

FOOD LOSS AND FOOD WASTE

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Summary. *Today, humanity is facing 2 global problems that have serious consequences, this is food loss and food waste. When food is lost or wasted, all the resources that were used to produce this food - , including water, land, energy, labour and capital – go to waste. In addition, the disposal of food loss and waste in landfills, leads to greenhouse gas emissions, contributing to climate change. Ensuring security food for all individuals, contributes to social peace, stability and prosperity.*

Keywords: *food loss, food waste, global problem, security.*

Food waste is a global problem that has become increasingly important on the public and political agenda of recent years. The importance of this topic will continue to grow in especially given the need to feed a growing world population. Food is a precious good, and their production may require significant resources. Current estimates indicate that at globally, about a third of food produced for human consumption is wasted or lost, which generates significant economic and environmental costs. Ensuring the food security of the population is the obligation of each state. The security issue food, the population's access to basic agri-food products of appropriate quality, it is a major concern that they all face, to a greater or lesser extent the states of the world, but primarily the underdeveloped or developing ones. The problem of access to Food is a factor that can lead to global instability. Ensuring security food for all individuals, contributes to social peace, stability and prosperity.

Foodborne illness kills two million people a year, of which a significant proportion are children. Foods may contain bacteria, viruses, or parasites chemicals that are responsible for over 200 diseases, from acute diarrheal disease and to cancer. There is a vicious cycle between digestive diseases and malnutrition, which primarily affects, infants, young children, the elderly and people with other pathologies. Foodborne illness can influence socio-economic development by burdening health systems, affecting economies national, tourism and trade.

In 2004, the Council unanimously adopted the guidelines on the right to food, The FAO was one of the most important steps in the history of the right to food. For the first time, the international community has fully agreed on its significance. These guidelines provides a bridge between the legal recognition of this right and its effective realization, providing governments, civil society and other partners a coherent set of recommendations. These cover the policies of economic development, legal and institutional aspects, agricultural and food policy, nutrition, food security and consumer protection, education and awareness, devices security, social security, emergencies and international cooperation. Provides a framework for a integrated food security policy at national level.

To understand the problem we need to know the meaning and the difference between *food loss* and *food waste*.

Food loss is the decrease in the quantity or quality of food resulting from decisions and actions by food suppliers in the chain, excluding retailers, food service providers and consumers.

Empirically, it refers to any food that is discarded, incinerated or otherwise disposed of along the food supply chain from harvest/slaughter/catch up to, but excluding, the retail level, and does not re-enter in any other productive utilization, such as feed or seed. Food loss, as reported by FAO in the FLI, occurs from post-harvest up to, but not including, the retail level.

Food waste refers to the decrease in the quantity or quality of food resulting from decisions and actions by retailers, food service providers and consumers. Food is wasted in many ways:

- Fresh produce that deviates from what is considered optimal, for example in terms of shape, size and color, is often removed from the supply chain during sorting operations.
- Foods that are close to, at or beyond the “best-before” date are often discarded by retailers and consumers.
- Large quantities of wholesome edible food are often unused or left over and discarded from household kitchens and eating establishments.

Sociological study on food waste in the Republic of Moldova

For the study was proposed a questionnaire consisting of 8 questions that was addressed to 50 people aged between 18-53 years. In the questionnaire participated 31 women (62%) and 19 men (38%) where 50% people aged between 18-23 years, 20 % people aged between 24-29 years, 8 % people aged between 30-35 years, 8 % people aged between 36-41 years, 8 % people aged between 42-47 years and 6 % people aged between 48-53 years.

1. Do you prefer to cook or to eat ready-made food from food units?

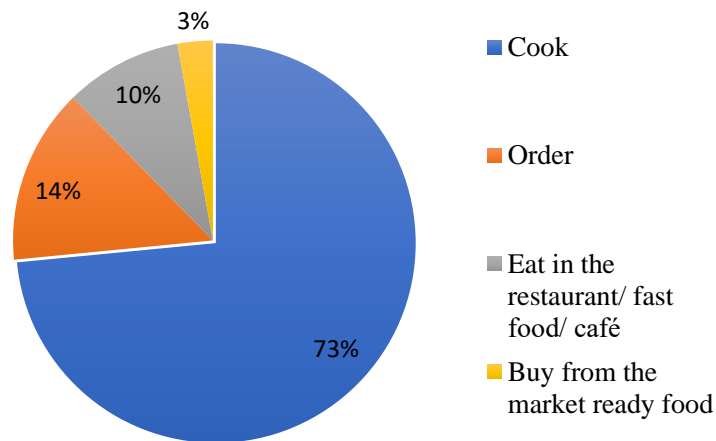


Figure 1. Preferences

2. How often do you buy food?

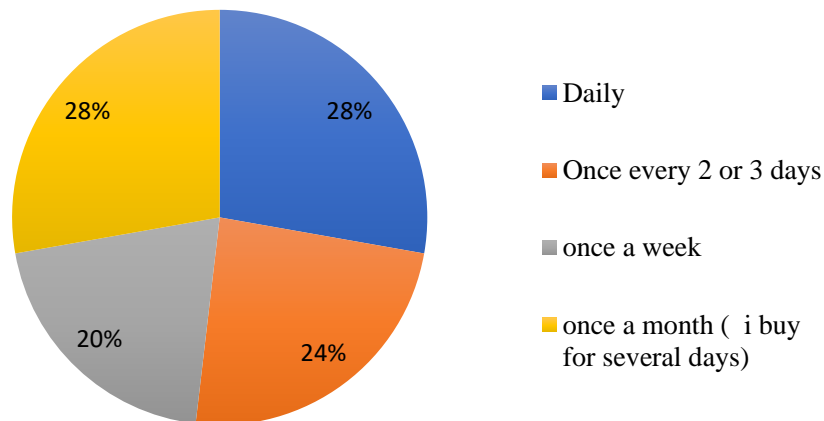


Figure 2. How often do you buy food

3. How often do you throw food in the trash ?

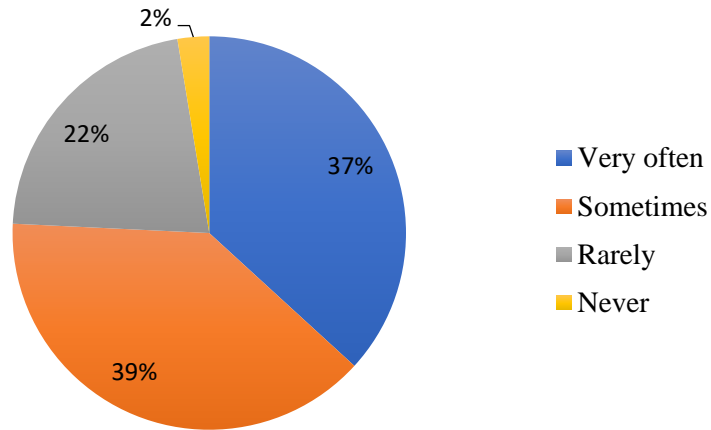


Figure 3. How often do you throw the food

4. How much food do you throw away a week? (Attention, we do not include vegetable peels or cooking results or inedible parts - bones, eggshells, etc.)

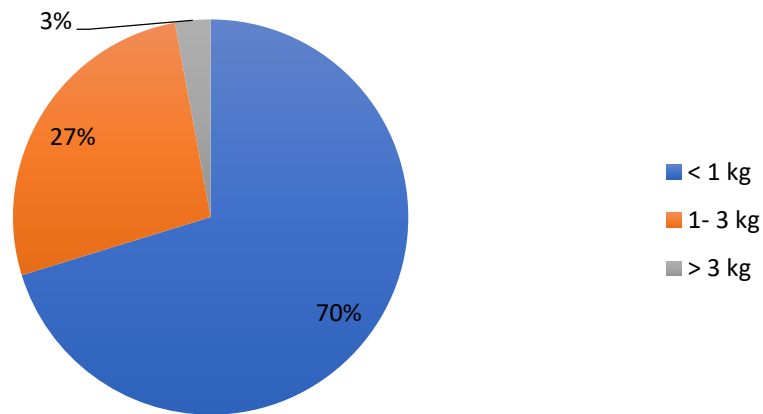


Figure 4. Quantity of throw food

5. What is the category of food you throw away most often?

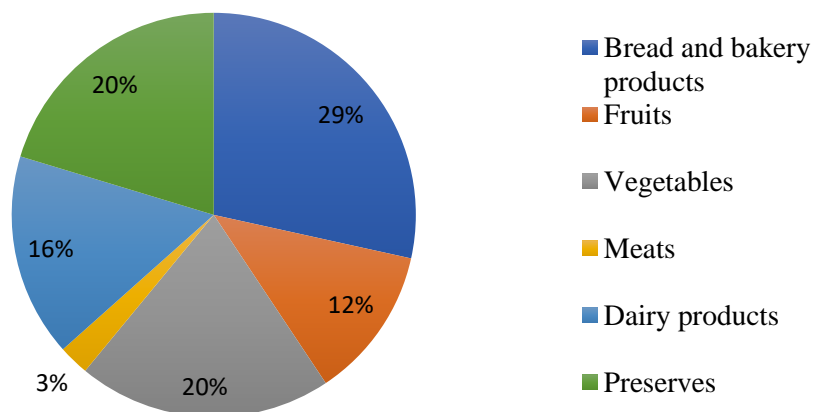


Figure 5. Category of food

6. What is the reason for throwing away food?

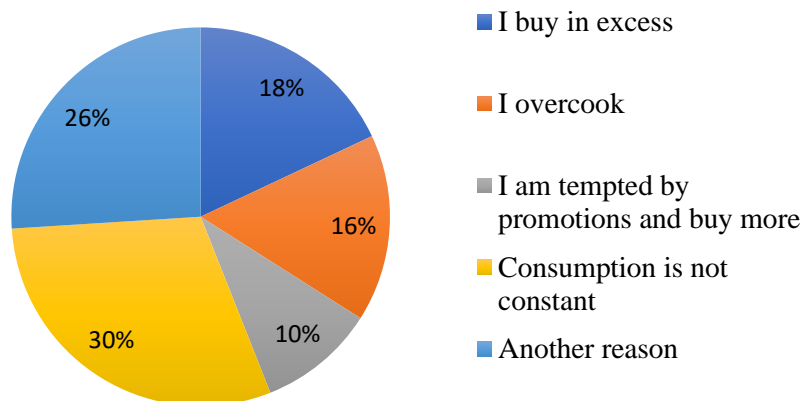


Figure 6. Reason of throwing away food

Conclusion: Following the survey we can conclude that most people prefer to cook food at home but because they do not keep track of the number of people consuming in the family and the amount of food needed to meet nutritional needs, much of the food ends up being thrown.

For many people in the world, food waste has become a habit: buying more food than we need at markets, letting fruits and vegetables spoil at home or taking larger portions than we can eat. These habits put extra strain on our natural resources and damage our environment. When we waste food, we waste the labour, effort, investment and precious resources (like water, seeds, feed, etc.) that go into producing it, not to mention the resources that go into transporting and processing it. In short, wasting food increases greenhouse gas emissions and contributes to climate change. It's a big problem. It's up to us to change our habits to make not wasting food a way of life!

Here are some easy actions you can take to re-connect to food and what it stands for:

Adopt a healthier, more sustainable diet- Life is fast-paced and preparing nutritious meals can be a challenge, but healthy meals don't have to be elaborate. The internet is full of quick healthy recipes that you can share with your family and friends

Buy only what you need- Plan your meals. Make a shopping list and stick to it, and avoid impulse buys. Take smaller portions at home or share large dishes at restaurants. Not only will you waste less food, you'll also save money!

Pick ugly fruit and vegetables- Don't judge food by its appearance! Oddly-shaped or bruised fruits and vegetables are often thrown away because they don't meet arbitrary cosmetic standards. Don't worry - they taste the same! Use mature fruit for smoothies, juices and desserts.

Put your food waste to use- Instead of throwing away your food scraps, compost them. This way you are giving nutrients back to the soil and reducing your carbon footprint.

Support local food producers- By buying local produce, you support family farmers and small businesses in your community. You also help fight pollution by reducing delivery distances for trucks and other vehicles.

Respect food- Food connects us all. Re-connect with food by knowing the process that goes into making it. Read about food production and get to know your farmers.

References:

Books

1. MICHAEL BLAKENEY " FOOD LOSS AND FOOD WASTE Causes and Solutions " 2019 .

Articles

2. Packaging's Role in Minimizing Food Loss and Waste Across the Supply Chain Volume28, Issue7, July 2015, Pages 603-620
3. <http://www.fao.org/climate-change/our-work/areas-of-work/food-loss-and-waste/en/>