Citizen Science in Barangay Malinaw

20-minute digital participant workbook | One study decision viewed through different roles

Work in a group of 3-6. Each person takes a different stakeholder role, listens for what the proposal may miss, and helps improve one study decision. No specialist knowledge is required. One person can type the group's shared answers into this workbook. Passing or contributing in writing is welcome.

The hypothetical proposal

In fictional Barangay Malinaw, recurring flooding disrupts ordinary journeys to a health centre, school and market. A university proposes a six-week pilot using a smartphone form to mark public routes as open or closed and create a public map. The starting question is: Which public routes become difficult to use, when, and for whom?

Keep this exercise hypothetical and indoors. Do not enter real addresses, named routes, personal details or live flood reports. Any real-world data collection would need its own community engagement, permissions, ethics, privacy and safety planning.

Optional group code (no names needed)

20-minute activity clock

0-2 min	Read the fictional case and agree on the question you are exploring.
2-5 min	Assign different roles. Each person notes one contribution or concern.
5-10 min	Hear each role in turn. Listen before debating or choosing a change.
10-14 min	Revise the research question and decide what evidence would help.
14-17 min	Check participation, access, privacy, permissions and safety.
17-20 min	Record one next step, one responsible partner and one open question.

Save your work: this fillable PDF keeps entries in the copy saved to your device; it does not submit them to MCSA. If your facilitator asks you to share responses, use the online submission form on the activity page or follow the facilitator's directions.

Source note: Adapted from the MCSA Participant Activity 20min worksheet. Background references named in that worksheet: ECSA (2015); Shirk et al. (2012); Paleco et al. (2021). See the companion presentation for complete references.

Stakeholder role cards

Choose different positions within the group. People in the same community may have varied views.

Each card suggests knowledge and responsibilities to explore; it does not speak for every person in that group. If your group has fewer than six people, leave unused role fields blank. In each box, capture one point from that perspective.

1. Residents and service access

Consider daily journeys, mobility and care responsibilities. Why might a route marked open still be hard to use?

One contribution or concern

2. Livelihoods and transport

Consider travel time, fares, moving goods and lost work time. Which costs or assumptions need discussion?

One contribution or concern

3. Barangay and local government

Consider service responsibilities and available resources. Which office or community authority can act on evidence?

One contribution or concern

4. University research

Consider a useful question, comparable observations and honest uncertainty. Which measure needs explanation?

One contribution or concern

5. Extension and student support

Consider relationships, accessible meetings, supervision and continuity. What time or support might be overlooked?

One contribution or concern

6. Civil society and data support

Consider missing voices, privacy and acceptable sharing. Whom else should be heard before a map is made public?

One contribution or concern

Helpful opening: “From this position, one thing the proposal may miss is…” **Helpful question:** “What would make you reconsider your first view?”

Improve the study idea

Use the role notes to revise the proposal. A good pilot can include uncertainty and questions still to resolve.

The original question is: *Which public routes become difficult to use, when, and for whom?* Discuss whether this question is useful, inclusive and answerable with the proposed evidence.

1. Our revised research question

What should the group learn, and whose perspective shaped the revision?

2. What would count as a route being difficult to use?

Consider time, conditions, mobility needs and how different users might define difficulty.

3. What should be observed or recorded?

Record only what is needed to answer the question. Avoid personal identifiers.

4. How could people contribute without a smartphone or mobile data?

Consider accessible offline or assisted options and who would help provide them.

5. Facilitator constraint and the change your group would make

If no constraint was given, enter one realistic issue the team should examine.

Citizen science principle: participants should help shape the question and interpretation, not only provide observations. The pilot should explain how community knowledge will influence decisions.

Practical citizen science checks

Before a real project begins, identify what must be agreed, tested or reviewed.

Ask the group: Who helps set the question? Who is missing? Can people participate accessibly? Who can see the data or map? What permissions and safeguards are required? How will findings be shared back?

6. Which residents, services, groups or authorities should be involved?

Name roles or organizations, not individual people.

7. What permissions, ethics review or safety planning would be needed?

No fieldwork is part of this 20-minute exercise.

8. How should sensitive location or participation data be protected?

Consider access limits, map precision, retention and who approves public sharing.

9. How will participants benefit and hear what the study found?

Plan a useful return of results in an accessible format.

10. One next step, a responsible partner role and a target time

Use a role or organization for ownership; do not enter personal contact details.

11. What changed in your view? What remains unresolved?

Download and share: save this completed PDF to keep your group's answers. They remain in this file and are not sent automatically. To submit responses, use the online activity form when available; after submitting, download your group's response copy. Do not enter names, emails, exact home locations or real incident reports in this fictional exercise.