

# Science for Environment Policy

## Household food waste: an individual and national issue

**The main factors affecting household food waste in the EU** have been identified by an analysis of the 2013 Flash Eurobarometer survey (n.388). On an individual level, the main factors include age, gender, income and environmental attitudes. On the national level, the most significant factor is median disposable income. The authors suggest their results could help develop campaigns targeted at groups that generate the most household waste.

**Around one third of all edible food is currently wasted**, with losses occurring at the stages of production, retail and consumption. [A study from the FAO](#) suggests that the EU is the second worst global region for food waste (just behind the regions of America and Oceania), with 280 kg per person per year being lost across the three stages of the food cycle. The European Commission estimates that as much as 42% of total food waste happens at the consumption stage, which costs an average UK household an estimated £420 a year, and produces a [carbon footprint](#) that is approximately equal to one third of an individual's average household electricity usage.

The Flash Eurobarometer survey on 'Attitudes of Europeans towards resource efficiency' was conducted in December 2013 on a representative sample of over 26 000 individuals from the EU-27. The authors mined the survey for data specific to household waste, and identified relevant variables on two levels; individual and area (country). At the individual level, relevant variables included age, gender, income, education, habits and values. At the area level, variables included environment type (rural, town or city), cost of food, and the country's socio-economic status. The data was then put through a multilevel statistical model created by the authors to assess the extent to which individual differences can be attributed to the characteristics of the country in which they reside.

The researchers found that most of the variables affecting food waste behaviour are due to personal variables, but also confirmed that countries of residence play a statistically significant role.

In general, it was found that EU countries with a higher income per capita produced larger quantities of household waste. For example, people from the Czech Republic, Estonia, Lithuania and Poland were less likely to waste food whilst respondents from Denmark, Ireland and Sweden had a greater propensity to waste food.

A variety of results, expressed in terms of odds ratios, regarding the individual characteristics, perception and attitudes that influence food waste were obtained:

- Older people, particularly in the category of 65 and over, are less likely to waste food than younger people.
- Females are less likely to waste food than males.
- Unemployed people and jobseekers waste less food on average than employed people.
- The perception of living in an area with little or no litter in the street is positively related with the production of small percentages of food waste
- Rural inhabitants are less likely to produce food waste than town or city dwellers.

It is important to note that the results of the study are based on self-assessments regarding the percentage of food waste individuals perceive their household makes. This could be affected by the abilities of respondents to perform accurate percentage estimates. However, the survey contains the most current and complete data regarding food use behaviour in the EU.

*Continued on next page.*



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The authors suggest that community-based interventions that work with select groups of people may be more effective than general awareness campaigns, with young people being a particularly important focus. When people are educated about food waste, an important message to convey is that the responsibility to improve resourcefulness lies as much with consumers as agriculture and retail. In terms of future surveys, more information on the local environment of respondents is needed to help shape specific policy, and a more rigorous, harmonised, EU-wide method to calculate food waste is needed.

