



STRATEGIES TO OVERCOME FOOD WASTE

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Abstract:

Present research article was taken up with using secondary data related to strategies for reduction in food waste. It is estimated that on an average 30 to 50 percent of the world's food is never consumed. The U.N. Food and Agriculture Organization (FAO) estimated that 1.3 billion tones of food are wasted annually. A huge amount of food waste usually takes place at weddings, religious feasts and various social gatherings. Food is lost or wasted throughout various stages of the food supply chain. During agricultural production, crops and harvest can become damaged or spilled, animals may die due to diseases, fish may be discarded during fishing and milk could be lost due to cattle diseases. Crops, animals, fish or milk may be lost during post harvest handling, storage and in transportation. The proper implementation of strategies for reduction in food waste is important at every stage.

Keywords: *food waste, strategies, agricultural production.*

Introduction:

Food waste reduction or prevention is the strategy of preventing food waste before it is created. An example of food waste prevention for a buffet is tracking which dishes generally have more leftovers, and either make less of the dish or substitute it with a more popular dish, rather than continuing to throw the leftovers away. It is estimated that on average 30 to 50 percent of the world's food is never consumed. Food losses arises the retail food services and post consumer stages of the food chain have grown dramatically in recent year for a variety of reasons. Different strategies are required to minimize the waste. Food loss and waste also amount to a major squandering of resources, including water, land, energy, labor and capital and needlessly produce greenhouse gas emission, contributing to global warming and climate change.

The U.N. Food and Agriculture Organization (FAO) estimate that 1.3 billion tonnes of food are wasted annually. Some countries are, unfortunately, greater culprits than others; according to the Barilla Center





for Food & Nutrition (BCFN), the total amount of food wasted in the U.S. exceeds that of the United Kingdom, Italy, Sweden, France, and Germany combined. In addition, the U.N. Environment Programme (UNEP) estimates that global food production accounts for 70 percent of fresh water use and 80 percent of deforestation. Food production is also the largest single driver of biodiversity loss and creates at least 30 percent of global greenhouse gas emissions.

With the growing economy, lifestyle changes are seen where rich people throw lavish parties where the quantity of food cooked is over estimated on most of the occasions and the left over or surplus food goes to the waste-bins in large quantities. A huge amount of food waste usually takes place at weddings, religious feasts and various social gatherings.

Food is lost or wasted throughout various stages of the food supply chain. During agricultural production, crops and harvest can become damaged or spilled, animals may die due to diseases, fish may be discarded during fishing and milk could be lost due to cattle diseases. Crops, animals, fish or milk may be lost during post harvest handling, storage and in transportation. During processing, food may be lost or degraded during washing, peeling, slicing, canning, packaging etc; or during slaughtering, smoking, freezing or pasteurizing. During distribution, food may be lost or wasted during transport, at wholesale markets, supermarkets, retailers etc. Finally, consumers may waste food by throwing it away. Food wastage refers to the combination of both food loss and food waste. In medium and high income countries food is wasted to a great extent at the end of the supply chain by consumers. In low income countries food is mainly lost during the early and middle stages of the food supply chain and much less food is wasted at the consumer level. According to the UN, food security exists when all people, at all times have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life (World Food Summit, 1996). This includes the availability of food, access to food, utilization of food and stability of all these three elements in the future.





Reduction of Food Waste and its Prevention Strategies

Food Waste Assessment - The first step to reduce food waste is to measure and track the amount, type, and reason for its generation. Knowing how much and why food waste is generated will help a business create targeted food waste prevention strategies. This baseline information also serves as a marker for measuring your diversion rate and change in spending.

Modify menu to increase customer satisfaction and reduce food left uneaten - Food frequently left uneaten or sent back by customers can be identified by tracking wasted food. Based on this information, managers can modify the menu and better satisfy the customers.

Change serving sizes and garnishes - Even small garnishes and improper serving sizes quickly add up to a significant amount of food waste. Strategies to reduce this waste include avoiding inedible or rarely eaten garnishes, reducing the scoop or serving size while still satisfying a customer's appetite, and using an "ask first" policy.

Encourage guests to order or take only the food they can consume - Food service managers can post informational signs at buffet-style food service venues that encourage customers to take only enough food to match their appetite.

Reduce over-purchasing of food - Create guidelines to implement a system to ensure that only needed amount of food should be purchase when needed. Avoid over purchasing. This could include a "just-in-time" ordering system or a new purchasing policy.

Reduce preparation waste and improperly cooked food - In the production and handling practices strategies for reducing preparation waste is needed. The preparation waste can be reduces by improving knife skills of the staff, purchasing pre-cut food, reducing batch sizes when reheating foods like soups or sauces, and training staff to reduce improperly cooked food.

Consider secondary uses for excess food - Use of leftover food can be creatively used in the preparations to reduce waste. Leftover bread can become croutons, excess rice can become fried rice, leftover fruits can be





dessert toppings, and vegetable trimmings can help to form a base for soups, sauces, and stocks.

Ensure proper storage techniques - In order to reduce spoilage of food products these food products should be stored in proper conditions (e.g. temperature) and organized easily at inventory levels and ensure that older products are used first.

Food waste can be reduced by implementing certain measures. At household levels the best way to reduce food waste is to plan meals before a day. Making a prior list of meals will enable to plan efficiently to use up the ingredients available, and ensures that leftovers can be used in subsequent meals. Prior planning of meals also makes shopping simpler and more efficient. About 15% of food wasted in the home included the sealed products with crossed expiry date.

Garden harvests are often uneven. Often, there's a surplus of a crop, such as tomatoes or leafy vegetables and corn, which is difficult to store in the refrigerator or in a room. Stored produce without processing has a short shelf life, and there are inevitable lost. A great way to deal with this surplus produce is to processed it and freeze it.

Compost kitchen waste

At the very least, all food waste should be compost. Composting food waste is easy, and the best way to produce high quality, low-cost fertilizer. In the kitchen, keep a bucket with lid, or a compost keeper, in a convenient location within close proximity to the chopping board and for family members to scrape their plates into. Compost keepers come with a carbon filter so there is no odor, and the lid keeps fruit flies and pets out of the compost. In the yard or garage, keep a sealed compost bin for pest-free, odorless composting. In home composting only vegetable and fruit wastes, bread scraps, rice, potatoes, pasta and cereal leftovers can be incorporated into home composters.

Reducing food waste saves money from buying less food products. It reduces methane emissions from landfills and lowers carbon footprint. It conserves energy and resources, preventing pollution involved in the growing, manufacturing, transporting, and selling food. It cut down Disposal





Costs by decreasing the amount of food wasted; businesses pay less to dispose of their trash. It reduces over purchasing & labor costs in making strides to prevent food waste, it can reduce costs by purchasing only the food that will be used, or by decreasing improperly prepared foods. Additionally, reducing food waste can increase staff efficiency and reduce energy and labor associated with disposing of food. It supports community by providing donated untouched food that would have otherwise gone to waste to those who might not have a steady food supply.

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