

## **Appendix 4: Details of adopting the scenario archetype approach on the IPBES science-policy interface**

### **Decision process to apply scenario archetypes**

According to the survey respondents, the decision to apply scenario archetypes as a means of harmonization and synthesis across regional assessments was not in place from the very beginning of the regional assessment process, but was made only later, when individual regional assessments were already at various stages of development. The respondents reported that the original idea to use scenario archetypes emerged from individual IPBES experts involved in the regional assessments during the initial stages of compiling the assessments. Subsequently, potential use of scenario archetypes across all regional assessments was discussed at the level of assessment chairs, coordinating lead authors and other key experts involved in the chapters at a variety of face-to-face meetings. Specifically, the first workshop on scenarios and modelling (Bilthoven, January 2016) focused on sharing experiences to set up the chapter on scenarios, discussing the main aims of the chapters in view of the whole assessment, discussing ways to find relevant studies and to summarize the results from these studies in a structured way. Furthermore, a framework to summarize scenario studies into scenario archetypes was jointly developed, which was subsequently used and continuously updated during the drafting of the assessments. The progress of the scenario archetype analysis in the regional assessments was shared in the second workshop on scenarios and modelling (Shonan Village, November 2016).

### **Reflections of process clarity, transparency and consensus**

The survey showed that the awareness of the process leading to the selection of scenario archetypes as the overarching approach for the IPBES regional assessments differed among participants, depending on the level of overview they had, e.g. based on their role in the assessments. Nevertheless, there was a general agreement that the approach matched the purpose and capacities of the IPBES assessments and the respondents were generally satisfied with the level of clarity, transparency and consensus in the process of adopting scenario archetypes as a unifying approach within the IPBES assessments.

In addition, the respondents indicated that several confusions emerged during the process, e.g. (a) the word "archetype" was not initially understood by some of the authors, and (b) in some cases, scenario archetypes as a classification tool for organizing scenario studies tended to be mixed up with "scenarios" in general. This led to difficulties in communication across chapters in some regional assessments, as well as the communication of the findings of the archetype analysis outside the regional assessments, which illustrates the importance of defining and clarifying key terms and concepts early on in assessment processes.

### **Dismissed alternatives to the scenario archetype approach**

The respondents also listed several alternative approaches originally considered for scenario synthesis instead of scenario archetypes, such as organizing scenarios based on: (1) the themes they focused on for example, poverty, food, water, or impacts of climate change; (2) input

variables or drivers (e.g. population, gross domestic product), and (3) scale or region to which they applied. For instance, the IPBES Land Degradation and Restoration chapter on scenarios (IPBES 3bi) (Brink et al. 2018) ultimately adopted a biodiversity and ecosystem service based thematic framework to scenario classification due to the relative paucity of global integrated scenarios of land degradation. Such approaches would, according to the respondents, enable the analysis of scenarios without clustering them into shared archetype narratives which can result in the loss of detail and contextual nuances from the underlying scenarios (see Section 3: Challenges). In addition, quantitative aggregation of the scenarios was suggested as an alternative approach, which was, however, hampered by the extreme differences between indicators employed by different scenarios to model the same drivers.