



# Move the cheese from the preying eye: libraries as community-governed infrastructures to protect citizen science-generated data

Open Access Week

22 October 2024

University of Pretoria Auditorium

Modiehi Winnie Rammutloa  
Department of Information Science  
University of South Africa  
[rammumw@unisa.ac.za](mailto:rammumw@unisa.ac.za)

Define tomorrow.

UNISA





Setting the scene

01



Citizen science-generated data.

02



Where is the cheese going?

03



Problem identified

04



How can libraries assist?

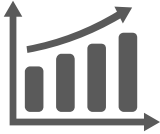
05



Conclusion

06

# SETTING THE SCENE



## DEFINED

Citizen science is a collaboration or activity of gathering research data by untrained community members commissioned by trained researchers.

## CORE

Volunteers and scientists work together to answer real-world questions.



## ALIASES

Public Participation in Scientific Research, Community Science, Amateur Science, Crowdsourcing



## HEROES

People collecting data in citizen science projects are citizen scientists



## DELUGE

Citizen science projects produce copious amounts of data



## GOAL

Citizen Science data contributes to monitoring and measuring the achievement of SDGs.




# Importance of citizen generated data


The government rely on traditional sources of data to report on various issues that could affect the country.




Citizen science projects on the other hand produce massive data which is generated by citizens.



Citizen science-generated data is referred to as non-traditional due to the nature of how it was collected.



Importance and confidence in citizen science data have been widely reported including in Africa – Nigeria, Kenya and South Africa (Brooks et al 2022; Weingart & Meyer 2021).



Trust in research is strengthened by stakeholder engagements (European Commission).

# Importance of citizen generated data cont'



Citizen science could be regarded as an essential tool and driver for, amongst other things, sustainable development towards ensuring the trustworthiness and reliability of citizen science data (de Sherbinin et al 2021).



Citizen science is essential in realising SDGs as it can be used as the primary source of research data in monitoring and measuring the progress of SDGs (Fritz et al 2021).

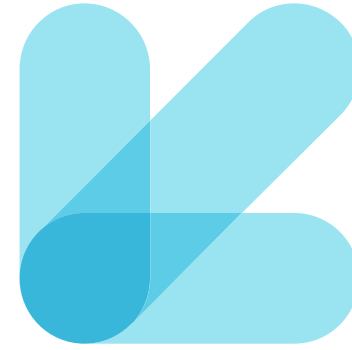
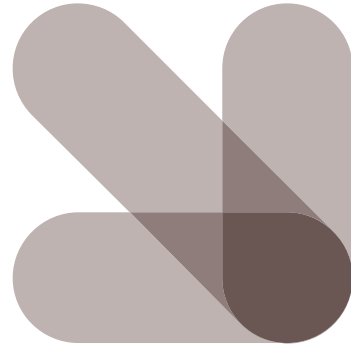


The community members can contribute positively to scientific research by providing their time and knowledge to science projects related to varied SDGs and their objectives (Sauermann, Vohland, Antoniou, Balázs, Göbel, Karatzas, Mooney, Perelló, Ponti, Samson & Winter 2020).



Democratisation of science and cost-effective data collection.

Non-  
governmental  
organisations  
databases



Government Departments  
and agencies.

**Where is the  
cheese going?**

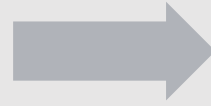
Research institutions,  
Universities and  
published in academic  
publications



Private companies for  
further commercialisation

# Big Questions!

Is it easy for community members to access this data?



Where would an ordinary member find information, let alone data?



## Answers

- No
- Library



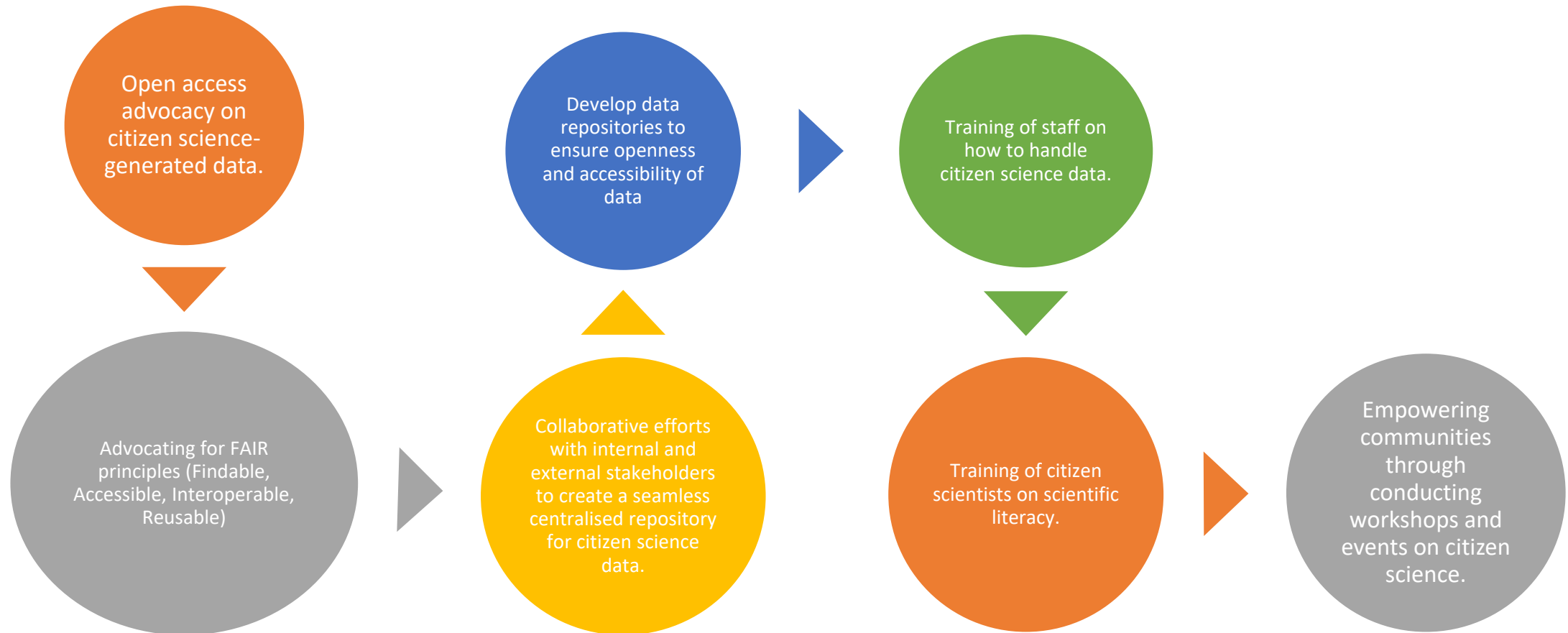
## Problem identified

- Data is commercialised and gatekeepers lock it behind paywalls.
- Contributors/citizen scientists could feel exploited, although their involvement is voluntary.
- Community members do not have a say in how their data is used.
- Lack of data justice due to no control over how data is used.
- Although consent is sort, who does it favour?
- What are the chances of data being sold for further commercialisation?
- Private companies continue to make a profit while communities do not benefit.





# The role of libraries as community-governed infrastructures.



# CONCLUSION

Citizen science projects give ordinary members of society to contribute meaningfully to science and potentially influence policy.

One of the benefits for community members to participate in citizen science projects is capacitation in scientific literacy skills.

Centralisation of citizen science data will ensure data justice where ordinary members of society can access the data anytime.

Citizen science data should open and easily accessible to the people who assists in its collection.

Libraries have an important role to play as a glue between researchers and community members.



**Ke a leboga.**  
**Thank you**

**Modiehi Winnie Rammutloa**  
**Department of Information Science**  
**University of South Africa**  
[rammumw@unisa.ac.za](mailto:rammumw@unisa.ac.za)

**Define tomorrow.**

**UNISA**



college of  
human sciences