How to use

Scenario Planning

for Environmental Management Group Programming

OASIS Training-of-Trainers Online-Course,
25 July 2024, Michael Hauser

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What is a scenario?

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Let's define scenarios

- Scenarios are images of envisioned possible futures (i.e. many).
- But they are no predictive models but explorations of what could happen under different conditions such as changing weather, clan relations, political decisions.
- Scenarios focus on key drivers of change, such as new technologies, agronomic practices, market trends, social dynamics, and environmental factors.
- Best-case, worst-case, and most likely outcomes
- Scenarios are presented as stories that describe how different factors and events might unfold.

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Applications

Business Strategy

Companies use scenario planning to prepare for market changes, competitive dynamics, technological disruptions, and new policies.

Public Policy

Governments and public agencies employ scenario planning for policy development and to anticipate societal shifts.

Crisis Management

Scenario planning improves readiness for unexpected changes and crises, helping organizations prepare for and respond to emergencies.

Environmental Planning

Scenario planning is used to forecast the impacts of climate change and plan for adaptation, such as in coastal areas and shifting cropping seasons.

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Change from low intensity land use to higher intensity land use, for example in arable land (a & b) and in grassland (c & d).

Loos, Jacqueline & Abson, David & Dorresteijn, Ine & Hanspach, Jan & Hartel, Tibor & Horcea-Milcu, Ioana & Mikulcak, Friederike & Fischer, Joern. (2016). Sustainable Landscapes in Central Romania: A social-ecological study on the future of Southern Transylvania.

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Approaches

Forecasting projects current trends into the future to predict what might happen (e.g. with wetlands, forests, rangelands, etc). This approach relies heavily on historical data and trend analysis.

Backcasting starts with defining a desired future outcome and then works backward to identify the steps needed to reach that future from the present.

We are combining forecasting and backcasting to support EMGs in planning

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How scenario planning empowers Environmental Management Groups

1 **Set Informed Goals**

Scenario planning allows environmental groups to explore different possibilities and opportunities, helping them set more informed and achievable goals for conservation and restoration efforts, especially in uncertain environments.

2 **Ease Planning and Decision-Making**

Scenario planning helps organizations anticipate challenges and prepare for changes ahead, easing the planning and decision-making process for landscape restoration projects.

3 **Build Resilience**

This preparedness also helps communities get ready for shifts driven by climate, policy, or other external factors, building resilience in environmental restoration efforts.

4 **Support Peace-building**

Ultimately, scenario planning provides a shared framework for understanding environmental risks and cooperating on solutions, supporting peace-building initiatives.

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Example: Kerio-Valley

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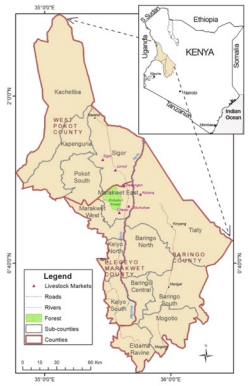

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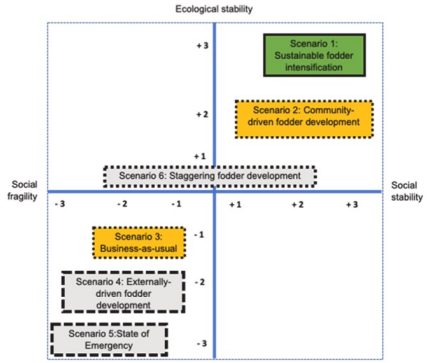

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Participants envision a community-driven approach to fodder production and utilization

"Land will be reallocated and communally controlled for both individual and group fodder growing. **Community breeding programs** will promote the adoption of improved livestock breeds. **Grasslands will be better organized** with enhanced pasture species. With large-scale fodder production, **centralized storage facilities** managed by the communities will be necessary. Supportive government policies and strategies will aid in achieving fodder security. **Reducing herd sizes** by selling local breeds to purchase improved cattle breeds, like Sahiwal, will assist in this intensification effort."

Action planning

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journal homepage: www.elsevier.com/locate/futures

Scenarios of sustainable fodder production in the conflict-affected Kerio Valley of Kenya

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Determinants of quality-based payments for livestock in conflict-prone areas in Kenya

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Facilitating scenarios

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Step 1: Prepare

1. Ask the EMG to outline the goals of the scenario planning. What specific environmental issues are being addressed in the scenarios? Forests, grazing areas, watersheds, etc.
2. Map actors to ensure a diverse group of participants (EMG members, community members, environmental experts, peace building, private sector…) to take part in the exercise. Why? Diversity ensures a wide range of perspectives, ensures more robust scenarios, aid the planning.
3. In preparation for the driver analysis, collect relevant data on current environmental conditions, trends, and uncertainties. This might include scientific research, environmental reports, baseline data (use LDSF where available).
4. Arrange the scenario planning venue, materials (flip charts, markers, sticky notes), allocate at least half a day for the scenario planning session.

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Step 2. Identify drivers

1. At the beginning of the scenario planning meeting, begin with a welcome and an overview of the scenario planning. Let the EMG core team members explain the objectives and the importance of scenario planning in environmental management (you have to prepare them for this and all subsequent steps).
2. Within the demarcated restoration area, let participants develop their vision of the area at a certain point in time in future (e.g. 5 years ahead)
3. Determine the critical driving forces that could impact the future vision. These may include clan dynamics, weather patterns, aid agencies, etc– use your data from the preparation and the wisdom of the scenario planning participants.
4. Group the drivers into categories (e.g., social, technological, environmental, economic, political) and prioritize them based on their impact and uncertainty (i.e. low-high impact; low-high uncertainty).

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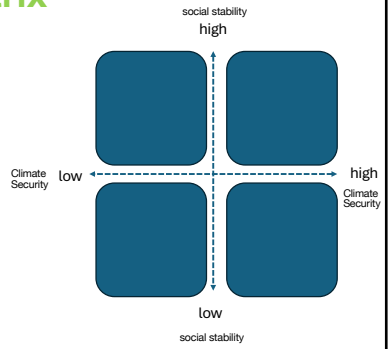
Step 3. Scenario matrix

- Select two critical categories (e.g. social stability; climate security) to form the basis of a scenario matrix. These categories should be high-impact and high-uncertainty factors.
- Create a Scenario matrix with four quadrants, see left right side of the slide;
- Ask participants to brainstorm how their vision will play out in each of the four quadrants,



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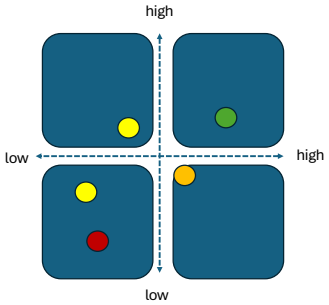
Step 4. Develop scenarios

- Agree on 3-5 scenarios by combining different outcomes of the two critical uncertainties. For each scenario, create a narrative that describes the future state of the environment and the implications for environmental management.
- Assess the implications of each scenario for the EMG's strategy, operations to achieve the vision. This involves exploring how the vision might perform in each of the quadrants.
- Agree on the best-case, worse-case and business-as usual scenario, and assess how probable each of those is (very, average, low probability).



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Step 5. Develop workplans

1. Focus on most probable scenario(s) to be supported by the EMGs
2. Develop restoration strategies for the respective scenario(s) (this could include an adapted vision), define key performance indicators to measure the achievements towards the vision. This includes identifying early warning signals that indicate which scenario might be emerging.
3. Develop workplans and implement the chosen strategies and continuously monitor the environment for changes that could influence the scenarios, monitor using the Regreening App.

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Facilitation tips

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Facilitator skills

- Ensure all voices are heard
- Remain neutral and avoid influencing
- Keep the group focused on the objectives and the process
- Aim for consensus in decision-making

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