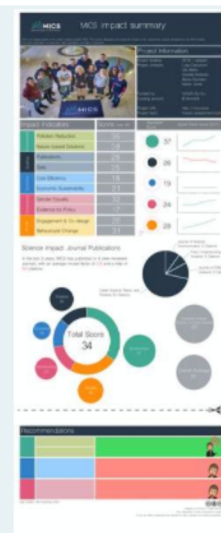


MICS - General indicators

A test-bed for potential indicator questions for the MICS project

...

General questions



Questions leading the user from their project space into the indicator space.

At this point, we understand that you are ready to answer a few (well... a lot of) questions on the xxx project. xxx should be a citizen-science project and you should be the person best positioned to answer questions about the project. If this is not the case, then something went terribly wrong..., you can leave this page now and have a good read with "The Science of Citizen Science" book instead [<https://link.springer.com/book/10.1007%2F978-3-030-58278-4>].

Timing is important. Your answers might change as the project evolves. You are always welcome to come back and change them when appropriate. It's very tricky to ask questions that are answerable whatever the development status of the project is, so we assume that the project is currently active. When answering the questions, if the project is no longer active, place yourself in the last month of activity. If the project didn't start yet, place yourself in its first month of activity.

The international community defined ten "principles" of citizen science. You can find them below. Later, the so-called "characteristics" of citizen science have been defined to allow for a more granular definition of the field. You can find them [here]. You can use the principles and the characteristics to warm you up, if you want. But you don't need to. We took them into account and we went deeper, much deeper. Through the MICS platform, you will be able to characterise a project as it has never been possible before. And we will use this characterisation to measure its impact and show the result to you. And to the world.

1

Project's title

Enter your answer

Questionnaire 1: General input features Microsoft Forms

2

*(T001) What forms of knowledge does the project (as a whole) create?

- ☐ New data
- ☐ New analyses
- ☐ New written knowledge
- ☐ New methodologies
- ☐ New concepts
- ☐ Other forms of knowledge
- ☐ I don't know.

3

*(T002) What is the start date of the project? (It can be in the future. If the project starts with a grant, this is the start date of the funding.)

Please input date (dd/MM/yyyy)



4

*(T003) What is the end date of the project?

Please input date (dd/MM/yyyy)



5

*(T004) The typical duration of a citizen-science project is about 3-4 years. Would that be a decent estimation for this project?

- ☐ Yes
- ☐ No
- ☐ I can't say.

6

*(T005) Are participants currently able to submit data?

- ☐ Yes
- ☐ No
- ☐ I don't know.

Questionnaire 1: General input features Microsoft Forms

7

*(T006) How many observations (observations as defined by the project) have been collected so far?

- ☐ I know the approximate number.
- ☐ I know the order of magnitude.
- ☐ I have no idea about how many observations have been collected.
- ☐ I don't really know what observations are.
- ☐ Observations are not a significant element of the project and quantifying them is not important.

8

*(T007) How many observations are collected in a typical recent year of active project?

- ☐ 0 - 300
- ☐ 301 - 3000
- ☐ More than 3000
- ☐ Too difficult to estimate

9

*(TPU008) To put the project's data collection in perspective just think that eBird collected 700 000 000 observations and iNaturalist 40 000 000. We'll tell you more about how your project compares with others in a moment.

- ☐ Good to know!
- ☐ I don't care...

10

*(T009) How many participants have collected data?

- ☐ I know the approximate number.
- ☐ I know the order of magnitude.
- ☐ I don't know.
- ☐ Participants are not a significant element of the project and quantifying them is not important.

Questionnaire 1: General input features Microsoft Forms

11

*(T010) How many participants collect data in a typical recent year of active project?

- ☐ 0 - 300
- ☐ 301 - 3000
- ☐ More than 3000
- ☐ Too difficult to estimate

12

*(TPU011) On average, in the project, each participant collects [(calculation) observation/participants] observations. In a typical long-tail situation, 10% of the participants would collect [(calculation to be defined) x] observations, and 90% would collect [(calculation to be defined) y] observations.

- ☐ Good to know!
- ☐ I don't care...

13

*(T012) Including participants who collect data, how many people have been engaged by the project (excluding social media)?

We will ask you more about "spin off" projects in future questions

- ☐ 0 - 300
- ☐ 301 - 3000
- ☐ 3001 - 30,000
- ☐ 30,001 - 300,000
- ☐ More than 300,000
- ☐ I don't know.

14

*(T013) Could you quantify the total funding received by the project (in £, € or \$) (for example, "2 000 000")?

The value must be a number

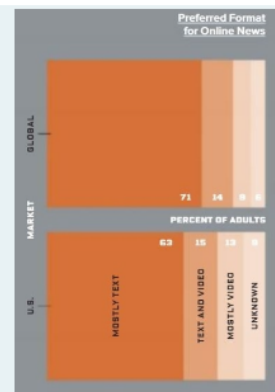
Questionnaire 1: General input features Microsoft Forms

15

*(T014) How is news about the project published?

- ☐ Mostly text
- ☐ Mostly oral
- ☐ Mostly visual (images, infographics)
- ☐ Mostly video
- ☐ Unknown
- ☐ Other

16



Pop-up: Some projects experiment with rich, multimedia formats. Turns out consumers like news in text form, thank you very much. Simply put, video takes too long.) (Wired, Mar 2018)

- ☐ Good to know!
- ☐ I don't care...

17

*(GG065) Is the project focused on one or more of the following five domains?

- ☐ Economy: the production and exchange of goods and services among economic agents
- ☐ Environment: the bio-chemical-physical environment
- ☐ Governance: the processes and institutions through which decisions are made, both informal and formal
- ☐ Science and technology: the scientific process (method) as well as research more broadly; the scientific system, scientific paradigms and resulting technological artefacts and standards
- ☐ Society: individuals as well as collective (societal) values, understanding, actions and well-being (including relationships)

Submit

MICS - Society indicators

A test-bed for potential indicator questions for the MICS project

...

Society domain



Questions focussed on the impact of citizen science on society

1

Project's title

Enter your answer

2

*(SG016) Who co-ordinates the project?

- ☐ Professionals (paid to work on the project)
- ☐ Citizens (as defined by citizen science, not by citizenship)
- ☐ An AI :-)
- ☐ Some other kind of actor
- ☐ I don't know.

Questionnaire 2: Society input feature Microsoft Forms

3

*(SG017) What type of organisation leads the project?

- ☐ Public bodies
- ☐ Non-governmental organisations (NGOs)
- ☐ Commercial organisations
- ☐ Research-performing organisations (including universities)
- ☐ Some other kind of organisation
- ☐ I don't know.

4

*(SG018) What type of organisations are associated with the project?

- ☐ Public bodies
- ☐ Non-governmental organisations (NGOs)
- ☐ Commercial organisations
- ☐ Research-performing organisations
- ☐ Some other kind of organisation
- ☐ I don't know.

5

*(SA021) Does the project have a code of ethics available to the participant?

- ☐ Yes
- ☐ No (Pop-up: here's an example you can use)
- ☐ I don't know.

6

*(SA022) Does the project have explicit health and safety regulations in place?

- ☐ Yes
- ☐ No
- ☐ Not applicable
- ☐ I don't know.

Questionnaire 2: Society input feature Microsoft Forms

7

*(SA023) Does the project involve the collection of personal data of the participants? (Personal data is any information that relates to an identified, or identifiable, living individual.)

- ☐ Yes, at least sometimes
- ☐ No
- ☐ I don't know.

8

*(SA024) Is payment required by the participants to take part in the project?

- ☐ Yes, at least in some cases
- ☐ No
- ☐ I don't know.

9

*(SA025) What is this payment used for?

- ☐ Equipment/services given to the participants
- ☐ General support to an organisation
- ☐ Training given to the participants
- ☐ Something else
- ☐ I don't know.

10

*(SH026) Are participants the object/focus of the research? (This might be the case, for example, in health and medical research.)

- ☐ Yes
- ☐ No
- ☐ I don't know.

11

*(SH027) Does the project investigate human health?

- ☐ Yes
- ☐ No
- ☐ I don't know.

Questionnaire 2: Society input feature Microsoft Forms

12

*(SH028) Does the project explicitly aid in fighting communicable diseases? (This paper provides an example of the context that can help to understand the question: "A Global Digital Citizen Science Policy to Tackle Pandemics Like COVID-19"
[\[https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7284491/\]](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7284491/).)

- ☐ Yes
- ☐ No
- ☐ I don't know.

13

*(SH029) Does the project investigate diseases (such as, for example, cardiovascular, cancer, diabetes or respiratory)?

- ☐ Yes
- ☐ No
- ☐ I don't know.

14

*(SH030) Does the project contribute to the research and development of vaccines or medicines?

- ☐ Yes
- ☐ No
- ☐ I don't know

15

*(SH031) Does the project directly address mental health concerns? (This paper provides an example of the context that can help to understand the question: "Developing a Citizen Social Science approach to understand urban stress and promote wellbeing in urban communities"
[\[https://www.nature.com/articles/s41599-020-0460-1\]](https://www.nature.com/articles/s41599-020-0460-1).)

- ☐ Yes
- ☐ No
- ☐ I don't know.

Questionnaire 2: Society input feature Microsoft Forms

16

*(SP032) What is the degree of participation of the citizen scientists, according to the following categories?

- ☐ Contractual projects, where communities ask professional researchers to conduct a specific scientific investigation and report on the results
- ☐ Contributory projects, which are generally designed by scientists and for which members of the public primarily contribute data
- ☐ Collaborative projects, which are generally designed by scientists and for which members of the public contribute data but also help to refine project design, analyse data, or disseminate findings
- ☐ Co-created projects, which are designed by scientists and members of the public working together and for which at least some of the public participants are actively involved in most aspects of the research process
- ☐ Collegial projects, where non-credentialed individuals conduct research independently with varying degrees of expected recognition by institutionalised science or professionals
- ☐ The project doesn't fit any of these categories. (Jennifer won't be happy.)
- ☐ I don't know.

17

*(SP033) In which phases of the project do participants play a role?

- ☐ Identifying a research question
- ☐ Definition of project activities
- ☐ Collecting data
- ☐ Analysing data
- ☐ Monitoring in ways other than collecting data
- ☐ Training other participants
- ☐ Publication of outputs
- ☐ Assessment of project impacts
- ☐ Closure or handover of the project
- ☐ Something else
- ☐ I don't know.

Questionnaire 2: Society input feature Microsoft Forms

18

(SP034) Are participants aware they are contributing to a research project and have they actively chosen to be involved in the project?

- ☐ Yes
- ☐ No
- ☐ I don't know

19

*(SP035) Are the options for participation and the degree of involvement diversified?

- ☐ Yes
- ☐ No: participants have only one option of involvement.
- ☐ I don't know.

20

*(SP036) Are participants and other stakeholders (usually, scientists) equal partners in the knowledge generation process (that is, the conclusions drawn from the data)?

- ☐ Yes
- ☐ No; participants dominate the knowledge generation. (This is very unlikely. Please, double check before selecting it.)
- ☐ No; another stakeholder dominates the knowledge generation.
- ☐ I don't know.

21

*(SP037) How is the involvement of participants formally recognised in publications?

- ☐ Individual authorship
- ☐ Group pseudonym as (co-)author
- ☐ Individuals acknowledged by name
- ☐ Group of participants collectively acknowledged
- ☐ Participants are not formally recognised in publications
- ☐ The project does not have any publications yet
- ☐ I don't know.

22

*(SE038) What is the balance between engagement and research in the project?

- ☐ More engagement
- ☐ More research
- ☐ I don't know.

Questionnaire 2: Society input feature Microsoft Forms

23

*(SE039) What engagement strategies does the project have?

- ☐ Gamification
- ☐ Real-time validation on observation/data submission
- ☐ Notification of updates to contributed observations
- ☐ Tips of the day
- ☐ Personalised recommendations
- ☐ Feedback on data quality
- ☐ Active and responsive social-media presence ("responsive" in the sense that questions from participants are responded)
- ☐ Storytelling or exchanging of experiences
- ☐ Invitation to or suggestion of events
- ☐ Workshops
- ☐ Measurement campaigns
- ☐ Active and responsive pilot presence ("responsive" in the sense that questions from participants are responded)
- ☐ A forum, or other platform on a website
- ☐ Awareness raising (ad-hoc demonstrations, meetings, and appearances from partners)
- ☐ Photo contests
- ☐ Social events not included in previous options
- ☐ Creation of champions, ambassadors or leaders
- ☐ Organic conversation
- ☐ Other strategies

24

*(SE040) Is the engagement strategy clearly and transparently communicated to participants?

- ☐ Yes
- ☐ No
- ☐ The project doesn't have a formal engagement strategy.
- ☐ I don't know.

Questionnaire 2: Society input feature Microsoft Forms

25

*(SE041) How much involvement and responsibility are offered to the participants? (with options depending on interests, availability and knowledge).

- ☐ A lot of involvement and responsibility
- ☐ A lot of involvement but not much responsibility
- ☐ Not much involvement but a lot responsibility
- ☐ Not much involvement or responsibility
- ☐ I don't know.

26

*(SE042) We understand that participants are motivated to engage in project activities. Are they also motivated to get involved in similar activities outside of the project?

- ☐ Yes
- ☐ No
- ☐ I don't know.

27

*(SC043) We understand that the project carries out communication activities; but does the project have specific communication plans for specific target groups?

- ☐ Yes
- ☐ No
- ☐ The project has only one target group.
- ☐ I don't know.

28

*(SC045) If the project has an explicit outreach or communication strategy, which of the following elements does it include?

- ☐ Hands-on experiences (for example, an interactive exhibit)
- ☐ Multi-directional communication (for example, a forum where all stakeholders can have a voice)
- ☐ Innovative means of science communication (for example, via TikTok)
- ☐ Collaboration with science-communication professionals
- ☐ Other outreach and communication approaches
- ☐ The project does not have an outreach or communication strategy
- ☐ I don't know.

Questionnaire 2: Society input feature Microsoft Forms

29

*(SC046) Which channels does the project use to communicate with participants?

- ☐ In person
- ☐ In print
- ☐ Online social media (blogs)
- ☐ Online social media (microblogs: for example, Twitter)
- ☐ Online social media (social and professional networks: for example, Facebook, LinkedIn)
- ☐ Online social media (fora, for example [EU-Citizen.Science](https://eu-citizen.science/forum/) (<https://eu-citizen.science/forum/>))
- ☐ Online social media (image and video-sharing platforms: for example, YouTube, Instagram, TikTok, Pinterest)
- ☐ Online media (newsletter)
- ☐ Online media (webpage)
- ☐ Other channels
- ☐ I don't know

30

*(SC044) How are the objectives and results of the project communicated or shared?

	Objectives	Data and results	Objectives, data and results
Formal scholarly outputs: e.g. peer-review publications, open data sets, abstracts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internally produced outputs: e.g. newsletters, leaflets, blog posts, social media posts, podcasts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Externally produced outputs: e.g. magazine or newspaper articles, TV or radio interviews	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Events: e.g. lectures, workshops, fairs, seminars or webinars	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other ways	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Questionnaire 2: Society input feature Microsoft Forms

31

*(SC048) Are there plans for sustaining the collaboration between citizen scientists and other stakeholders (for example, scientists or public authorities) after the end of the project-coordination support?

- ☐ Yes
- ☐ No
- ☐ There is no collaboration between citizens and other stakeholders (for example, scientists or public authorities) in the project.
- ☐ There are no plans to end the project-coordination support
- ☐ I don't know.

32

*(SE049) What kind of specific training does the project provide to participants? (We will ask you about more general education later)

- ☐ IT training (for example, using a website)
- ☐ Equipment training (for example, using an app)
- ☐ Measurement training
- ☐ Train the trainer
- ☐ Training about citizen-science methodologies
- ☐ Some other kind of training
- ☐ I don't know.

33

*(SE050) If the project involves educating participants, what education does it provide?

- ☐ Primary-level education to pupils
- ☐ Secondary-level education to pupils (middle and high school)
- ☐ Adult education or life-long learning
- ☐ Other education
- ☐ The project does not involve educating participants
- ☐ I don't know

Questionnaire 2: Society input feature Microsoft Forms

34

*(SE051) Does the project work with educational institutions to make sustainable development part of the curricula?

- ☐ Yes
- ☐ No
- ☐ I don't know.

35

*(SE052) What are the learning outcomes for individuals (in terms of new knowledge, skills or competencies)?

- ☐ New knowledge
- ☐ New skills (specific learned activities)
- ☐ New competencies (on-the-job behaviors which often require specific skills and knowledge)
- ☐ Other learning outcomes
- ☐ I don't know.

36

*(SE053) Does the project ease access to traditional and local knowledge resources?

- ☐ Yes
- ☐ No
- ☐ I don't know.

37

*(SI054) Are support and training adapted to the different participant groups (e.g. participants age, language)?

- ☐ Yes, at least in part.
- ☐ No
- ☐ The project has only one participant type.
- ☐ I don't know.

Questionnaire 2: Society input feature Microsoft Forms

38

*(SI055) Does the project explicitly promote the inclusion of all people (for example, people from ethnic minorities)?

- ☐ Yes
- ☐ No
- ☐ I don't know.

39

*(SI056) Has the project been designed to give access to all participants, including those with functional diversity [[https://en.wikipedia.org/wiki/Functional_diversity_\(disability\)](https://en.wikipedia.org/wiki/Functional_diversity_(disability))]?

- ☐ Yes
- ☐ No
- ☐ It's not possible. (For example, it could be impossible to collect data along a river on a wheelchair, and that's the only thing participants can do.)
- ☐ I don't know.

40

*(SI057) Does the project explicitly contribute to gender equality?

- ☐ Yes, at the decision-making level
- ☐ Yes, at other levels
- ☐ No
- ☐ I don't know.

41

*(SI058) Does the project actively engage participants from disadvantaged backgrounds?

- ☐ Yes
- ☐ No
- ☐ I don't know.

Questionnaire 2: Society input feature Microsoft Forms

42

*(SI059) Does the project actively raise motivation or self-esteem amongst participants?

- ☐ Yes
- ☐ No
- ☐ I don't know.

43

*(SS060) Does the project contribute to social innovation?

(Social innovation is the process of developing and deploying effective solutions to challenging and often systemic social and environmental issues in support of social progress. These solutions often require the active collaboration of constituents across government, business, and the nonprofit world.)

- ☐ Yes
- ☐ No
- ☐ I don't know

44

*(SS061) Does the project foster resilience, or does it foster learning and adaptation (which then leads to resilience)?

This is often done by fostering one of the following:
(1) the will and intention to maintain social-ecological resilience
(2) knowledge about the problem and the desired direction of change
(3) proactive behaviour
(4) the capacity to change existing patterns of behaviour.

- ☐ Yes
- ☐ No
- ☐ After five minutes, I still don't understand the question.
- ☐ I don't know.

45

*(SS062) Does the project foster social capital? (Social capital is the networks of relationships among people that enable society to function effectively.)

- ☐ Yes
- ☐ No
- ☐ I don't know.

Questionnaire 2: Society input feature Microsoft Forms

46

*(SS063) Does the project contribute to personal change in behaviour (for example, "switching from plastic bags to reusable shopping bags" or "changing an omnivorous diet to a vegan one and losing all friends in the process")?

- ☐ Yes
- ☐ No
- ☐ I don't know.

47

(SDG Pop up) The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs):

- (1) No Poverty
- (2) Zero Hunger
- (3) Good Health and Well-being
- (4) Quality Education
- (5) Gender Equality
- (6) Clean Water and Sanitation
- (7) Affordable and Clean Energy
- (8) Decent Work and Economic Growth
- (9) Industry, Innovation and Infrastructure
- (10) Reducing Inequality
- (11) Sustainable Cities and Communities
- (12) Responsible Consumption and Production
- (13) Climate Action
- (14) Life Below Water
- (15) Life On Land
- (16) Peace, Justice, and Strong Institutions
- (17) Partnerships for the Goals

Citizen science is an emerging example of a non-traditional data source that is making a contribution to measuring these goals.

- ☐ Good to know!
- ☐ I don't care...

Questionnaire 2: Society input feature Microsoft Forms

48

*(SG019) Which socially-relevant issues - as represented by the SDGs - are directly addressed by the project?

(We ask about other SDGs, for example, the ones related to the environment, somewhere else; don't worry.)

- ☐ No poverty
- ☐ Zero hunger
- ☐ Good health and well-being
- ☐ Quality education
- ☐ Gender equality
- ☐ Decent work and economic growth
- ☐ Reduced inequalities
- ☐ Responsible consumption and production
- ☐ Peace, justice and strong institutions

49

*(SG020) Does the project explicitly support effective and targeted capacity-building related to national plans to implement SDGs?

- ☐ Yes
- ☐ No
- ☐ I don't know.

50

Finally, what is the meaning of citizen science, life, the universe, and everything?

- ☐ 42
- ☐ Are you asking me to define citizen science, because I'm not opening that can of worms
- ☐ I don't know, but I'm glad this is over

Submit

MICS - Governance indicators

A test-bed for potential indicator questions for the MICS project

...

Governance domain



Questions focussed on impact on governance

1

Project's title

Enter your answer

2

(GG066) Does the project contribute data to a country's official reporting for a Sustainable Development Goal indicator?

- ☐ Yes
- ☐ No
- ☐ I don't know.

3

(GG067) Does the project engage multiple stakeholders to share knowledge in relation to the achievement of the SDGs?

- ☐ Yes
- ☐ No
- ☐ I don't know.

Questionnaire 3: Governance input feature Microsoft Forms

4

(GA068) Are the data generated by the project open access?

- ☐ Data can be shared
- ☐ Data can be edited or combined with other material to produce a new work
- ☐ Data can be used for commercial purposes
- ☐ Data can be used without attribution to the author
- ☐ No
- ☐ I don't know.

5

(GA069) Does the project explicitly state which ethical procedures it follows to ensure the data are collected and processed lawfully? (See, for example [\[mics.tools/.../Ethics](#) requirements: Protection of personal data])

- ☐ Yes
- ☐ No
- ☐ The project is not about data collection, and doesn't collect or process personal data.
- ☐ The project doesn't need to ensure the data are collected lawfully.
- ☐ I don't know.

6

(GA070) Does the project include opportunities for project leaders and participants to discuss the ethical and political dimensions of the research carried out?

- ☐ Yes
- ☐ No
- ☐ The research element of the project is not significant.
- ☐ I don't know.

7

(GA071) Do citizens know what the data collected by the project are used for?

- ☐ Yes
- ☐ No
- ☐ I don't know.

Questionnaire 3: Governance input feature Microsoft Forms

8

(GA160) Do citizens know where the data collected by the project are stored?

- ☐ Yes
- ☐ No
- ☐ I don't know

9

(GA161) Do citizens know whether the data collected by the project are shared?

- ☐ Yes
- ☐ No
- ☐ I don't know

10

(GA072) Are data access rights clear and transparent?

- ☐ Yes
- ☐ No
- ☐ I don't know.

11

(GA073) Do participants have to explicitly give consent (for example, signing a consent form) to take part in the project? (See, for example [\[mics.tools/.../Ethics](#) requirements: Participant informed-consent procedures])

- ☐ Yes
- ☐ No
- ☐ I don't know.

12

(GP074) Does the project explicitly foster ownership of the project amongst participants?

- ☐ Yes
- ☐ No
- ☐ I don't know.

Questionnaire 3: Governance input feature Microsoft Forms

13

(GP076) Does the project make sure that those with less power, women, and minorities are among those who are asking the questions?

- ☐ Yes
- ☐ No or not yet
- ☐ I don't know.

14

(Pop up) Whether the scientific questions to be addressed by a citizen science project come from citizens themselves or civic educators - including scientists, professional researchers, and their institutions - needs to be interrogated.

Is it reasonable to expect communities to ask the questions?

Is it overambitious to assume that they can?

Does suggesting that they cannot indicate a level of institutional and structural racism?

Empowering people includes enabling them to drive citizen-science projects. (Ceccaroni et al., 2021)

- ☐ Good to know!
- ☐ I don't care...

15

(GC077) Does the project explicitly foster new collaborations amongst different societal actors and groups (not including those between citizens and scientists)?

- ☐ Yes
- ☐ No
- ☐ I don't know.

16

(GC078) Does the project work with other organisations to involve specific target groups or individuals (for example, a river trust for water-quality monitoring or a local community action group)?

- ☐ Yes
- ☐ No
- ☐ I don't know.

Questionnaire 3: Governance input feature Microsoft Forms

17

(GC079) Does the project collaborate with other initiatives to enhance mutual learning?

- ☐ Yes
- ☐ No
- ☐ I don't know.

18

(GC080) Which resources does the project share with other initiatives?

- ☐ Data
- ☐ Learnings
- ☐ Participants
- ☐ Instruments (for example, measuring kits)
- ☐ Methodologies
- ☐ Resources on the theory and practice of citizen science
- ☐ Communication channels
- ☐ Other resources
- ☐ I don't know.

19

(GC081) The following question refers to "institutional change". You can consider institutions broadly as "a system of rules, beliefs, norms and organizations that together generate a regularity of (social) behaviour".

The institutional change is usually measured along the following six dimensions:

1. Open access/data
2. Ethics
3. Gender equality
4. Public engagement
5. Science education
6. Responsible research and innovation

Based on these 'dimensions', what institutional change does the project contribute to?

- ☐ Ethics: for example, creation of an ethics board or employment of a quality assurance officer
- ☐ Open access/data: for example, development of an organisational Data Management Plan
- ☐ Public engagement: for example, specialists interacting with non-specialists
- ☐ Science education: for example, teaching and learning of science to non-scientists
- ☐ Gender equality: for example, development of a Gender Equality Plan
- ☐ Responsible research and innovation: for example, development of practices that enhance social responsibility, inclusiveness or sustainability of research and innovation processes and products
- ☐ Other institutional changes
- ☐ I don't know.

Questionnaire 3: Governance input feature Microsoft Forms

20

(GC082) Does the project have any explicit impact on external organisational policy (for example, the Outfall Safari project causing a change in the policies of Thames Water)?

- ☐ Yes
- ☐ No
- ☐ I don't know.

21

(GC083) Does the project explicitly inform any governmental policy process?

- ☐ Yes, at the sub-national level
- ☐ Yes, at the national level
- ☐ Yes, at the international level
- ☐ No
- ☐ I don't know.

Submit

MICS - Economy indicators

A test-bed for potential indicator questions for the MICS project

...

Economy domain



Questions focussed on the impact on the economy

1

Project's title

Enter your answer

2

*(EP084) How is or was the project funded?

- ☐ European Union (for example, via Horizon 2020 or Horizon Europe)
- ☐ Other international sponsors
- ☐ US National Science Foundation
- ☐ NASA
- ☐ Other US federal sponsors
- ☐ Other national sponsors
- ☐ Crowdfunding

☐ Micro funding (There is a general connection between all forms of alternative funding; they all provide access to capital for a segment of the population that cannot access it through traditional means. However, there are significant differences between micro funding and crowdfunding. Micro funding includes microfinance and social (peer-to-peer) lending, and is not commonly used in citizen science. Microfinance provides loans and other basic financial services to the poor. Social lending gives ordinary people the ability to lend around the world.

- ☐ Corporate sponsors
- ☐ Non-governmental organisations
- ☐ Internal funding of the coordinating organisation
- ☐ Other funding sources
- ☐ I don't know.

Questionnaire 4: Economy input feature Microsoft Forms

3

*(EP085) Is participation in the project voluntary or non-voluntary?

- ☐ Voluntary
- ☐ Non-voluntary (for example, pupils who have to participate as part of school activities)
- ☐ Both
- ☐ I don't know.

4

*(EP086) Does the project involve a socio-economically diverse pool of participants?

- ☐ Yes
- ☐ No; participants are from the same socio-economical group.
- ☐ I don't know.

5

*(EP087) Does the project offer any tangible incentives for participation?

- ☐ Merchandise
- ☐ Vouchers
- ☐ General equipment, such as bird-boxes
- ☐ Access to media and special events
- ☐ Scientific equipment, such as sensors
- ☐ Co-authorship
- ☐ Socialisation
- ☐ A good excuse to avoid lockdown restrictions
- ☐ Other
- ☐ I don't know.

6

*(EP088) Can participants make a voluntary financial contribution to the project?

- ☐ Yes (For example, Patreon supporter)
- ☐ No
- ☐ I don't know.

Questionnaire 4: Economy input feature Microsoft Forms

7

*(EP089) How much time is invested by scientists in engaging and training citizens?

- ☐ Scientists don't engage and train citizens.
- ☐ Not much (hours)
- ☐ Some (days)
- ☐ A lot (there are one or more people, or a work package, explicitly dedicated to engaging and training citizens)
- ☐ Too difficult to quantify
- ☐ I don't know.

8

*(EC090) Does the project have explicit links with public authorities (for example, having them as partners of the consortium managing the project)?

- ☐ Yes
- ☐ No
- ☐ I don't know.

9

*(EC091) Does the project involve commercial activities related to industry or academia?

- ☐ Yes (for example, commercialisation of sensors developed within the project)
- ☐ No
- ☐ I don't know.

10

(EC092) Does the project include any competitive advantage (on the economic, rather than the scientific scale)?

Here "competitive advantage" refers to factors that allow an organisation to produce outputs or services better or more cheaply than its rivals.

For example, incorporation of citizen science might provide a competitive advantage for the ecotourism providers in the tourism market

- ☐ Yes
- ☐ No
- ☐ I don't know

Questionnaire 4: Economy input feature Microsoft Forms

11

*(EC093) Does the project explicitly promote the formation and growth of micro-, small- or medium-sized enterprises?

- ☐ Yes
- ☐ No
- ☐ I don't know.

12

*(EC094) Does the project promote sustainable tourism?

- ☐ Yes
- ☐ No
- ☐ I don't know.

13

*(ET095) What technology does the project use or develop?

	Uses a pre-existing version	Develops a new version	Both
Apps	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sensors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
AI	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Platforms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Digital solutions (digitalising old methodologies, processes or technology)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other technologies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We don't use technology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Questionnaire 4: Economy input feature Microsoft Forms

14

*(ET096) Does the project require recurring investments in technology (for example, software licences or app/platform maintenance) that affect its long-term sustainability?

- ☐ Yes
- ☐ No
- ☐ I don't know.

15

*(ET097) Does the project explicitly improve economic productivity through diversification, technological upgrading or innovation?

- ☐ Yes
- ☐ No
- ☐ I don't know.

16

*(ET098) Does the project explicitly promote the development, transfer or dissemination of environmentally-sound technologies (documented, for example, in a dissemination plan)?

Environmentally sound technologies are techniques and technologies capable of reducing environmental damage through processes and materials that generate fewer potentially damaging substances, recover such substances from emissions prior to discharge, or utilize and recycle production residues.

- ☐ Yes
- ☐ No
- ☐ I don't know.

17

*(EE099) Does the project have an explicit sustainability plan?

- ☐ Yes
- ☐ No
- ☐ I don't know.

18

*(EE100) Does the project collaborate with external companies to enable the adoption of sustainable practices?

- ☐ Yes
- ☐ No
- ☐ I don't know.

Questionnaire 4: Economy input feature Microsoft Forms

19

*(EE101) Does the project have any concrete cooperation in place for the exploitation of results; i.e. the use of results for commercial purposes or in public policymaking?

- ☐ Yes
- ☐ No
- ☐ I don't know.

20

*(EE102) Does the project have any economic potential to be exploited in the future (for example, new intellectual property with economic value, or new sensors with a clear market, or the prospect to employ new personnel)?

- ☐ Yes
- ☐ No
- ☐ I don't know.

21

*(EE103) Did the project generate related new projects or new project proposals?

- ☐ Yes
- ☐ No
- ☐ I don't know.

22

*(EE104) Does the project explicitly contribute to the reduction of government expenditure?

"Not yet, but it might one day?" Don't worry, you can always come back and update your answers on the MICS platform when it does.

- ☐ Yes
- ☐ No
- ☐ I don't know.

23

*(EC105) If it has been estimated, how does the project compare, from a purely economical point of view, with using experts or traditional scientific methods?

- ☐ It has not been estimated.
- ☐ It has been estimated and there is no clear winner from the purely economic point of view.
- ☐ Citizen science clearly produces savings in comparison with using experts or traditional scientific methods.
- ☐ We know that you will never admit that citizen science is more expensive or less efficient than traditional methods, but here is the option; just in case.
- ☐ I don't know.

Questionnaire 4: Economy input feature Microsoft Forms

23

*(EC105) If it has been estimated, how does the project compare, from a purely economical point of view, with using experts or traditional scientific methods?

- ☐ It has not been estimated.
- ☐ It has been estimated and there is no clear winner from the purely economic point of view.
- ☐ Citizen science clearly produces savings in comparison with using experts or traditional scientific methods.
- ☐ We know that you will never admit that citizen science is more expensive or less efficient than traditional methods, but here is the option; just in case.
- ☐ I don't know.

24

*(EC106) How many hours, on average, does a participant dedicate to the project in a typical recent year? We acknowledge that this can vary hugely from participant to participant; go with an average participant.

- ☐ Less than 3
- ☐ 3-30
- ☐ More than 30
- ☐ The project has no participants.
- ☐ I don't know.

25

*(EC107) By using citizen scientists (rather than professionals) is the project able to cover a larger sample size (i.e., to collect or analyse a larger amount of data)?

- ☐ Yes
- ☐ No
- ☐ Not relevant for the project
- ☐ Too difficult to say
- ☐ I don't know.

26

*(EC108) What are the estimated, typical, annual personnel costs across the project (in £, € or \$)?

- ☐ Less than 30,000
- ☐ 30,000-300,000
- ☐ More than 300,000
- ☐ I don't know.

Questionnaire 4: Economy input feature Microsoft Forms

27

*(EC109) Excluding personnel costs, what is the estimated, approximate cost per observation (in £, € or \$) (observations as defined by the project)?

- ☐ Observations are not a significant element of the project and quantifying their cost is not important.
- ☐ Less than 2 (Just for comparison, this is the income per day of one seventh of the world population.)
- ☐ 2-8 (Just for comparison, this is the income per day of three sevenths of the world population.)
- ☐ 9-32 (Just for curiosity, this is the income per day of two sevenths of the world population.)
- ☐ More than 32 (Just for curiosity, this is the income per day of one seventh of the world population.)
- ☐ I don't know.

28

*(EC110) What are the estimated, typical, annual costs of IT systems for data collection and management (in £, € or \$) (for example for the use of Amazon Web Services or other cloud computing services)?

- ☐ Less than 300
- ☐ 300-3000
- ☐ 3001-30,000
- ☐ More than 30,000
- ☐ I don't know.

29

*(EC112) On a scale of 1 to 3 (1 being "not at all" and 3 being "very well"), how would you score the ability of the data collected in the project to answer the question posed at the start of the project?

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ The project does not collect data
- ☐ Not relevant to the project
- ☐ I don't know

Submit

MICS - Environment indicators

A test-bed for potential indicator questions for the MICS project

...

Environment domain



Questions focussed towards impact on the environment

1

Project's title

Enter your answer

2

(SDG Pop up) The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs):

- (1) No Poverty
- (2) Zero Hunger
- (3) Good Health and Well-being
- (4) Quality Education
- (5) Gender Equality
- (6) Clean Water and Sanitation
- (7) Affordable and Clean Energy
- (8) Decent Work and Economic Growth
- (9) Industry, Innovation and Infrastructure
- (10) Reducing Inequality
- (11) Sustainable Cities and Communities
- (12) Responsible Consumption and Production
- (13) Climate Action
- (14) Life Below Water
- (15) Life On Land
- (16) Peace, Justice, and Strong Institutions
- (17) Partnerships for the Goals

Citizen science is an emerging example of a non-traditional data source that is making a contribution to measuring these goals.

☐ Good to know!

☐ I don't care...

Questionnaire 5: Environment input feature Microsoft Forms

3

(ES113) Which environmental issues - as represented by the SDG)- are related to the aims of the project? (We'll ask details about each issue later.)

- ☐ Zero hunger (including sustainable agriculture)
- ☐ Clean water and sanitation (freshwater not marine)
- ☐ Affordable and clean energy
- ☐ Sustainable cities and communities (including urban air quality)
- ☐ Responsible consumption and production (including food waste and chemical pollution)
- ☐ Climate action
- ☐ Life below water (marine not freshwater)
- ☐ Life on land
- ☐ Other environmental issues

4

(ES114) How does the project contribute to sustainable agriculture?

- ☐ Increasing the proportion of agricultural area being managed sustainably
- ☐ Increasing investment in rural infrastructure, agricultural research and technology development
- ☐ Researching sustainable agriculture
- ☐ Other activities related to sustainable agriculture

5

(ES115) Does the project contribute to secure plant and animal genetic resources in either medium- or long-term conservation facilities?

- ☐ Yes
- ☐ No
- ☐ I don't know.

6

(ES116) Does the project explicitly investigate the link between pollution and health?

- ☐ Yes, air pollution
- ☐ Yes, water pollution
- ☐ Yes, some other kind of pollution
- ☐ No
- ☐ I don't know.

Questionnaire 5: Environment input feature Microsoft Forms

7

(ES117) With regards to clean water and sanitation, which of the following activities does the project include?

	Monitors	Has a measurable impact on	Both monitors and has a measurable impact on
Ambient water quality/pollution	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Water-related ecosystems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Involving local communities in water management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Water-use efficiency	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Water stress or water scarcity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Correct treatment of wastewater	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other activities related to clean water and sanitation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8

(ES118) How does the project contribute to affordable and clean energy? (Clean energy includes sources like sunlight, wind, rain, tides, waves, and geothermal heat.)

- ☐ Increasing the share of clean energy in the energy mix
- ☐ Increasing energy efficiency
- ☐ Researching clean energy
- ☐ Other activities related to clean energy

9

(ES119) With regards to clean air and sustainable cities, which of the following activities does the project include?

	Monitors	Has a measurable impact on	Both monitors and has a measurable impact on
Involving local communities in urban planning and management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Correct collection and treatment of solid waste	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ambient air quality/pollution (including fine particulate matter e.g. PM2.5 and PM10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Green public spaces	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other activities related to sustainable cities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Questionnaire 5: Environment input feature Microsoft Forms

10

(ES120) With regards to responsible production and consumption, which of the following activities does the project include?

	Monitors	Has a measurable impact on	Both monitors and has a measurable impact on
Food waste	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Harmful chemicals in the air	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Harmful chemicals in the water	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Harmful chemicals in the soil	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Waste generation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other activities related to responsible consumption and production	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11

(ES121) Does the project explicitly disseminate information on sustainable development or lifestyles?

- ☐ Yes
- ☐ No
- ☐ I don't know.

12

(ES122) Does the project educate participants on environmental challenges?

- ☐ Yes
- ☐ No
- ☐ I don't know.

13

(ES123) With regards to life below water (marine not freshwater), which of the following activities does the project include?

	Monitors	Has a measurable impact on	Both monitors and has a measurable impact on
Marine nutrient pollution	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Marine plastic pollution	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ocean acidification	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Marine protected areas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Marine technology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other activities related to life below water (marine not freshwater)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Questionnaire 5: Environment input feature Microsoft Forms

14

(ES124) With regards to life on land, which of the following activities does the project include?

	Monitors	Has a measurable impact on	Both monitors and has a measurable impact on
Sustainable management of forests	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Desertification or land degradation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mountain ecosystems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other terrestrial ecosystems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Biodiversity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Species extinction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Invasive alien species	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wildlife poaching or trafficking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other activities related to life on land	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

15

(EG125) Does the project include objectives to protect or enhance natural resources?

- ☐ Yes
- ☐ No
- ☐ I don't know.

16



(EG126) Does the project explicitly contribute to a higher awareness of, or responsibility for, the natural environment, on this planet or others?

- ☐ Yes
- ☐ No
- ☐ I don't know.

Submit

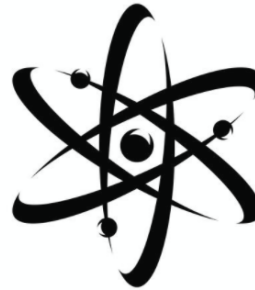
Questionnaire 6: Science input feature Microsoft Forms

MICS - Science indicators

A test-bed for potential indicator questions for the MICS project

...

Science domain



Questions focussed towards impact on science

1

Project's title

Enter your answer

2

*(SG127) Which disciplines are involved in the project?

- ☐ Citizen science (If you don't select this one, you are in trouble.)
- ☐ Agricultural and veterinary sciences (including, forestry sciences, fisheries sciences, and land and farm management)
- ☐ Art theory and criticism
- ☐ Biological sciences (including ecology, zoology, genetics, and biodiversity)
- ☐ Chemical sciences (including medicinal and biomolecular chemistry)
- ☐ Earth sciences (including geology, atmospheric sciences, and oceanography)
- ☐ Engineering (including food sciences, environmental engineering, and biomedical engineering)
- ☐ Environmental sciences (including ecological applications, environmental management, and soil sciences)
- ☐ Information and computing sciences (including artificial intelligence and image processing, distributed computing, and computer software)
- ☐ Language, communication and culture (including linguistics, and literary studies)
- ☐ Law and legal studies
- ☐ Mathematical sciences and statistics
- ☐ Medical and health sciences (including neurosciences, public health and health services, nutrition and dietetics, and human movement and sports science)
- ☐ Philosophy and religious studies (including applied ethics, and history and philosophy of specific fields)
- ☐ Physical sciences (including astronomical and space sciences, atomic, molecular, nuclear, particle and plasma physics, and quantum physics)
- ☐ Psychology and cognitive sciences
- ☐ Studies in human society (including human geography, policy and administration, sociology, and education)
- ☐ Technology (including communications technologies, and computer hardware)
- ☐ I don't know.
- ☐ Something else (Really?!)

Questionnaire 6: Science input feature Microsoft Forms

3

*(SG128) What is the scope of the research? (The project, for example, studies plastic pollution worldwide.)

- ☐ Local
- ☐ Regional
- ☐ National
- ☐ International
- ☐ Global
- ☐ Galactic
- ☐ I don't know.

4

*(SG129) Is the project's citizen science basic or applied?

Basic science, such as understanding how cells work, is research aimed at understanding fundamental problems. Applied science, such as the medical field, is the application of basic scientific knowledge to solve practical problems.

- ☐ Basic
- ☐ Applied
- ☐ Both
- ☐ Too difficult to distinguish
- ☐ I don't know.

5

*(SG130) Is the project's research inductive or deductive?

Inductive reasoning is described as a method where one's experiences and observations are synthesised to come up with a general truth. Many dictionaries define inductive reasoning as deriving general principles from specific observations: "bottom-up logic".

Deductive reasoning, or "top-down logic", is the process of reasoning from one or more statements (premises) to reach a logical conclusion.

- ☐ Inductive
- ☐ Deductive
- ☐ Both
- ☐ I don't know.

6

*(SG131) Do participants take part in systematic or convenience data-collection?

Convenience data-collection or sampling - also known as grab sampling, accidental sampling, or opportunity sampling - is a type of non-probability sampling that involves the sample being drawn from that part of the population that is close to hand. This type of sampling is the most common in citizen science.

- ☐ Systematic data-collection (for example, data collected from a vessel along a transect)
- ☐ Convenience data-collection (for example, data collected from a vessel of opportunity like a ferry)
- ☐ Both
- ☐ Data collection is not a significant element of the project.
- ☐ I don't know.

Questionnaire 6: Science input feature Microsoft Forms

7

*(SD132) The following four questions focus on the 'FAIR Guiding Principles for scientific data management and stewardship'.

Are the data generated by the project findable?

- ☐ Yes
- ☐ No
- ☐ I don't know.

8

*(SD133) Are the data generated by the project accessible?

- ☐ Yes
- ☐ No
- ☐ I don't know.

9

*(SD134) Are the data generated by the project interoperable?

- ☐ Yes
- ☐ No
- ☐ I don't know.

10

*(SD135) Are the data generated by the project reusable?

- ☐ Yes
- ☐ No
- ☐ I don't know.

11

*(SD136) What processes are defined in the project to guarantee high data-quality?

- ☐ Data profiling - Initially assessing the data to understand their current state, often including value distributions
- ☐ Data standardization - Ensuring that data conform to standards
- ☐ Matching or linking - A way to compare data so that similar but slightly different records can be aligned; matching may use "fuzzy logic" to find duplicates in the data; it can for example recognise that "Sasha Wood" and "Sasha Woods" may be the same individual.
- ☐ Data monitoring - Keeping track of data quality over time and reporting variations in the quality of data
- ☐ Peer-to-peer validation - More-expert participants validating observations by less-expert participants
- ☐ Expert validation - professionals validating observations by participants
- ☐ Artificial intelligence - For example, improving image or audio classification by using computer vision or computer hearing
- ☐ Other processes
- ☐ I don't know.

Questionnaire 6: Science input feature Microsoft Forms

12

*(SD137) Does the project link participants to experts (for example, to validate data)?

- ☐ Yes
- ☐ No
- ☐ I don't know.

13

*(SD138) Does the project have or adopt a code of research or a research integrity policy available to participants? (See, for example <https://ukrio.org/publications/code-of-practice-for-research/>)

- ☐ Yes
- ☐ No
- ☐ I don't know.

14

*(SK139) Does the project investigate the social or psychological needs of animals?

- ☐ Yes
- ☐ No
- ☐ I don't know.

15

*(SK140) Does the project contribute to a better understanding of science?

- ☐ Yes
- ☐ No
- ☐ I don't know.

16

*(SK141) Does the project formally build on existing citizen-science expertise in the specific field of research?

- ☐ Yes
- ☐ No
- ☐ I don't know.

17

*(SK142) Is new knowledge developed regarding how best to incorporate citizens into research design?

- ☐ Yes, and formally documented
- ☐ Yes, but not formally documented
- ☐ No
- ☐ I don't know.

Questionnaire 6: Science input feature Microsoft Forms

18

*(EC111) How many open-access publications, indexed by Google Scholar, resulted from the project?

- ☐ Less than 3
- ☐ 3-30
- ☐ More than 30
- ☐ I don't know.

19

*(SK143) How many citations have the publications produced by the project received, in total (according to Google scholar)?

- ☐ Less than 3
- ☐ 3-30
- ☐ 31-300
- ☐ More than 300
- ☐ I don't know.

20

*(SK144) What is the highest impact-factor (or impact-index) of the publications produced by the project? (Just Google: "[journal name]" impact factor)

- ☐ Less than 2
- ☐ 2-5
- ☐ More than 5
- ☐ I don't know.

21

*(ST145) Does the project use mobile phones as a primary tool (for example, using an app to collect observations)?

- ☐ Yes
- ☐ No
- ☐ I don't know.

22

*(ST146) Is participation possible without a phone connected to the internet?

- ☐ No; it's nearly impossible.
- ☐ Yes; participation is possible without a phone, but a computer connected to the internet is necessary.
- ☐ Yes; participation is possible without a phone or a computer connected to the internet.
- ☐ I don't know.

Questionnaire 6: Science input feature Microsoft Forms

23

*(ST147) Does the project provide technical support to participants?

- ☐ Yes
- ☐ No
- ☐ I don't know.

24

*(ST148) Does the project use enabling technology, in particular information and communications technology, to promote the empowerment of women?

- ☐ Yes
- ☐ No
- ☐ I don't know.

25

*(ST149) Does the project enhance international cooperation on science, technology or innovation?

- ☐ Yes
- ☐ No
- ☐ I don't know.

26

*(SP150) Are participants exposed to steps in the scientific process in a systematic manner?

For example, are they presented with the problem before they are presented with the method?
Are they exposed to the results before they are given the conclusion.

- ☐ Yes
- ☐ No
- ☐ I don't know.

27

*(SP151) Are participants able to challenge the project's methodologies?

- ☐ Yes, and this could result in methodologies changing
- ☐ Yes, but this could not result in methodologies changing (because, for example, data need to be compared with existing datasets or because some SDG indicator is determining the parameters to measure, even if they don't necessarily make sense in a particular location)
- ☐ No
- ☐ I don't know.

Questionnaire 6: Science input feature Microsoft Forms

28

*(SP152) Does the project provide participants with easy and explicit access to pertinent research findings or salient literature used to inform the project before research begins?

- ☐ Yes
- ☐ No
- ☐ I don't know.

29

*(SP153) Does the project have a formal dissemination strategy?

- ☐ Yes
- ☐ No
- ☐ I don't know.

30

*(SP154) Does the project influence the attitudes of participants regarding science (hopefully in a positive way)?

- ☐ Yes
- ☐ No
- ☐ I don't know.

31

*(SP155) Are participants explicitly encouraged to reflect on or discuss current values, perspectives, opinions and attitudes relating to general science concepts?

- ☐ Yes
- ☐ No
- ☐ I don't know.

32

*(SP156) Do changes in participants' values, perspectives, opinions and attitudes occur as a consequence of actions carried out in the project?

- ☐ Yes
- ☐ No
- ☐ I don't know.

Questionnaire 6: Science input feature Microsoft Forms

33

*(SP157) Are participants explicitly exposed to various careers in science through the project?

- ☐ Yes
- ☐ No
- ☐ I don't know.

34

*(SP158) Are project leaders challenged to consider novel connections between their own careers and research, and the context of participating citizens?

- ☐ Yes
- ☐ No
- ☐ I don't know.

35

*(SP159) Has adequate consideration been given to allow citizen participants time and space to participate in the research given other demands and responsibilities?

- ☐ Yes
- ☐ No
- ☐ I don't know.

Submit