

Appendix E.1 English interview guide

Key

- **Yellow:** project-/ interviewee-specific modifications
 - **Blue:** practical instruction
 - A: actor
 - S: social, economic, and political settings
 - GS: governance system
 - RS: resource system
 - Numbers: second-tier variables of social-ecological systems framework, according to McGinnis and Ostrom (2014)
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1 Welcoming

Thank you for taking the time for my interview!

2 My person and my research

Introduction: Before the interview, let me introduce **myself and** the background and purpose of my research.

 I have developed a theoretical and practical interest in this topic and am now also working on it as part of my Master's thesis.

Specifically, **my master's thesis is** focussing on the status and context of biodiversity monitoring in forest garden projects.

To be honest, I have always assumed that forest garden areas have a positive effect on biodiversity. However, I realised that this assumption has not yet been scientifically proven. One of the reasons for this is that there is no standardised, comprehensive biodiversity monitoring on our complex and multifunctional forest garden areas.

With my master's thesis, I would therefore like to create a basis for future monitoring in our projects and on our areas. As you know, I used the survey to record how and to what extent plant and animal species surveys are carried out on forest garden areas in projects. **Project-specific sentence: In your project ...**

In this interview, I would now like to take a closer look at the context of your biodiversity monitoring activities, focussing in particular on social, ecological and economic factors. In order to have more generalised and comparable results, I am conducting interviews with people from four different forest garden projects in Germany and the Netherlands.

Do you have a **question** about me or my research?

3 Data privacy

Introduction: I will now briefly address the topic of data privacy.

I sent you the information on data privacy in advance. The most important points in the document are that I will record the interview now and transcribe it later. Also, I am planning to pseudonymise your person in my Master's thesis and any possible publication of it, but not your forest garden project. Some of my interviewees mentioned that they do want to have their name specifically mentioned in my thesis, as a form of publicity. You have the chance to decide on that within the document I sent you.

Do you have any **questions** about this and do you agree?

It would be great if you could sign the document and send it back to me as soon as possible! **OR** Thank you for sending me the signed document already!

I will start recording the interview right now.

Start recording (zoom & phone)

4 Research-specific definitions

Introduction: So that we have a common understanding of the terminology, I will briefly explain the understanding of biodiversity and monitoring in my master's thesis. Also, to let you know, I am using the term forest garden equally to the term food forest, as there is no scientific differentiation between these terms so far.

Biodiversity is a complex concept that encompasses, among other things, the diversity of genes, organisms and ecosystems. In my thesis, I use the term biodiversity to refer to the diversity of organisms, with a focus on non-planted animal and plant species in forest gardens.

Biodiversity monitoring in this context means the collection of attributes around these animal and plant species, for example the number of occurrences of a specific species. I also count irregular, one-point, unsystematic and non-standardised approaches to the term biodiversity monitoring in my work.

Do you have a **question** about this?

5 Topic I: Forest garden project

Introduction: Firstly, I will first ask you general questions about your forest garden project.

Free narrative prompt I

- 1) How would you describe your role in the project, especially in relation to biodiversity monitoring? (A)

Optional question I

- 2) Volunteer vs. full-time? (A)

Free narrative prompt II

- 1) Could you please give a few basic details about your forest garden project and your forest garden area(s)?
- 2) What is the motivation for planting your forest garden or what purpose does it fulfil or should it fulfil for you? (A6- A8)

Optional follow-up questions I

- 1) How important are biodiversity and biodiversity monitoring in your project? (A6- A8)
- 2) Do you think that forest gardens increase biodiversity? (A6- A8)

6 Topic II: State biodiv monitoring (supplement to survey data) (state)

Introduction: Now we are talking specifically about biodiversity monitoring. Firstly, let's take a brief look back at my survey. **Survey participants** have reported back to me that they would like to talk about in the interview.

- 1) Is there anything else you would like to say?

7 Topic III: Context biodiv monitoring

Introduction: Next, we are talking about the context of biodiversity monitoring in your forest garden project.

Free narrative prompt I

- 1) What is going well with biodiversity monitoring in your project?
- 2) Based on your experience, what advice would you give other forest garden projects for biodiversity monitoring?

Free narrative prompt II

- 1) What challenges do you face in biodiversity monitoring in your project and on your area? (e.g. external, internal, anthropogenic, ecological, ...)

Optional follow-up questions I-II

Social, economic and political setting (S)

- 1) Which political and institutional conditions at national, international and EU level have an influence on biodiversity monitoring in your project? What needs to change? (S?)
- 2) What funding opportunities are available at national, international and EU level for biodiversity monitoring in your project and in general? (S1)
- 3) Should something change in the development and / or provision of technologies for biodiversity monitoring? (S7)

Resource System (RS)

- 1) Are there area-specific, possibly ecological factors that make biodiversity monitoring easier or more difficult? (e.g. area size, complexity & uncertainty, site factors, unclear boundaries, invasive species, climate change, biodiversity trend, year of planting ...) (RS3, RS7, RS9, RS2, ECO, ...)
- 2) Are there species groups or species that you particularly like to record? Why?

Governance system (GS)

- 1) Are there guidelines that you have to stick to for your biodiversity monitoring? (GS8, GS4); What is your relationship with the institution and these guidelines? (GS3)
- 2) Does your project structure have an influence on your biodiversity monitoring? (GS1, GS2); How do you make decisions in your project in the context of biodiversity monitoring? (GS5-7, participation in rule making)

Actors

- 1) What is the motivation / purpose behind your biodiversity monitoring? (e.g. financial support, intrinsic interest ...) or do you see a purpose in biodiversity monitoring at all? (A6, A8, economic dependence)
- 2) Who is interested in biodiversity in your project? (A8)
- 3) Who has biodiversity expertise and experience? (e.g. full-time staff, volunteers, external ...) (A7, A3, external monitoring)
- 4) Who is responsible for biodiversity monitoring? How many people? Does someone lead the monitoring? Is there trust in this person? (A1, A5, Trust, participation in monitoring)
- 5) Do you have appropriate technology and resources for biodiversity monitoring? (e.g. GPS devices, bat recorders, ...) (A9, Monitoring technology)
- 6) Do you have an elaborated monitoring concept or are you working on one?
- 7) What do you think of citizen science approaches?
- 8) Are there any personal or professional conflicts in the context of biodiversity monitoring in your project? (I4)
- 9) Do you have an overview of which activities are running in parallel in your project, and who is responsible?

Free narrative prompt III

- 1) Would you like the state of biodiversity monitoring in your project to be different? What would be the ideal situation?
- 2) What would have to happen to achieve this?

Optional follow-up questions III

- 1) **Only non-participating projects:** Are you aware of the National Monitoring Programme for Forest Gardens in the Netherlands?
 - a. In the Netherlands, a government-funded national monitoring programme has been in place for several years, in which, among other things, biodiversity is surveyed in currently 33 participating forest garden projects on the basis of a standardised catalogue of methods. So far there are no published scientific papers on the programme, but there is a project report.
- 2) Would you to be part of the monitoring programme? Why aren't you?

Questions that come to mind spontaneously.

8 Final question

I'm done with my questions so far. Is there anything else you would like to share in this context?

9 Conclusion

Thank you very much for the conversation! I will now end the recording.

End recording

If you would like to stay informed about the results of my MA, I would be happy to add you to my mailing list.

If this hasn't happened yet: It would be great if you could sign the data privacy information sheet and send it back to me by email as soon as possible.

Thank you very much & have a nice day!