

Dealing with food waste through participatory workshops: a community engagement approach

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Nowadays, it is estimated that one-third of all food, produced in the globe for human consumption is lost or wasted (FAO, 2014). Consequently, it can be argued that food wastage and its implications in the environment, society and economy is one of sustainability challenges to be addressed by contemporary world. Food “sufficient, safe, affordable and nutritious” appears as top priority of the 193 member states of the UN in their common vision of the Agenda 2030.

Our project, the A2UFood project, aspires to design and implement a holistic management scheme including all aspects of reduction, reuse, and recycling of food waste. Its implementation is the result of a wide partnership between Municipality of Heraklion – Crete- Greece and other agents such as the United Association of Solid Waste Management in Crete, ENVIROPLAN S.A, University of Crete, Hellenic Mediterranean University, Harokopio University and University of Stuttgart.

The A2UFood scheme is designed to inform, raise awareness and educate the public through a variety of off and on line tools and activities. In particular, off line activities developed in the localized informative campaign, involved communication material (e.g. leaflets, communication spots), events for public awareness, publicity, visibility and training courses targeting citizens and food related enterprises.

Complying with the objectives of A2UFood informative campaign, “A2UFood training kit” and related participatory-based workshops (Foodsaveshare, 2021) have a key role in order to involve and train people to act as “trainers” in their working places, friend circle or neighborhoods. The activities of A2UFood training kit are based on the principles of Education for Sustainability and more precisely on Environmental adult education emphasizing the qualities of voluntariness, conscious control, interpersonal encounter, active participation and capacity building in order for participant-learner to bring about the necessary change (Paterson, 2010).

This tailored made kit in form of an e-book, includes a short theoretical background and nine sets of participatory activities with content related/adjusted to the topic. All activities are designed and developed in the form of worksheets accompanied by corresponding instructions (e.g. educational goals, implementation time, necessary materials etc) to support trainers who wish to implement. The first three sets are commanded by the pedagogical principles of active and collaborative learning upon which all the other activities were designed. Ice-breaking and group formation activities adjusted to the subject are necessary for breaking the awkwardness in order to increase participants’ interaction into the participatory workshops (Activities 1-3). The theme of food consumption is elaborated through a cluster of three activities sets (Activities 4-6). Personal reflection on the subject under study is the focus of the fourth activity aiming to explore the consequences of our personal choices on food consumption on the environment, society and local economies. Critical reading of date labelling is the focus of the fifth activity, while the role of advertising in food consumption is approached through text analysis of advertisement and creative writing exercise in activity six. Disposal and management of food waste in our own household as well as a short 3-level evaluation on food waste management (Self-evaluation, Local Authority policies evaluation, Government policies evaluation) are the issues elaborated in activity seven through a case-study (Activity 7). The development of cooling technology through time (different ages) and space (different geographical areas) is the focal point of the following activity revealing the crucial role of technology in food waste (Activity 8). The final set of activities aims to highlight the complexity of food losses/waste issue due to differences of social contexts at different stages of food production/consumption (Activity 9).

The evaluation of the educational –training kit was developed through various forms used in a complementary way. Initially, persons with domain expertise related to the specific partnerships of A2UFood project were actively involved in evaluation process acting not so much as experts but as critical friends. The activity worksheets completed by participants groups and debriefing sessions implemented throughout training session in both pilot and main training courses have also been used as significant evaluation tools.

In summary, it is a well - established evidence that food wastage is a complex issue affecting industrialized and non-industrialized countries. Its causes and consequences concern many different and interrelated aspects of society, environment and economy. Due to the interactive nature of these multiple actors, citizens' behavioral change plays a key role in tackling this problem. However, it is emphasized that informative-type campaigns, in and of itself, are not sufficient to trigger intended behavioral changes including food waste prevention (Stöckli et al., 2018). An informative campaign hardly affects people's deep thoughts and feelings, in order to change long-term established practices and routines. In order to make informative campaign more efficient synergy in the actions (Aschemann-Witzel et al., 2015) and "community engagement" are perceived as a critical path for effectively communicating food waste management practices (Soma et al., 2020).

The pedagogical principle upon which the given training kit has been designed is the pursuit of personal engagement with the issue. All the proposed activities aim to enable participants reflect on their own consumption attitudes, values and practices towards food waste/loss starting from the level of personal experience up to the global level of food management. The trainer encourages participants to reflect on their daily practices, express their point of view, feel, gain empathy, work in groups and finally to commit themselves to socially desirable behaviors in the future and develop favorable attitudes concerning the avoidance of waste. In this perspective, reflection becomes a social action and the new knowledge is built collectively by the community members and is connected to the broader debate of environmental protection and postmaterialist values, predominant issues into the public discourse of the last thirty years and factors contributing to behavior change (Inglehart and Welzel, 2005). Such participatory activities and workshops allow the different topics to be introduced in a more familiar framework and add the values of collaboration, team work and face-to-face communication.

Having argued all this, we challenge those who carry out future food-waste interventions to implement one or more "community engagement" type interventions such as participatory workshops.

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References

- Aschemann-Witzel, J., de Hooge, I., Amani, P., Bech-Larsen, T., Oostindjer, M.: Consumer-related food waste: causes and potential for action. *Sustainability* 7, 6457–6477, <http://dx.doi.org/10.3390/su7066457> (2015).
- FAO, Food wastage footprint, full cost accounting, Final report, <http://www.fao.org/3/a-i3991e.pdf> (2014). Accessed 20 February 2021.
- Foodsaveshare, <https://foodsaveshare.gr/wp-content/uploads/2019/06/e-book.pdf> (2021). Accessed 20 February 2021.
- Inglehart, R., Welzel, C.: *Modernization, Cultural Change, and Democracy: The Human Development Sequence*. Cambridge: Cambridge University Press (2005)
- Paterson, R.W.K. Ed.: *Values, education and the adult*. New York: Routledge (2010).
- Soma, T., Li, B., Maclaren, V.: Food waste reduction: a test of three consumer awareness interventions. *Sustainability* 12 (3), 907 (2020).
- Stöckli, S., Niklaus, E., Dorn, M., Call for testing interventions to prevent consumer food waste. *Resour.,Conserv. Recycle.* 136, 445–462, <https://doi.org/10.1016/j.resconrec.2018.03.029> (2018).