SESSIONS 3 & 4 :

Designing the Future of Mountains: MOVING approaches to Foresight Exercises

by Dominique Barjolle

MOVING has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No. 862739. The content of this website does not reflect the official opinion of the European Union. Responsibility for the information and views expressed therein lies entirely with the author(s).

Designing the Future of Mountains: MOVING Approaches to Foresight Exercises

The theory of foresight, often referred to in the context of future studies or futurology, revolves around the systematic exploration of possible futures. It's not so much a single theory as it is a framework or approach used to anticipate and plan for future scenarios. Here are key aspects of the theory of foresight:

- **Anticipation**: Foresight involves anticipating future developments and changes in various domains such as technology, society, economy, and the environment. This is done through the analysis of trends, drivers of change, and emerging issues.
- **Scenario Planning**: One of the primary tools in foresight is scenario planning. Scenarios are plausible, alternative narratives about how the future might unfold under different conditions. By constructing and analyzing different scenarios, individuals and organizations can prepare for a range of possible futures.
- **Systems Thinking**: Foresight often employs systems thinking, which involves understanding the complex interactions and interdependencies among different factors that shape the future. This helps in identifying leverage points and understanding the consequences of decisions and actions.
- **Participatory Approach**: Foresight processes often involve stakeholders and experts from diverse fields to contribute their insights and perspectives. This participatory approach helps in generating a more comprehensive understanding of future possibilities and ensures that a broader range of potential outcomes are considered.
- **Strategic Decision-Making**: The ultimate goal of foresight is to inform strategic decision-making in the present. By exploring multiple futures, decision-makers can better prepare for uncertainty, mitigate risks, and identify opportunities that may arise.
- **Ethical and Sustainable Futures**: Increasingly, foresight also includes considerations of ethics, sustainability, and social responsibility. It seeks not only to predict future developments but also to shape desirable futures that are equitable, sustainable, and beneficial for society as a whole.

The participatory process theory of foresight guides MOVING in developing scenarios through inclusive discussions among stakeholders. This approach aims to engage all relevant parties in considering various aspects of resilience management. MOVING's primary objective is to prepare for a comprehensive sustainable local development project capable of adapting to future changes while leveraging the territory's existing capacities and resources.

In practice, MOVING employs foresight theory by using participatory methods to foster resilience-enhancing strategies. This involves creating scenarios—descriptions of possible futures—to stimulate strategic thinking. The process includes a transdisciplinary approach involving motivated local stakeholders, external experts, and insights from other regions.

Key steps in the foresight exercise include:

- Context analysis by experts.
- Developing baseline scenarios that illustrate current trajectories and potential improvements.

- Conducting participatory workshops to engage stakeholders in discussing these baseline scenarios.
- Identifying key variables that influence outcomes and discussing with stakeholders what defines success or difficulty.
- Classifying these key variables to identify long-term forces that are critical for resilience but beyond immediate local control.

The process aims to prioritize these long-term forces collaboratively with local stakeholders, considering how they can be influenced by national policies, international agreements like the Paris Climate Agreement, and local initiatives. This approach builds resilience against future challenges, even those outside direct local influence.

Strategic Options for Mountain Regions

The importance of integrating strategic options into regional roadmaps for mountainous areas was emphasized by Dominique Barjolle from the University of Lausanne. A methodical approach began with identifying key variables and their interconnections, utilizing participatory methods involving the Foresight Group.

Long-term forces and the local capacity to adapt and change vary significantly among foresight groups and mountain communities. While some groups harbor deep pessimism towards governance and authorities, perceiving only constraints and a bleak future, others within these communities are proactive and assertive. These proactive members seek autonomy and influence over their own destinies, moving beyond victimhood to shape long-term forces in their favor. Dominique emphasizes that addressing these diverse perspectives requires tailored policy frameworks rather than a one-size-fits-all approach, enabling strategic options to be developed and implemented effectively across Europe's Mountain regions.

Key Long-Term Forces (LTF) and Scenario Building

Two critical long-term forces were highlighted: Market Dynamics and Climate Change. These forces shaped four distinct scenarios exploring potential futures for mountain regions:

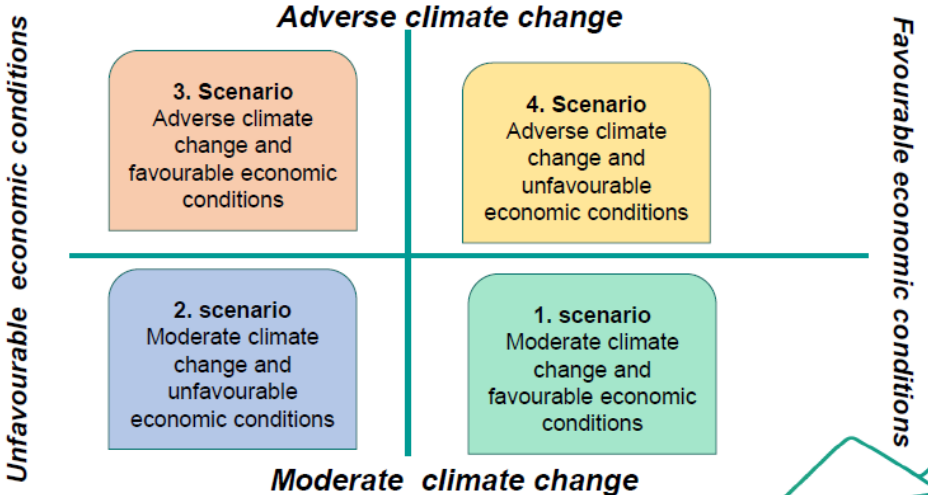

Figure 1: The four scenarios of Market Dynamics and Climate Change

Market Dynamics Scenario

This scenario focused on the economic challenges specific to mountainous regions. It highlighted the limited agronomic potential due to geographical constraints such as altitude and terrain. High production costs were noted, stemming from factors like climate variability, which hinder mechanization and automation in agriculture. The scenario emphasized the importance of local heritage, identity, and cultural values as competitive advantages. It discussed the risks associated with hyper-specialization in agriculture, potentially leading to reduced diversity in food production. Strategies included promoting local products with geographical indications (PDO) to preserve quality and reputation and fostering community involvement in diversifying agricultural products to strengthen local economies.

Climate Change Scenario

Addressing the environmental impacts on mountain regions, this scenario outlined challenges related to infrastructure needs and disaster preparedness. Mountains are particularly vulnerable to climate change effects such as increased frequency of natural disasters like landslides, avalanches, and forest fires due to rugged terrain and varying precipitation patterns. The scenario highlighted sectors like agriculture, forestry, tourism, and hydroelectric power as most affected. Strategies included adapting agricultural and forestry practices to enhance resilience, developing robust disaster preparedness plans, and investing in sustainable tourism practices that minimize environmental impact.

Demographic Trends Scenario

This scenario focused on demographic shifts and socio-economic consequences in mountain areas. It discussed trends of population decline, leading to concerns over desertification, abandonment of rural services, and social amenities. While some regions manage to maintain demographic stability due to tourism influx, others face challenges in sustaining local communities. Strategies included supporting initiatives to attract and retain populations through improved infrastructure, healthcare, education, and economic opportunities tailored to mountainous living conditions.

Tourism Dynamics Scenario

This scenario examined the role of tourism in shaping mountain identities and its impact on natural resources. It differentiated between types of tourism dynamics such as luxury, mass, soft, and sustainable tourism. Climate change was identified as a major threat to winter tourism, while technological advancements and social media influenced tourism patterns throughout the year. Strategies included promoting sustainable tourism practices that conserve landscapes, biodiversity, and cultural heritage while ensuring economic benefits for local communities. Emphasis was placed on community-driven tourism initiatives that balance seasonal tourism demands with long-term environmental and social sustainability.

Policy Recommendations

Moving from strategic options to actionable policies, the need for tailored approaches acknowledging the diverse needs of Europe's mountainous regions was stressed:

- **Investments:** Develop investment plans aligned with regional planning, securing European funding for mountain areas and involving local communities and authorities. This strategy ensures sustainable development through dedicated funding.

- **LEADER & SMART-Village:** Enhance support for LEADER and SMART-Village tools to empower local communities and modernize mountain economies, integrated into the Common Agricultural Policy (CAP) to boost local agency and resilience.
- **Sustainable Terroirs:** Strengthen local competencies in product quality and regulatory frameworks, supporting European standards and protective schemes like PDO and PGI. Increase funding to support local farms and artisans within high-quality value chains.
- **Ecosystem Resilience:** Promote adaptive practices in agriculture, forestry, and tourism to enhance ecosystem resilience and biodiversity conservation, developed in consultation with local stakeholders.
- **Ecosystem Services:** Establish remuneration schemes for ecosystem services in consultation with local communities and environmental organizations, ensuring simplicity and community involvement.
- **Gentle Tourism:** Promote sustainable tourism through targeted financial support and community-driven plans, encouraging year-round opportunities supported by CAP's rural development programs.
- **Foresight Tools:** Develop territorial foresight tools for long-term strategic planning and resilience, providing methodological and financial support.
- **Simplify Administration:** Streamline policy tools and support mechanisms for better accessibility and effectiveness in mountain communities, with straightforward information and reduced complexities.
- **Community Agency:** Strengthen community capacity for collective action and decision-making to resolve resource-use conflicts and uphold collective rules.
- **ERASMUS Altitude:** Propose an educational initiative to foster knowledge exchange among mountain communities across Europe, both physically and virtually, to deepen expertise and collaboration.