Appendix 1: Elaboration of methods

A. Meeting notes from IPBES workshops

These included notes from: (1) First workshop on scenarios and modelling in support of IPBES assessments which included coordinating lead authors and IPBES Fellows from the scenario chapters of the regional assessments and selected experts from other IPBES assessments, hosted by the IPBES Technical Support Unit for Scenarios and Models, Bilthoven, the Netherlands, January 2016, (2) Second workshop on scenarios and modelling in support of IPBES assessments which included coordinating lead authors and IPBES Fellows from the scenario chapters of the regional assessments and selected chapters of the global assessment, hosted by the Institute for Global Environmental Strategies in Japan, and co-organized with the Expert Group and Technical Support Unit on Scenarios and Modelling, Shonan Village, Japan, November 2016, (3) First and second meetings of the respective regional assessments (Summer 2015, Autumn 2016) (IPBES 2018a), and (4) associated key meetings during the drafting of the chapter texts.

B. Survey

The survey was designed using Google forms and was sent out electronically on 19 December 2017 to 43 experts, who had 2 months to complete the survey. The survey was also sent out attached to an email in case respondents did not have access to Google. The survey was anonymous, although, given the nature of the purposeful sampling and details of the respondent profiles, some details requested would enable the identity of the respondent to be known to the research team. Nevertheless, no sensitive information was requested nor presented among the findings, and there was informed consent from all participants and confidentiality was maintained. The IPBES secretariat was contacted prior to the commencement of the analysis to ensure there was no conflict of interest. At the time of the publication of this paper, the IPBES Regional assessments had been finalised and accepted at the IPBES-6 Plenary; however the global assessment was still ongoing and thus many results are not permitted to be presented or discussed in this paper. We provide the full version of the survey below.

IPBES Scenario Archetype survey

Thank you in advance for taking the time to complete the following questions!

This survey aims to contribute to a special issue on "Archetype analysis in sustainability research" in the journal Ecology and Society. A link to the focus and scope of the special issue can be found here:

https://www.ecologyandsociety.org/issues/view.php?sf=133

The outcomes of this survey will assist with a reflection on the understanding and use of the ways in which scenario archetype-based approaches have been used across the IPBES regional and global assessments and will be combined with a thematic assessment of the completed chapters. The questions focus on what the aims of applying a scenario archetype approach are, as well as the strengths and challenges that emerged during the process of using them in the IPBES assessment. We focus solely on the application of the scenario archetype approach within the IPBES assessments and the results will not include any of the results drafted during the assessment.

The survey will be sent predominantly to Chapter 5 authors of the IPBES regional assessments who were involved in the scenario archetype analysis, together with those authors involved in scenario archetype assessments in the IPBES global assessment as well as those who indicated they would be interested in being involved.

If you have any questions, please contact either [lead authors names]

Section A: Background information

- 1. Nationality:
- 2. Academic background:
 - a. Natural science
 - b. Social science
 - c. Humanities
 - d. Interdisciplinary
 - e. Other [...]
- 3. What type of institution are you based at?
 - a. Academic (e.g. university)
 - b. Research institution (e.g. science council or advisory body)
 - c NGO
 - d. Government department
 - e. Other [...]

4. Which assessment(s) are you part of (please select all that apply)

Type of Assessment/ Group	Yes/No	Chapter/ Type of group	Role (CLA, LA,)
Regional Assessment: Africa Americas Europe and Central Asia Asia Pacific			
Regional Assessments' SPMs			
Global Assessment			
Expert group			
Technical Support Unit			
Other			

- 5. How many years of experience in the field of scenarios do you have?
 - a. 1-5
 - b. 6-10
 - c. 11-20
 - d. 21 and more
- 6. Did you use the scenario archetypes approach before your IPBES involvement?
 - a. Yes (please elaborate on your experience)
 - b. No

Section B: Use of Scenario archetypes in IPBES assessments

- To your knowledge, how did you come to use scenario archetypes in your IPBES work? (e.g. I was told to, we had a meeting and decided this was a good way forward, I suggested it....)
- 2. To your knowledge, why where scenarios archetypes used for your IPBES work, i.e. what was the purpose of applying the scenario archetype approach and what questions were you trying to answer or assess with them?
- 3. Which scenario archetypes did you use in your work? (e.g. we created our own archetypes, we used existing ones, ...)

- 4. Please describe your role, i.e. how you contributed to the work with scenario archetypes in the context of the assessment work. (If you took part in multiple assessments/groups, please describe each of your roles separately.)
- 5. According to your understanding, what does the "scenario archetypes approach" mean in the context of your IPBES-related work?
- 6. Were there any further scenario archetype analyses you wanted to do in your IPBES assessment?
 - a. If yes, please elaborate
 - b. If yes, why didn't you do it? (ran out of time, lack of expertise, ran out of space, ...)
- 7. Where there any alternative analysis approaches (not an archetype-based approach) that you wanted to apply?
- 8. How do you think using scenario archetypes can help in decision-making processes?

In the following questions, please list the top three points.

- 9. What are/were the **strengths** of using scenario archetypes in IPBES?
- 10. What are/were the **weaknesses/barriers** with using scenario archetypes in IPBES?
- 11. Were there any specific **challenges** linked to the scenario archetype assessment that came up in relation to*:

Yes,	No	I don't
 specifically:		know

Issues of scale (e.g. temporal, spatial, cross-scale suitability, regional relevance of global archetypes, ...)

Policy relevance/coherence

Uncertainty

The level of generalization

Classification

Other

- 12. Beyond your IPBES work, what are some of the key **gaps** in current scenario archetype research?
- 13. What are some of the research **frontiers** in terms of scenario archetype analyses?

^{*} This list of challenges came out of those challenges captured in meeting notes from discussions at the two key workshops in the Netherlands and Japan.