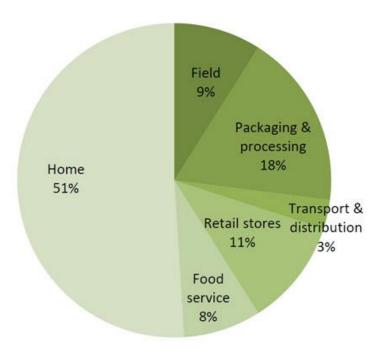
#### **Food Waste: the Next Food Revolution**

The Green Revolution, which began soon after WWII, had a nearly singular focus: poverty reduction, improved nutrition, and achieving characteristics of "modernity" could be addressed through increased yield. Technologies were introduced, efficiencies found, and if these are the measures of success, the Green revolution delivered beyond expectations. However, in the 21<sup>st</sup> century we still see nearly 1 billion humans going hungry, looming food insecurity and the social threats that go along with that. There are renewed calls to address these issues by continuing to focus on supply. GM technology has been ushered in as the modern extension of the Green Revolution. We are talking more about insect as a more environmentally sustainable source of protein. But is the answer all about supply? The statistics about food waste would suggest that there are other ways to address these issues without having to find more supply.

#### Where is food wasted?



Source: Gooch et al, 2010

As a class we will look at each of these areas to understand why/how food is wasted at the different stages of the food chain. We will consider the environmental consequences of food waste (if food waste was a country, it would be the second biggest polluter of greenhouse gases on the planet....something like that, check stat). We will look at food security, and how to address food waste as individuals and communities.

Student projects will focus within these broad topic areas.

### Where is food wasted?

- Field:
- Packaging and processing:
- Transportation and distribution:
- Grocery stores:
  - 3 billion dollars of food wasted every year in Canada in grocery stores (10 percent of total). Covered on Marketplace CBC... may be more through the week of October 24-30 (expose of Walmart)
- Food service (restaurants):
  - o Might be interesting to consider Camosun's cafeteria
- Home:

# Other topic areas for projects:

- Social innovation and food waste:
  - Beyoncé's WTRMLN water (article in Modern Farmer, can now get this product at Costco?)
  - o store that sells items near or just past their best before date
  - o new Mustard Seed fridges will help divert food from dumpsters at grocery stores
  - http://www.cbc.ca/news/canada/british-columbia/excess-okanagan-fruits-and-veggies-feed-millions-overseas-1.3856261

### • Environmental consequences of food waste

- According to the United Nation Food and Agriculture Organization (FAO), global food waste represents more greenhouse gas emissions than any country in the world except for China and the United States.
  - https://blogs.scientificamerican.com/plugged-in/un-says-that-if-food-waste-was-a-country-ite28099d-be-the-3-global-greenhouse-gas-emitter/
- FAO report from 2013 breaks environ piece down into various components: Carbon footprint, water usage, land usage, biodiversity http://www.fao.org/docrep/018/i3347e/i3347e.pdf
- Food security issues and food waste
- Best before dates
- Inglorious fruits and vegetables

## Loblaws sells ugly fruit at a discount to curb food waste

Real Canadian Superstore and No Frills are selling blemished, misshapen and undersized apples and potatoes for 30 per cent less than regular prices.

• http://www.toptipsclub.com/blog/general/canada-s-largest-food-retailer-to-sell-ugly-produce-at-low-prices-to-cut-food-waste/

Great resources to get things started: Farm to table.... to landfill?

http://modernfarmer.com/2013/09/next-food-revolution-youre-eating/