

Optional Sectoral Module CULTURAL HERITAGE



In a resilient city, cultural heritage assets (both *tangible* and *intangible*) are integrated into the city disaster risk management (DRM) mechanism; historic areas or other heritage sites include plans to manage disaster risk (*inclusive* and *coordinated*). Cultural institutions and their authorities, DRM authorities, private owners, and local communities are aware of risks related to disasters that are affecting their cultural resources and collaborate in their protection (*coordinated*), including by sharing relevant information. A resilient city uses culture and traditions as anchors for identity and springboards for creativity in order to build the resilience of communities in the face of disasters and to promote sustainable recovery. Traditional building systems are documented and used to strengthen local disaster mitigation and adaptation techniques by drawing on the resilient materials and architecture that undergo testing through past events (*reflective* and *robust*); there is also the opportunity to draw on creativity and the compatible use of new technologies. Traditional knowledge and practices are harnessed and integrated in DRM strategies, notably in relation to alternative warning systems, emergency evacuation routes, and shelters (*reflective* and *redundant*). Culture-based programs for post-disaster recovery are implemented after natural or human-made disasters (*inclusive*).

TOPIC	GUIDING QUESTION	QUALITY	EXPLANATION
Institutional arrangements and capacity	<p>Who manages the different cultural heritage assets in the city, including historic and archaeological areas, monuments, museums, religious buildings, traditional festivals, etc.?</p> <p>Who is responsible for disaster risk management at city level?</p> <p>Do the city's cultural authorities support or collaborate with cultural institutions and private owners to protect cultural heritage assets? Do heritage properties and cultural institutions have in place disaster risk management plans?</p>	Coordinated; Inclusive	<p>Close coordination among public/private and national/local institutions responsible for cultural heritage assets facilitates their better protection.</p> <p>Often cities include several cultural sites such as cultural landscapes, historic areas, monuments, museums, national treasures, as well as festivities, traditions, and other such intangible heritage elements. Some may be considered an important part of the Country Cultural Heritage, and therefore its conservation is a national matter. Collaboration between cultural heritage specialists and DRM specialists plus the integration of both practices in cultural sites and other resources are crucial for their protection.</p>
International recognition	Are there any UNESCO World Heritage properties in the city or nearby? If so, who manages it?	Robust; Reflective	<p>Inclusion on UNESCO World Heritage List* is an honor that also implies responsibilities for cities and countries. Heritage plays an important role attracting not only tourism but also investments, and promoting job creation related to several areas (tourism, conservation, arts, crafts, etc.).</p> <p>Honoring this commitment implies the effective management of the heritage property so as to protect the associated cultural and natural values.</p>

<p>Regulatory framework</p>	<p>Are there policies or regulations regarding protection and preservation of cultural heritage at national and/or municipal level? Which kind of attributes do these include? Are there specific building regulations and land use policies? What agencies are responsible for implementing them? To what extent are they successful?</p>	<p>Robust</p>	<p>Specific regulations and associated safeguards can prevent intentional or unintentional damage to cultural properties. Sometimes ignorance regarding a specific culture, tradition, or system may cause unintentional damage. Likewise, regulations should consider the different cultural attributes in order to protect their associated values.</p>
<p>Regulatory framework</p>	<p>Are the site management systems for the cultural heritage properties coordinated with DRM organizations, policies, and procedures in the city? Are there specific regulations regarding prevention and emergency response in the heritage areas? Do relevant sites have DRM / contingency plans? Are they regularly updated? Are regular drills conducted?</p>	<p>Coordinated; Redundant</p>	<p>Inclusion of DRM plans and regulations within the site management plans and systems, in close cooperation with city authorities, is indispensable to mitigate the impact of natural hazards at the sites. At the same time, the city DRM plans and policies should include the cultural heritage sites, and the authorities should keep contact and coordination with the site managers/ owners. In the case of cultural heritage, it is essential to strengthen prevention measures and emergency response to avoid irreparable losses.</p>

<p>Planning</p>	<p>Does the city have any rules or principles for safeguarding cultural heritage in the context of urban development? (e.g., protection of historical buildings from re-urbanization, and preservation and study of archaeological findings.)</p>	<p>Inclusive; Reflective</p>	<p>Urbanization frequently affects cultural heritage assets, especially in historic areas where population and/or tourism is quickly increasing. In such areas, cultural heritage assets may be more exposed to hazards and damage, such as through earthquakes, flooding, fire, as well as theft, vandalism, and “wear and tear”/depreciation. To manage such risks and promote sustainable urban development, it is recommended to establish mechanisms to (a) identify and safeguard historic assets in urban planning and development, (b) ensure proper research of potential new findings (e.g., mandatory presence of archeologists in city’s excavation of urban surface), (c) integrate DRM measures in designated areas and surroundings (e.g., targeted enforcement of building regulation, prioritization of flood risk management and drainage investments, fire prevention, etc.), and (d) ensure through appropriate risk-assessment tools that new urban development does not create new risks for cultural heritage assets.</p>
<p>Finance</p>	<p>What are the funding sources for cultural heritage? How are they administrated? For example, are they spent on management/ conservation? Do they include prevention measures from disasters and/ or rehabilitation/recovery plans?) To what degree are funding sources and uses coordinated across institutions?</p>	<p>Robust; Coordinated</p>	<p>Cultural heritage maintenance, protection, and conservation rely on sustained and predictable funding. It should include investment in risk prevention/mitigation measures as most heritage assets usually are irreplaceable. Coordination among agencies or institutions, both public and private, helps ensure a proper investment of funds and implementation of regulations to protect cultural heritage assets.</p>

<p>Finance</p>	<p>Is there contingency financing available for urgent stabilization measures as well as for restoring cultural heritage assets after natural and human-made disasters? Are the cultural assets protected by some kind of insurance?</p>	<p>Redundant</p>	<p>A contingency fund enables fast actions over heritage at risk of being irreversibly lost. In the face of a disaster, it is highly important that heritage specialists are involved in the rescue and restoration of the affected cultural assets, to avoid misunderstandings and potential additional damages.</p>
<p>Asset management</p>	<p>Is there an inventory of cultural heritage in the city? Does this include all components of cultural heritage (tangible/intangible, movable/immovable, cultural/natural/mixed) that might be at risk? Are there any systems for (a) collecting and storing data on the effects of previous disasters and recovery measures/interventions, and (b) collecting data on the social and economic benefits that communities derive from cultural heritage (e.g., incomes, jobs, well-being). If so, who are the responsible authorities?</p>	<p>Inclusive; Reflective</p>	<p>Cultural heritage may come in many forms, tangible and intangible, movable and immovable. Typical categories of urban cultural heritage include designated historic areas; listed monuments and buildings, notably religious structures; museums and other cultural repositories such as archives, libraries and public theatres; archaeological sites; historic gardens and other urban landscapes; movable collections contained in cultural repositories and historic buildings; and intangible cultural heritage expressions such as festivals, celebrations, rituals, and traditions. A proper inventory of cultural heritage, ideally integrating related socio-economic information, is an essential precondition for safeguarding of cultural heritage and for harnessing its potential to support resilience.</p>

Risk Identification	<p>Has a proper analysis and assessment been carried out of disaster risks to urban cultural heritage, based on existing inventories and integrating data on different hazards and considering the most likely scenarios? Are there specific studies or maps identifying risk over cultural heritage assets? Do these consider and evaluate social and economic impacts?</p>	Reflective	<p>Understanding disaster risks to cultural heritage, including intangible ones, is a critical element for setting priorities and identifying structural and non-structural mitigation measures. In assessing risks, it is important to take into consideration the social and economic impacts of potential disaster scenarios in addition to effects on physical assets and infrastructure. It is also important to give due consideration to potential hazards that may occur in areas adjacent to cultural heritage assets and which may have a significant impact on them.</p>
Disaster risk Management Measures	<p>Are DRM measures in place in historic areas? To what extent do they reduce and manage risk? To what extent do they take into account and help preserve the integrity of cultural heritage sites?</p>	Robust	<p>Safeguarding cultural heritage assets can be promoted both through specific DRM measures at a cultural heritage site and through wider DRM measures across a city or region. Specific site measures may include culturally appropriate seismic retrofitting of buildings, on-site drainage improvements, slope stabilization, and firefighting systems. For each, it is important to preserve the cultural and aesthetic integrity of the site and avoid any adverse impact. Wider DRM measures in a city or region can also reduce and manage disaster risk through culturally informed building regulation, prioritized flood risk management in historic areas, and city-wide improvements in disaster and emergency preparedness and response. It is useful to consider to what extent these measures have or will reduce and manage risks and the level of risk that may still remain.</p>

<p>Preparedness</p>	<p>Do the heritage sites have emergency preparedness and response plans, including detailed protocols describing who does what for various scenarios?</p> <p>Do the heritage sites have evacuation systems for visitors in case of emergency?</p> <p>Are there contingency plans for movable artifacts?</p> <p>Do these plans include traditional knowledge if known?</p> <p>Do the heritage sites conduct regular drills, involving all actors at the city-level and concerned communities?</p>	<p>Robust; Coordinated</p>	<p>Heritage sites are often places open to visitors and tourists who are not familiar with the city and surrounding environment. It is essential to establish specific protocols of emergency in coordination with the local authorities to ensure an efficient evacuation in case of emergency. At the same time, movable heritage might be at risk to be irreplaceably lost and therefore need to be evacuated in case of disaster. Evacuation protocols should be implemented by heritage specialists or staff specifically trained to act in the best interest of cultural heritage.</p>
<p>Capacity building</p>	<p>Are emergency personnel such as police, firefighters, and others prepared to act in heritage contexts? Are there drills/training developed periodically?</p>	<p>Inclusive; Coordinated</p>	<p>In case of an emergency, saving lives is priority. And to avoid irreplaceable losses of heritage assets, quick and thoughtful actions are required. The teams responsible for heritage sites and/or manipulating cultural elements or artworks should be trained to take such action. Specific knowledge is needed in many cases, and the correct action might be just the difference between safeguarding or forever losing that heritage treasure.</p>
<p>Community awareness and participation</p>	<p>Are the community members aware of the disaster risk in their heritage area? Are they capable of assisting the authorities in an emergency? Are they involved in the regular maintenance/ protection of their cultural heritage assets?</p>	<p>Redundant; Coordinated</p>	<p>Culture provides identity to people. The people who identify with a specific culture should be involved in its protection and preservation. Communities living inside or surrounding cultural heritage areas should be aware of risks and be able to support authorities in case of emergency. Workshops, training sessions, and drills are useful to keep the community engaged with heritage protection.</p>

Indigenous People and Traditional Knowledge	Are there any Indigenous Peoples in the city? Is any relevant traditional knowledge integrated into DRM and cultural heritage site plans?	Inclusive; Reflective	Indigenous or local knowledge for disaster reduction comes from accumulated experiences based on close relationships that indigenous and other local communities usually maintain with the environment. Local early warning systems, and local materials and construction technologies that have evolved through trial and error over time reflect adaptation to the environment; therefore, it is essential to include them in the DRM plans.
Recovery	Does the city have specific culture-based plans for post-disaster recovery? How are culture and heritage used in the recovery process? Do existing recovery and reconstruction policies, if any, consider culture?	Inclusive; Reflective	One's culture plays an important role in the recovery of victims of disaster. Understanding cultural values and instituting culture-based recovery programs could make a significant difference in the recovery process, helping traumatized people with recovery and reconnecting with their traditions and cultural identity.
Communication	Do the historic areas/heritage sites have clear information for visitors regarding potential risk and how to act in case of emergency? Is this information displayed in different languages?	Robust; Inclusive	Heritage areas receive frequent visits by people not familiar with the area and the potential risks. Clear information displayed in places of risk and proper emergency instructions are fundamental to save lives and protect the cultural heritage.
Tourism	Does the city have specific measures and/or regulations to manage tourism? Do the historic areas have plans to protect heritage from a great number of visitors? Do they display announcements or guidelines to prevent damage?	Robust	Tourism could be considered a hazard in some heritage areas. Numbers of visitors coupled with lack of awareness about the local culture could threaten both the cultural heritage and the life of local residents. It is essential for cities to establish mechanisms to control and monitor tourism, especially in heritage areas.

<p>Tourism</p>	<p>Are tourists considered a vulnerable group in the city's DRM plans? Do the historic areas have plans for tourists' evacuation?</p> <p>Is the Tourism sector taken into account in DRM plans, including risk assessments and mitigation measures?</p>	<p>Robust; Coordinated</p>	<p>Tourists may be also a vulnerable group in the face of a disaster if they are not familiar with the environment and conditions of the site. Specific programs targeting tourists and visitors could help authorities to act effectively in the aftermath of a disaster.</p> <p>Also, a disaster could affect the city tourism sector, including business disruptions or bad reputation, as a consequence of the disaster's effect on tourists. Therefore, including tourism into DRM plans and involving sector professionals in specific preparedness activities could help to strength resilience in historic cities.</p>
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* United Nations Educational, Scientific, and Cultural Organization – World Heritage Center: <http://whc.unesco.org/>

Specific bibliography and resources:

UNESCO. 2010. Managing Disaster Risks for World Heritage. UNESCO in cooperation with ICCROM, ICOMOS, and IUCN. (http://www.preventionweb.net/files/14614_188562e1.pdf)

ICOMOS-ICORP, How is Heritage being used to promote Resilience to Disasters? in Heritage and Resilience: Issues and opportunities for reducing disaster risks, Chapter 4. ICOMOS-ICORP in collaboration with ICCROM, Marsh-UK, UNESCO, and UNISDR. 2013 (<http://www.preventionweb.net/publications/view/33189>)

Johnnides, C. 5. Disaster Preparedness for Cultural Heritage. EAP DRM Knowledge Notes, Working Paper Series No. 14. The World Bank. 2009

Guidelines:

R-DMUCH, Disaster Risk Management of Cultural Heritage in Urban Areas - An Interactive Training Guide. http://www.r-dmuch.jp/en/project/itc/training_guide/index.html

ICCROM. 2016. A Guide to Risk Management of Cultural Heritage. http://www.iccrom.org/wp-content/uploads/Guide-to-Risk-Management_English.pdf

Acronyms:

- ICCROM: International Centre for the Study of the Preservation and Restoration of Cultural Property
- ICOMOS-ICORP: International Council on Monuments and Sites - International Committee on Risk Preparedness
- IUCN: International Union for the Conservation of Nature
- R-DMUCH: Institute of Disaster Mitigation for Urban Cultural Heritage at Ritsumeikan University
- UNESCO: United Nations Educational, Scientific and Cultural Organization
- UNISDR: United Nations Office for Disaster Risk Reduction