Discussions

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- "Clarification of Global Climate Risk Perception through Public Dialogue"

- Results of uncertainty assessment may have large impacts on risk perception
  ⇒Sharing the basis of assessment is a key to success in communication on risks
  ⇒My challenge: Developing teaching materials and exercises for general use to share the basis

Exercise Uncertainty Assessment, the case of extinction risk of climate change.

In the course materials you find:
- The text: *Extinction risk from climate change* by Thomas et al, 2004.
- The *RIVM/MNP Guidance for Uncertainty Assessment and Communication: Minichecklist and Quickscan Questionnaire*
- A Pedigree Matrix for evaluating models (use it for question 4 of Quickscan)
- The Uncertainty Matrix (use it for question 5 of Quickscan)

Assignment (group work, in groups of about 6 person):
Suppose you have the task to write a report to inform policy makers on the risks of species extinction from anthropogenic climate change, using the insights from the recent study *Extinction risk from climate change.* You want to be explicit in your report about the uncertainties so you use the Uncertainty Guidance to assess and identify the most important uncertainties.

Apply the *Quickscan Questionnaire* to the study *Extinction risk from climate change.*

Step 1: Read the paper *Extinction risk from climate change* and make a reconstruction of the steps taken in that study to quantify the risk of species extinction from climate change. What indicator is used to express the risk of species extinction? What methods are used to quantify this indicator? What are the inputs of each calculation of the indicator? What are the outputs of the calculations? What are the causal relationships between input and output? What extrapolations and or interpolations are made? What are the main assumptions made in this study? Draw a **scheme representing the chains of calculations** behind the indicator used in this study. Put this scheme on a transparency (*product 1*).

Step 2: Apply the *Quickscan Questionnaire* to assess and identify the main uncertainties in the study. **Start on page 9 with Question 1.**
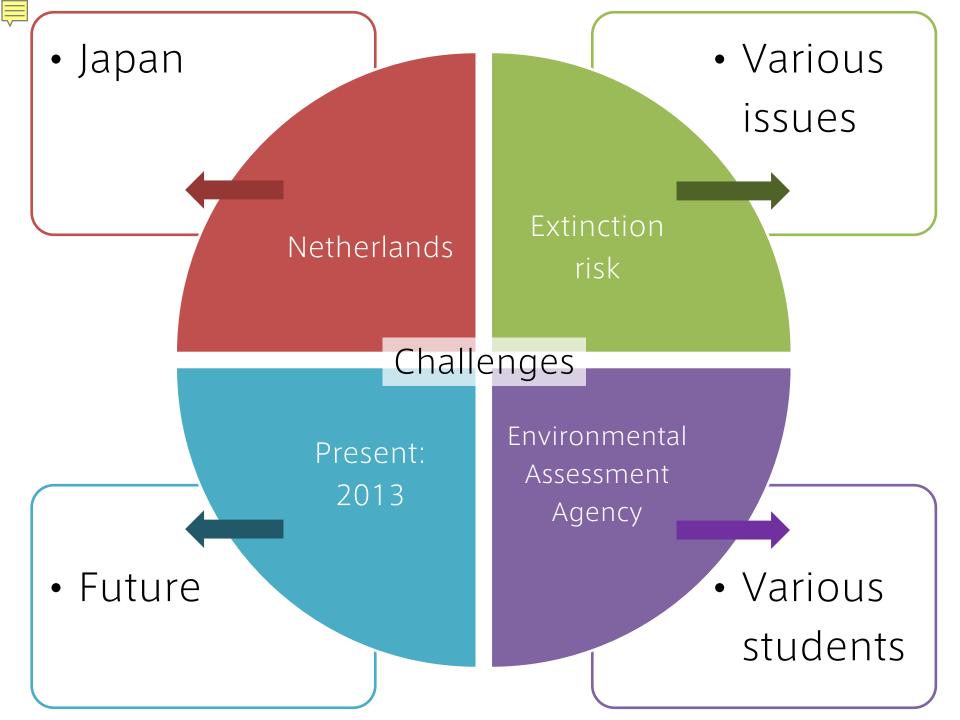Keep track of all uncertainty issues that you identify on a **"gross list of key uncertainties"**

Depending on the answers you give you will be referred to Hints and Actions, which you can look-up in the *Quickscan Hints and Action list*. One copy of this document is available for each group. Look up those hints and actions, and collect the relevant ones on a **"to-do list"**. If you think a deeper analysis is needed, the *Quickscan Hints and Action list* has a column "More details in", which refers you to relevant parts of the "*Detailed Guidance*" that you can use for further elaboration.

Note that the Quickscan checklist was designed for use in the context of the Netherlands Environmental Assessment Agency to use it during making an assessment. In this exercise you use it differently, so use it with some flexibility.

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Questions

Q1: Various learners

- (In case of the "exercise of extinction risk of climate change")
- Are there any necessary or expected academic backgrounds or skills to complete this exercise?
- What should we be careful when we instruct this exercise to students who don't major in environmental studies?

Q2: Procedures in detail

- Time schedule
  - Weeks/ some days/ one day/ hours
  - Pedigree Matrix and Uncertainty Matrix
- Levels of Explanation
  - Issue of extinction risk
  - Methodology of uncertainty assessment
- Facilitation
- Comments, feedback and evaluation

Q3: Applications

- How do you encourage learners to apply these methods to the issues of their concern?
  - Skills to apply this method to different issues

- Advices to develop learning materials and to do exercise