



BiodivERsA

Citizen Science workshop

Barriers for using Citizen Science in biodiversity research

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Citizen Science Workshop
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Survey on Citizen Science practices & barriers

Survey sent end 2018 to BiodivERsA-funded projects: Replies from 51 people from 35 different projects.

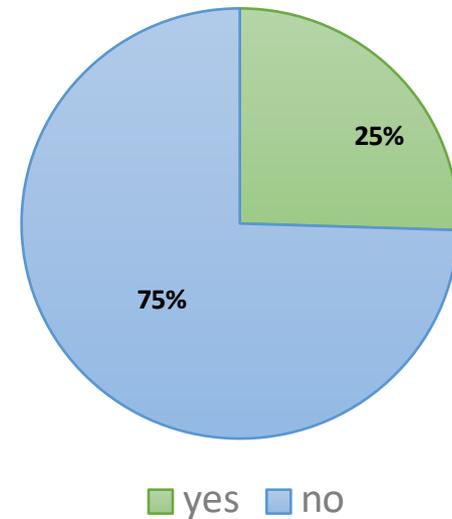
Questions on own experience and knowledge of Citizen Science.

Aim: extract challenges/barriers, but also best practices.

Results:

Have you used CS in your (BiodivERsA) research project?

- 25% said yes
- 75% said no





Results for the **27% who answered 'yes'** in using CS in their project.

Most of them perceive high to very high added-value of Citizen Science, e.g. for:

- Education
- Saving public funds (which are not spent by the researchers)
- Wealth of data
- Involvement of multiple external actors; stakeholders' perspective
- Connect with citizens' needs & views (e.g. change the study design based on their perceptions)
- Realistic view on research questions and results

Most frequent type of actions/approaches implemented:

- Data collection & sampling
- Observations & sightings of species
- Scenario definition; design; results validation
- Interviews, surveys, meetings (e.g. fish species extinctions/introductions by local fishermen)

Most commonly mentioned difficulties...

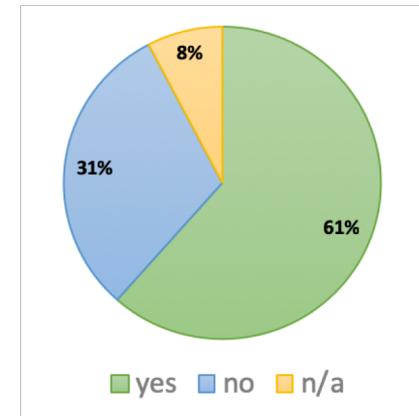
1. Data: quality/reliability not guaranteed, problems with data format, sample size, randomness of sampling, over/underestimation of species,...
2. People: engaging stakeholders, finding collaborators, sometimes with specific skills (e.g. divers)
3. Problems of language/tools/skills

... & how they tried to overcome them:

1. Data: quality control; adjust use of data; verifications by professionals; evaluating the level of expertise...
2. People: finding collaborators through institutions, networks, or specific organisations (when specific skills are needed) ; ask students
3. Organise meetings and trainings

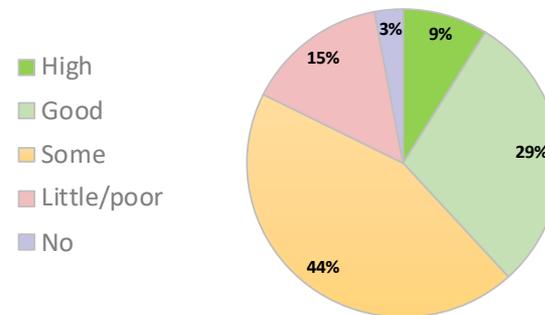
Does CS require specific skills from the research team?

- Statistical modelling methods
- Social and communication skills
- Tools to design interviews
- Mediation, facilitation, moderation
- Speaking the same language (e.g. than local people)



Results for the 75% who answered 'no' in using CS in their project.

Respondents were asked to rate their knowledge of CS.



Main difficulties or hesitations:

- Not applicable / relevant with the projects' objectives/project doesn't require that method
- Quality/reliability of data, limitations in sampling, risk of scientific bias (e.g. lack of randomness)
- Approaches in the project require strong/specific scientific skills
- Time investment needed
- Technical difficulties (e.g. need platform for data collection)
- Don't know any good reason to use it
- Lack of understanding on CS

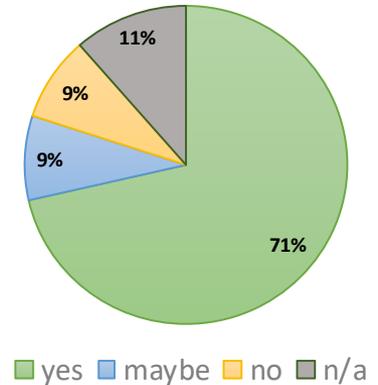
Using CS in the future?

There appears to be a clear interest in CS as 71% of respondents say they would be willing to use CS in their future projects.

But some added: only if relevant/necessary; or only for tackling specific questions.

Advantages for integrating CS in a research project:

- Access to more (complete) data, monitoring across large areas
- Outreach, knowledge transfer, and awareness-raising (e.g. on environmental problems)
- Bridge the gap between citizens vs scientists, emphasize importance of research
- Getting feedback from practitioners
- Understand the needs of the community, SH and public engagement





Thank you!