

Shelter

Sustainable Historic Environments
hoListic reconstruction through
Technological Enhancement &
community-based Resilience

**Extract of D6.3 Adaptive Governance
Schemes Mapping**

Seferihisar Organigraphs

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Glossary

Acronym	Full name
AG	Adaptive Governance
AGSF	Adaptive Governance Scheme Framework
CA	Consortium Agreement
CCA	Climate Change Adaptation
CH	Cultural Heritage
CHM	Cultural Heritage Management
D	Deliverable
DoA	Direction of Action
DRR	Disaster Risk Reduction
DRM	Disaster Risk Management
DoA	Description of Action
EC	European Commission
ICCOMS	The International Council on Monuments and Sites
ICCROM	The International Centre for the Study of the Preservation and Restoration of Cultural Property
IUCN	The International Union for Conservation of Nature
IoG	Institute of Governance
SFDRR	The Sendai Framework for Disaster Risk Reduction
T	Task
OL	Open Lab
OLC	Open Lab Co-ordinator
UN	United Nations
UNESCO	The United Nations Educational, Scientific and Cultural Organization
WHS	World Heritage Sites
WHO	World Health Organisation
WP	Work Package

1 Executive summary

Across academia, policy and practice, the perceptions and understanding of cultural heritage (CH) are changing as experts seek to manage CH more sustainably to better withstand the effects of climate change. Naturally, this has led to a mushrooming of contemporary research and practical work exploring the role of CH as a critical aspect of resilience and sustainability. One research topic within this broader paradigm shift is the integration of CH into disaster risk management (DRM) governance. Both academic and international organizations such as the United Nations Educational, Scientific and Cultural Organization (UNESCO), International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM) and International Council on Monuments and Sites (ICOMOS) emphasize the importance of this theoretical integration through a lattice of interacting articles, reports, papers, frameworks, and guidelines. However, one key document championed at aiding in the practical integration of CH into Disaster risk reduction (DRR) and DRM is The Sendai Framework for Disaster Risk Reduction (SFDRR) (UN, 2015).

The SFDRR forms a critical global policy framework that aims to reduce disaster risk and losses in lives, livelihoods, and health. As well as the economic, physical, social, cultural, and environmental assets of persons, businesses, communities, and countries (UN, 2015). The SFDRR is comprised of seven targets and four priorities to prevent new and reduce existing disaster risks. Importantly within the context of this deliverable is Priority 2 of the SFDRR. Priority 2 is entitled '*Strengthening disaster risk governance to manage disaster risk*'. At its core, Priority 2 emphasizes the importance of governance in effectively and efficiently managing disaster risk. As a result, practitioners and policymakers engaging with the SFDRR are encouraged to consider contemporary DRM governance and its role in DRR. As well as proactively facilitate the integration of CH stakeholders into pre-existing DRM strategies and associated governance structures.

However, to date, the integration of CH into DRM is in its infancy. The concept of CH is inherently complex, with highly subjective and unique societal values. Making it difficult to quantify those values accurately and effectively bring all necessary stakeholders together. Furthermore, the interactions between CH stakeholders and decision-making processes are often implicit and reactive. The implicit nature of these decisions can make it challenging to develop clarity around CH governance. Highlighting this challenge within the broader paradigm shift and growing international importance pinpoints a timely and critical research opportunity. In which, there is a need for an academically robust and practical approach that can 'map' DRM governance structures within CH sites. It is within this research opportunity that this work is focused. In short, this deliverable outlines in detail supporting literature, an innovative research approach and all raw data collected in the adaption and subsequent implementation of a semi-empirical research approach to map the DRM governance structures across the five SHELTER Open Labs (OLs). Each of the SHELTER OLs included individuals from public and private organisations that have a common interest in improving the management of CH into the broader governance. However, after preliminary discussions with the coordinators of these Open labs (OLC) in December 2019, it became clear that mapping the governance within the SHELTER

OLs required a more comprehensive approach. Furthermore, very few (if any) empirical studies explicitly attempt to map governance structures across academic literature within the context of DRM and CH.

As a result, the work within T6.3 went beyond mapping DRM governance for the OL and attempted to establish an innovative and collaborative methodological approach that could be replicated by other experts outside of the SHELTER Project. The innovative methodological approach had to be carefully designed, thoroughly researched, and justified to ensure that it fulfilled the requirements of the SHELTER Project and, just as importantly, provided the OLs with a platform and tool to continue exploring their DRM governance in the long term. Despite the limited amount of academic literature attempting to map DRM governance, one valuable exception was found in the European Commission-funded project entitled "Benchmarking Regional Health Management II (Ben RHM II)". In which Tiliouine *et al.* (2018) developed a toolkit designed to help experts map governance structures around medicine distribution in the context of human health and well-being using a technique called The Organigraph technique. This toolkit formed an essential inspiration and resource for adapting the Organigraph technique within the SHELTER Project.

Building upon the toolkit provided by Tiliouine *et al.* (2018), the research team at ULIEGE believed that the value of Organigraphs went beyond its ability to map governance structures. Using a semi-empirical qualitative research approach, the Organigraphs provided the basis for enhanced stakeholder engagement and collaboration, individual and group social learning, proactive self-diagnostics by local experts, and cross-national, cross-scale and cross-issue peer learning. With this in mind, an iterative four Phase methodology was created to explore, co-produce, and fine tune detailed OL specific Organigraphs within the SHELTER OLs. This report is structured around these four phases and can be briefly outlined as follows.

First, Phase 1 created a robust conceptual framework underpinning the methodological approach by exploring the relevant literature around the concept of governance. Phase 2 focused on drafting the OLs Organigraphs by consolidating the pre-existing material with each OL and involving key stakeholder groups. The draft Organigraphs created within Phase 2 were co-produced through, focused developmental meetings and iterative feedback. Phase 2 also led to the refinement of the standardized key that outlines the common 'building blocks' used in developing the Organigraphs. Phase 3 aimed to fine-tune and validate the Organigraphs through 12 collaborative stakeholder workshops. In which 94 stakeholders across the five OL were invited to critique and validate their OLs Organigraph. Finally, Phase 4 aimed to encourage peer learning between the OLs using the finetuned Organigraphs to share knowledge and expertise. This was achieved through a digital interactive workshop in collaboration with WP7. This Phase encouraged the OLCs to present their Organigraph to other experts and use the SHELTER project as a platform to illicit cross-national discussions.

Notably, because of the iterative and co-productive nature of the four Phases, a myriad of raw data was collected in various methods and platforms. These inputs contained

valuable insights into how the OLCs, and stakeholders perceived their DRM governance. This report attempts to capture this huge amount of raw data and presented it alongside the fine-tuned Organigraphs. The outputs developed through the semi-empirical approach covers a wide range of topics, including the strengths, weaknesses, opportunities, and threats of current DRM governance within CH sites across the SHELTER OLCs. Practically, this deliverable provides practitioners with five detailed contemporary examples of DRM governance within CH sites. As well as a series of tailored recommendations to help enhance the resilience of these sites to the effects of climate change. However, this research had a great deal of value beyond the SHELTER Project. Throughout the research, there were several significant findings with implications beyond the SHELTER Project.

First, from a practical perspective, the Organigraph technique provided a platform to develop an innovative and collaborative tool to present the key stakeholders, responsibilities, and interactions within the DRM governance. Furthermore, the Organigraphs provided the stakeholders with a unique opportunity to perceive their position in the context of the broader DRM governance strategy. With the ability to identify the essential functions and responsibilities of both themselves and other stakeholders within the DRM response. Building upon this, the Organigraphs provided an accessible platform for self-reflection, facilitating discussions between different stakeholders (including CH stakeholders) to identify strengths, weaknesses, opportunities, and threats in their DRM before the event of a disaster. This provides an opportunity for proactive decision-making encouraging DRM experts to identify weakness in their DRM governance in the preparedness stage of the DRM cycle. In part shifting the DRM governance from 'reactive' to 'proactive' by encouraging experts to critique their own DRM governance and improve their preparedness for disasters. However, the current version of the Organigraph technique also had limitations that couldn't be fully addressed in the scope of Work Package 6 (WP6) and would require further research and development. For instance, the stakeholders pinpointed a negative correlation between the complexity of the Organigraphs and their accessibility. Essentially stating that the more detailed the Organigraphs become, the less they can be understood and used in practice. The stakeholders also lamented that the Organigraphs in their current form could oversimplify the complexity of the DRM governance structures, which can be more nuanced than those defined in a 'fixed' DRM governance map. Interestingly, the stakeholders also appeared to overlook the role of the Organigraphs as a tool for self-reflection and instead considered their contents more literally, as explicit guidelines for what they should do in the event of a disaster. Furthermore, one individual stated that the contents of the Organigraphs is what happens in theory and not necessarily an accurate representation of what happens in practice—opening a much broader debate about effective DRM governance and our ability to map it.

Second, from a theoretical perspective, the semi-empirical transdisciplinary research approach was integral to the development, refinement, and subsequent publication of the Organigraphs. The four Phases of the approach provided an academically robust foundation for adapting the Organigraph technique to DRM governance. Also, the approach facilitated greater degrees of social learning amongst the stakeholders and

Open Lab Co-Ordinator's (OLCs) in each SHELTER OL. In which the experts requested to continue using the Organigraphs in their own decision making and ongoing work. The process of co-producing the Organigraphs allowed them to reflect on their governance and create their solutions with minimal intervention from the facilitators enhancing the probability of the solutions being effective.

Furthermore, upon deeper reflection of the five fine-tuned Organigraphs, several interesting findings were observed and are worthy of greater discussion in the context of the broader academic debate. First, despite the apparent differences between the five SHELTER OLs, the Organigraphs shared a great degree of similarity, especially regarding the position of different stakeholders and the types of relationships linking them, hinting at the fact that there are methods of best or established practice in DRM governance, regardless of context.

Also, stakeholders in the OL reinforced the pivotal role local stakeholders play at ALL phases of DRM. However, the DRM governance at the local spatial scale remains implicit, unclear, and often outside of the pre-existing legal frameworks. In response, the Organigraph provides a tool at the disposal of experts to begin mapping these implicit relationships and better integrate these stakeholders into the explicit DRM strategy. Furthermore, all the Organigraphs developed within the SHELTER Project demonstrated a clear pertinence towards a hierarchical governance structure. In which, critical decisions, policy, plans, resources, and solutions are developed and implemented at the national (or most relevant highest spatial scale) and then filtered down towards smaller spatial scales. On the one hand, the pertinence towards hierarchical governance structures is understandable. The consequences of a disaster event on CH can be irreparable and require precise coordinated management which must be conducted by an overarching entity. However, on the other hand, broader academic literature reiterates the critical role of local communities in shaping and implementing such DRR and response and highlighting that what we should see in the Organigraphs is a series of feedback loops between the national, regional and local spatial scales. Still, for the most part, this was not the case and based on the findings of T6.3 the establishment of such mechanisms is still a challenging and difficult issue for DRM governance in CH sites.

In part, this work highlights the persistent disconnection of stakeholders at different spatial scales and the challenges practitioners face when integrating local community groups into DRM governance. Building upon the above observations, the local communities are often perceived as stakeholders to be saved rather than resources that can be mobilized into action and guide more effective DRM responses. Importantly, in reaction to this observation through the development of the Organigraphs, the OLCs, research team, and stakeholders attempted to pinpoint specific topics of improvement within each OL which have been framed as adaptive governance proposals. These adaptive governance proposals included missing connections or stakeholders, challenging ingrained behaviors, overcoming siloed working, highlighting implicit relationships and connections, and adapting new policies and plans to facilitate the inclusion of missing stakeholders. Furthermore, as a collective of experts in T6.3 we attempted to take this one step further. We attempted to draw connections between the

tools being developed in the SHELTER project to foster more adaptive governance approaches and increase the likelihood of their long-term uptake.

In short, this deliverable consolidates all the work that went into the development, adaptation, and execution of the Organigraph technique to mapping DRM governance for five case studies. It highlights the value of the Organigraph technique in providing an innovative, collaborative, and attractive technique for mapping DRM governance structures. With the capacity of enhancing the implementation of the priorities of the SFDRR by giving practitioners a tool to develop clarity around DRM. When accompanied with a multi-phase semi-empirical research approach, it can provide a platform for self-critique, social learning and cross-issue, national and scale discussions. Ultimately leading to improved preparedness to disaster through greater clarity and the identification of weakness and bottle necks before a disaster event. Resulting in great resilience and more effective DRR response.

This report provides a precedent for using the Organigraph technique to map DRM governance structures within CH sites. And finally, it highlights the value of further research into the Organigraph technique as a tool for enhancing the resilience of CH internationally.

2 The refined Organigraphs for each SHELTER OL

The Organigraphs co-produced within T6.3 were too large and too complex to be included in this A4 document. The final versions, separated into distinct spatial scales, have been provided at the end of the document within Appendix.

2.1 Identify aspects of each OL DRM governance to strengthen and propose potential areas to enhance adaptive governance across the OL.

It is essential to reflect upon the various outcomes, discussion points, comments and conversations that arose across the four Phases of the semi-empirical approach. This was done to develop a series of adaptive governance proposals that draw both on the outcomes of the Organigraphs and draw upon the wealth of raw data collected throughout the entire semi-empirical approach. The following section outlines the specific adaptive governance proposals for each of the five OL within the SHELTER Project. For ease of reading the key salient messages in each proposal is highlighted with bold text.

2.1.1 Seferihisar district

Following the development of the Organigraph within the Seferihisar OL, several strengths, weaknesses, opportunities, and threats were identified within the OLs DRM governance structure. The stakeholders and the OLC who participated in the co-production of the Organigraphs raised an array of discussion points across the four Phases. These discussion points consolidated from across the four Phases have been briefly encapsulated below. They have been used to guide the development and research around adaptive governance proposals outlined in the following section.

- The Organigraph identified the need to develop greater clarity around the DRM governance at all scales, especially the local spatial scale.
- The discussions around the Organigraph highlighted the critical role of the local stakeholders at all phases of the DRM cycle. As well as the lack of clear and practical strategies to enhance their capacities.
- The Organigraph highlighted the need for tailored training and awareness campaigns for stakeholders at the local and municipal spatial scale that accounts for the needs and practices of the local community.
- The Organigraphs reinforced the importance of the national and regional entities of Ulusal Afet ve Acil Durum Yönetimi Başkanlığı (*National Disaster & Emergency Management Authority (AFAD)*) and the potential opportunity to decentralise the DRM governance structure and enhance the autonomy of some of the stakeholder groups within the OL.
- The Organigraphs highlighted the need to better integrate CH stakeholders into the current DRM cycle.
- Finally, the peer learning exercises highlighted the challenges within the suitability and availability of the funding mechanisms to CH stakeholders and local residence within the Seferihisar OL.

Where appropriate and possible, the researcher has attempted to draw from wider academic and other sources to support the proposals outlined below. As well as provide potential resources, support and guidance from wider academic literature and research that may help the practitioners explore the efficacy of these proposals.

2.1.1.1 Continuing to develop clarity around the DRM governance structure at all spatial scales and explore more in-depth stakeholder identification and engagement processes.

During the research approach and the subsequent development of the Organigraphs, it became clear that colleagues at Seferihisar had never formally 'mapped' DRM governance. As a result, the process of mapping the DRM governance, key stakeholders, governance mechanisms and their connections in and of itself had a huge amount of value to the OLC and involved stakeholders. Despite the challenges in facilitating direct stakeholder inputs through the co-production process, a clear Organigraph was created; however, from the outset, there were distinct challenges in mapping DRM governance structures at the local spatial scale. Namely, very little research work has been done to explore local-level governance structures. The lack of clarity regarding DRM governance at the local spatial scale did not appear to result from the challenges in the stakeholder's engagement in the methodological process. But rather a distinct challenge that colleagues at the Seferihisar OL are facing.

From a broader perspective, this lack of clarity in the DRM governance at the local spatial scale is concerning. Especially when considering the findings of wider academic literature, which emphasize the importance of local stakeholders and/or citizens in the potential for enhanced DRR, increased preparedness and response, and reduction of damage to assets and loss of life (Paul *et al.*, 2017; Chong and Kamarudin, 2018). As well as the continued reference to the importance of local spatial scale in the operationalization of the SFDRR (2015). However, it is also important to note that this weakness was by no means limited to the Seferihisar OL; three of the OL within SHELTER highlighted similar challenges around the lack of clarity at the local spatial scale. Furthermore, there is a broader array of academic research which identifies the challenges in mapping the governance at the local spatial scale and emphasizes the epidemic proportions of this issue (Chong and Kamarudin, 2018)

To address this weakness, stakeholders and the OLC who participated in the semi-empirical approach attempted to highlight the key local stakeholders they perceived within DRM. Also, they attempted to actively describe the role of local communities as first responders in the event of disasters. But these discussions were somewhat limited and often theoretical rather than based upon empirical findings. **As a result, a key proposal in enhancing the adaptive governance in Seferihisar revolves around the development of clarity around the stakeholders, connections, and mechanisms at the local spatial scale.** This can be achieved potentially through a focused stakeholder identification and engagement strategy targeted at the local communities within Siğirak. In the short term, this will enable the current stakeholders within the Seferihisar OL to engage with and build relationships with local stakeholder groups and, in the long term, ensure that the local stakeholders feature as an active and

vital component of effective DRM. Thankfully, due to the semi-empirical approach, a few key local stakeholder groups were identified to begin this process, which could form a basis for further work. Using the broad stakeholder groups from T6.1, five critical stakeholders' groups were identified at the local scale of the Organigraphs, these were. 1) Religious leaders, 2) Local residents, 3) Local business owners, 4) Volunteers, and 5) CH owners. Figure 27 demonstrates their position in the Organigraph.



Figure 1 – The key local stakeholders identified within the Organigraph because of the semi-empirical research approach.

These key stakeholders groups were highlighted because they could serve critical roles at different stages of the DRM cycle as perceived by the OLC. The potential role of these individuals has been outlined below with supporting academic material.



1) *Religious leaders* – Within the ancient walls at Siğıcak is an active Mosque called the '*Siğıcak Cami*'. This mosque serves as a central point for the local community. In turn, the religious leader or Imam is considered a respected community leader. During the development of the Organigraph, it was highlighted that engagement of these religious centres may be a powerful mechanism for community engagement and awareness-raising on disaster events through a respected individual in a mechanism that is already well established and trusted by the local community.

2) *Local residents* - According to the 2020 census data provided by TUIK (2020), the current neighbourhood population at Siğıcak was 3'637 (1'789 male and 1'848 female). During the discussions around the Organigraphs, many participants emphasized the need to enhance their understanding and engagement with the residents of Siğıcak. Significantly, the value of this stakeholder group is only exacerbated when considering the findings of True and Kilicaslan (2014), in which the local residency has a strong motivation for living in Siğıcak, with 86.37% of the population being happy with their life in the port town. Reinforcing this happiness was a range of factors, including work, tranquillity and being born there as critical drivers for local people living in Seferihisar. Furthermore, the Permanent local resident population is not very dynamic. Individuals have lived in the area for decades, developing strong community ties and emotional connections to the town (True and Kilicaslan, 2014).



3) *Local business owners* – another important stakeholder group pinpointed by the development of the Organigraphs, which is worthy of further discussion in the development of adaptive governance schemes, is the role of local business owners. According to historical academic research and past census data, many businesses are operating within the ancient walls of Siğıcak. According to True and Kilicaslan (2014), the main business within Siğıcak is ‘*eating place owners*’ (37.88%) ‘*selling stand owners*’ (24.24%), with a small percentage being business owners running hotels as well as individuals who work in local farms. These findings suggest that the majority of the population in Siğıcak rely on the tertiary sector for economic stability.



4) *Volunteers and/or Tourists* – Understandably, due to its beauty and popularity as a tourist destination, the town of Siğıcak has a large fluctuating tourist population representing a distinct stakeholder within the Seferihisar OL. Seferihisar experiences a highly fluctuating population number between different times of the year, stimulated by the influx of tourists during the holiday season. Tourism within Seferihisar is both domestic and international, attracting visitors from other provinces within Turkey and abroad (Türzün *et al.*, 2019). As a result, both tourists and visitors were highlighted in the Organigraph as a critical stakeholder group. Their role in DRM must be explored in greater detail.



5) *Cultural heritage owners* – finally, one key stakeholder group which was explored as part of the development of the Organigraphs was the array of CH stakeholders within the Seferihisar OL. According to the Organigraph, there is an array of CH owners at the local spatial scale, which currently are not part of the DRM strategy and are not an explicit part of DRM related decisions, these included building owners, archaeologists, Conservation of Cultural Heritage Regional Boards and Excavation officers.

Identifying these different stakeholders’ groups is only the start of the process. A bespoke stakeholder engagement plan would need to be created and implemented. A huge amount of reliable material assists in the design and delivery of a stakeholder engagement plan. A simple search of the term will yield an array of different approaches and designs.

2.1.1.2 The need to define explicit strategies to enhance the connection between local communities DRM response and overarching legal frameworks.

Through the identification of these different local stakeholder groups, the key questions underpinning the potential proposal to enhance the DRM governance structures within the Seferihisar OL revolves around why these stakeholders are not part of the DRM governance structure within Seferihisar and how to explicit engage these individuals within the context of the DRM governance. Initially, through the preliminary discussions in the co-production of the Organigraph, it became clear that there were some reservations from the stakeholders within the institutions and organizations about the

local community involvement in DRM, particularly in the response phases of DRM. For example, within experimental phase 2, one stakeholder contributing to the development of the Organigraph stated that.

“When needed, the Red Crescent attracts labour and volunteers from the [city] centre, other than the local office, or there may be problems such as looting. It is against the law to seek help from the local [people] unless they are well trained. Even [for] the police.” [Input from Stakeholder within Experimental Phase 2, feedback workshop, (direct translation from Turkish to English)].

This comment suggests that in the case of Seferihisar, there is an explicit legal framework in place that requires all individuals who are formally involved in the DRM to have training in DRM response according to preexisting laws. Because the local community groups have no such training, they cannot be formally involved in DRM governance during and after a disaster event. However, during the development of the Organigraphs, it becomes clear that the local community groups do inherently respond in the event of a disaster irrespective of the expert’s reservation and in fact, because they often live/work in the port town serve the role as first responders out of instinct and necessity.

On the one hand, it is clear why training is a legally required aspect within the context of the Seferihisar OL. Other case studies and research highlight those disasters are inherently dangerous events and poorly trained individuals may be at risk, slow down disaster response, or cause more damage after the initial disaster event. But on the other hand, the local people are often highly motivated and immediately react to disasters (UNISDRR, 2018). This disconnect between overreaching legal frameworks, policies, plans and the DRM at the local spatial scale or is not isolated to Seferihisar and, in fact, is a widely recognized issue across the literature (see; IFRC, 2013) and was even highlighted in section 2 regarding the operationalization of the SFDRR.

As a result, there is value in turning towards broader academic literature to find potential strategies or approaches created within other case studies which have attempted to better align the local community with the overarching DRM strategies, policies, and legal frameworks. It is important to note that the aspect of ‘training’ will be explored in section 3.6.2.2. This proposal focuses on the potential for an overarching legal mechanism that could enhance the DRM process at the local spatial scale. **One potential approach is the development of “A local disaster risk reduction and resilience strategy”,** as defined by UNDRR (2018). Developing a robust DRR resilience strategy can help develop a clear framework in line with the overarching legal framework around the DRM governance at the local spatial scale. In short, a local disaster risk reduction and resilience strategy can provide advice to local government stakeholders such as; authorities, planners and managers at the city or other sub-national levels on the development and implementation of a holistic and integrated DRR strategy at the local spatial scale that contributes to the resilience whilst remaining consistent with the national strategy whenever one is in place. According to UNDRR (2019), The development of this strategy falls to the responsibility of the local government entity.

Still, it could be supported by the regional government and even the national government entity, including AFAD within the OL. According to the Organigraph, AFAD is the key stakeholder responsible for the DRM strategy across different spatial scales. AFAD is directly responsible for developing and delivering the national DRM and legislation, making it an ideal candidate to provide support and ensure that any local level governance frameworks are consistent with overarching national and regional policies/plans.

However, while the responsibility of the local disaster risk reduction and resilience strategy would fall to local government entities, it **must be developed through a participatory, citizen-based approach or bottom-up approach**. The importance of integrated approaches is widely cited across academic literature and is often championed (Bosher, 2009; Paul et al., 2017) and was an essential aspect of adaptive governance highlighted in section 3.1.4.2. Across the semi-empirical approach, it quickly became clear that the local community within Seferihisar do indeed have the capacity, experience, and motivation to respond in the event of a disaster. As a result, if a robust local disaster risk reduction and resilience strategy were created, it would be fundamental to draw upon the local stakeholders' experiences, knowledge, and perceptions and integrate this information into the local strategies. This requires a robust and explicit community-based approach supported by effective methodologies that can collect meaningful information.

There is a wide array of research into the design and delivery of a practical community-based approach. These would serve as meaningful starting points for experts within the Seferihisar OL to begin this process. Also, as part of WP6 within the SHELTER project, colleagues at POLITO developed a methodology for local knowledge extraction. (see; Tamborrino et al., 2019). This deliverable outlines several different methodological approaches and techniques to gather the local stakeholder's knowledge and experiences. Figure 29 below summarises the proposal's key aspects that may help establish a defined, explicit strategy to enhance the connection between local communities DRM response and overarching legal frameworks.

2.1.1.3 Enhancing resilience of the DRM through a locally focused awareness campaign, targeted outreach in community centres and training of community-level DRM response leaders

Building upon the previous proposal regarding the need for clarity and developing a local disaster risk reduction and resilience strategy. Another critical challenge that arose during the semi-empirical approach was building an explicit mechanism for training, education, and raising awareness for the stakeholders at the local spatial scale. This goes beyond aligning the local DRR and DRM strategies and actually brings to the surface some specific proposals that emerged during the development of the Organigraphs, which are worthy of further exploration and development.

First, it is essential to discuss the potential platforms identified to enhance the awareness and engage with the local stakeholder groups identified through the Organigraph development. **The experts within the Seferhisar OL highlighted four potential**

places which could serve as platforms to engage with local communities in the preparedness phase of DRM; these were 'Religious centres', 'Daily and weekly Markets', 'Restaurants/Hotels', and Coffeeshops/Cafes. These areas form-critical social and spiritual hubs within the local community, which are well-established meeting places within their daily lives, unrelated to DRM. Notably, to reach different population demographics, including different genders and age groups, the OLC considered it necessary to target different social settings which attract different individuals.

When discussing the potential methods of engaging with these local stakeholders. The OLC suggests using a **targeted 'Awareness campaign'** as a potentially suitable approach. Carrying this suggestion forward, the international federation of the red cross and red crescent societies (IFRC) published a public awareness and public education for disaster risk reduction guide (IFRC, 2011), which may help to provide insights from the stakeholders within the OL. Through the development of the Organigraph, the beginnings of a solution began to merge, which may enhance the adaptive capacities of the DRM governance with Seferihisar and provide the preliminary results to begin the development of an awareness campaign.

Building upon the need to identify communication platforms and enhance local awareness, the OLC and surrounding experts identified another potential strategy: **'Community DRM Response Leaders' at the street scale.** Put simply, these are community members who live or work in Siğirak and receive explicit training to respond to natural disasters, regular updates on potential events and essential resources to assist in the first response. These individuals serve as first responders in the immediate aftermath of a disaster event, taking advantage of the already observed behaviours of local people.

And in fact, WHO (2015) produced a training manual for local community representatives and volunteers, which may prove to be a valuable resource in training such individuals. Once selected and identified, these community leaders take primary leadership as first responders, facilitating the evacuation of neighbours (particularly the most vulnerable members of the population) and taking appropriate actions to protect heritage aspects. Also, explicit lines of communication can be established to ensure their consistency with more highly trained stakeholders and emergency services who can take over responsibility.

Not only would the selection and training of these individuals provide a mechanism of immediate response after the event of a disaster during a critical period. But it could also alleviate the reservations of the experts defined in Phase 2. This is because the selection and identification of community leaders would provide a straight line of communication between the local communities and the regional/national scales. As well as allow for the identification of designated first responders who can receive training in line with the overarching legal framework highlighted by previous experts.

2.1.1.4 Exploring the potential of decentralizing some aspects of the DRM governance across spatial scales and enhancing the autonomy of some other stakeholder groups.

During the development of the Organigraph, it became clear that the National Disaster and Emergency Management Authority (AFAD) forms a central role within the DRM governance across different spatial scales. AFAD is appointed by the National government as a single government institution to single-handedly coordinate and exercise legal authority in disasters and emergencies.

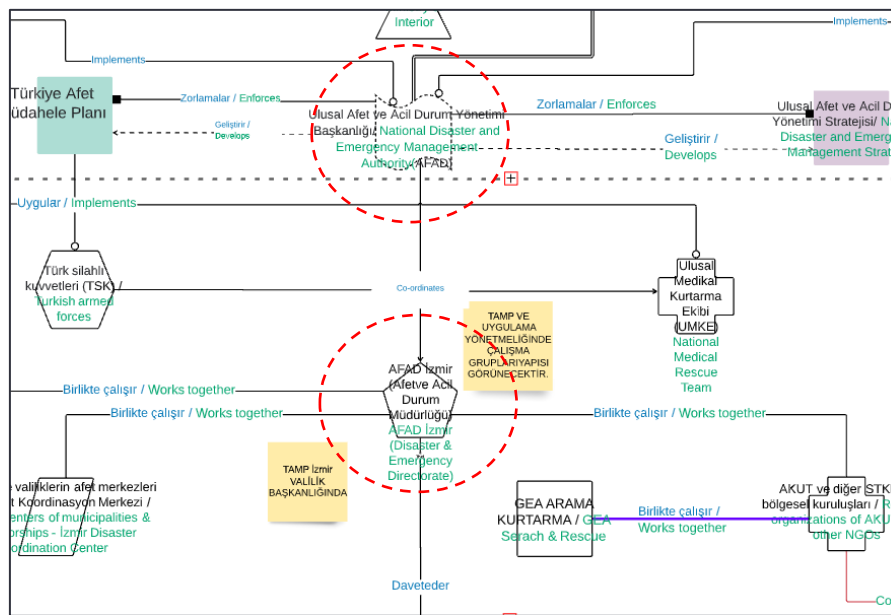


Figure 2 – The role of AFAD within the DRM governance structure as outlined within the fine-tuned Organigraph.

On the one hand, this consolidation of authority into one singular instrument in the holistic and coherent coordination of DRM strategies was standard across the five OL. (Typically, a national ministry). But on the other hand, highly centralized DRM governance structures can be less resilient to disaster events as all of the power, responsibility and capacity to deal with the disaster is controlled by one entity. As a result, contemporary academic literature emphasizes the importance of decentralized governance structures or ‘polycentrism’ (see section 3.1.4.1) in more adaptive governance approaches. Polycentrism refers to multiple centers of power that are formally independent of one another but still capable of semi-autonomous decision making across different spatial scales. Within Seferihisar, the application of polycentrism could in part be partially fulfilled as a result of Proposal 5 and Proposal 6, in which local communities are empowered, trained and designated to serve functions, removing some of the responsibility of the response phases of DRM away from AFAD and in the capacity of the local community. But polycentrism also comes with its challenges and difficulties. For example, recent research work by Maes et al. (2018) highlighted the issues that arise from decentralized governance structures, including; incomplete decentralization, blame dissolution and scale jumping.

Therefore, the proposal should not focus on the complete decentralization of power away from AFAD, a fundamental institution in the consistent application of policies and plans across different spatial scales. But rather an exploration into how the different responsibilities fulfilled by AFAD could be better shaped, disseminated, and supported by other institutions. To enhance the autonomy of the different stakeholder groups.

2.1.1.5 Continued Identification and co-operative integration of CH stakeholders into the DRM governance.

Finally, similar to all of the SHELTER OL and consistent with the vast academic literature as described in 3.1.6 the CH stakeholders were not an explicit aspect of the DRM governance. However, through the semi-empirical approach and throughout the Organigraph development, several CH stakeholders were identified. They became actively involved in the development of the Organigraphs. Namely, Kültürve Turizm Bakanlığı/ (Ministry of Cultural & Tourism), Directorate of Survey & Monuments, General directorate of Foundations, Conservation of CH Regional Boards, kazı başkanlıkları (Excavation officers) and finally, Kültürel miras (CH stakeholders). Figure 33 below highlights the perceived role and position of these stakeholders’ groups within the fine-tuned Organigraph.

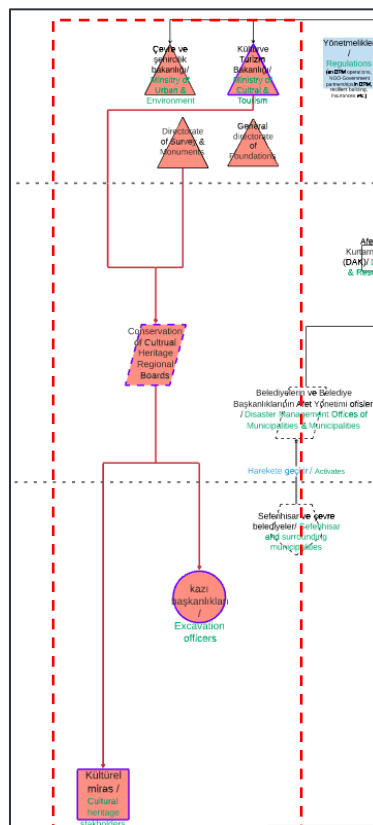


Figure 3 – The current CH stakeholders identified within the fine-tuned Organigraph.

As a result of these findings, the final proposal within the Seferihisar OL **focuses on the continued identification and inclusion of CH stakeholders into the broader DRM strategy. The fine-tuned Organigraph provides the initial findings and a platform for exploring potential integrating CH Stakeholders into the broader DRM governance.** [Ç](#)

3 Appendices

The refined Versions of All OL Organigraphs as printable PDF Documents split by 'Layers' According to the OL specifications (Phase 4)

The Following Appendix includes all fine-tuned Organigraphs after the completion of the semi-empirical research approach.

10.2 Seferihisar District (Seferihisar OL)

