

# Public views on household composting: Empirical evidence from the municipality of Kalamata, Greece

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## Introduction

The Municipal Solid Waste (MSW) Management is worldwide one of the most important environmental problems, especially in economically developed countries, due to the increase in the urban population and the change in consumption patterns [1],[2]. The main component of MSW generated, both in developed and developing countries, is the organic fraction. In Greece, approximately 80% of the total MSW produced ends up in landfills, 13.8% is recycled and only 3.4% is composted [3]. It is obvious that the recycling rate and especially the composting rate remains at particularly low levels. Intensive efforts need to be made for the achievement of the goals that have been set as well as for the transition to an environmentally sustainable waste management. One of the most important factors for the successful implementation of environmental programs (such as composting) is the active participation of citizens [4],[5],[6],[7],[8],[9],[10],[11].



## Aim

composting in the municipality of Kalamata. Kalamata is one of the largest cities of the Peloponnese. The Municipality of Kalamata in collaboration with the RE THINK group (NGO) has installed 50 neighborhood composting bins and has distributed 500 household composting bins to citizens.



## Methods

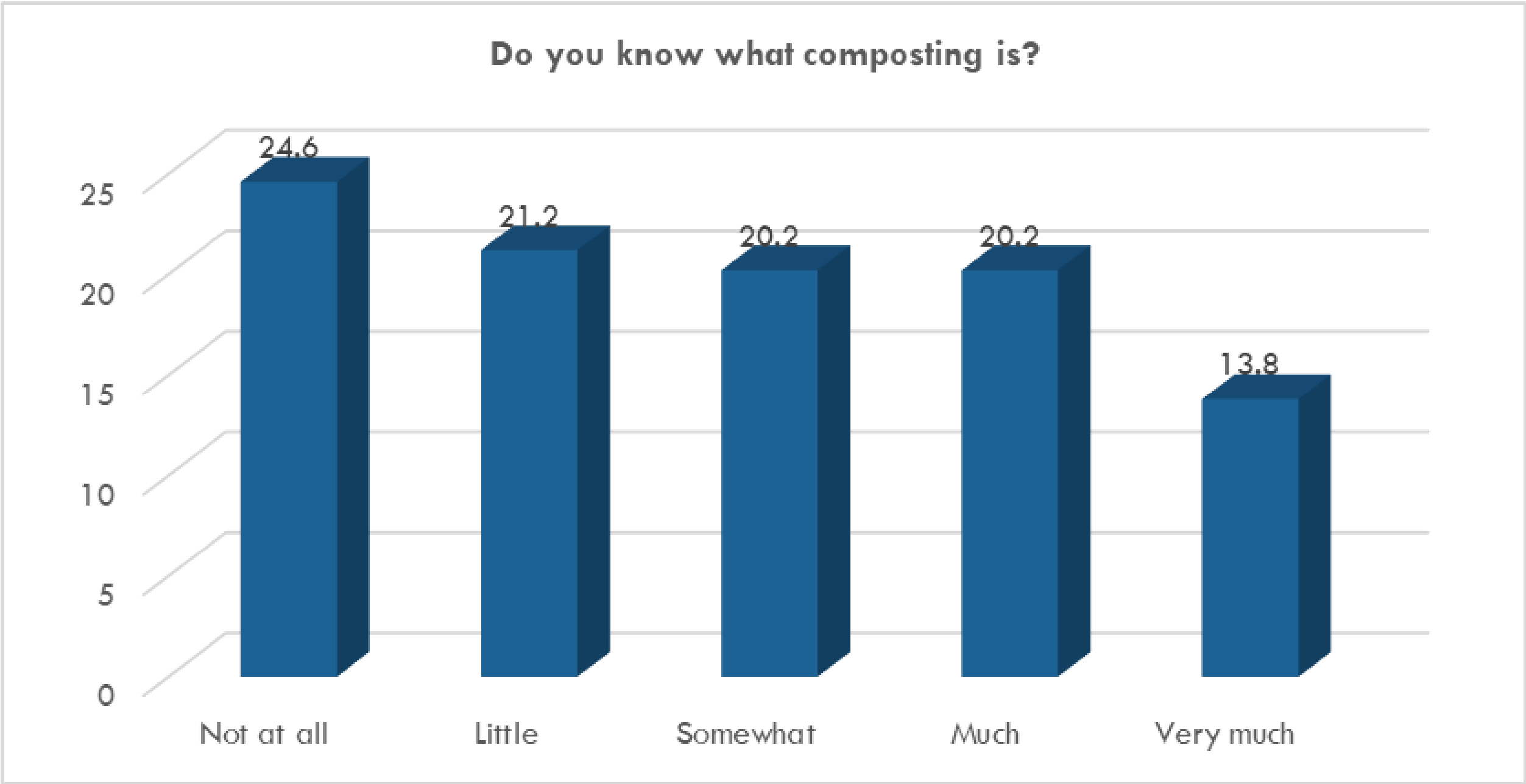
Structure of questionnaire

Collection (April to May 2022, 500 valid questionnaires)

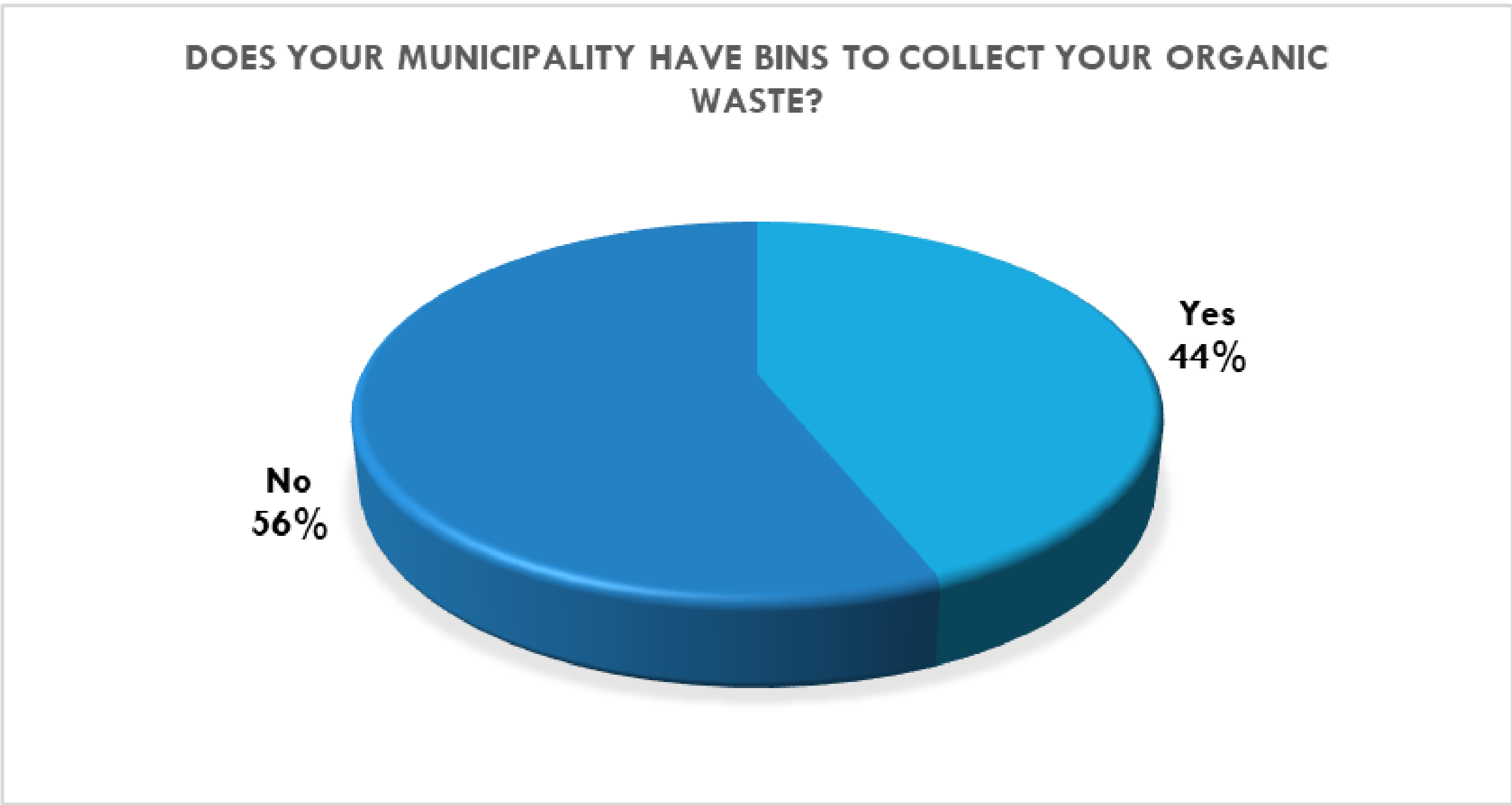
Statistical analysis of the data (descriptive statistics, x2 independence test)



## Results-Discussion



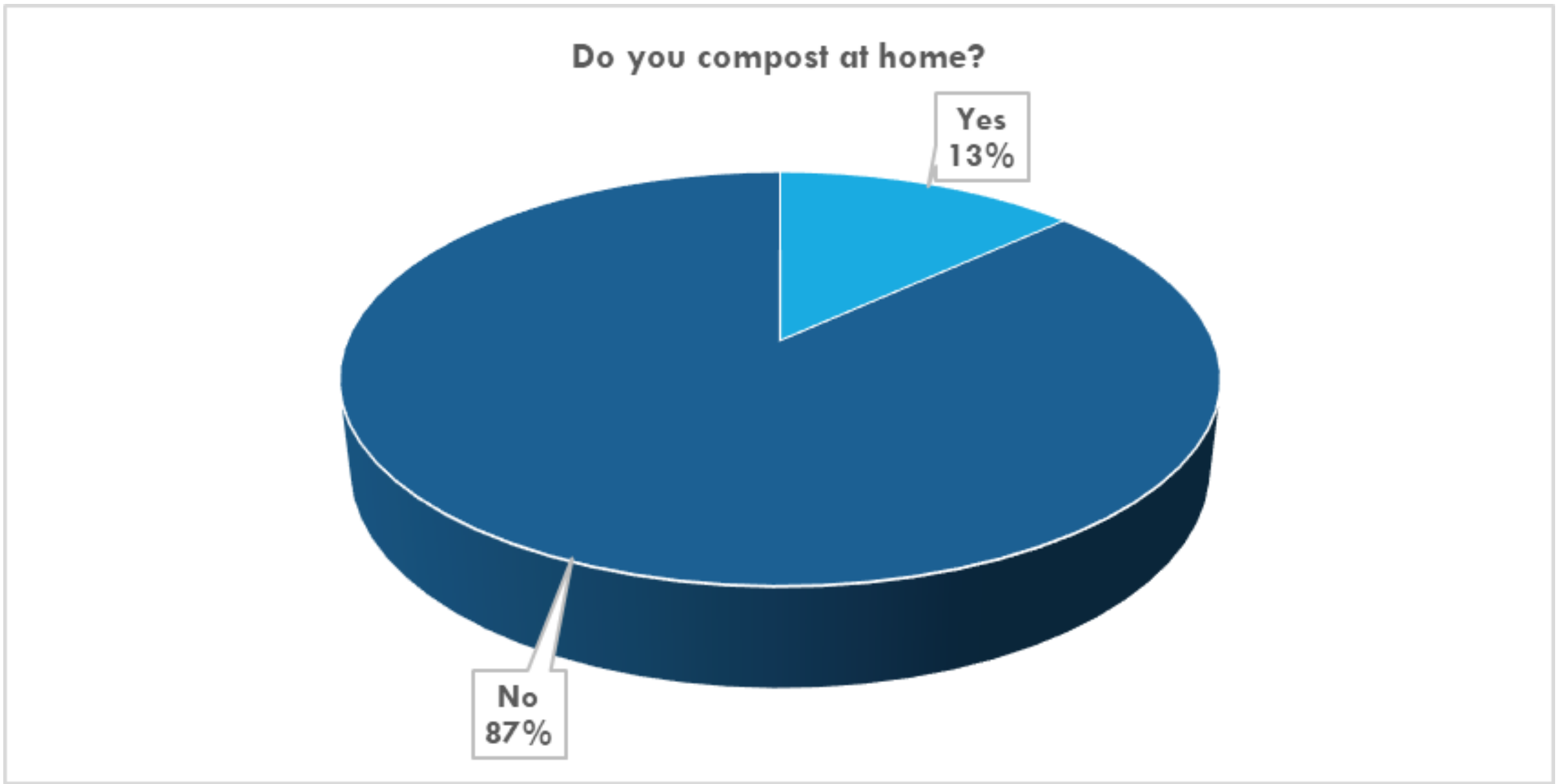
It seems that composting is not an unfamiliar concept to citizens.



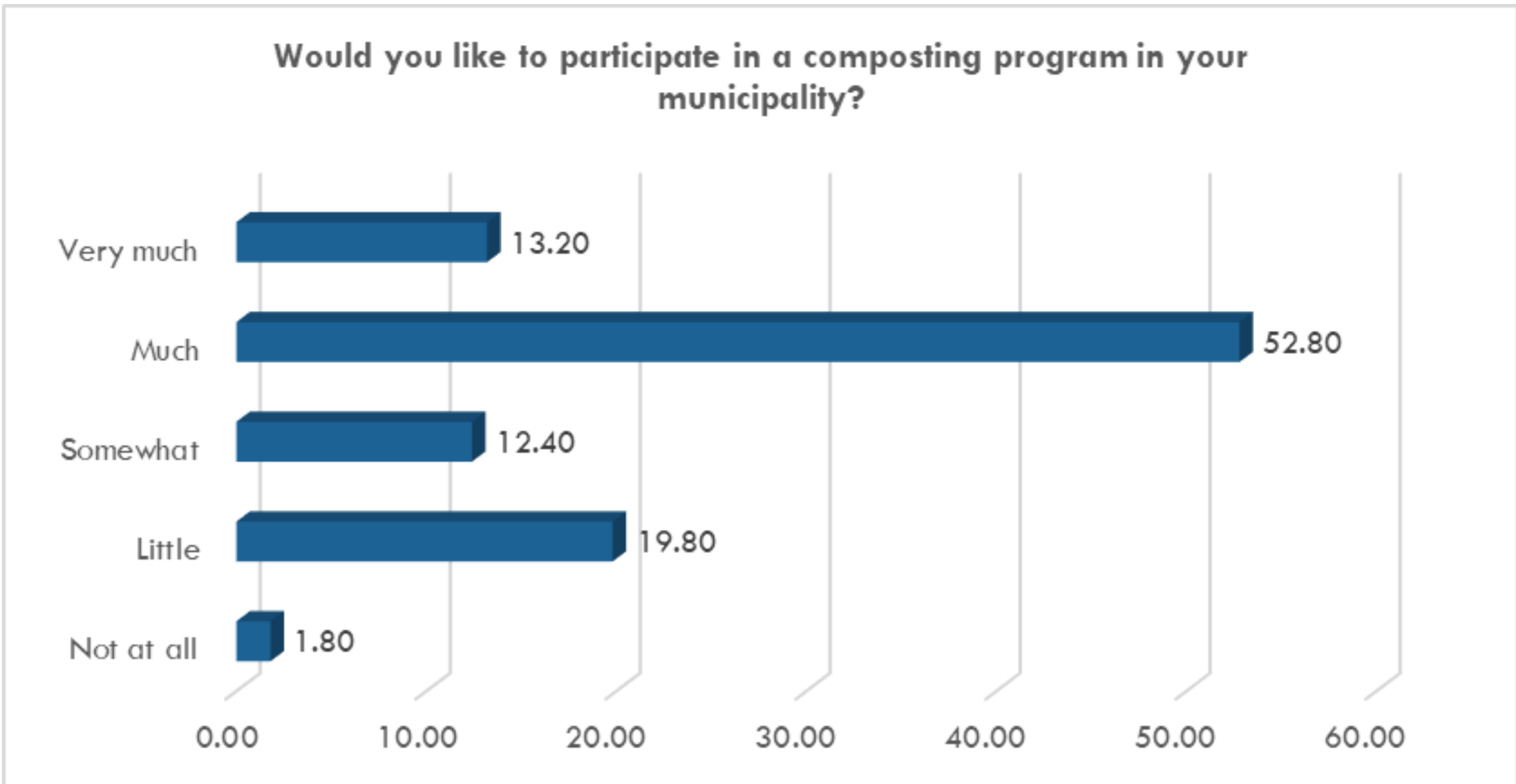
2 out of 5 participants state that a composting program operates in their municipality



## Results-Discussion



Although a significant percentage of the respondents state that a composting program operates in their municipality, only a very small percentage is composting.



In addition, a very large percentage declares willingness to participate in a composting program.

## References

- [1] Marshall, E. R. & Farahbakhsh, K. (2013). Systems approaches to integrated solid waste management in developing countries. Waste Management, 33, 988–1003.
- [2] Pires, A., Martinho, G. & Chang, N. (2011). Solid waste management in European countries: A review of systems analysis techniques. Journal of Environmental Management, 92, 1033-1050.
- [3] EEA, European Environment Agency, (2013). Municipal Waste Management in Greece, February 2013.
- [4] Drimili, E., Herrero-Martin, R., Suardiaz-Muro, J., Zervas, E. (2020). Public views and attitudes about municipal waste management: Empirical evidence from Athens. Waste Management and Research, 38(6).
- [5] Drimili, E., Gareiou, Z., Vranna A., Pouloupoulos, S., Zervas, E. (2019). An integrated approach to public's perception of urban water use and ownership of water companies during a period of economic crisis. Case study in Athens, Greece. Urban Water Journal, 16(5), 334-342.
- [6] Gareiou, Z., Drimili, E., Zervas, E. (2021). Public acceptance of renewable energy sources. In G. Kyriakopoulos (Ed), Low carbon energy technologies in sustainable energy systems (pp. 327-309). London: Academic Press.
- [7] Drimili, E., Gareiou, Z., Vranna A., Pouloupoulos, S. & Zervas, E. (2019). An integrated approach to public's perception of urban water use and ownership of water companies during a period of economic crisis. Case study in Athens, Greece. Urban Water Journal, 16(5), 334-342.
- [8] Drimili, E., Gareiou, Z., Zervas, E. (2019). Public perceptions of the concept of green growth: application in Athens, Greece, during a period of economic crisis. Environment, Development and Sustainability, 22, 6053-6076.
- [9] Drimili, E., Zervas, E. (2018). Public knowledge, attitudes and perception of ecological debt. Journal of Political Ecology, 25(1), 470-487.
- [10] Zervas, E., Vatikiotis, L., Gareiou, Z., Manika, S., Herrero-Martin, R. (2021). Assessment of the Greek national plan of energy and climate change-Critical. Sustainability 13(23), 13143.
- [11] Tsimnadis, K., Kyriakopoulos, G.L., Arabatzis, G., Leontopoulos, S., Zervas, E. (2023) An Innovative and Alternative Waste Collection Recycling Program Based on Source Separation of Municipal Solid Wastes (MSW) and Operating with Mobile Green Points. Sustainability 15(4), 3106.

## Conclusions

Further information and awareness of the citizens is required as well as the provision of incentives for effective participation in composting programs.

4th International Conference on  
Environmental Design, ICED2023

Sustainability / Pollution / Energy / Cities-Buildings / Transportation / Erosion / Climate  
Change / Policy / Social Acceptance / Health Impacts 20-22 October 2023, Athens, Greece

