



Mapping Citizen Science Contributions to the SDGs

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SDG CoP: UN Sustainable Development Goals and Citizen Observatories

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The WeObserve SDGs and Citizen Science Community of Practice (SDGs CoP) is an online platform for citizen science/citizen observatories and the SDGs.



Our aim is to connect citizen science practitioners and researchers with National Science Offices (NSOs) and government officials; UN and other international agency representatives; and the broader data and stats communities to share and exchange knowledge, ideas and resources on how to demonstrate the value of citizen science data and impact for SDG achievement.

SDGs are a roadmap to achieve a healthy, prosperous and fair future for all. Achieving the SDGs requires informed decisions that are based on accurate, timely and comprehensive data. Even though data availability has improved over the last decade, there are still major gaps in information and knowledge for guiding policy formulation and implementation. New innovative approaches to data collection, such as citizen science/citizen observatories, which is very broadly defined as public participation in scientific research, can contribute to SDG monitoring. In addition, citizen science could also help mobilize citizen action and

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Recources

- Glossary
- Inception report
- Citizen science and the United Nations Sustainable Development Goals, Nature Sustainability



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Mapping citizen science contributions to the UN sustainable development goals

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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

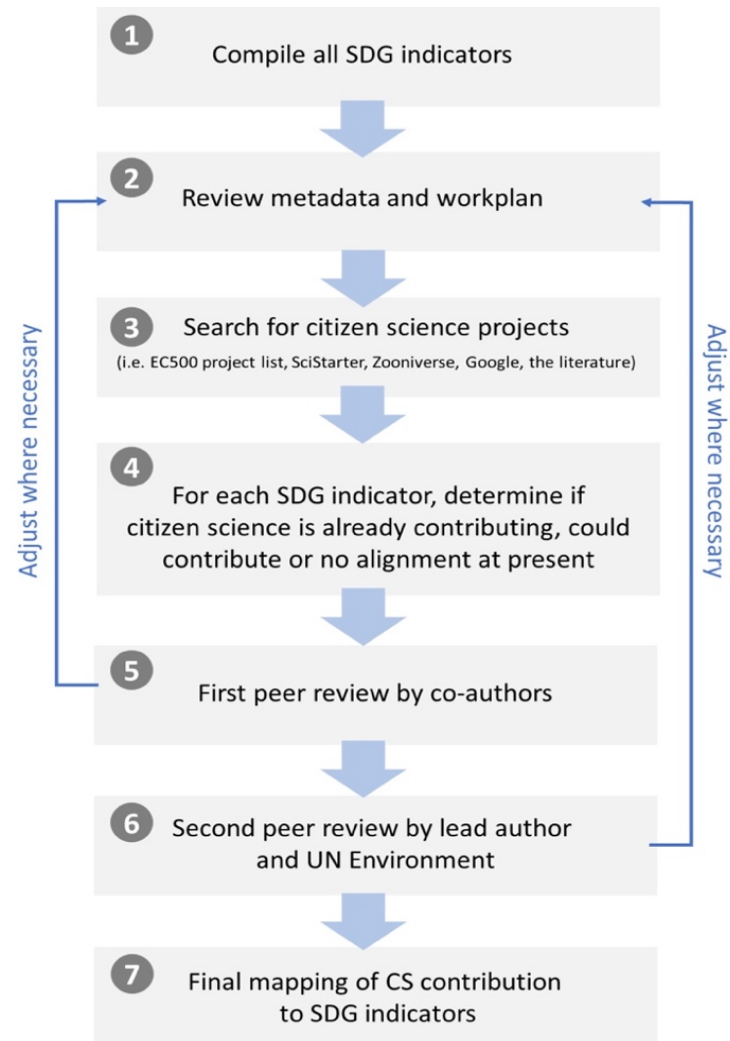
Public Participation

Voluntary Contributions

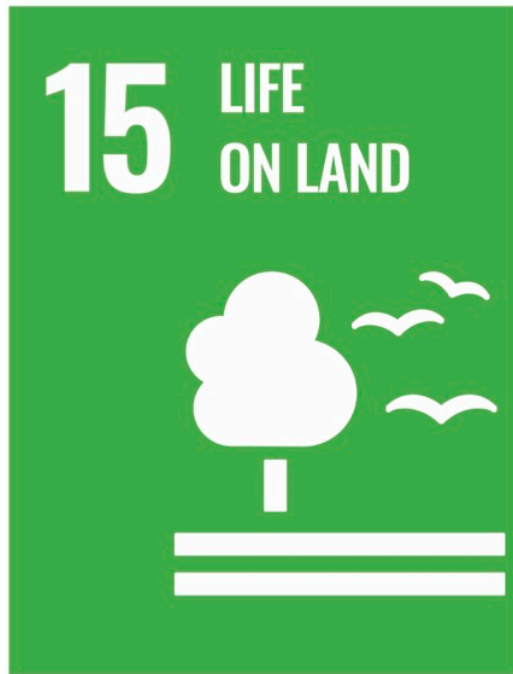
Knowledge Production



Methodology



The greatest contribution of citizen science data to SDG monitoring would be in:





	H	J	K	L	M	N	
198	s, combat desertification, and halt and reverse land degradation and halt biodiversity loss						
199	Tier I		Global Forest Watch, LACO-Wiki; Picture Pile: Deforestation, FotoQuestGo		https://www.globalforestwatch.org/ https://laco-wiki.net/en/Welcome https://geo-wiki.org/games/picturepile/ http://fotoquest-go.org/en/	High quality remote sensing imagery of areas with forest cover is increasingly widely available, and citizen science approaches, such as participatory mapping, crowdsourcing, volunteered geographic information and more are very well suited to identifying and categorising the nature of forest cover, and forest cover change. There are a large number of existing citizen science initiatives that focus on exactly this topic.	D
200	Tier I	eBird, Bird Track, Seabirds, PanEuropean Common Bird Monitoring Scheme, International Water Bird Census, IBA Canada Regional Caretaker Networks, Maritime Breeding Bird Atlas, North American Breeding Bird Survey, INaturalist, Natura Alert, and many more bird monitoring & biodiversity projects...			Call recording with Stuart Butchart - Birdlife International https://www.cepf.net/sites/default/files/iba-statusreport2015.pdf https://www.birdlife.org/sites/default/files/attachments/iba-monitoring-factsheet-birdlife-international.pdf https://www.birdlife.org/sites/default/files/attachments/iba-monitoring-factsheet-birdlife-international.pdf	Citizen science is already informing this indicator on protected areas through the Important Bird and Biodiversity Areas (IBAs) and Key Biodiversity Areas (KBAs) schemes (Fritz et al, 2019; SDSN TRenDS, 2019). 44% of each freshwater and 47% of each terrestrial KBA is covered by existing protected area boundaries (UNEP, 2019). The largest subset of KBAs is identified using data on birds including IBAs. Hence, all the projects mentioned here (eBird, Bird Track, PanEuropean Common Bird Monitoring Scheme, International Waterbird Census, etc.), and many more in the fields of bird monitoring and biodiversity, are already contributing to the monitoring of this indicator.	D
201	Tier I		Relasphone, Amazon Aerobotany, Moabi DRC, Logging Roads, FotoQuest Go, Forest Eyes, Forest Watchers, Picture Pile		https://www.mdpi.com/2072-4292/8/10/869 http://info.perunature.com/aerobotany http://rdc.moabi.org/en/ https://blog.globalforestwatch.org/people/tracing-the-paths-to-forest-destruction-new-crowdsourcing-initiative-tackles-logging-roads-in-the-congo-basin http://fotoquest-go.org/en/ https://blog.iiasa.ac.at/2016/05/17/picture-pile-gaming-for-science/ https://geo-wiki.org/games/picturepile/	The citizen science initiatives mentioned in the column to the left could be used for direct inputs to some of this multi-part indicator. One of the sub-indicators focuses on both the direction of change (whether there is a loss or gain in forest area) and how this rate is changing over time; the latter is important in order to capture progress among countries that are losing forest area, but have managed to reduce their rate of annual forest area loss.	D



**Examples of
Citizen Science
Contributions to
SDG Monitoring**

14.1.1b Floating plastic debris density

UNEP, the custodian agency for this indicator developed a methodology that uses citizen science data as a primary source of information for measuring marine plastics on beaches and shorelines.

[Litter Intelligence](#) is a large-scale citizen science program led by Sustainable Coastlines. The initiative collaborating with the Ministry for the Environment, Stats New Zealand and the Department of Conservation since the design phase of the program in 2016. The results are included in the official environmental report 'Marine 2019' produced by the Ministry for the Environment and Stats New Zealand as well as the 2019 VNR Report of the country.



LITTER SURVEY #01 • 25 October 2018 • Waikanae Beach, Gisborne, New Zealand www.sustainablecoastlines.org/litterproject

Citizen Science for the SDGs (CS4SDGs) – Ghana





< Zurück

Bitte bewerten Sie die Qualität des Punktes für folgende Attribute:

Wohlfühlen
Nicht wohl ————— Sehr wohl

Ruhig
Nicht ruhig ————— Sehr ruhig

Sicher
Nicht sicher ————— Sehr sicher

Sauber
Nicht sauber ————— Sehr sauber

Attraktivität
Nicht attraktiv ————— Sehr attraktiv

Ausstattung
Nicht gut ————— Sehr gut

Weiter

< Wähle Aktivitäten

Radfahren Parcour Roller

Skaten Ballsport Joggen

Auf Karte anzeigen

Map preview showing activity icons overlaid on a city map. The map shows a green park area (Volksgarten) and surrounding urban areas. A red button labeled "Auf Karte anzeigen" is positioned above the map preview.

Was willst du machen?

Map showing activity icons overlaid on a city map. The map shows a green park area (Volksgarten) and surrounding urban areas. A red button labeled "Was willst du machen?" is positioned above the map.

11.7.1 on the built-up area of cities that is open space for public use

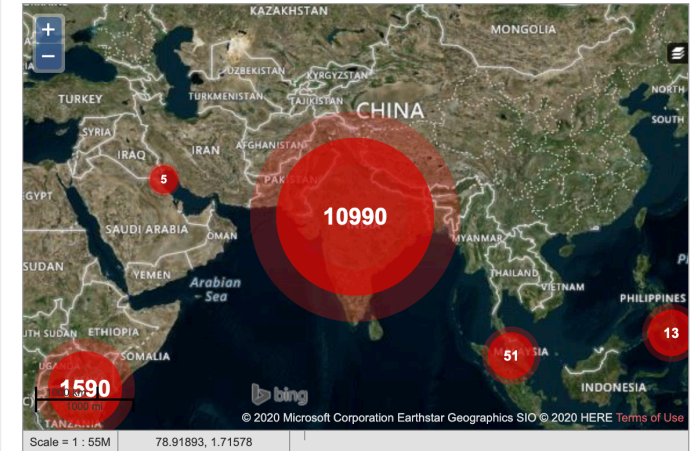


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Safety organizes several campaigns to spread awareness about gender based crimes. Join one of our campaigns or use our resources to start your own.
- Volunteer**
Safety is a completely volunteer based initiative. Volunteer your time and help us take it forward with our team of passionate and dedicated volunteers.

If you have been sexually harassed or abused in public spaces anywhere in the world, You can report anonymously in under 2 minutes.

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16.1.3 Proportion of population subjected to (a) physical violence, (b) psychological violence and (c) sexual violence in the previous 12 months

- This is NOT a proposal on how to replace the traditional sources of data, but instead the questions of how to complement them in a more cost effective way;
- Citizen science projects we highlighted today probably need some modification and improvement in their methodologies for their results to be used for SDG monitoring;
- No data source is perfect. They all have their limitations and advantages;
- Not only a source of data, but also a way to mobilize action for achieving the SDGs.

Citizen Science and the Sustainable Development Goals

Citizens in Action: The story of citizen science data contributions to the SDG indicator framework

Dilek Fraisl | October 28, 2020

Sustainable Coastlines | Litter Intelligence

Our Storymap: <https://arcg.is/1WDGWm>

Thank you!

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