

TEMPLATE FOR BUILDING A SCENARIO

1. Identify the primary hazard that is most likely to affect your institution and collections.

- Earthquake
- Flood
- Fire
- Volcano
- Tsunami
- Hurricane/Tornado
- Man-made (such as nuclear emergency, oil spill, bomb-blast, gas explosion, etc.)
- Other

Please add:

2. Try to identify the possible time of the year and day on which, the scenario is likely to play out (month and time).

.....

3. In order to prepare a risk path, answer the following questions:

- a) What is the point of origin or geo-location of the identified hazard? Identify which part of the site of your heritage institution will be exposed to the hazard.
(Use the floor plan of the risk path exercise that you have produced, on the 9th of December, 2020).

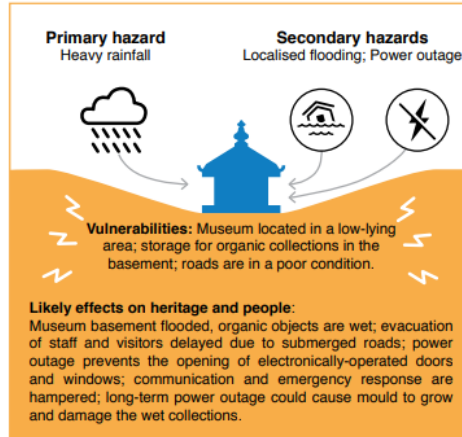
.....
.....

b) Consider the list below and identify the vulnerabilities at regional and institutional levels that will make the hazard act on your heritage resource. Also, take into consideration how these vulnerabilities will interact and build upon each other, to create negative impacts.

- Lack of legislation
- Lack of human resource management or attitudinal issues
- Lack of urban planning
- Other systemic problem such as (financial crisis, political unrest, lack of emergency services, etc.)
- Weak governance
- Lack of social cohesion and alienation of population
- Lack of awareness
- Composition of cultural heritage
- Poor maintenance of building, furniture like storage cabinet, utilities and infrastructure
- Past conservation interventions
- Poor management of the heritage resource (e.g.: badly maintained storage spaces, etc.)
- Lack of institutional policy (lack of clear policy for access, for collection management etc.)

c) Identify the secondary hazards that might be triggered by the interaction of the primary hazard and the vulnerabilities

- Projectiles (Hazards related to falling / flying e.g. falling of false ceiling on glass showcases)
- Critical infrastructure failure such as fire in AC unit, gas explosion after earthquake
- Possibility of converging effect (effect magnifies onto some establishments only e.g. mould outbreak on wet organic collections after a flood)
- Storage of hazardous elements such as natural history collections in formaldehyde or alcohol
- Possibility of diverging effects (chances of effect or hazard moving beyond the boundaries)



Source: Tandon, A. 2018. *First Aid to Cultural Heritage in Times of Crisis – Handbook*, ICCROM.

d) Identify the part of the heritage resource which is exposed to the hazard.

.....
.....

e) Based on answers a, b, c and d now make your risk path (use the floor plan where you have completed your risk path exercise on 9th Dec, as well as the 'value' exercise on 10th Dec).

4. What are the existing physical measures in your institution that will:

- a) Avoid the hazard (e.g.: ban on indoor cooking or smoking, as well as storage and use of combustible materials)

.....
.....

- b) Block the hazard (flood barriers, retrofitting, circuit breakers)

.....
.....

- c) Detect the hazard (alarm system, smoke detectors, early warning systems etc.)

.....
.....

5. What are the coping capacities in your region(city/locality) as well as institution:

- Awareness and skills of the people/staff to respond
- Dedicated resources for response
- Financial resources (contingency) to build back better
- Law abiding citizens, social cohesion
- Traditional knowledge for coping with the hazard
- Availability of contingency for recovery
- Volunteering spirit
- Other

Please add:

6. What would be the likely impact on people and heritage? Describe the likely damage to heritage in terms of value.

.....

.....

.....

7. Once you have established the likely impact, rate the likelihood as well as the impact on heritage and people, using the risk matrix.

RISK MATRIX

		IMPACT				
		Insignificant 1	Minor 2	Moderate 3	Major 4	Catastrophic 5
LIKELIHOOD	Almost Certain 5	low	medium	high	extreme	extreme
	Likely 4	low	medium	high	extreme	extreme
	Possible 3	low	medium	high	high	extreme
	Unlikely 2	low	medium	medium	high	extreme
	Rare 1	low	low	medium	medium	high

Data that you need to have, to support your forecast:

- Hazard maps - geophysical, hydrological (floods),
- City weather patterns / Seasonality - rains, snowfall, fires (forest / bush), weather / climate data - heat-wave, rainfall-Check if factors like climate change will change the frequency
- Past history of incidents- all hazards
- Existing vulnerabilities and how long they are likely to continue? (institutional reports and forecasts on finances, staffing and other relevant documents)
- Recent developments in the city, site or institution such as new construction, diversion of traffic and setting up of a heavy industry
- Socio-economic census data

Outcome

- Based on the above exercise you will have a forecast of a likely disaster risk scenario. The scenario which is grounded in your context will help you to identify possible ways in which primary hazard (first hazard) will interact with exposure and vulnerabilities to activate secondary hazards, which in turn may increase the damage and /or cause human losses.
- After identification, you can reduce some of the vulnerabilities and increase capacities. You can do a mock drill to test the capacities you have developed.
- It will also help you to estimate resources you will need to respond and recover as well as help compare the costs of prevention and mitigation.

➤ ***Find out from your local disaster risk management agencies on what kind of disaster risk scenarios they have developed for your area, and if these scenarios include your institution or heritage site.***

Reference:

Tandon, A. et al. 2018. *First Aid to Cultural Heritage in Times of Crisis –Handbook*. International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM).Rome.

Permanent Link: <https://perma.cc/B2Z7-CMV9>

[Accessed 19 January 2021]