Photovoice

Participatory research methods for sustainability – toolkit #8

Photovoice is a participatory research method based on participant-led photography and dialogue. It is particularly suited to engaging vulnerable groups to visually document a specific issue that affects their personal lives. Because photovoice is based on images and language alike, it encourages participants to reflect on the issue and elevates marginalized voices by facilitating the expression of local knowledge, opinions, and experiences and allowing participants to identify their concerns and priorities.

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Photovoice is a research method based on participant-led photography and dialogue (Castleden and Garvin 2008). Participants use photography to identify and visually document the issues that represent their community's concerns and priorities. The photos taken are shared to encourage dialogue within the community. The method elevates unheard voices by facilitating the expression of local knowledge, opinions, and experiences (Masterson et al. 2018). The method has three main objectives: 1. reflecting upon community issues, strengths, and concerns; 2. encouraging critical dialogue on personal and community issues through discussion; and 3. promoting social change by communicating issues to society and policy-makers (Wang and Burris 1997). By empowering communities through participant ownership of the research process, photovoice aims to promote transformative action for social and environmental change (Masterson et al. 2018).

Photovoice has been defined as "a process by which people can identify, represent, and enhance their community through a specific photographic technique" (Wang and Burris 1997, p. 369). Originally developed for marginalized groups, the method focused on assessing community needs, empowering participants, and promoting community action in the context of public health (Wang and Burris 1997). Photovoice draws on feminist and critical consciousness theory and documentary photography (Wang and Burris 1997).

Apart from public health research, photovoice has been used in many other contexts such as immigration, homelessness, disability, youth, and in recent years also in sustainability science, where it has been applied also to less marginalized groups. In the latter area, photovoice has proven to be an effective tool for expanding scientific knowledge on environmental management, ecosystem benefits, environmental change, landscape relationships, sense of place, conservation practices, and human-wildlife conflicts (Masterson et al. 2018).

Procedure

While the original photovoice approach (Wang and Burris 1997) followed a rather fixed course of action, the method has evolved over the years into different forms and variations. Photovoice has proven to be flexible in its structure and can be adapted and modified according to the specific needs of the community under study. Moreover, photovoice can be combined with other methods such as focus group discussions, surveys, workshops, or transect walks (Masterson et al. 2018). We recommend the following procedure:

> In this series, we aim to alert *GAIA* readers to useful toolkits for participatory research methods for sustainability. If you would like to contribute a toolkit description, please contact **gaia@oekom.de**.

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1 *Development of a research design:* Researchers define the time frame and spatial dimension of the exercise. They decide whether the exercise allows for freedom of movement or has a planned itinerary (by the researchers or in collaboration with the participants). Researchers determine whether they accompany participants and whether participants take photos alone or in groups. The team of researchers should also develop an interview and analytical protocol adjusted to the objectives of the study. Participants should be able to engage in the design of the research process.

2 *Selection of participants and informed consent:* Researchers define criteria for selecting potential participants. All members of this group of interest will be invited to a workshop to explain the purpose of the study. It can be helpful to get support from local facilitators (e. g., local leaders, local NGOs etc.) that advertise the study and approach potential participants. As photographs are the property of the photographer and may contain sensitive data (e. g., peoples' faces), it is crucial that participants express informed consent for their participation in the study and the use of their photos and quotations. Moreover, people who appear in the photographs must sign informed consent forms agreeing to the use and publication of images in which they can be recognized.

3 *Photovoice training session:* In a training session with the participants, the researchers present the guiding questions, communicate the objectives of and instructions for the photovoice exercise (including the number of photos to be taken by each participant), and explain how the data will be used. If the participants are not familiar with photography, they obtain technical (but also ethical) guidance on how to use a camera.

4 *Photovoice exercise:* Participants are equipped with cameras if they do not have their own phones or cameras. Participants decide on the motives that they feel best represent the research subject and portray their perspectives on the issue. They can record their needs, concerns, and hopes for the future. This can include activities, places, people, objects, features, views, moments, ideas, or settings.

5 *Discussion of the photographs:* The photos are printed and used as a basis for follow-up discussions. The discussion is a tool for reflection, interpretation, and meaning-making. It provides an opportunity to contextualize the photographs, examine the motivation behind them, and identify emerging themes, issues, and theories. Participants can group the photographs around these emerging themes, and prioritize them according to personal relevance. Captions by the participants allow for an enrichment and contextualisation of the images. Participants should be invited to extend the discussion beyond the photographs towards general experiences with the identified issues, perceived causes, and associated impacts. The researchers can either conduct individual interviews with the participants, or discuss the

photos in groups of several (or all) participants. Group discussions allow for social learning and the development of a collective voice that can be mobilized for unified action. The discussions or interviews typically follow a guideline (see, e. g., Wang and Burris 1997 for a more structured approach) and are audio-recorded and transcribed.

6 *Data analysis:* Qualitative content analysis allows for systematic coding of the photos and discussion/interview transcripts according to key themes that were identified in the discussion. Sub-themes can be grouped into overarching themes, and association and causation pathways between different themes can be explored. The frequencies of mentions of themes can be count-

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BOX 1: Perspectives on collaborative agri-environmental governance at landscape scale

The *KOOPERATIV* project develops a coordinated landscape-scale approach to agri-environment and climate measures (AECM) in Lower Saxony, Germany. In this project, farmers plant flower strips to enhance biodiversity in a coordinated way. 39 representatives from agriculture, conservation, and local government and politics sectors took part in photovoice and semi-structured interviews conducted from July to August 2022. The aim was to identify participants' individual perspectives on collaborative agri-environmental governance. Participants were asked to capture moments or settings that they associated with cooperation and cooperative conservation. The first author met each participant individually to accompany the photo exercise and discuss the photos. Participants took photographs of places (e. g., AECM in the study area), situations (e. g., exchange or interaction of multiple people), symbols of cooperation (e. g., a handshake, see figure 1) or biodiversity conservation (e. g., bees). The subsequent interviews revealed that they valued the landscape for aesthetic reasons, used it for recreation, and valued conservation to protect the landscape. Most participants had positive attitudes towards cooperation. Perceived benefits of cooperation were a higher likelihood to achieve ecological benefits, and improved relationships. Conflicting interests and more complex decision-making were identified as challenges to cooperation.

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FIGURE 1: Symbols of cooperation: *Collaboration* (title chosen by the photographer, a local farmer). An adult and a child are shaking hands in a flower field.

ed to determine priorities and relevance of themes. Within these categories, researchers can compare and contrast differences and determine similarities. The researchers can provide the participants with the preliminary analysis results so that they can verify or correct any misinterpretations. Depending on the sample size, statistical tests such as correlation analysis or chi-square test can be run to determine associations between themes.

7 *Knowledge sharing:* Knowledge and insights should be shared with other community members through discussion fora or photo exhibitions. In addition, policy-makers may be informed about the problems and desired improvements identified by the participants.

Skills and resources needed

If participants do not own cameras or camera phones, or do not wish to use their own equipment, they will need to be provided with single-use or digital cameras. They furthermore require basic photography skills and an understanding of the ethics of photography (e. g., how to approach a person whose photo they wish to take). In addition, the researchers must have these skills and be able to teach them. Photovoice is very time-intensive for both, the participants as well as the researchers. In addition to the time spent brainstorming and photographing, participants must be willing to attend several events (information workshop, training session, discussion/interview, forum/exhibition). The researchers have to prepare these events, may accompany groups or individuals to take photographs, and has to code rich data.

Strengths and weaknesses

Key strengths/benefits
Photovoice balances power between researchers and research subjects. The research process is locally-led, as participants have shared ownership of the research topic: marginalized voices get empowered, as participants are able to share their perspectives on their community's concerns and requirements. Through social exchange, participants co-produce knowledge, develop common understandings, and identify key actions. Participants develop a collective voice, which can catalyze social action. In doing so, participants become agents of community change.

Researchers gain a contextual understanding of the topic being researched and an insight into local knowledge systems. The photographs translate local worldviews for the researchers. This access to insider realities might be denied by other methods. Photography generates a richer understanding than conventional interviews as it requires participants to reflect upon the issue more deeply, and provides visual evidence for the described situation. Visual data can also generate different information, as photographs can evoke emotions, and convey experiences and

views more effectively than spoken language. As a task-centered activity that examines the participants' concerns and interests, photovoice furthermore allows the photographers to express their views and ideas more vividly.

Photovoice offers flexibility in its structure. It is adaptable to many different uses and contexts and can be modified to suit the research objectives and the target community. Moreover, the approach is dynamic as it is co-designed by the participants, and can be adjusted during the process if necessary. Photovoice can be considered an inclusive method as it does not require complicated skills, but is simple to use and readily understandable.

Key weaknesses/challenges
Photovoice is time-consuming for both, the researchers and the participants, as it requires engagement over several process steps. This may discourage community members from participating. People with limited sight or mobility are excluded from participating. Others may be discouraged to participate because they find the task challenging, difficult, or abstract, or feel insecure about taking photographs.

Photovoice comes along with ethical challenges. Photographs are sensitive data, because anonymity of the persons portrayed cannot be guaranteed. In some cultures, people are reluctant to be photographed, which may limit photographers' choice of subjects. Photovoice is also particularly sensitive to bias arising from participants' self-censorship, hidden agendas, and personal risk, if the issue being photographed is conflicted.

Issues that are not photographed (e. g., as they are intangible and cannot be captured visually, or because a particular site of interest is inaccessible) *may be excluded from the discussion,* even if they are relevant to the community. Furthermore, participants can only represent the status quo and are unable to photograph what they envision for the future or how past events have shaped the present.

References

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