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# **Household Food Waste Developments: A Comparison of Progress in the European Union and the United States**

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The importance of addressing worldwide food waste in terms of combating climate change and alleviating food insecurity should not be overlooked (Food and Agriculture Organization of the United Nations [FAO], 2011; Food and Agriculture Organization of the United Nations [FAO], 2013). According to the FAO, around one-third of certain food in the world goes unconsumed every year, resulting in a loss of resources, including greenhouse gases (GHGs) (FAO, 2011; FAO, 2013). Considering the world will likely have over nine billion people by 2050 (United Nations, Department of Economic and Social Affairs, 2019; United Nations, Department of Economic and Social Affairs, Population Division, 2019), wasting good food is an increasingly egregious act; accordingly, the Sustainable Development Goals of the United Nations include responsibly using food (United Nations, n.d.). One of the United Nations' specific goals for 2030 is to “halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses” (United Nations, n.d., Goal 12 targets section, para. 3). It is especially important to address household food waste in higher-income countries, where consumers are often a large contributor (FAO, 2011). Which of such countries can lead efforts to address this harmful, household-level consumer food waste and support under-resourced communities? This Paper will discuss some of the food waste research, interventions, and reduction resolutions in the United States (US) and in countries in the European Union (EU) to better understand food waste in these countries.

Research in the EU has examined studies on food waste behaviors (Quested, Marsh, Stunell & Parry, 2013) and evaluated resource use theories (Evans, 2012). One EU food waste research entity is the Waste and Resources Action Programme (WRAP) in the United Kingdom (UK) (Quested, Marsh, Stunell & Parry, 2013); for instance, in the paper “Spaghetti Soup: The

Complex World of Food Waste Behaviors,” researchers use WRAP studies to analyze behaviors affecting household food waste in the UK (Quested, Marsh, Stunell & Parry, 2013). One seminal sociology paper from the UK that qualitatively addresses food waste is “Beyond the Throwaway Society: Ordinary Domestic Practice and a Sociological Approach to Household Food Waste” (Evans, 2012). In this study, Evans (2012) investigates the merit of the notion that society is more wasteful today than in the past by conducting interviews of homeowners and exploring their kitchens alongside them. The researcher comes to reject this notion, finding the flow of life may simply not match with the timing of food use, and describing food waste “as a consequence of households enacting ordinary domestic practices and negotiating the contingencies of everyday life” (Evans, 2012, p. 53).

In the US, studies in the food waste world have explored behavioral determinants (Neff et al., 2015; Qi & Roe, 2016). In “Wasted Food: U.S. Consumers' Reported Awareness, Attitudes, and Behaviors,” Neff et al. (2015) survey Americans to determine the elements associated with their food waste behaviors. Unfortunately, the researchers discover that most Americans think they do not waste as much as an average American—which simply cannot be true (Neff et al., 2015). Thus, many Americans lack awareness of how much food they waste (Neff et al., 2015). But, despite the stereotype of the American inclination for large products, some respondents in this study desired smaller food portions (Neff et al., 2015). This could indicate that American packaging norms conflict with consumer needs (Neff et al., 2015). In another study analyzing behaviors, “Household Food Waste: Multivariate Regression and Principal Components Analyses of Awareness and Attitudes Among U.S. Consumers,” Qi and Roe (2016) use survey data to model food waste variables. Their statistical models indicate that, for instance, wealthier

consumers agree more strongly that wasting food has some personal advantages, such as avoiding foodborne illness (Qi & Roe, 2016).

Food waste research in the EU and the US possess different strengths and areas for improvement. In the EU, the study by Evans (2012) accounts for sociological factors through qualitative methods. By contrast, some US research employs quantitative, statistical techniques to categorize consumer behaviors, which may be useful in designing interventions (Neff et al., 2015; Qi & Roe, 2016). Going forward, the EU could take behavioral determinants into greater consideration to explore targeted interventions, while the US could take a leaf from the EU's book and study the issue through a more sociological lens.

Outside of academia, advocates in the EU and the US are taking action to address food waste (Natural Resources Defense Council, 2019; Quested & Luzecka, 2014; US EPA, 2016; USDA, n.d.; WRAP, 2018). One such actor in the EU is, again, the UK's WRAP (Quested & Luzecka, 2014); one of WRAP's aims is to decrease food waste by engaging with different groups and offering education (Quested & Luzecka, 2014). As for the US, the United States Environmental Protection Agency (US EPA) and the United States Department of Agriculture (USDA) address food waste on their websites and are involved to some extent in advocating for reduced food waste (US EPA, 2016; USDA, n.d.). Both the EU and the US provide a number of digital tools for consumers' benefit (Natural Resources Defense Council, 2019; WRAP, 2018). From the EU comes the "Love Food Hate Waste" campaign, its website brimming with educational tips about why to decrease food waste and how, including leftover preparation strategies (WRAP, 2018). In the US, the "Save the Food" campaign has similar features (Natural Resources Defense Council, 2019). While both the EU and the US provide online educational campaigns, the EU seems unique in having its powerful WRAP organization working on the

ground to empower consumers (Quested & Luzecka, 2014). Food waste advocacy in the EU thus appears overall more robust than that in the US.

How have research and campaign work influenced the US and the EU governments, respectively, thus far? A potential impetus for governmental action may have sprung from the Global Climate Action Summit in San Francisco in 2018, during which US participants in the Pacific Coast Collaborative decided to decrease their food waste by 50 percent soon—by 2030 (Pacific Coast Collaborative, 2018). While significant, these regional decisions are in fact somewhat delayed considering the entire US already made the same commitment to reduce food waste under the Obama administration in 2015 (Leibrock, 2015; US EPA, 2016; USDA, n.d.). Similarly, the EU sought before the summit to decrease its food waste (Win, 2018). EU members may look to the UK for guidance in reaching this goal because WRAP reports it may have helped reduce certain UK food (and drink) waste by about one-fifth within five years (Quested, Ingle, & Parry, 2013). However, this finding may be due to economic fluxes as opposed to, say, conscientious behavior change (Quested, Ingle & Parry, 2013). In short, both the EU and the US have ambitious aims to reduce food waste, and aims within the US and between the US and the EU appear to be unified.

A comparison of food waste developments in the EU and the US reveals that while these actors are setting similar goals to address their food waste, their theoretical and practical approaches differ. Food waste research in the EU shows more signs of well-roundedness, and EU campaigns appear more well-developed. The US can heed the example of the EU on these fronts to move closer to achieving its similar aims. Moving forward together, the EU and the US can focus on reducing food waste to address this environmental and food insecurity concern, as well as send food to countries in need. With knowledge of the strengths and weaknesses in the EU

and the US, a successful transatlantic relationship to reduce food waste can hope to emerge for the betterment of the global community.

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