

Citizen collaboration in coastal monitoring - The promise and pitfalls of digital apps

Marie Briguglio¹ Hadas Gann-Perkal²

¹University of Malta, marie.briguglio@um.edu.mt ²SPNI - Society for the Protection of Nature in Israel, seawatch@spni.org.il

Voluntary cooperation by the public in monitoring and reporting of illegal activity offers considerable promise for the environmental regulatory toolkit, not only to improve environmental management itself, but also to do so with fewer resources - while achieving community buy-in. This paper surveys the literature on citizen collaboration in monitoring and reporting illegal environmental activities, focusing on the use of digital apps. It then describes the potential and the challenges of such an app following a pilot exercise (in Israel) and a hypothetical test of the willingness to engage using a representative survey-based experiment. Data collection took place in a large country (UK) and a small island (Malta) using an on-line representative panel of respondents (n=1,000). The analysis involved estimating a model to forecast which respondents are most willing to engage, exploring coastal proximity, government trust, pro environmental sentiment and education among other determinants. Furthermore, respondents were randomly assigned to one of two treatments (anonymous/public) to assess the role of anonymity. The study offers useful insights to coastal zone management using collaborative digital tools and draws interesting insights on the distinctions at play in smaller versus larger states. Assisted by the European Commission's Horizon 2020 Grant agreement No 101000302.

Keywords: Cooperation, environmental, reporting, digital app, coast