

Adapting public funding schemes for participatory research: Managing expectations, overcoming structural constraints

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In this contribution, we report on the results of the workshop “*Participatory research between expectations, aspirations and structural constraints*”, held at the 7th Austrian Citizen Science Conference. Following the guiding topic of the conference – “Citizen Science - Why (actually) not?” – we investigated the challenges participatory citizen science projects may struggle with when adhering to existing funding programmes, and explored potential solutions. Tapping into the experiences of 14 participants from Austria, Germany and Switzerland, we first collected expectations toward participatory research ventures, then combined practical experiences with ethical considerations to jointly work out challenges and finally defined possible solutions. The thus developed requests and recommendations formed the basis for designing a “perfect” funding program for citizen science initiatives. The workshop revealed that citizen science projects require more flexible funding structures with regard to timing, budget and applied research methods, if they should support participatory research that involves citizens as equal partners in the whole research process.

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1. Introduction

When implementing citizen science initiatives expectations of funding organisations tend to collide with the social and structural realities of the participative research process. For example, projects may need great flexibility in their implementation as citizen scientists take on more ownership in the course of the project [1], or funding programmes might be too restrictive about their definition of citizen science activities [2].

In a workshop titled “Participatory research between expectations, aspirations and structural constraints,” we invited 14 participants from Austria, Germany and Switzerland to investigate the challenges participatory citizen science projects may struggle with when adhering to existing funding programmes, and explored potential solutions.

1.1 Workshop Participants

Through an initial structure constellation, we determined the composition of our 14 workshop participants: Most participants were researchers or engaged in science communication, such as representatives of museums or science communication offices; only one participant represented a research funding organisation. Those able to draw on experiences with funded citizen science projects confirmed that their aspirations toward participatory approaches have collided with the constraints of research funding. The interactive workshop was designed and facilitated by 4 researchers from the Centre of Social Innovation (ZSI).

2. Current challenges of publicly funded citizen science projects

We first invited participants on a gallery walk to collect and reflect on current challenges, organised around five themes, which were predefined by the workshop facilitators based on their experiences in publicly funded citizen science projects. The outcomes were:

2.1 Time and planning

The overall time pressure that often leaves little time for participatory activities was identified as a major challenge. Often, funding programmes are very strict on deadlines and do not easily allow for adjustments, which may however be necessary to accommodate project activities to citizen scientists’ needs and circumstances. An important question of how to accommodate the lack of availability or reliability of citizen scientists in strict project structures remains unanswered. Keeping up the motivation of citizen scientists over a rather long period of time is another challenge that current funding restrictions often do not allow to respond to. Similarly, the question of how to deal with expectations after the project life-time seriously worries citizen science practitioners.

2.2 Methods and themes

Flexibility materialised again as a key issue when discussing research methods and thematic orientation of projects. On the one hand, funding calls usually strictly predetermine the

specific topics to be addressed and allow little flexibility to adapt these to the interests and needs of participants. On the other hand, there are also very strict procedures to follow, which cannot be modified. Predetermined methods and formats, as requested in many disciplines, do not allow for experimental settings or the processual tailoring to involved groups. Funding programmes ask for exact research questions at the proposal stage already, and often do not accept explorative methods. Consequently, there is only little room for the development of new methods and formats.

2.3 Roles and tasks

A lack of flexibility in the assignment of roles and titles was mentioned as challenging, especially when they cannot be changed in the course of the project. However, a complete lack of role descriptions and unclear expectations is also not desirable. Participants recounted how the project team and especially the coordinator often has to step in to cover unforeseen tasks. It was further pointed out how citizen scientists run the risk of only being used as “data slaves” instead of participating in the project in a more substantial manner, or that they have little to no decision-making power. Additionally, technical and scientific experts do not necessarily have the expertise required for the implementation of participatory processes and consequently need training or outside support to perform e.g. facilitation or self-reflection.

2.4 Finances and budget

With regard to the budgets of participatory projects, a lack of resources and flexibility was mentioned as a significant challenge. Participants experienced that there is no or insufficient funding for many important steps in the participatory process. For instance a lack of resources for handling the participatory process of negotiating changing roles throughout a project, for adding additional expertise to the team, or for purchasing additional technical equipment. Project implementers often experience a substantial gap between the resources covered by the provided funding and those actually invested to make participation possible, especially when activities have to be redesigned to meet the citizens’ expectations and needs.

2.5 Evaluation and results

Correspondingly, there is seldom room for an open-ended evaluation process, as funding schemes tend to require applicants to predefine results with little openness or flexibility. In general, citizen science struggles in project evaluation. Evaluators frequently lack competences in or knowledge of participatory methodologies, and evaluation committees are often strictly disciplinary. Also, requiring measurability or purely quantitative KPIs is seen as obstructive to citizen science initiatives. On the other end of the spectrum, ensuring and evaluating the quality of contributions from citizen scientists also represents a challenge.

2.6 General remarks

As a cross-cutting issue, the lack of support within research performing organisations, such as additional funding, training, or provision of technical infrastructure, were mentioned. While discussing the various challenges, it also became clear that many of the raised issues intersect and influence one another. For example, the available budget and timing of activities are often strongly related.

3. The “perfect” funding scheme for citizen science initiatives

Finally, participants worked in three small groups to convert these challenging aspects into building blocks for a favourable funding scheme for participatory research, collaboratively building an “perfect” new funding programme for citizen science.



Fig 1: Building the ideal funding programme for participatory research (CC BY-NC-ND 4.0 Barbara Kieslinger)

Grouping these building blocks according to the scheme laid out above, we were able to develop a set of general recommendations for research funding institutions:

3.1 Time and planning

For better planning and to save resources, two-stage procedures for research proposal submissions are regarded as helpful, first outlining an overall idea and only presenting the complete proposal in detail as a second step. In between these steps, a pre-financed co-creation workshop with citizens or targeted communities to concretise the project ideas could help to work out the necessary details in order to avoid difficulties in implementation later on. In general, projects need sufficient resources, not only in terms of time, money and sufficient personnel, but also for implementing and facilitating interaction processes and adaptations. Therefore, a realistic time budget is to be calculated and perhaps already clarified within an inception report to check whether it is feasible. Flexible project extensions with the possibility for additional budget negotiation are also desirable, to be able to cover the unforeseeable.

3.2 Methods and themes

The involvement of citizen scientists must be made possible from the beginning, in the participatory process structure as well as in management. Appropriate engagement strategies and formats are needed. These should be clearly communicated, visualised and financed accordingly. Overall, there is also a need for openness in defining the themes and objectives of a project.

3.3 Roles and tasks

Flexibility should also be given in the distribution of roles across project actors. As tasks and roles evolve over time, they could be kept partly open in the submission. Complex citizen science projects demand a broad range of expertise from the main actors. Many skills have to be acquired and built up during the project duration, such as human resource or community management skills. In principle, structural capacity building is needed in all respects in order for citizen science projects to work well.

3.4 Finances and budget

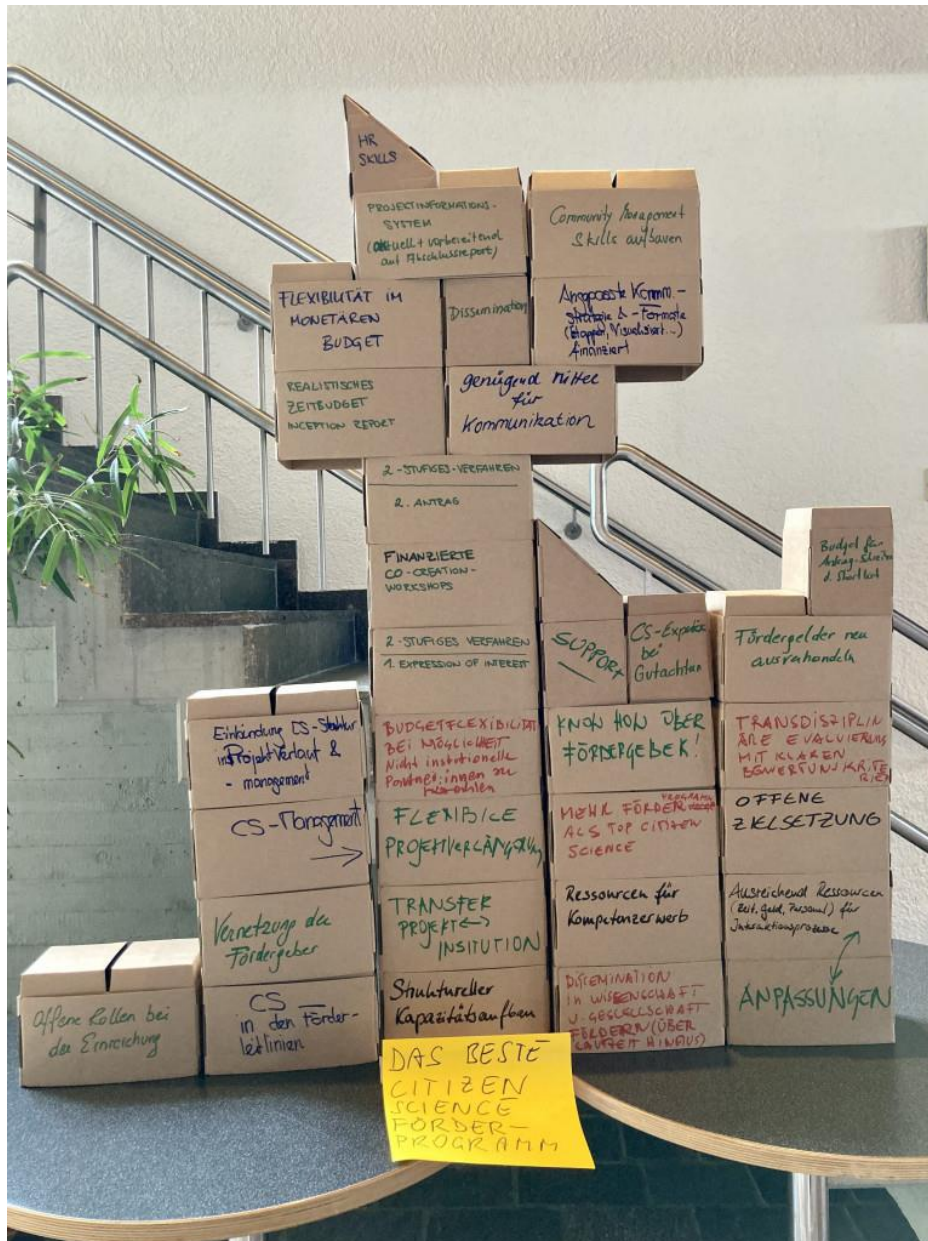
As mentioned above, being able to renegotiate funding is considered necessary by experienced citizen science implementers. Likewise, they request sufficient flexibility in the monetary budget with the option of paying non-institutional project partners such as citizen scientists. Furthermore, initiators of citizen science activities need a budget or funds already for proposal writing. A possible option, as mentioned above, could be the provision of multi-staged funding for shortlisted project ideas. It should also be possible to take into account additional efforts, such as acquisition of required competences or additional expenditures for communication efforts.

3.5 Evaluation and results

Evaluators need to have expertise in citizen science processes in order to be able to assess such projects. Clear evaluation criteria are needed, especially for transdisciplinary evaluation processes. In addition, alternative output formats to scientific papers have to be considered and supported, which is tied to the broad dissemination of results in science and society. For the transfer and sustainability of citizen science activities and results it is important to consider early on how to embed the project in participating institutions, and how to receive funding for citizen science activities beyond the project duration.

3.6 General recommendations

As a general remark, funding bodies should find opportunities for actively exchanging experiences on participatory processes across national borders. Here, already existing networks might prove beneficial. For the represented countries Austria, Germany and Switzerland, more dedicated funding programmes are requested than the currently available ones. Citizen science methods should be part of funding guidelines. Also, know-how about funding streams and support in general is required and should be made more visible also to citizen science communities. Electronic project information systems could ease administrative processes during the project, but also in the preparation phase and with the final reporting. Finally, funding decisions have to be made more rapidly.



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Fig 2: The “perfect” funding programme for participatory research (CC BY-NC-ND 4.0 Barbara Kieslinger)

4. Conclusion

This workshop can be seen as a first step in raising awareness of how participatory research struggles with the requests and specifications of current standardised research funding schemes. It showed that to support truly participatory action, current funding schemes need to adapt and reflect the particularities and needs of participatory research. Most importantly, more flexibility is requested as participatory research has to deal with many uncertainties in highly complex settings. Next to the funding programmes, the assessment schemes have to be adapted and show more flexibility towards participation, not only in the research process, but also in the

evaluation. Overall, the main message to funding organisations is to allow for the unplanned to happen and for unforeseen goals to be reached.

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