

Horsens case – Break out groups

Jens Christian Refsgaard and Hans Jørgen Henriksen, GEUS

The Horsens case deals with climate change adaptation of water issues in the Horsens area. The aim of the group work is to work actively with the four topics covered during lecturing (scenario building, stakeholder involvement; risk perception/acceptability and uncertainty) in a specific case.

The group should imagine itself as a policy agency responsible for designing a long term (20 years) planning process that should enable the society to cope with the climate change effects and its uncertainties and develop a climate change adaptation strategy.

We will form two groups with slightly different topics as described in the terms of references below. Each group should have 3-4 students. If necessary we can form more than one group for the same topic.

Group 1 – Scenarios

Objective

- To build scenarios for use in a 20 years planning process aiming at design of a climate change adaptation plan.

Tasks – questions to be answered

1. Knowledge gathering – climate change effects
 - Which knowledge is needed regarding climate effects and the involved uncertainties? What are the main knowledge gaps?
 - How is this knowledge acquired? (new data, modelling studies, stakeholder processes, research, etc.)
 - What are the expected main climate change effects for this case?
2. Uncertainty
 - What are the main uncertainties on climate change effects?
 - Prepare a survey of the main uncertainties, their characteristics and describe how to deal with the different sources of uncertainties
3. Identify possible development scenarios
 - What are their respective key characteristics with respect to climate change, societal development, adaptation strategies, and people's behaviour?
4. Build development scenarios
 - Describe scenarios (base year, time horizon, time steps, geographic coverage, main themes, major driving forces/indirect effects and uncertainties)
 - To which extent and how do you involve stakeholders in the scenario building?
 - What are the adaptation options in the different scenarios?
5. How do you deal with uncertainty in the scenarios?
6. What are the critical assumptions regarding risk perceptions and behavioural responses in the different scenarios?
7. How should the scenarios be applied in the planning process?
8. Capacity of policy makers, water managers, researchers
 - What capacity is needed of policy makers and water managers in order to make full use of scenario work
 - What are the requirements to research results?
 - Can stakeholders and policy makers cope with uncertainty? How?
 - Describe the most important assumptions to achieve a fruitful social learning process.

Group 2 – Stakeholder involvement

Objective

- To prepare a stakeholder involvement plan for use in a 20 years planning process aiming at design of a climate change adaptation plan.

Tasks – questions to be answered

1. Knowledge gathering – climate change effects
 - Which knowledge is needed regarding climate effects and the involved uncertainties? What are the main knowledge gaps?
 - What type of knowledge are you eliciting, in what way and from which stakeholders?
 - What knowledge representations are you using and why?
 - How are you integrating knowledge from different stakeholders?
 - When you integrate knowledge from different stakeholders, whose knowledge is the integrated knowledge?
 - What are the expected main climate change effects for this case?
2. Uncertainty and ambiguity
 - What are the main uncertainties on climate change effects?
 - Which ambiguities are in play regarding various themes and challenges?
 - Prepare a survey of the main uncertainties and ambiguities, their characteristics and describe how to deal with the different sources of uncertainties
 - How are you representing and explaining uncertain knowledge to stakeholders?
3. Prepare a stakeholder involvement plan
 - How do you achieve a common understanding among stakeholders?
 - What are the overall objectives and principles of the stakeholder involvement?
 - What participatory methods are being used with the different types of stakeholder in the stakeholder process, and for what purpose?
 - Stakeholder analyses and role of authorities
 - Overall process time schedule
 - i. How long will the different parts of the stakeholder process last?
 - ii. How will you encourage the same stakeholders to keep on participating for the duration of the stakeholder process?
 - What are the key milestones of the process?
 - What are the criteria of success for the process?
 - What are the key challenges to organising a successful stakeholder process that you are trying to overcome, and how?
 - What different skills will be needed to successfully realise the process?
 - Which group model building and stakeholder engagement tools should be included for dealing with ambiguity/framing of the scenario development and uncertainties?
4. How do you deal with social learning and planning for change in the stakeholder involvement process?

5. What conflicts, if any, are there in trying to support social learning and formal decision-making processes at the same time?
6. How do you test behavioural responses to risk and acceptability of policy through the stakeholder involvement process?
7. How should the scenarios be applied in the stakeholder involvement process?
8. Capacity of policy makers, water managers, researchers
 - What capacity is needed of policy makers and water managers in order to make full use of scenario work
 - What are the requirements to research results?
 - Can stakeholders and policy makers cope with uncertainty? How?
 - Describe the most important assumptions to achieve a fruitful social learning process.
9. Connecting to Policy
 - Where is the stakeholder process situated in the formal policy making process?
 - How are you to guarantee that the results of the stakeholder process are substantively used to guide final decision-making?
10. Supporting adaptive management
 - What parts of the adaptive management process are different parts of the stakeholder process supporting?
 - What aspects of adaptive governance are different parts of the stakeholder process supporting?