Workshop Report: Climate Fresk and Local Territory Identification

Location: Linnovate center, Livno, Bosna i Hercegovina Date: 19.11.2024 Facilitators: Nevena Savić, Ružica Janjić Participants: 12 participants

| CLIMA 19 NOV 2024 | |
|---|--------------------------------|
| 10:00-10:30 | Introduction |
| 10:30-12:00 | Climate Fresk |
| 12:00-12:30 | Break |
| 12:30-13:30 | Conclusions & Solutions |
| 13:30-14:30 | Lunch |
| 14:30-15:00 | Identification of the teritory |
| 15:00-15:30 | Break |
| 15:30-16:30 | Making connections |
| AIDA Action, Mediation, Association internationale pour le développ | |

Workshop Context and Objectives

This workshop combined the interactive **Climate Fresk** activity in the first part of the day with **local territory identification** in the afternoon to engage participants in understanding the complex connections between human activities and climate change.

The sessions aimed to:

- Build awareness of the global and local impact of human activities on climate systems.
- Facilitate a participatory diagnosis of local territories to identify strengths, weaknesses, and opportunities for sustainability.
- Encourage participants to propose actionable steps for improving resilience and environmental stewardship in their communities.

Our initial contact was the office of the prime minister of Canton 10. They were our hosts and bridge to reach the local representatives of the institutions and associations. The target audience included local stakeholders such as civil society representatives and public officials, creating a diverse group with varied perspectives on climate-related challenges. The workshop was supported by the Linnovate Center, the Office of the Prime Minister of Canton 10, and AIDA association. Representatives came from the Ministry of Construction, Renewal, Urban Planning, and Environmental Protection; the Ministry of Economy; the Ministry of Water Management, Agriculture, and Forestry; as well as local organizations like the Youth Association Livno and the Public Forestry Enterprise of Canton 10. Additionally, officials from the City of Livno, including departments for the economy and urban planning, and the representative of the Municipality of Glamoč also attended.



Solutions and challenges session

After the session of Climate Fresk, participants had a session named "Solution and Challenges" where they went through three levels of solutions marking them on the level from easy implementation towards harder implementation and smaller and bigger impact.

- On the **personal level** participants shared what they could implement easier was to use reusable bags, use less energy in the houses, less usage of cars, more sustainable transport, use tools such as permaculture to raise awareness, and use food rationally. What was more challenging for them was to walk more, become a vegetarian, since Livno area is culturally connected to meet consumption.
- Local level means solutions which can be implemented with local community, family, co-workers, friends. Participants shared that they could start a local solar power plant, "no car" weekends, start local ecological labels, separate waste and make compost. What was more challenging to implement is the influence they have on the current educational system where they think the root of solutions is.
- On the **institutional** level what can have an impact was to use less paper in the offices, start the process of the digitalisation of the institutions, install collectors and systems for treatment waste waters from the industry, have recycle islands for waste separation, reforestation (which is already implemented on the high level), advocate for more protected natural areas, and advocate for laws on energy efficiency.

• Unexpected Enjoyment and Interactivity Many participants admitted they hadn't anticipated such an interactive and engaging session. They appreciated the balance between serious topics and a supportive, enjoyable environment, which helped them feel comfortable contributing to discussions.

Local Context - Afternoon session

In the afternoon session, participants were introduced to statistical and contextual data about Canton 10 with their inputs.

Social/economical context

Socially, statistics indicate a continuous decline in population, driven by migration from rural to urban areas and from urban centers to other countries. Villages are typically located near karst poljes, with major urban hubs including Livno, Tomislavgrad, Kupres, and Glamoč. Economically, the region is traditionally dominated by livestock farming and the production of Livanjski sir and other dairy products. However, these industries are in decline. Other smaller industries include tourism, which is developing, along with woodworking, stone processing, and food production, rooted in the area's heritage.

• Geography

Geographically, the landscape is characterized by the Dinaric Alps, ranging from 700 to 2,200 meters in altitude, interspersed with karst landscapes, Europe's largest karst fields, forests, meadows, hills, and plateaus. Most of the land is used for livestock grazing and grain cultivation.

• Energy

The region's energy is derived 55% from the coal industry and 45% from hydropower plants, with the Buško Blato reservoir being a significant source, though much of this energy is exported to Croatia and later re-imported. Wind energy is represented by

the Mesihovina wind power plant, built despite local opposition, which has significantly impacted the community. Solar energy is limited to pilot projects in private and institutional settings, while biomass is widely used for heating in households and public institutions. A biogas facility on a large farm serves as a pilot for waste-to-energy conversion. In favorable years, the region exports 20–30% of its energy, mostly to Croatia, Montenegro, and Serbia, while in less favorable years, it imports 30–40% of its energy, primarily from Croatia. There is significant potential for renewable energy expansion in wind, solar, and biomass, though it is crucial to consider the needs of local communities when designing strategies and projects.

• Climate

The climate in Canton 10 is predominantly sub-mountainous and mountainous, with Mediterranean influences. Summers can be extreme, with temperatures reaching 35°C in Livno and 43.1°C in Mostar, while winters often drop to -20°C. Strong winds from the Adriatic coast can reach speeds of 100 km/h. Summer storms cause floods, while droughts impact agriculture and natural resources. Although the total annual precipitation remains steady, its distribution has shifted, leading to longer droughts and more intense rainfall. Snowfall has also decreased in recent years, affecting water reserves.

Data suggests these climate extremes are worsening, emphasizing the need for adaptive strategies and legislation that address these challenges.

Then we started the identification of human activities in the local area and how it affects resource management. Unfortunately, most of the participants needed to leave before the end of this session, so we didn't have time to create links between human activities and resources.



Canton 10 demonstrates considerable potential for aligning human activities with sustainable resource management, fostering economic resilience and environmental preservation. The revitalization of traditional agricultural practices, particularly the production of **Livanjski sir**, offers a pathway to strengthen the rural economy while maintaining **soil fertility** and **biodiversity**. By implementing strategic pasture management and integrating reforestation efforts that consider the needs of local farmers, the region can mitigate soil degradation and support the local economy. Supporting small-scale livestock farming and promoting the sustainable use of natural resources will help maintain the delicate balance between agriculture and environmental health, ensuring long-term viability for rural livelihoods.

In parallel, improving urban infrastructure and fostering **eco-conscious tourism** are critical steps for sustainable development. Investing in **wastewater treatment**, public transportation, and waste management systems will alleviate the strain on growing urban centers, enhance water quality, and reduce **mortality rates** associated with environmental pollution. Additionally, promoting **responsible tourism** that respects natural habitats, such as **Livanjsko polje** and its wild horse population, can drive economic growth while preserving ecological integrity. These coordinated efforts will support the region's socio-economic development, protect natural resources, and elevate the overall **quality of life** for the population of Canton 10.



Key Moments

The workshop's standout moments reflected both the participants' engagement and the effectiveness of the methods employed:

• Realization of Human Impact on Climate Change

During the final stage of the Climate Fresk activity, participants expressed surprise and concern upon visualizing the cumulative effects of human actions on global warming. This "aha" moment underscored the urgency for proactive measures.

- Unexpected Enjoyment and Interactivity Many participants admitted they hadn't anticipated such an interactive and engaging session. They appreciated the balance between serious topics and a supportive, enjoyable environment, which helped them feel comfortable contributing to discussions.
- Identifying Local Challenges and Opportunities In the local territory identification session, participants mapped out critical factors affecting their community's sustainability, sparking in-depth discussions on actionable solutions in the real life situation and different approaches we could take.

Participant Reactions (Verbatims)

Here are a few direct quotes that capture participant experiences:

• "The Climate Fresk helped me connect the dots—I had no idea the problem was this interconnected."

• "I expected this to be another lecture-style event, but the activities made me feel actively involved in the solutions."



Methodology Commentary

The workshop methodology combined structured activities with open dialogue, fostering both learning and collaboration.

Strengths

- Interactive Approach: Activities like the Climate Fresk engaged participants in collaborative problem-solving. The tactile and visual elements made abstract concepts tangible.
- **Diverse Participants:** Bringing together representatives from different sectors enriched the discussions and provided a variety of perspectives on local issues.
- Local Relevance: By tying global climate challenges to local contexts, the session ensured participants felt the content was applicable and actionable.

Areas for Enhancement

- While most participants found the methodology engaging, a few noted the need for more time in the territory mapping phase to explore solutions in greater detail.
- Including additional visual aids like maps, pictures, videos and real-life local examples could further enhance the connection between global issues and local realities. Looking for solutions globally which are already implemented.

Dissemination

The workshop's key messages were disseminated effectively through:

- **Peer Sharing:** Participants expressed interest in sharing insights with colleagues and community members, suggesting the potential for a ripple effect within their networks.
- **Institutional Integration:** Some attendees planned to integrate workshop outcomes into their professional contexts, such as education or policy-making, amplifying the workshop's impact.
- **Our communication channels:** We created a post about the workshop and shared it through our social media, and created an article on our website with more information.



Conclusion

This workshop successfully demonstrated how engaging activities like the Climate Fresk can deepen understanding of climate issues, while local territory identification fosters community-specific solutions. Participants left with a heightened awareness of their roles in addressing climate change and a shared commitment to taking action in their communities.