CHAPTER 7

WASTAGE OF COOKED FOOD IN HOUSES

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INTRODUCTION

Food is any substance consumed to provide nutritional support for an organism. Food is usually of plant, animal or fungal origin and contains essential nutrients such as carbohydrates, proteins, fats, vitamins or minerals. The substance is ingested by an organism and assimilated by the organism's cell to provide energy, maintain life or stimulate growth. Different species of animals have different feeding behaviors that satisfy the needs of their unique metabolisms. Food loss and waste is food that is not eaten. The causes of food waste or loss are numerous and occur throughout the food system, during production, processing, distribution, retail and food service sales and consumption. Overall, about one- third of the world's food is thrown away. Food loss and waste is a major part of the impact of agriculture on climate change and other environmental issues. Moreover, food waste that is not handled or reclaimed properly, that is through composting, can have many negative environmental consequences.

Reducing food waste in all parts of the food system is an important part of reducing the environmental impact of agriculture, by reducing the total amount of waste, land and other resources used.

According to Kelleher and Robins (2013) 'avoidable food waste' consists of products that could have been eaten, such as leftovers, food left to go bad and food past its sell-by date, while, 'unavoidable food waste' is waste arising from food and drink preparation that is not, and has not been, edible under normal circumstances (eg: - meat bones, egg shells, pineapple skin etc). Fruits and vegetables, roots and tubers have the highest wastage rates of any food.

Globally, nearly one third of food produced for human consumption is lost or wasted. As the production of food is resource-intensive, food loses and wastes are indirectly accompanied by a broad range of environmental impacts, such as soil erosion, deforestation, water and air pollution, as well as greenhouse gas emissions that occur in the processes of food production, storage, transportation, and waste management.

FOOD WASTAGE

Food waste is one of the most challenging issues human kind is currently facing worldwide. Globally, nearly one third of food produced for human consumption is lost or wasted (Gustavsson et al., 2011).). As the production of food is resource-intensive, food losses and wastes are indirectly accompanied by a broad range of environmental impacts, such as soil erosion, deforestation, water and air pollution, as well as greenhouse gas emissions that occur in the processes of food production, storage, transportation, and waste management (Mourad, 2016).

TYPES OF FOOD WASTE

Food waste is defined as the use of food meant for consumption by humans for non-consumption purposes, the redirection of food to feed animals, or the disposal of edible food. It includes the edible as well as inedible parts of food that get removed from the food supply chain and which can be recovered or managed through disposal. Furthermore, food waste can be grouped into three different types: (a) avoidable waste, which is food that was edible at some point in time but has become inedible by the time it reaches disposal; (b) unavoidable waste, which refers to certain items, like eggshells, that are not edible; and (c) potentially avoidable food waste, which applies to particular wastes that are consumed at times, but not always, such as potato skins (Papargyropoulou et al., 2016).

Fig1 Types of food waste

(Source:https://www.epd.gov.hk/epd/english/environmentinhk/waste/prob_solutions/foodwrtips.html).

EFFECTS AND CAUSES OF FOOD WASTE

Food waste occurs within many different but interconnected practices of everyday life such as shopping routines, storage, cooking, and eating habits. Moreover, material properties of food itself and the material infrastructure in terms of living situation, available space for storing food, geographical access to stores and means of transportation have great impact on food waste as they influence every day routines. Food waste in households occurs because of how food is valued and also because of some incompatible values people try to live by (Hebrok and Boks, 2017).

A substantial amount of money is wasted producing food that is never used. Additionally, one must consider the wasted labor, material resources, time and energy that go into food production. It's nearly impossible to estimate the potential economic benefits from redirecting these resources, but the situation carries considerable gravity. The Food and Agriculture Organization of the United Nations (FAO) recently estimated annual losses of $1 trillion from resource costs.

Higher prices and lower quantities of food invariably cause nutritional deficiencies for lower-income people. This, in turn, may result in externalities like higher healthcare costs and lost productivity from individuals weakened by nutritional deficiency and food insecurity. This cost is estimated by the FAO to be approximately $900 billion per year. In terms of economic impacts, food waste represent high waste management costs and money is wasted, given the considerable amount of edible foods thrown away from every year (Koester, 2014).

REUTILIZATION METHODS AND FOOD WASTAGE DISPOSAL PRACTICE

Recycling refers to both the direct reuse of used products, combustible waste from households and waste wood that is not suitable for recycling undergo thermal treatment in waste incineration plants or waste wood furnaces. The heat released in the process is used to generate electricity and heat buildings.

Waste utilization is both a necessity and a challenge. In the food industry, the recovery and modification of wastes is becoming increasingly important. The aim is more complete utilization of the raw material, and minimization of the problems of pollution and waste treatment. Waste utilization is both a necessity and a challenge. In the food industry, the recovery and modification of wastes is becoming increasingly important. The aim is more complete utilization of the raw material, and minimization of the problems of pollution and waste treatment. Waste utilization is both a necessity and a challenge. In the food industry, the recovery and modification of wastes is becoming increasingly important. The aim is more complete utilization of the raw material, and minimization of the problems of pollution and waste treatment (Amihud Kramer and Itamar Ben-Gera, 1969). The necessity to carry out a proper utilization of food waste is underlined by the amounts of resources needed for food production, processing and transport (Daniel Pleissner, 2018).

CONCLUSION

Reducing food loss and waste is essential in a world where millions of people go hungry every day. When we reduce waste, we respect that food is not a given for the millions of people who go hungry every day. The causes of food waste can be classified as socio-demographic factors, the attitudes of the individual shopping too much and cooking too much, the attitudes of family members and problems with the cooling equipment and lack of storing equipment. Most of families waste very little amount of food and are very good in managing food waste. Food waste is disposed by simply removing, giving to domestic animals, Use for home garden, Use for making fertilizer or biogas, Composting etc. Amount of food waste can reduced by cooking accurate quantity of food. Through the sources of motivation for reducing food waste the idea of protecting materiality and spirituality, ensuring sustainability can enhance the overall development of the country.

REFERENCES

- Gustavsson, J., Cederberg, C., Sonesson, U., Van Otterdijk, R. and Meybeck, A. 2011. A Global Food Losses and Food Waste: Extent, Causes, and Prevention. Rome: Food and Agricultural Organization.
- Hebrok, M. and Boks, C. 2017. Household food waste: drivers and potential intervention points for design-an extensive review. J. Clean. Prod. 151: 380-392.
- Kelleher, M. and Robins, J. 2013. Food wastage: Biocycle. 54(8): 36pp.
- Koester, U. 2014. Food loss and waste as an economic and policy problem. 49(6): 348-354.
- Kramer, A. and Ben, G. I. 1969. The utilization of food industries waste. Adv. Food. Research. 17: 77-152.
- Mourad, M. 2016. Recycling, recovering and preventing "Food waste": competing solutions for food systems sustainability in the United states and France. J. Clean. Prod. 126: 461-477.
- Papargyropoulou, E., Wright, N., Lozam, R., Steinberger, J., Padfield, R. and Ujang, Z. 2016. Conceptual framework for the study of food waste generation and prevention in the hospitality sector. Waste. Manag. 49: 326-336.
- Pleissner, D. 2018. Recycling and reuse of food waste: current opinion in Green and sustainable chemistry. 13:39-43.