Food losses and waste and their impacts on food security in Latin America and the Caribbean

II. Food waste and the eradication of hunger

III. Food losses and waste affect the sustainability of food systems

IV. Are there ways to cope with the phenomenon of food losses and waste?
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Main findings

- Food losses and waste together affect the sustainability of food systems, reduce local and global food availability, cause food producers to lose income, raise food prices to consumers and impair their health and nutritional status, and destroy the environment due to the unsustainable use of natural resources.

- **Latin America and the Caribbean** are responsible for 6% of global food losses.

- Each year, the LAC region loses or wastes at least 15% of its available food.

- Consumers waste 28% of their food, and food producers lose the same 28%. Another 22% of food is wasted and lost during handling and storage, 17% during marketing and distribution, and the remaining 6% during processing.

- Retail food waste alone in Latin America and the Caribbean is enough to satisfy the nutritional needs of over **30 million people**, that is, of 64% of the people who go hungry in the region.

- Retail food losses alone in those countries in Latin America and the Caribbean in which more than 5% of the population are overnourished are enough for six LAC countries to feed their entire populations, and for twelve of them to achieve the first Millennium Development Goal.
Food losses are defined as the decrease in the availability of food apt for human consumption along the entire food supply chain, especially in the production, post-harvest, storage and transportation segments. Food waste is defined as the losses arising from the decision to throw away food that is still edible; it reflects behaviour mainly at the level of wholesale and retail sales, in prepared food services, and at the consumer level.

According to World Bank data, about one quarter to one third of the food produced annually worldwide for human consumption is lost or wasted. Cereals make up over half of the lost or wasted food. More than one third of the losses occur at the consumer level.

The Food and Agriculture Organization of the United Nations (FAO) estimates that 6% of global food losses occur in Latin America and the Caribbean. Each year, the region loses and/or wastes about 15% of its available food.

In Latin America and the Caribbean, most of the food is lost or wasted in the production and consumer segments of the food supply chain. About 28% of food losses occur in the consumer segment, about 28% in the production segment, 17% during marketing and distribution, 22% during handling and storage, and the remaining 6% during processing (Figure 1).

Figure 1. Food losses and waste in Latin America by food supply chain segment

Percentage of calories lost or wasted


Note: Consumption refers to food losses and waste by consumers at the household level. Marketing and distribution refers to food losses and waste within the marketing system, for example, wholesale and retail merchants and supermarkets. Processing refers to food losses and waste during industrial processing. Production refers to food losses and waste during the harvest and post-harvest phases and the industrial processing of animal products. Handling and storage refers to food losses and waste during the handling, storage, packaging and transport stages between the farm or production point and the distribution phase.

2 Measured as the contribution to calorie consumption.
There are currently 47 million people suffering from hunger in the countries of Latin America and the Caribbean, that is, about 7.9% of the population. In order to meet Goal 1 of the Millennium Development Goals – to reduce by half between 1980 and 2015 the proportion of people suffering from hunger – about three million people must overcome undernourishment by 2015, according to recent estimates. Food loss and waste reduction is one path towards achieving this Goal and eradicating hunger in the world.

According to the latest estimates by FAO for the period 2011/13, the countries of the region lose between 2.9% to 4.3% of available calories in retail sales alone, that is, in supermarkets, street markets, grocery stores and other points of sale.

The calories lost at the retail sales level alone would be enough food to feed over 30 million people by satisfying their minimum daily energy requirements.

The fact is that the region has enough food to feed its population adequately: hunger exists basically because the poorer segments of the population do not have the means to buy food. Still, countries in Latin America and the Caribbean cannot afford to lose and waste food when there are millions of men and women, boys and girls who go hungry every day.

The impact and consequences of food losses and waste in the region become obvious when the countries are examined individually. Retail food losses in the Bahamas, Jamaica, Trinidad and Tobago, Belize, Colombia and Uruguay are enough to feed all the hungry people in each of these countries.

In Antigua and Barbuda, the Bahamas, Jamaica, Saint Kitts and Nevis, Trinidad and Tobago, Belize, Bolivia, Colombia, Ecuador, El Salvador, Suriname and Uruguay, food losses at the retail level would be enough for each of these countries to feed enough people to achieve Goal 1 of the Millennium Development Goals, reducing by half the percentage of the undernourished in their populations.

Finally, Saint Vincent and the Grenadines, Brazil, Guyana, Honduras and Panama –having already achieved Goal 1 of the MDGs –waste more food at the retail level than is needed to feed all the people who still go hungry in each country.

Clearly, the potential impact of food loss and waste reduction throughout the food supply chain is immeasurable, since retail food losses alone could feed enough people to enable the entire region to achieve the first of the Millennium Development Goals, the eradication of hunger.
How much could the countries of Latin America and the Caribbean progress towards Millennium Development Goal 1, were retail food waste alone to be reduced?


Notas:
1. Current status refers to the prevalence of undernutrition in the 2011/13 triennium. The indicator 50% food loss refers to the level of undernutrition that the country would have, had retail food losses been 50% of the real total, assuming that the remainder of the calories would be consumed by the population. The indicator 0% food loss refers to the level of undernutrition that the country would have, had there been no retail food losses, assuming that those calories not lost would be consumed by the population.

2. The data considered only those countries in which undernutrition was above 5% for the 2011/13 triennium. Undernutrition under the scenarios of 50% and 0% food losses have been calculated taking into consideration retail food losses, calories available in the country, the minimum energy requirements per person and the number of inhabitants during that period.

The region of Latin America and the Caribbean produces more than enough food to feed its entire population. Food production and availability grow year by year, making the region a significant global exporter of food products.

However, despite the abundance of food in the region, food losses and waste affect the sustainability of food systems—and therefore, food and nutritional security— in three ways:

(i) They reduce local and global food availability, affecting the health and nutritional status of the population.

(ii) They produce negative effects on food access: a result of financial and income losses to both food producers and sellers and consumers, due to the contraction of the market and the rise in prices generated by food losses and waste.

(iii) They have a negative impact on the environment as a result of both the unsustainable use of natural resources on which current and future food production depend, and the creation of waste.

There are a number of important initiatives that seek to minimize food losses and waste at the various stages of the food chain, mainly through investment in infrastructure and physical capital.
The strategy for reducing food losses and waste must be built around three central pillars:

I. Technology, innovation and training in data collection, the implementation of best practices, and investment in infrastructure and capital to improve the efficiency of food systems;

II. Governance for the establishment of regulatory frameworks, investment incentives and strategic alliances;

III. Information and communication through sensitization campaigns targeting every actor in the food chain as part of the global SAVE FOOD initiative.

There must be international cooperation and coordinated action between the public and private sectors to confront this issue, the outstanding item on the agenda in the struggle against hunger in Latin America and the Caribbean.

Although there has not yet emerged any clear strategy on food loss and waste reduction in the region’s countries, Governments clearly are implementing measures to face the issue.

One measure is the food banks that collect for redistribution food that, for various reasons, would have been discarded. This is a viable platform for the public and private sectors to establish alliances, such as have been set up in Costa Rica, Chile, Guatemala, Argentina, the Dominican Republic, Brazil and Mexico. The Association of Food Banks of Mexico, for example, is a non-profit organization which coordinates a network of 61 food banks all over the country, and was able to rescue 56,000 tons of food in 2013 alone.

SAVE FOOD

In 2011, FAO launched its Global Initiative on Food Loss and Waste Reduction –SAVE FOOD– as a corporate effort supported by the German company Messe Düsseldorf. This global initiative brings together 250 partners, including organizations and companies both public and private, in an effort to change the practices in management, technology and behaviour of the individuals involved in food supply chains.

SAVE FOOD develops campaigns throughout the world, in an effort to save some of the 1,300 million tons of food that are lost or wasted each year, which include 30% of cereals, between 40% and 50% of root crops, fruits and vegetables, 40-50% of oilseeds, 20% of meat and dairy products and 35% of fish. FAO estimates that the amount of food produced that is never eaten would be enough to feed 2,000 million people.

The FAO Regional Office for Latin America and the Caribbean is the focal point for SAVE FOOD in Latin America and the Caribbean and supports the Food Loss and Waste Reduction Strategy which will be launched in September 2014 within the framework of the Regional Experts Consultation on Food Losses and Waste.

For more information:
Global Initiative on Food Loss and Waste Reduction – SAVE FOOD:  
http://www.fao.org/save-food