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by P K

Submission date: 05-Apr-2021 07:28AM (UTC-0700)

Submission ID: 1550979574

File name: Ariel.docx (23.82K)

Word count: 2017

Character count: 11095

Food Wastage

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Introduction

The amount of food waste disposed of has been increasing gradually. Food waste can occur between the process of production and consumption. Globally, it is estimated a ⁵ third of the food produced is wasted or lost; also, the value equates to more than 1 billion tons wasted annually. Reducing food wastage globally has the potential to reduce the twenty percent food gap by 2050. Consequently, food wastage is associated with adverse effects on the environment; there is an increase in the amount of rotten food globally, increasing greenhouse gas production (methane). The greenhouse gases affect the climate more than carbon emissions.

Food wastage is mainly affecting developing countries due to poor production processes (Dou et al., 2016). In other words, developing countries lack effective methods which assist them in harvesting their products. Most people in developing countries have used poor storage techniques, which increases the potential of their products to be damaged by pests, and during the consumption period, wastage occurs when the food products are rejected due to safety and quality. This paper will focus on identifying the main effects caused by food wastage globally towards identifying whether food wastage is an environmental or a social problem. Additionally, it will provide an action plan to minimize food wastage.

Economic problem

Food waste is an economic problem. Almost ³ more than 1 billion tons of food are wasted globally, which causes a great impact on the economy because it losses more than \$ 3.5 trillion every year. When considering the environmental and social costs, including deforestation, increase in greenhouse gasses, increased soil erosion, reduced profits caused by poor production methods, increased food wastage, and poverty levels rise. The decrease in consumer surplus, which results from food wastage, makes food and other basic food prices. As a result, poor

people cannot afford nutritious and healthy foods, which can later increase health problems due to malnutrition. The United States records more than 61 million food waste annually, and the food wasted is worth more than \$160 billion (Thyberg & Tonjes, 2016). Furthermore, more than 30 million tons are disposed of in a landfill, which costs the government almost \$2 billion.

Due to the negative economic effects caused by food wastage, governments need to create awareness to educate citizens on better methods of disposing of food. Also, people should understand that minimal food wastage will save their income spent on buying food. However, others may feel that food wastage may positively improve the economy for every job created within the waste diversion industry, a job position is created. Therefore, people will be employed, and they will be able to buy food even when prices rise. However, reaching Zero food wastage improves the local economy by reducing landfills and the cost incurred.

Environmental impacts of food waste

Food waste can have negative effects on the environment when it's not well managed. The inputs required to produce food may negatively affect the agricultural systems and ramifications of the surrounding environment. For instance, if food production is not done properly, there are higher chances of disposing of products to waterways. When the foods are disposed of in the landfills, they easily convert and produce methane gas. The greenhouse gas produces increases greenhouse gases increasing global warming effects. An increase in poor food disposal increases adverse climatic changes (Katajajuuri et al., 2014). Governments need to ensure they offer support to citizens by introducing better disposal methods and minimize methane production. However, in the developed nations, they take advantage of food waste; when the waste is in the landfills, they can easily generate they can generate energy from methane gases.

The existing disadvantage is most of the methane gases are released into the environment. Another barrier to energy production is that food wastage of energy is not energetically considered favorable due to the high moisture content. In other words, the heat produced by methane gas is low compared to other gases. Waste to food incineration is considered not to be among the best methods of disposing of food waste because it does not capture nutrients, which may increase the effects of environmental pollution. Food waste can generate energy benefits when well handled by developing better landfills for energy collection. Additionally, informal methods of disposing of food waste can assist in minimizing negative environmental effects. For instance, donating the remains or feeding the leftovers to pets. Minimizing food wastage disposal by increasing recycling rates will be beneficial to environmental systems.

Culture and food wastage

Culture plays a significant role in shaping food eating and nutrition as well as waste disposal. Sometimes, the amount of food wasted is dependent on the attitude and cultural habits of people. People need to understand that the increased food wastage increases food insecurity. Different peoples from different cultures consume different foods and consider different parts edible, therefore, disposing of different parts. For example, in the United States, food culture is of low value because they have an unhealthy relationship with what they consume, leading to increased wastage. However, in countries where they have food cultures, they value quality and not abundance hence low food wastage and disposal (Chalak, Abou-Daher & Abiad, 2018). Additionally, a family buying patterns can either increase or decrease food wastage; when a family buys more groceries and lacks effective preserving methods, there are higher chances of food wastage.

In developing countries, food wastage is high because individuals buy in large quantities due to fear of price rise. Some have minimal incomes, which requires them to buy more products when they get their payment. Due to the large quantity of products, there are higher chances for food to go bad before consumed, increasing food wastage. On the other hand, in developed countries, they just buy enough for a meal for the day, which will minimize wastage. Food waste may also be high in different countries due to different country cultures. For instance, in Germany, the retail managers fail to agree that food wastage is a problem when in the United Kingdom, even the government creates awareness through campaigns to minimize food wastage.

Relationship between food wastage and demographic factors.

People's behaviors and attitudes influence the levels of food wastage. A better understanding of demographic patterns and factors can help predict how food wastage changes within the patterns. One of the demographic factors is the age where the young generation is associated with a large number of food wastage. People between the age of 16 – 27 years are recorded to increase the levels of food wasted in Zambia, While in the US, individuals over the age of 67 wasted less food (Graham-Rowe et al., 2014). The older people mostly believe that wasting food is wrong, making them be rational. The family composition may increase or decrease food wastage; in families where there are young participants, there are higher chances to waste more food because many children fail to finish their food. Also, the larger the household, the higher amount of wastage is recorded. It is the parents' responsibility to educate their children on the effects of food wastage on the environment. It will be easier even when the lifestyle and attitude of the young generation changes. They can easily take care of the environment by minimizing food wastage.

Action plan to minimize food wastage

Every person needs to be ambitious in their drive to minimize food wastage. Also, some countries and individuals have a higher potential to make positive changes than others because they can take more effective measures. Globally, households and consumers constitute a larger percentage of food waste. In order to develop effective plans, governments need to work together with groups that create awareness to minimize food wastage (Nair, 2021). For instance, the United States works together with Divert group, which helps gather data and provides better solutions to the retail supply chain to minimize food wastage. Divert company work with the retail supply chain, and they assist in recycling perishable foods. Therefore, perishable products are removed from the supply chain, thus creating better methods of disposal. Additionally, it is important to educate people on the importance of joining local food rescue organizations. Through volunteering, individuals can easily find solutions associated with specific food waste.

Food wastage starts during the process of production till the time of consumption. In order to minimize food wastage during the production process, the government can educate people on how to preserve and store their products to minimize food wastage (Aschemann-Witzel et al., 2015). Another challenge is most of the women are involved in the production sector compared to males. Women may lack funds and knowledge on how they can carry out their activities to reduce food wastage. Empowering women will help in reducing a significant percentage of food wastage, improving positive climatic changes. Governments have the mandate to develop policies and set targets to reduce food waste.

The government must invest in supporting food rescue organizations and programs. Furthermore, they can implement recycling rules for organizations involved in the production sector. For instance, ensuring that every organization recycles their organic waste if they produce more than 9 tons per year; thus, this will involve even the hospitality industry. People should be

encouraged to shop smart. Some customers feel that bulk buying is very convenient and effective. However, bulk buying increases the chances of food wastage. When people shop smart, they must use all the products they bought earlier, minimizing wastage. Additionally, the government should impose heavy taxes on people who might be selling expired products.

Food producers have the mandate to indicate the date a product is expected to expire, which will prevent food wastage. Also, it will give the producers time to recycle the products. Public communication and engagement can increase awareness of people. When communication is sustained, it will be easier to change people's behavior. As a result, it will be easy to control the supply chain and food wastage. Encouraging people to compost the leftovers is beneficial to turn the food waste into manure for plants. The composting process can be achieved by those with an outdoor composting system for people with extensive gardens, while those in cities, due to space limitation they can apply countertop composting systems.

Conclusion

Globally, the ² increasing amount of food waste is a problem. It is the responsibility of the government to continue amending food wastage policies to ensure better disposal and reduce adverse climatic conditions. Reduction of food wastage will also improve the economic conditions due to the decrease in the costs involved in collecting the waste. Additionally, better disposal will reduce greenhouse effects which affect the climate. Individuals should understand that the negative climatic effects will lead to food insecurity affecting the wellbeing of people. People should always be willing to volunteer to work with food rescue groups, and they will be in a better position to develop effective ideas to minimize food wastage. Also, educating people on how they can develop beneficial products from leftovers composting will help people to convert waste into energy for plants.

References

- Aschemann-Witzel, J., De Hooge, I., Amani, P., Bech-Larsen, T., & Oostindjer, M. (2015). Consumer-related food waste: Causes and potential for action. *Sustainability*, 7(6), 6457-6477.
- Chalak, A., Abou-Daher, C., & Abiad, M. G. (2018). Generation of food waste in the hospitality and food retail and wholesale sectors: lessons from developed economies. *Food Security*, 10(5), 1279-1290.
- Dou, Z., Ferguson, J. D., Galligan, D. T., Kelly, A. M., Finn, S. M., & Giegengack, R. (2016). Assessing US food wastage and opportunities for reduction. *Global Food Security*, 8, 19-26.
- Graham-Rowe, E., Jessop, D. C., & Sparks, P. (2014). Identifying motivations and barriers to minimising household food waste. *Resources, conservation and recycling*, 84, 15-23.
- Katajajuuri, J. M., Silvennoinen, K., Hartikainen, H., Heikkilä, L., & Reinikainen, A. (2014). Food waste in the Finnish food chain. *Journal of Cleaner Production*, 73, 322-329.
- Nair, G. (2021). The food we waste: antecedents of food wastage management behavior. *International Journal of Social Economics*.
- Thyberg, K. L., & Tonjes, D. J. (2016). Drivers of food waste and their implications for sustainable policy development. *Resources, Conservation and Recycling*, 106, 110-123.

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