



Enormous quantities of food are thrown away every day. According to the Food and Agriculture Organization of the United Nations (FAO), about one third of global food production (around 30 to 40%), is lost or wasted annually.

Every year rich countries waste more than 220 million tonnes of food. Per capita waste by consumers is between 95 and 115 kgs per year in Europe and North America, while in Sub-Saharan Africa and South/South-East Asia, the “throw away” represents 6 to 11 kgs per capita per year, according to Isabelle Denis from the FAO Liaison Office in Brussels.

In developed countries, at retail level, large quantities of food are wasted due to quality standards that over-emphasize appearance. Consumers in rich countries are generally encouraged to buy more food than they need and fail to plan their food purchases properly.

In developing countries the problem is essentially due to inadequate harvest techniques, poor post-harvest management, lack of suitable infrastructure, processing and packaging, lack of marketing information.

“We must know that food waste or losses have an impact on climate change, because we use resources (water, fertilizers, pesticides, seeds, energy, and labour) to produce this food that we will not use. It has an impact on the production of greenhouse gas emissions and consequently on climate change. In developing countries, food losses during harvest and storage reduce the income of small farmers and result in a higher price for poor consumers who can’t afford to pay for the food. Reducing food losses can therefore have an impact on improving the livelihoods and food security of small farmers and poor consumers,” Isabelle Denis says.

### What are the solutions?

We are now 7 billion people in the world. We know that to feed a world population that is estimated to reach 9 billion people by 2050 and assure their food security, we will have to increase food production and productivity, and we will have at the same time to reduce food losses and waste.

According to Denis, advice to developing countries would be to strengthen food supply chains, by diversifying and up-scaling the production and marketing of small farmers, to assist them in being directly linked to the buyers. Private and public sectors could invest more in infrastructure, transportation, packaging, processing.

“In developed countries we know that consumers are willing to buy products that do not meet appearance standards as long as they are safe and good”, Denis says. Education in schools and political initiatives are possible starting points to change consumer attitudes because throwing food away is unacceptable.

“We would also recommend having selling farms next to the consumers, with direct selling through “farms shops”. It is also important to raise awareness among food industries, retailers and consumers on how to better use food that it is now thrown away. For the food which is still good in terms of safety and nutritional value, in place of throwing away at the supermarket level, we would suggest that commercial and charitable organizations collect it at the retailers, and selling it in social shops or giving it to poor people”.

### New technologies to avoid losses

FAO, the Food and Agriculture Organization of the United Nations, has a mandate to raise levels of nutrition, improve agricultural productivity, better the lives of rural populations and contribute to the growth of the world economy.

According to a recent report produced by FAO in joint collaboration with the World Bank “ [Missing Food: The Case of Post Harvest Grain Losses in Sub Saharan Africa](#)”

”, investing in post-harvest technologies may reduce food losses and increase the food supply in sub-Saharan Africa where food losses are estimated to be USD 4 billion per year, which would allow us to feed 48 million people. It might have a positive impact on Millennium Development Goal 1, to eradicate extreme poverty and hunger. It consists of 3 targets:

1. Halve, between 1990 and 2015, the proportion of people whose income is less than \$1 a day
2. Achieve full and productive employment and decent work for all, including women and young people
3. Halve, between 1990 and 2015, the proportion of people who suffer from hunger

To avoid food losses, a variety of practices and technologies are available such as storage containers, hermetically sealed bags, metallic silos.

“In Africa we can introduce technologies which have been successfully tested in Asia and might be adapted to Africa’s conditions. Governments can also help in avoiding food losses, by investing in infrastructure like roads to facilitate the commercialization of food, electricity and water to process food. It is also important to invest in research and extension, to identify where along the food chain food losses are happening and how to tackle them”, Denis says.