



QUANTIFIED ACTIONS TO PREVENT HOUSEHOLD FOOD WASTE

EXECUTIVE SUMMARY
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HOUSEHOLD FOOD WASTE: CAUSES, FIGURES, AND COMPARISONS

Food waste represents very significant economic losses and is the cause of about 8% of the global greenhouse gases emissions. A large part of the generated food waste is avoidable. Households are a major contributor of food waste, caused by e.g. over-purchase, wrong interpretation of the “best before” and “use by” labelling systems, inefficient storage methods, faulty food consumption habits and poor food leftovers management. Food waste generation is different from one household to another depending on their abilities and knowledge to manage and cook food, their motivation to reduce food waste, and contextual factors such as their local food offer or their available time, that can impact positively or negatively food waste generation.

There are quite significant differences when it comes to the generated quantities of “avoidable” food waste by household. Such data were identified for 11 countries and values range from 20 to over 60 kg/cap/yr. Whether these differences are due to inconsistent definitions and reporting methods, or actually reflect discrepancies in consumption and wasting habits across Europe, is unknown. The available data also show differences regarding the type of avoidable food waste generated, possibly indicating that culinary habits have a significant impact on food waste composition. However, most territories report the same food categories in the most wasted products: bread, fruits and vegetables, meat.

FOOD WASTE IS THE CAUSE OF
ABOUT 8%
OF THE GLOBAL GREENHOUSE
GASES EMISSIONS.

HOUSEHOLDS
ARE ONE OF THE MAIN SOURCES
OF FOOD WASTE

IN SOME COUNTRIES, UP TO
30 KG / CAPITA / YEAR
OF FOOD WASTE
COULD BE AVOIDED

MOST WASTED FOOD PRODUCTS



BREAD



MEAT



VEGETABLES



FRUITS

QUANTITATIVE IMPACT OF HOUSEHOLD FOOD WASTE REDUCTION ACTIONS

ACR+ conducted a study for its member Brussels Environment which identified 13 strategies and practices that tackled household food waste and documented the impact on food waste generation. It analysed four national and regional strategies, four operations focusing on food waste measurement, two communication campaigns, two actions addressing food labelling, and one actions in collaboration with smaller food retailers. Very few food waste reduction actions tackling householders managed to properly quantify the impact on food waste generation. Uncertainties regarding the available data also make comparisons and cross-analysis challenging. However, some key findings could be drawn from the cross-analysis of these 13 practices:

SUCCESSFUL FOOD WASTE REDUCTION STRATEGIES RELY ON A MIX BETWEEN RECURRING, MASSIVE CAMPAIGNS AND SMALLER ACTIONS CONVEYING SIMPLE AND CLEAR MESSAGES AND TARGETING SPECIFIC POPULATIONS.

Such strategies also rely on the collaboration with different stakeholders, and continuous monitoring of the impact on prevention behaviour and waste reduction.

IMPROVING THE INFORMATION ON FOOD LABELS, SUCH AS USE-BY OR BEST-BEFORE DATES, OR INDICATION ON OPTIMAL STORAGE, HAS THE POTENTIAL TO REDUCE FOOD WASTE BY 10 TO 15%.

FOOD WASTE MEASUREMENT OPERATIONS ALSO RAISE AWARENESS.

Food waste measurement operations , in which households are invited to measure their food waste generation before and after implementing specific measures, tend to lead to very significant decrease of food waste generation, ranging from -30 to -60% over short periods of time.

INTENSIVE COMMUNICATION CAMPAIGNS CAN LEAD TO RELEVANT RESULTS.

Communication must present concrete actions as well as meaningful reasons for households to engage in food waste prevention, which requires to tailor the messages to key target audiences.

Furthermore, about 20 publications addressing household food waste prevention were reviewed, and key recommendations were also identified. The lessons learnt from the documented practices and from these publications lead to the identification of general recommendations:

- Promote self-assessment of individual food waste generation
- Inform, raise awareness, promote preventive actions
- Collaborate to improve the information on food products
- Determine your resources, objectives, and monitoring

PROMOTE SELF-ASSESSMENT OF INDIVIDUAL FOOD WASTE GENERATION

The discrepancy between people's perception of their own food wastage and the actual wasted quantities makes it relevant to attract their attention on their individual behaviours. Self-assessment practices tend to give very good results when it comes to food waste reduction and seem to provide a significant potential to lead households to concrete actions. However, most of the identified actions focus on rather small panels of participants and requires intensive human resources to properly monitor their involvement.

SUGGESTED ACTIONS

IDENTIFY SYNERGIES WITH FOOD WASTE SORTING

Food waste sorting can compete with the food waste message, or conversely, can raise awareness or even equip households to reduce their food waste. There is no evidence that food waste sorting leads to either increase or decrease of food waste generation. If food waste collection is being implemented, it can be relevant to also attract attention on food wastage before and after the implementation, while focusing the communication solely on sorting during the first months of implementation.

DEVELOP REGULAR PRACTICAL AWARENESS RAISING CAMPAIGNS THROUGH SCHOOLS

Implementing actions promoting weighing of food waste could also have a relevant potential to raise awareness on food waste.

CAPITALIZE ON FOOD WASTE MEASUREMENT ACTIONS TO MAKE WASTE REDUCTION A SOCIAL NORM

Various publications indicate that making food waste prevention a social norm is one of the most promising ways to promote the implementation of sustainable household actions. Capitalising on the experience of participants in food waste measurement operations seems to have a potential, preferably during "live" social events (in the context of neighbourhood associations, sports, cultural events, etc. to which the participants may be affiliated with). Engaging local "influential" personalities that could reach different types of target audience in such practices could also be interesting.

DEVELOP SELF-ASSESSMENT TOOLS AND PROMOTE THE ADOPTION OF PREVENTION BEHAVIOURS BY HOUSEHOLDS

For actions of self-assessment of food waste generation to reach larger panels of participants, it is interesting to explore ways to allow households to conduct such a process independently. As an illustration, the 2022 edition of the "Food Winners Brugge" initiative involves more than 5,000 participants, by capitalising on the previous editions to produce communication and training materials, and by involving local companies, associations, and schools. Besides, identifying the socio-demographic characteristics of the participants to such activities could help spot and target under-represented audiences. Assessing the long-term effects of such initiatives with surveys occurring 1 year after the organisation could also help to determine the full potential of these self-assessment practices.

CONSIDER DIFFERENT INSTRUMENTS AND MESSAGES

To reach a wider audience, food-related prizes could be proposed to participants in self-assessment practices. Besides, different messages should be used to promote such practices, such as the potential financial savings (150 to 200€ per household per year) or the time saved thanks to a better management of food at home.

INFORM, RAISE AWARENESS, PROMOTE PREVENTIVE ACTIONS

Communication is the main instrument currently used for the promotion of food waste prevention. Even though other (economic) instruments could be investigated, local food waste prevention policies should rely on a regular, pro-active, and targeted communication to raise awareness of householders on the negative impact of food waste and on the practical prevention behaviours, as well as to engage the different stakeholders and make their commitment visible. Several recommendations are suggested:

MAKE FOOD WASTE A RECURRENT COMMUNICATION THEME

Successful communication campaigns make the key messages visible, easily identified, and displayed in all relevant communication channels (general media, public space, food retailers, etc.). To do so, they resort to recurrent communication actions and to a strong visual identity also used by external partners. Homogenising the messages, the visual identity, and seeking consistency among the different initiatives against food waste implemented by the different local players are recommended and is facilitated by the setting a local/regional communication committee that brings together the key players e.g. retailers, food chains and restaurant owners, and associations active on food.

ORGANISE AN ANNUAL HIGHLIGHT

A thematic day or week focusing on food waste prevention is an effective way to attract the attention of households on the challenges of food waste generation and the need for prevention. This is also a way to mobilise all key local stakeholders and highlight their commitment in the prevention strategy, and to reach the general media.

IMPLEMENT SPECIFIC COMMUNICATION ACTIONS TO TARGET DIFFERENT AUDIENCES

Smaller actions, focusing on one or two key messages or prevention practices, targeting a specific and well-identified target audience, are essential to address more specific challenges, through the use of tailored messages and adequate communication channels.

TRAINING IN PREVENTION BEHAVIOURS

Zero waste cooking workshops are often a key activity to directly engage with households and teach the concrete practices to limit food waste. However, they tend to mainly attract households with an initial interest in zero-waste. In order to reach a wider audience outside of interested households, it is recommended to train people offering training that could indirectly relate to food waste such as cooking teachers, home organising coaches, and parental coaching.

DELIVERING "THE RIGHT INFORMATION" TO THE "RIGHT PLACE"

Displaying clear and concrete indications where householders are in capacity of acting is an effective way to create nudges. This can be materialised by information on durability or storing advice in stores, by magnets explaining how to manage one's refrigerator, or by trays where householders can put leftover or opened products so that they can identify the food to be used in priority in their fridge.

LINK FOOD WASTE PREVENTION WITH THE LOCAL FOOD STRATEGY

The prevention message is more effective when it is integrated into global strategies on food (e.g. promoting local and sustainable food), rather than in waste prevention and waste reduction strategies. Besides, it seems that the local food production and local food distribution/offer have a strong impact on food waste generation. These relations should be further investigated



COLLABORATE TO IMPROVE THE INFORMATION ON FOOD PRODUCTS.

Expiration dates or information on proper storing practices presented on packaging strongly impact household food waste generation, both in positive or negative way. Misuse of “use-by” and “best before” dates, or misinterpretation of these dates by consumers all lead to avoidable food waste generation. Improving these aspects has the potential to lead to a reduction of food waste by 10 to 15%.

SUGGESTED ACTIONS

BRINGING TOGETHER STAKEHOLDERS

Improving food labelling requires the involvement of key stakeholders, such as federations of producers/distributors, as well as health authorities to ensure that the proposed changes are aligned with food safety regulation.

ESTABLISH GUIDES ON BETTER FOOD LABELLING

Recommendations can be highlighted in practical guides addressed to food producers and retailers, clarifying definitions and obligations, listing advice for storage information and for presenting key indications. These guides can also present figures on food waste generation linked with misuse of food labelling. Such guides can be general or targeting more specific food products. They must be prepared in collaboration with the stakeholders mentioned above, to make sure that the recommendations are aligned with the constraints and possibilities of food producers and distributors, and with the safety regulation. Such a collaboration is also essential to ensure a proper dissemination.

ORGANISE PILOT ACTIONS WITH RETAILERS

It is recommended to organise testing phases in several shops focusing on specific actions: change of formulation and format for use-by and best-before labelling, improved recommendations on storage, new logos, etc. Such testing phase should aim to assess consumers' reactions to these changes and identify if it actually leads to concrete change of behaviours.

PROMOTE INTER-REGIONAL COOPERATION

Joining force with other regions or with national authorities is recommended, to ensure consistencies and to better involve major food producers. Having consistent food labels is essential to avoid confusions on use-by and best-before dates. Information and recommendations on food storage should also be presented in a homogeneous way to avoid confusions.

DETERMINE YOUR RESOURCES, OBJECTIVES, AND MONITORING.

More general recommendations can be formulated when it comes to food waste strategies.

SUGGESTED ACTIONS

ALLOCATE SUFFICIENT AND CONTINUOUS RESOURCES TO FOOD WASTE PREVENTION

The strategies or specific actions that managed to achieve significant results on a large scale generally allocated significant human and financial resources, with amounts ranging from 0.10 to 0.20 € per person. To obtain durable results, programmes should be given a continuous attention and include recurring and consistent activities, as isolated actions tend to give short-lasting effects. Cooperation with other regions and local stakeholders must be sought to optimise the use of resources.

SET QUANTITATIVE TARGETS

Quantitative targets are a strong driver for the implementation of ambitious strategies and of an adequate monitoring system. It is still challenging to propose quantitative targets that are based on actual data; for such targets should take into consideration the current level of avoidable food waste as a starting point. As an illustration, the Love Food Hate Waste campaign in the United Kingdom managed to achieve a 30% reduction of avoidable food waste over a decade.

ASSIST LOCAL STAKEHOLDERS IN UNDERTAKING IMPACT ASSESSMENT

Providing tools and methods for local stakeholders implementing food waste prevention activities to help them monitor the impact of their actions is a good way to better understand the impact of the different instruments in use, and to assess the effectiveness of individual actions. It also contributes to make monitoring data more consistent.

ESTABLISH A PROPER MONITORING SYSTEM

Regular surveys are a good way to assess the adoption of food waste prevention behaviours by inhabitants, the trends regarding food consumptions, or the reaction to the strategy or specific actions. Quantifying the evolution of avoidable food waste via composition analysis or panels of citizens is also strongly recommended. The evolution of food waste generation should be interpreted in parallel with the changes of behaviours, but also with “external” parameters such as the evolution of the cost of food.

MONITOR THE IMPACT OF INDIVIDUAL ACTIONS

When implementing specific actions (communication campaigns, awareness raising in schools, measurement campaigns, etc.), it is important that the monitoring system put in place does not only monitor the activities and the outreach of the actions implemented but also the impact of the different actions on food waste prevention behaviours. Ensuring consistency when it comes to the monitoring of individual actions also contributes to harmonise their assessment and aggregate results, e.g. by defining a common typology of food waste behaviours that can be used by the different action developers.

FIND OUT MORE

ACCESS THE FULL REPORT ON [ACRPLUS.ORG](https://www.acrplus.org)

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