

# Policy Brief # PB-66-2021

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Food Wastage

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# By Shahid Najam

Food waste, ill luck would have it, is increasingly becoming a part of eating habit of a significant proportion of the population especially in the youth. This is true whether taking a portion of food much larger than the individual requirement or buying it from the markets. At times, an average household has to garbage the rotten and spoiled fruits and vegetables, for, it procured food items more than the consumption need. The problem is worldwide both in terms of food loss at the harvest level, and, food waste at the retail and consumer level. In low- and middle-income countries, the loss is primarily on account of poor infrastructure, obsolete agriculture and food processing technology, ill-trained and equipped farm labor and climate change vulnerability. In high-income countries, waste is particularly associated with consumers' behavior and food industry practices<sup>1</sup>.

It is estimated that between harvest and retail alone, around 14 percent of all food produced globally is lost<sup>2</sup>. The situation in Pakistan is even more alarming since every year more than 30 million tons of food is wasted while in wedding and receptions, the food wastage is estimated around 40 percent<sup>3</sup>. This is in the wake of high and pervasive incidence of food insecurity in the country. The World Food Program (WFP) 2020 reports that over three million people in the country are experiencing severe food insecurity, mainly in the drought-stricken districts of Baluchistan and Sindh while according to Food Agriculture Organization (FAO), the Prevalence of Undernourishment (PoU) stands at 20.3 per cent. Marginal reduction in food insecurity, if any, is neutralized by population growth rate of 2.4 percent to the extent that around 40 million poor do not access enough food. The absolute number of hungry people in Pakistan is thus rising every year<sup>4</sup> which confront the country with the major challenge of achieving by 2030 SDG 2 related to food security and nutrition and contributing to United Nations (UN) efforts to halve the per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses<sup>5</sup>.

<sup>&</sup>lt;sup>1</sup> Gustavsson J, Cederberg C, Sonesson U, van Otterdijk R, Meybeck A. *Global food losses and food waste: extent, causes and prevention* 

<sup>&</sup>lt;sup>2</sup> <u>http://www.fao.org/fao</u> stories/article/en/c/1309609/?utm\_content 20 Sept 2020

<sup>&</sup>lt;sup>3</sup> Food wastage in Pakistan | Pakistan Today www.pakistantoday.com.pk > 2020/09/19 >

<sup>&</sup>lt;sup>4</sup> Pakistan | World Food Programme – WFP www.wfp.org > countries > Pakistan

<sup>&</sup>lt;sup>5</sup> Papargyropoulou E, Lozano R, Steinberger JK, Wright N, bin Ujang Z. The food waste hierarchy as a framework for the management of food surplus and food waste. *J Clean Prod*. 2014;

The twin factors of food loss and waste indeed exact a huge strain on the human, financial and natural resources besides damaging the environment and ecological endowments e.g., water, land, seeds, labor, investment etc. The transporting and processing costs of producing food are in addition not to speak of greenhouse gas emissions associated with food production and the concomitant impact on climate. It is therefore imperative to prevent food waste and loss through collective action involving farmers and producers to customers, vendors and grocery shop-owners.

Policies and strategies need to be articulated to address food loss and waste through well-knit approaches from reducing (food loss and waste prevention) through reusing (diverting food surplus for human needs, when appropriate, or for animal feed) and recycling (recovering some value via industrial use, composting, or anaerobic digestion) to landfilling.

More specifically the following measures through a composite of policy, programmatic and behavioral interventions are suggested to prevent food losses and wastages.

# a) Policy and Upstream Level

- Food dimension must be integrated with agriculture and livestock policies and strategies to incentivize mitigation of food losses during the entire agriculture cycle e.g., production, harvesting, storage, transportation, marketing etc.
- Conservation and paradoxical agriculture should be promoted to maintain the nutrient balance of the soil and at the same time ensure minimal and rational water use to reduce the cost of production and minimize strain on soil and water resources.
- The synergies between efforts to reduce food loss and waste and those promoting public health need to be fully harnessed during the policy and strategy formulation along the three dimensions of food loss and waste, food security, food safety, and nutrition.
- A specific regulatory frame should be promulgated for national date labeling standards (including encoded sell-by dates, consistent language, food handling and freezing instructions, visual icons).

# b) Institutional

- A fully funded Research and Development entity related to food losses and wastage should be established with mandate including agricultural loss prevention; food packaging; food recovery programs; research on the psychology, sociology, and economics of food losses and wastage across the food chain. The R&D entity should also be able to monitor and surveil food losses and wastage; carry out and evaluate policies and programs and suggest measures to fill the gaps.
- Ambitious national goals should be set to reduce food loss and wastage. For the purpose agricultural extension and advisory services should be trained to provide farmers with technical assistance and education.

#### c) **Programmatic Interventions**

- Awareness, information, intelligence and education programs to reduce overall agricultural and food losses should be launched e.g., precautionary approaches to risk management, information about weather etc., to reduce both catastrophic losses by natural calamities and relatively minor losses by inappropriate agriculture practices. These programs should be tailored keeping in view the farm size and type e.g., to reduce losses by strengthening resilience to threats, using compost to build drought-tolerant soils etc. For larger and corporate farms, appropriate technology should be deployed to detect threats and then protect crops—for example, through targeted pesticide use.
- The right to food and its respect should form a part of school curriculum and adult teaching programs to nurture responsible eating culture and sense. The curriculum should include a general module on nutrition. Indeed, food waste guidance should be incorporated in all the government-funded nutrition programs.
- The farmers and retailers' associations should be sensitized to adopt technologies, knowhow and practices that reduce agriculture production losses food throughout the agriculture cycle from crop sowing to harvest and prevent food waste at the packaging, processing, transportation and selling points.
- Food supply-chain infrastructure should be upgraded with a view to reducing food losses and wastage which include improved storage (control temperature, moisture, pest attack), transportation (including refrigerated trucks, processing and mechanization for reducing postharvest food loss up to 25–50 percent of a harvest, depending on the crop.

# d) Household Level

- At the household level, the people need to be sensitized to adopt a healthier and more sustainable diet and acquire more responsible eating habits. They should be encouraged to buy only as per their dietary and nutrition requirement to mitigate food waste.
- The extra food supplies, if any, need to be consumed and/or stored prudently to avoid food spoilage especially fruits and vegetables which have limited shelf life.
- To improve decision making about food safety, consumers should be provided with the information about a food's shelf life, hygienic standards and its storage history.
- The leftovers or food surplus to the consumption need should not be thrown away but instead distributed to the poor and needy either individually or through the relevant NGOs, Food Banks etc. In the event, this option is not available, the food scraps should be used to make compost to be able to give back nutrients to the soil and reducing carbon footprint.

# Conclusion

The COVID-19 pandemic has posed to the world extra ordinary challenges and uncertainties and has brought about a transformative change in the way daily affairs and business are managed and

conducted. At the same time, it has unraveled many opportunities to build a better and more sustainable, prosperous and equitable world, free of poverty and hunger. The fundamental questions which need to be addressed in the post COVID-19 world are: how to re-orchestrate and change the way food is produced, distributed, sold and consumed? How to reduce food losses and wastages along the food cycle and chain? What are the alternative options to nurture better and more nutritious eating habits? And, how to transform the individual and collective behavior to adopt a sustainable and responsible buying, cooking and eating lifestyle to prevent food losses and waste?

It is only through collective effort and close collaboration involving public sector, private businesses, the non-governmental organization and above all the common citizens that huge food losses and wastages can be reduced to free the world from hunger and malnutrition.