



21-22 November 2024

Food waste and waste management in air catering. Short communication

Băsărabă Andreea-Camelia¹, Mocioalcă M.¹, Abu-Awwad A.¹, Rădoi P.B.¹, Rinovetz A.¹

¹University of Life Sciences "King Mihai I" from Timisoara, Faculty of Food Engineering, Calea Aradului
119, Romania, Phone: +40-256-277327; Fax: +40-256-277261

*corresponding author, e-mail: alexandrurinovetz@usvt.ro

Abstract: Air catering is an intensive, capital-intensive industry that consumes a large amount of resources to provide services. The terms food loss and waste are often used as substitutes in the literature, but they are still different concepts in the food chain. The term "food loss" refers to the early stages of the food chain generated by a decrease in the quantity or quality of food, which makes it unfit for consumption. The term "food waste" refers to the later stages of the food chain, dependent on retail and ultimately consumer behaviour. The food waste crisis is a major problem affecting the world, and food waste is recognized but neglected in the aviation sector. The International Air Transport Association reported that $5.7 \cdot 10^6$ tons of cabin waste (food consumed), was generated by airlines, of which $\approx 80.5\%$ was food and beverage waste. In 2018, the catering industry was valued at \$17.7 billion, and food waste resulting from catering technology valued at hundreds of millions. In this context, it is imperative to identify innovative solutions to reduce food waste in catering technology, given the financial and environmental impact of good food waste management and resource conservation. Thus, a classification of food waste based on edibility and degrees of reuse is proposed: 1. edible; 2. inedible; 3. industrial residues; 4. inedible due to natural causes (e.g.: presence/intervention of pests); 5. inedible due to incorrect (altered) management; 6. undeclared waste (Fig. 1) [1-4].

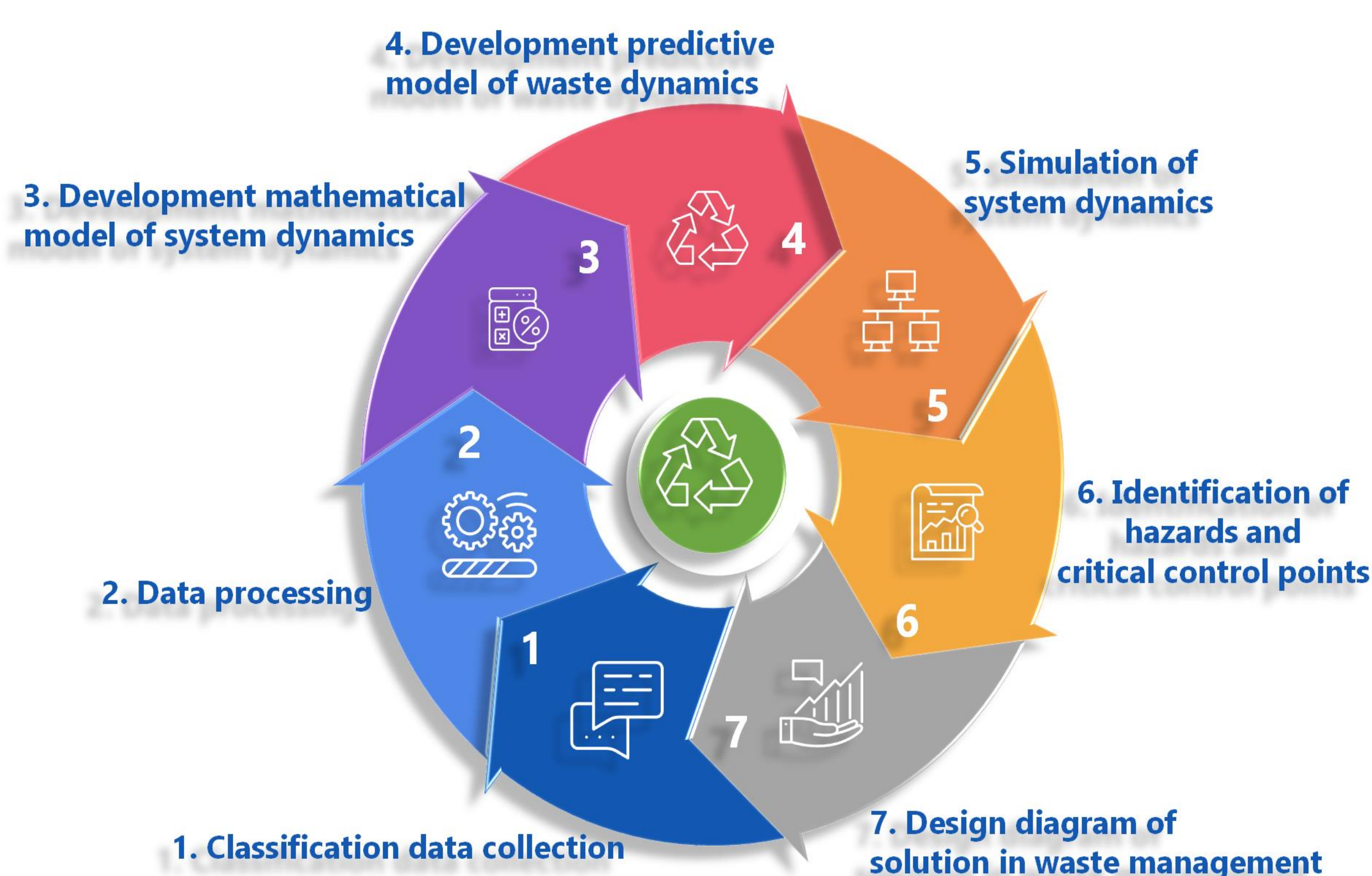


FIG. 1. Diagram of analysis and identification of solutions for flight catering waste management

• Conclusions

In a world that is still working hard to solve the "scourge of hunger", it constitutes a real danger to food security, a problem that must be actively addressed and managed in the future. The objectives of air catering biowaste management are to: 1. the impact of food waste resulting from airline suppliers on the economy and the environment (cause: redundant, polluting raw materials); 2. the orientation of food waste management to reduce the amount of food thrown away = the 3Rs = reduce, reuse, recycle.

• Reference

1. Parfitt et al., 2010, Food waste within food supply chains: quantification and potential for change to 2050, Biol. Sci., 365(1554), p.3065-3081.
2. Food Control Consultants Ltd, 2018, International Catering Waste – A Case For Smarter Regulation.
3. Fox, T., 2013, Global Food: Waste Not, Want Not, https://catalogue.unccd.int/1482_IME-Global-Food-Report.pdf.
4. Porter, M.E., Kramer, M.R., 2011, Creating Shared Value, Harvard Business Review 89, nos. 1-2, p. 62-77.

Acknowledgement: The authors are indebted to the University of Life Sciences "King Mihai I" From Timisoara, Research Institute for Biosecurity and Bioengineering, Faculty of Food Engineering, Timișoara, for financial and technical support.