Smart Food BaWue - Food Waste in Private Households

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Smart Food BaWue is a research project for the monitoring and prevention of food waste in private households in a pilot region in Southern Germany (Baden-Wuerttemberg). The aim is to develop methods for the permanent monitoring of food waste in private households and to detect successful methods for reducing the amount of food thrown away via an app for the smartphone. An interesting approach in this context is a quick check for self-assessment.

The monitoring is first carried out in around 100 private households in the pilot region and is foreseen to be scaled up later. The district administration is coordinating communication and networking with citizens and other stakeholders. The project is funded by the Ministry of Food, Rural Affairs and Consumer Protection, Baden-Wuerttemberg (MLR).

According to recent statistics, the largest amount of food waste is generated in private households. Nevertheless, until now, measures against food waste have mainly focused on out-of-home catering and also on retail. Until now, cooperation with private households was limited to small surveys and monitoring campaigns lasting a few weeks. For the first time in Germany, *Smart Food BaWue* is surveying a number of 100 households over a period of at least 12 months - a permanent monitoring program is even being planned for the entire federal state as a follow-up.

The monitoring is based on the existing APP "RESOURCEMANAGER FOOD", which was developed at the Technology Transfer Initiative at the University of Stuttgart and which has been successfully used in out-of-home catering for more than a decade meanwhile. Within the project, a new version of the APP - especially for private households - has been developed and tested. Household-specific features are for example: automatic connection of a scale, semi-automated monitoring, innovative tools for self-assessment and data evaluation, import & export of data etc.. In addition to the efficient measurement and documentation of food waste, it will also provide nutritional information with a guide to waste avoidance measures and a quick check for the self-classification of households. The app is available for android and iOS devices and as an online app for the web browser. The app is barrier-free.

With the new toolkit, it will also be possible to provide data for reporting in the context of the SDGs and to retrieve validated data for large regions or whole countries and to document the achievement of the EU-wide avoidance targets.

The project runs from 01.11.2023 to 31.12.2025. Food waste has been recorded in the participating pilot households since August 2024.

For the transfer of the new concept to the whole of Baden-Württemberg, the relevant boundary conditions will be researched and the different regions or districts will be typified accordingly. Finally, a concept for the whole of Baden-Württemberg is proposed – possibly with the identification of uncertainties and any outstanding questions. In addition, based on the results in the pilot region, an assessment of the avoidance potential for the whole of Baden-Württemberg will be carried out. Finally, the avoidance measures are also evaluated and the savings potentials for the whole of Germany are addressed.

In the oral presentation, the evaluated measurement results from the first six months of monitoring are presented in detail. The feedback from households and successful measures to avoid food waste will be presented - as well as the total avoidance potential in Baden-Wuerttemberg & Germany.





Figure 1: Screenshot Measurement – selection page & details page (here salad & vegetables)



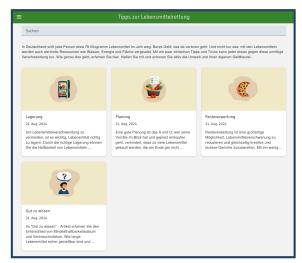


Figure 2: Screenshot Reports - Food Categories (left) & tips on food rescue (right)