

# Potential of Citizen Science for SDG 11

### **Dilek Fraisl**

International Institute for Applied Systems Analysis (IIASA)

Email: fraisl@iiasa.ac.at

International Institute for Applied Systems Analysis *Twitter: @dilekfraisl1* 

Web: www.iiasa.ac.at





### https://link.springer.com/article/10.1007/s11625-020-00833-7

Sustainability Science https://doi.org/10.1007/s11625-020-00833-7



ersität

Wiener

⊚,

3

A

/ien

0

**ORIGINAL ARTICLE** 

#### Mapping citizen science contributions to the UN sustainable development goals

Dilek Fraisl<sup>1,2</sup> + Jillian Campbell<sup>3</sup> · Linda See<sup>1</sup> · Uta Wehn<sup>4</sup> · Jessica Wardlaw<sup>5</sup> · Margaret Gold<sup>6</sup> · Inian Moorthy<sup>1</sup> · Rosa Arias<sup>7</sup> · Jaume Piera<sup>8</sup> · Jessica L. Oliver<sup>9,10</sup> · Joan Masó<sup>11</sup> · Marianne Penker<sup>2</sup> · Steffen Fritz<sup>1</sup>

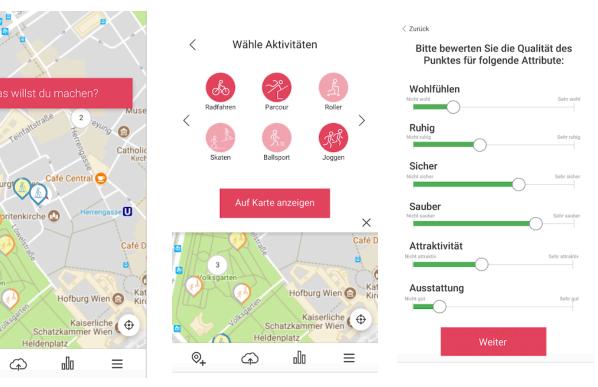
Received: 4 November 2019 / Accepted: 14 June 2020 © The Author(s) 2020

#### Abstract

The UN Sustainable Development Goals (SDGs) are a vision for achieving a sustainable future. Reliable, timely, comprehensive, and consistent data are critical for measuring progress towards, and ultimately achieving, the SDGs. Data from citizen science represent one new source of data that could be used for SDG reporting and monitoring. However, information is still lacking regarding the current and potential contributions of citizen science to the SDG indicator framework. Through a systematic review of the metadata and work plans of the 244 SDG indicators, as well as the identification of past and ongoing citizen science initiatives that could directly or indirectly provide data for these indicators, this paper presents an overview of where citizen science is already contributing and could contribute data to the SDG indicator framework. The results demonstrate that citizen science is "already contributing" to the monitoring of 5 SDG indicators, and that citizen science "could contribute" to 76 indicators, which, together, equates to around 33%. Our analysis also shows that the greatest inputs from citizen science to the SDG framework relate to SDG 15 Life on Land, SDG 11 Sustainable Cities and Communities, SDG 3 Good Health and Wellbeing, and SDG 6 Clean Water and Sanitation. Realizing the full potential of citizen science requires demonstrating its value in the global data ecosystem, building partnerships around citizen science data to accelerate SDG progress, and leveraging investments to enhance its use and impact.

Keywords Sustainable Development Goals (SDGs) · Citizen science · SDG indicators · Tier classification for SDG indicators · Crowdsourcing · Community-based monitoring







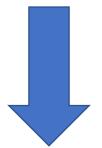
## Challenges

- Implementation delays due to COVID
- Reach out to, bring in and coordinate with the stakeholders
- Coordination between government agencies
- Adaptation to new ways of working online meetings: project meetings, data collection workshops/training activities



## Recommendations

- Existing practices based on data gaps and needs and priorities
- Search for the relevant tools, data and examples while considering own national/local context



EO for Sustainable Cities and Communities Toolkit



# Lessons Learned

These efforts require an enabling environment with supportive institutional, technological, policy, financial and policy related infrastructure.

Dilek Fraisl International Institute for Applied Systems Analysis (IIASA) *Email: fraisl@iiasa.ac.at Twitter: @dilekfraisl1*