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Collaborative Governance in Fierbinți-Târg, Romania

Capacity Building Through Data-Driven Collaboration and Strategic Planning

Fierbinți-Târg is adapting to climate change through collaborative governance and cutting-edge data. By partnering with neighbouring municipalities, this innovative community is transforming local insights into actionable strategies with the launch of the Integrated Geographic Information System. Together, they are setting a new standard for climate resilience in the region.

Key Learnings

- **Collaborative Governance:** Emphasising the importance of working together with neighbouring municipalities and key stakeholders to address climate challenges.
- **Data-Driven Decision Making:** Highlighting the role of data in understanding environmental problems and informing climate adaptation strategies.
- **Capacity Building:** Focusing on the increased local capacity and resources developed through these initiatives.
- **Strategic Planning:** Underlining the importance of creating structured and targeted action plans to manage climate risks effectively.

About the region

Fierbinți-Târg is a small town in Romania, serving as an administrative hub in the Ilfov County with a population of around 4,500 inhabitants. It is situated in the southern part of Romania, not far from the capital, Bucharest, and lies within the Wallachian Plain. It faces significant environmental challenges due to complex territorial governance, political issues, and limited resources, hindering its efforts toward environmental and climate transition.

Climate Hazards

Extreme Temperatures, Droughts, Water Scarcity, Storms and Flooding

Sector

Disaster Risk Reduction, ICT

Key system

Water Management, Critical Infrastructure



Climate Threats

Fierbinți-Târg faces significant climate-related challenges exacerbated by the complex interaction between agricultural practices, animal farming, urbanisation, and poor water management. The local water availability is at risk due to unregulated extraction from artesian wells and increasing drought conditions brought on by climate change. Nutrient accumulation in water bodies, partly due to agricultural run-off and neglect of essential flood control infrastructure and water management, threatens the area's natural and artificial water systems, including rivers and lakes. Additionally, the town suffers from urban heat islands and inadequate building insulation, further stressing the environment and energy resources. Addressing these threats requires adaptive strategies. However, the municipality lacks the necessary data, authority, and resources to mitigate the effects and build resilience against the future climate.

Joint development of climate change adaptation action plans

The Municipality of Fierbinți-Târg lacked the necessary environmental data to create a clear framework for evaluating the climate adaptation measures suggested in the Climate Adaptation Act. In response, the Mayor and Deputy Mayor committed to developing a more informed decision-making process. To support this effort, climate adaptation experts organised two site visits to promote collaboration with neighbouring municipalities, facilitating knowledge exchange and providing valuable insights to help Fierbinți-Târg craft an effective adaptation strategy.

The first visit aimed to meet with local technicians and decision-makers to address territorial issues and find practical solutions. It also aimed to pave the way for a joint action plan for technical assistance and

capacity building among local actors to create a collaborative governance structure with all key stakeholders.



Figure 1: Stakeholders meeting in the Municipality of Fierbinti-Târg. Image Credit: Pietro Elisei, Ion Dogenau, Policy Support Facility Experts, Covenant of Mayors Europe.

During the second site visit, the Fierbinti-Târg area and its surrounding municipalities established an inter-municipal and multi-actor association. The association fosters cooperation, raises the members' collective voice, and attracts attention and support. Members can access funding sources beyond the local and national levels and acquire knowledge to improve water management. This group includes key stakeholders such as neighbouring municipalities around Lake Dridu, the Regional Water Company, local high school students, the National River Management Authority, and NGOs.

Additionally, the municipal councils of the five participating municipalities – Dridu, Maia, Moldoveni, Movilița, and Fierbinti-Târg – have developed a comprehensive governance structure, based on a mechanism that allows common decisions on adaptation actions. This structure is designed to be more inclusive and collaborative, with several key elements that set it apart:

- **Multi-Level Coordination:** The governance structure integrates local and regional levels of government, ensuring that climate adaptation measures are coherent across different administrative layers. This multi-level approach allows for better alignment with broader regional and EU policies.
- **Stakeholder Association:** A central feature of this governance model is a stakeholder association that includes representatives from the public, private, and civil sectors.
- **Bottom-Up Planning:** Local communities are actively involved in identifying climate risks and developing adaptation strategies tailored to their specific needs and contexts.
- **Facilitation of Access to EU Funds:** The structure is specifically designed to enhance municipalities' access to EU funds. The association helps navigate the often complex application processes by pooling resources and expertise.

Key objectives of this governance structure include:

- Signing a Memorandum of Cooperation
- Designing and implementing two Local Action Plans: the “Flood Risk Management Plan” and the “Drought and Water Conservation Plan.”

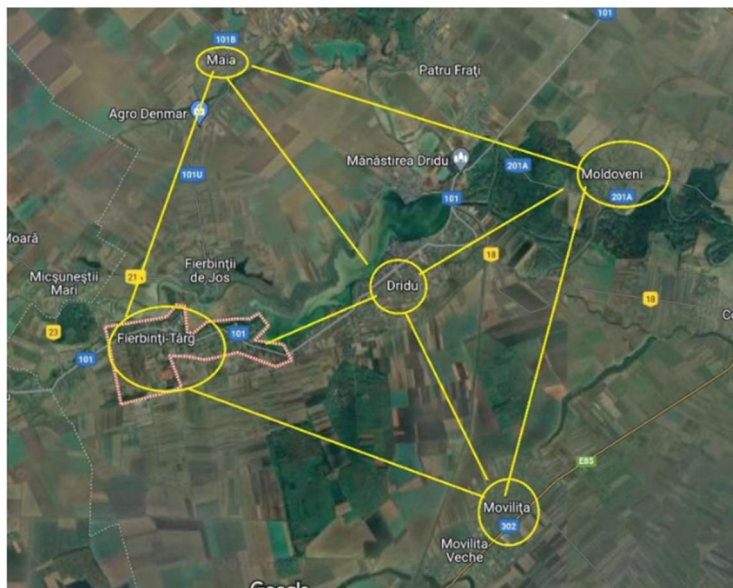


Figure 2: Map of the functional area initially consisting of the 5 neighbouring municipalities. Image Credit: Pietro Elisei, Ion Dogenau, Policy Support Facility Experts, Covenant of Mayors Europe.

The two local action plans involve:

- A Capacity Building Plan** through data-driven collaboration: This plan focuses on enhancing local capacity by using data to inform and drive collaboration among various stakeholders, such as the municipality, the Regional Water Company, the National River Management Authority, local high school students, and NGOs. It aims to build the expertise and resources needed to analyse and effectively address environmental challenges.
- A Strategic Plan:** This plan involves creating structured and targeted strategies to manage climate risks. It includes the development of comprehensive governance structures and the integration of local and regional levels of government to ensure coherent climate adaptation measures.

Integrated Geographic Information System for Climate Adaptation

Due to the lack of environmental data, the Fierbinți-Târg municipality started with the Integrated Geographic Information System (I-GIS) building process, a specialised tool designed to systematise geographic and environmental data. The data collection process involved the following steps:

- Data Integration:** The municipality integrated data on social and environmental values, some of which were based on expert judgment, with climate change hazards such as drought, wind erosion, water erosion, and water runoff. This comprehensive approach ensured that all relevant factors were considered.
- Indicator Revision and Weighting:** Together with experts, the municipality revised each indicator and its associated metrics and scores. They also defined weights, which represent the relative importance of one indicator to another. This step was crucial for creating a balanced and accurate assessment.

3. **Quantitative Evaluation:** The approach was then imported into an Excel spreadsheet, allowing for systematic and transparent comparison and prioritisation of adaptation initiatives. This tool enabled them to quantitatively evaluate, compare, and rank different strategies.
4. **Stakeholder Input:** To refine the approach and weighing scheme, an expert convened a roundtable with eight council members from Fierbinți-Târg municipality. Their input led to adjustments in the weighting system, ensuring a final versatile and representative approach to local priorities.

With this data, the team built the governance framework needed to assess the new climate adaptation measures. Accurate data in Fierbinți-Târg's climate adaptation efforts are important for the following, multifaceted reasons:

- **Digitalisation and data collection:** By starting the digitalisation process and collecting regional data on geographical features, water resources, and risks, Fierbinți-Târg and its neighbouring municipalities gained a comprehensive understanding of their environment. This data serves as a basis for informed decision-making and strategic planning.
- **Collaboration with other actors:** The data enables collaboration with key stakeholders, such as the Regional Water Company. This partnership allows coordinated water resource management and addresses environmental challenges.
- **Understanding environmental challenges:** Detailed data allows municipalities to gain a clearer understanding of their specific environmental challenges. This insight is crucial for identifying effective solutions and linking them to local and EU tools and resources.
- **Interlinked problems and cooperative solutions:** The data highlights how environmental issues are interconnected across municipalities. Recognising these interlinkages encourages cooperation, as the municipalities realise that working together is essential for addressing shared challenges and achieving climate resilience.

By utilising the Integrated Geographic Information System tool, Fierbinți-Târg addressed the immediate data deficiency and established a structured approach to manage and analyse environmental information. This enabled them to accurately assess climate risks, make informed decisions, and create targeted adaptation strategies.

Direct benefits for the Fierbinți-Târg municipality

The Fierbinți-Târg municipality has gained several direct benefits from its climate action initiatives. These actions have led to a better understanding of environmental problems and an increased ability to link them to local and EU tools. By digitalising and collecting regional data, such as geographical information, water resources, and risk assessments, the municipality has built a comprehensive database clarifying environmental issues. Increased local capacity and establishing a governance body ensure systematic use of this data. Collaboration with key actors, like the Regional Water Company, enhances the ability to connect problems with appropriate tools and resources. Additionally, these actions have strengthened partnerships with neighbouring municipalities, promoting a more coordinated approach to regional climate adaptation.

Next steps

The identified risks in Fierbinți-Târg are significant, including political, legal, and budgetary constraints, limited staff capacity, insufficient local expertise, weak inter-institutional dialogue, and a lack of effective governance tools for collaboration. To address these issues, there is a pressing need to organise and digitise the available tools and knowledge to support local decision-making. Currently, local studies and critical documents are fragmented and uncoordinated, making accessing and integrating crucial environmental data difficult. Systematisation and digitisation are essential for enabling Fierbinți-Târg to effectively manage and utilise key environmental data to achieve climate change adaptation successfully.

Summary

Despite being situated in an economically and politically marginalised region, the municipality of Fierbinți-Târg has leveraged effective collaboration with neighbouring municipalities to strengthen its platform for advocacy, unlock new funding opportunities, and gain access to innovative water management techniques. A key element of this progress was the rapid identification and integration of local data through the Integrated Geographic Information System (I-GIS) building process. This integrated geographic information system enabled Fierbinți-Târg to establish a robust governance framework, crucial for assessing and implementing effective climate adaptation measures.

Further information

- Covenant of Majors for Climate & Energy Europe. The governance structure of the climate adaptation act in Fierbinti-Targ, Romania. Available at: https://eu-mayors.ec.europa.eu/sites/default/files/2024-01/Fierbinti-Targ%2C%20Romania_PSF%20Case%20Study.pdf

Contact

Covenant of Mayors Europe Office.

Email: info@eumayors.eu



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