

# Script for participatory system mapping workshop (3-4 hours)

## Welcome and introduction

- Introduce the challenge of the WEF<sub>e</sub> nexus
- Explain the purpose of the workshop and a brief introduction to the agenda and the exercises.

## Visioning exercise

### How should the vision exercise look like?

A vision exercise should be challenging by pushing beyond the status quo while remaining practical and realistic, desirable to generate enthusiasm among the group for the ideas presented, and positive by framing proposals in affirmative and constructive language.

The visions are described in a vision statement, summarizing the long-term goals and aspirations of a community/organizations.

A suitable vision statement should:

- **Be written in the present**, not future tense. It must describe how stakeholders live/work/ manage/ operate in the focal area, as if they have already reached the vision.
- **Describe an outcome**, the best outcome stakeholders can imagine, without providing quantitative targets or measures of success.
- **Be concise** – 2-3 short sentences should be enough – and start with a powerful phrase that summarizes the main aspirations of the group.

## Exercise steps:

### **1. Explain the concept of visioning and ask participants to imagine a future in 10 years from now.**

The goal is to move beyond current problems and focus on what an ideal, sustainable future could look like (a vision statement may be written, usually in the present tense, conveying the future reality envisioned by participants).

### **2. Divide participants into groups of 4-6 people. Ask some questions to support participants' imagination. Questions always relate to the situation in 10 years:**

- **Water:** how is water distributed and used?
- **Energy:** what sources of energy do we use?
- **Agriculture/Production:** what type/model of agriculture/animal production do we have?
- **Biodiversity and Landscapes:** what is the status of landscapes and biodiversity?
- **Climate Adaptation:** how do we secure climate adaptation and resilience?
- **Technology:** what is the role of technologies?
- **Society:** how does the society change? How are the communities engaged in decisions about water, energy, food, and ecosystem management?

**Encourage participants to think creatively and positively, emphasizing that no idea is wrong. Record their suggestions on a flipchart, ensuring that all ideas are captured.**

### 3. Share the group vision and discussion

Each group should choose a representative who will briefly share the group's vision and present the key ideas.

## Systems thinking – Using Causal Loop Diagrams to understand the WEF<sub>e</sub> nexus challenges

Participants should collaborate to identify and frame key issues and develop a Causal Loop Diagram to map system interactions.

**Divide participants into groups of 4-6 people** distributed by Water, Energy, Food and Ecosystems (each table as a WEF<sub>e</sub> component) **and ask them to undertake the following activities.**

Provide a flipchart, post-it and pens to each group so that they can freely organize their ideas and design the CLD.

- **Identify Variables:** Participants shall start by listing all relevant variables that influence the system under study. These variables should capture essential aspects of the systems' dynamics, including both problem variables and causal factors. The variables should not be ambiguous, and have clear directionality, but not imply a behaviour (e.g. NOT "Increase of GHG emissions" BUT "GHG emissions"). The links between variables should be easy to trace in the model.
- **Define Relationships:** Participants are asked to establish the relationships between the variables, and to determine which variables influence others and how they do so. This involves identifying direct and indirect causal connections.
- **Indicate Causal Links:** Participants shall use arrows to connect variables, showing the direction of influence. An arrow from Variable A to Variable B indicates that A affects B.

- **Label Relationships:** Participants shall annotate the arrows with symbols indicating the type of relationship:
  1. A “+” (positive) sign means that an increase in Variable A leads to an increase in Variable B (or a decrease in A leads to a decrease in B).
  2. A “-” (negative) sign indicates that an increase in Variable A leads to a decrease in Variable B (or vice versa).
- **Create feedback loops:** A feedback loop in a causal loop diagram (CLD) represents the circular cause-and-effect relationships between variables in a system. (See Figure 31 for an example of a feedback loop and its narrative.)
  1. Reinforcing Loop (Positive Feedback Loop- R): Amplifies change, leading to exponential growth or decline. Represented by a loop with an even number of negative links (or none).
  2. Balancing Loop (Negative Feedback Loop- B): Stabilizes the system by counteracting changes and promoting equilibrium. Represented by a loop with an odd number of negative links.

### **Presentation of each CLD by each group to the plenary**

Each group explains the connections and feedback loops they identified, allowing everyone to see how different components of the WEF nexus interact, constructing a narrative of this system.

## **4. Closing of the workshop**