



Photo by Whitcombe - AdobeStock

# DECIDING WHETHER TO INCLUDE SCENARIOS

## WHEN/WHERE should this process be carried out?

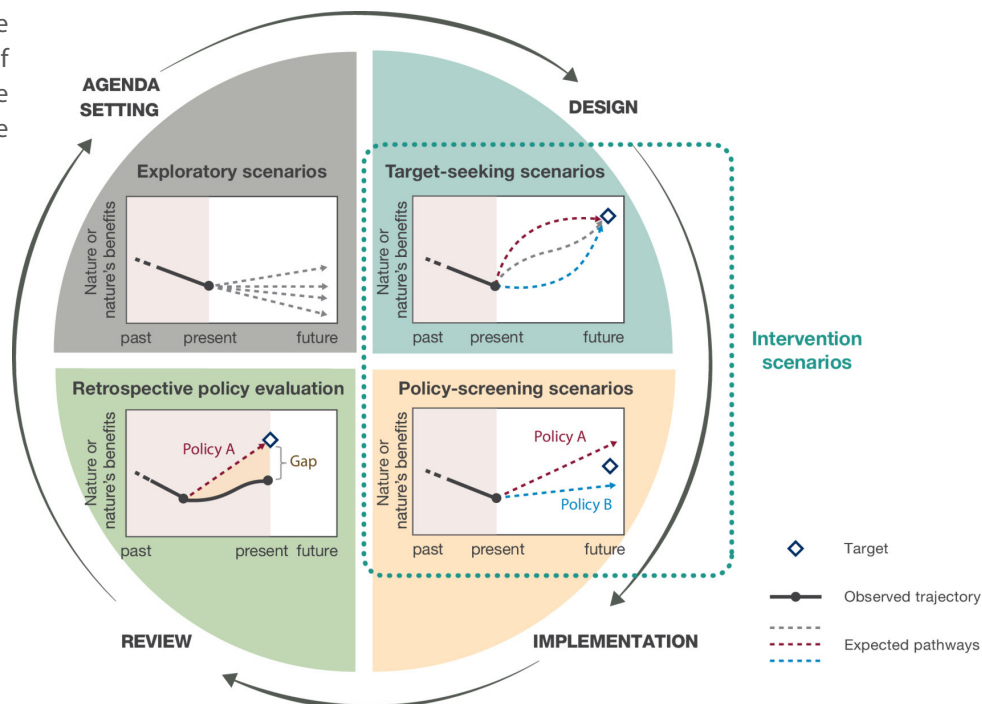
During the scoping stage, the rationale, goals and policy questions for the assessment are identified. Scenarios can be considered as tools to achieve these goals as well as provide foresight for policy planning at the national level. At this point, it is useful to decide whether scenarios will be included within the assessment and if so, then it could be beneficial to agree at an early stage whether the scenarios are to be included as a standalone chapter or integrated across all chapters. It is important to also have an idea of scenarios for guiding the development of policy questions of the assessment. The role of scenarios within the assessment can be summarised in the scoping report. Further information and specific details on scenarios can be developed at the beginning of the evaluation stage.



## WHAT are scenarios?

Scenarios are descriptions of plausible futures, that are identified through modelling, when the elements of a system are exposed to different indirect and direct drivers, and policy and management options. They can be both qualitative and quantitative. Models can address three main relationships: (i) projected effects of changes in indirect drivers, including policy interventions, on direct drivers; (ii) projected impacts of changes in direct drivers on biodiversity and ecosystems; and (iii) projected consequences of changes in biodiversity and ecosystems on ecosystem services.

Figure 1: This figure shows the roles played by different types of scenarios corresponding to the major phases of the policy cycle (IPBES 2016).



Understanding the potential impacts on biodiversity and ecosystem services and its linkages to people under different types of scenarios can provide support to the major phases of the policy cycle: agenda setting, policy design, policy implementation, and policy review. IPBES defines these scenarios as follows:

- x “Exploratory scenarios”, which examine a range of plausible futures under the potential trajectories of indirect drivers (e.g. sociopolitical, socioeconomic, demographic, cultural, and technological innovation) and/or direct drivers (e.g. natural resource use, land-use change, climate change, pollution, and invasive species). They can contribute significantly to high-level problem identification and agenda setting.
- x “Intervention scenarios” (also known as ‘policy scenarios’), which evaluate alternative policy or management options through either “target-seeking” or “policy-screening” analysis. They can contribute significantly to policy design and implementation.
- x “Retrospective policy evaluation scenarios” are employed to assess the extent to which the outcomes achieved by an implemented policy match those expected based on modelled projections. They can inform policy review processes.

## WHY is it important/what are the benefits of including scenarios in a national ecosystem assessment?

A national ecosystem assessment process can benefit from scenarios in the following ways:

- x Scenarios provide an effective means of addressing relationships between nature, its benefits to people and their wellbeing and can thereby add considerable value to the use of best available scientific, indigenous and local knowledge in assessments and decision support;
- x Different types of scenarios can play important roles in relation to the major phases of the policy cycle, which are (i) agenda setting, (ii) policy design, (iii) policy implementation and (iv) policy review;
- x Models can provide a useful means of translating alternative scenarios of drivers or policy interventions into projected consequences for nature and its benefits to people.

### Exploratory scenarios:

- x Raising awareness of current environmental trends, and future trends a country could face in different possible futures.
- x Understanding the impacts and interconnections of different direct and indirect drivers.

### Intervention scenarios:

- x Develop consensus around a shared future vision.
- x Supporting the development of political and/or societal targets for policymaking.
- x Assessing the ability of different policy and management actions to meet targets.
- x Identify trade-offs of alternative interventions and policies.

#### TOP TIP

If scenarios are deemed relevant for the assessment, it is important to define clearly its benefits for the assessment and how these benefits support its overarching goals in the scoping report.

### Retrospective policy evaluation scenarios:

- x Providing a basis for a policy review by comparing the extent to which outcomes achieved by an implemented policy match those expected by a scenario.

## WHO does this stage relate to?

The technical support unit, with support from authors who were selected to contribute to the scoping process as well as stakeholders, are encouraged to consider the benefits of including scenarios within the assessment and how they could be integrated across or within chapters. Following this decision, the next step is to identify the type of scenario method/ approach (see [Scenario 2-pager](#)) which will be synthesised/ developed during the evaluation stage. This will support the identification of relevant authors and knowledge holders.

## RESOURCES

- x IPBES (2016) 'The methodological assessment report on scenarios and models of biodiversity and ecosystem services.' Exec. Sum., pg. XVI-XVIII; Ch.2, pg. 40; Ch.3, pg. 90-95, pg 97. <https://doi.org/10.5281/zenodo.3235428>

Supported by:



Federal Ministry  
for the Environment, Nature Conservation,  
Nuclear Safety and Consumer Protection

In partnership with:



For further information, please contact [assessment@unep-wcmc.org](mailto:assessment@unep-wcmc.org) or visit <http://www.ecosystemassessments.net/>