Cultural heritage conservation helps a community not only protect economically valuable physical assets, but also preserve its practices, history, and environment, and a sense of continuity and identity. Cultural property may be more at risk from the secondary effects of a disaster than from the disaster itself, therefore quick action will be needed. Built vernacular heritage offers a record of a society’s continuous adaptation to social and environmental challenges, including extreme events, such as past disasters. This record can often be drawn on to design mitigation strategies for new construction or retrofitting. Communities should prioritize which cultural assets to preserve, considering both cultural meaning and livelihood implications, although reaching a consensus may be difficult. Cultural heritage conservation plans are best designed before a disaster, but, in their absence, heritage authorities can and should collaborate to develop effective post-disaster heritage conservation strategies. Because vernacular cultural properties are sometimes capable of withstanding local climate conditions, they may serve as safe havens where surrounding communities can temporarily relocate.

Once restricted to monuments, archaeological sites and movable heritage collections, now the definition for cultural heritage includes historic urban areas, vernacular heritage, cultural landscapes (tangible heritage, which include natural and cultural sites), and even living dimensions of heritage and all aspects of the physical and spiritual relationship between human societies and their environment (intangible heritage).

The World Bank uses a broad definition of physical cultural resources: “Movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance.” The World Bank also recognizes that “physical cultural resources are important as sources of valuable scientific and historical information, as assets for economic and social development, and as integral parts of a people’s cultural identity and practices.”

This paper addresses the importance of protecting the cultural heritage of communities, especially traditional housing, which should be an integral part of any post-disaster recovery program. Some of the decisions that should be considered are:

- Immediately after a disaster, government should mobilize the lead agency for post-disaster heritage conservation, if one is already designated, or if not, appoint one to address damage to resources of national significance and to assist local communities.
- The lead agency for heritage conservation should collaborate with the lead disaster agency and local governments to ensure cultural resources are considered in post-disaster damage and loss assessments.
- Communities in collaboration with local government and the lead agency for heritage conservation should identify and prioritize cultural resources that require conservation during recovery and reconstruction and document the condition of these resources.
- Communities in collaboration with local government and the lead agency for heritage conservation should decide whether adequate instruments or plans are in place to address post-disaster cultural heritage risks. If so, they should be activated. If not, stakeholders should work together to carry out the cultural heritage planning.
- The lead agency for heritage conservation should decide whether available local resources are adequate to address the post-disaster cultural heritage risks that have been identified. If not, it should identify and mobilize outside financial and technical assistance.
- Temples, Churches, Mosques, Durgahs, tribal organizations, and other guardians of cultural resources should ensure that their resources are included in post-disaster assessments and should request assistance in conserving them, if required.
- Communities being relocated and receiving communities should demand that the conservation of cultural resources be a consideration in resettlement planning, site selection, and relocation plans.

Local planning departments and local disaster management agencies are responsible for the implementation of the instruments mentioned i.e., disaster management plans and urban development plans. They should be involved when heritage conservation issues arise in a post-disaster situation, as should historical societies involved in protection of the affected cultural assets, academic institutions involved in heritage research, and local government arts and cultural agencies. Heritage conservation may be guided by national-level policies and by public agencies. At the international level, the 2005 Kyoto Declaration on the Protection of Cultural Properties, Historic Areas, and Their Settings from Loss in Disasters established a framework for work on the preservation of cultural properties and historic areas. The United Nations Educational, Scientific and Cultural Organization (UNESCO), the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCCOM), and the International Council of Monuments and Sites (ICOMOS) are closely involved in the...
implementation of the Kyoto Declaration, including working to reduce disaster risk at World Heritage sites. These agencies are often active in post-disaster situations and may provide technical assistance to public officials and owners of heritage assets.

Ideally, awareness about the socioeconomic value of cultural heritage and measures to protect it are established in “normal” times. This way, risks to cultural heritage and the related losses of livelihoods, cultural identity, and social cohesion can be mitigated before disaster strikes. In this scenario, the concern after a disaster is only with implementation. Cultural heritage risks can be addressed by various means, including the instruments like Disaster risk management plans that incorporate cultural heritage consideration, Culturally sensitive land use and spatial plans, Raising the cultural sensitivity of disaster management authorities, the families, and other users that occupy heritage properties, Systematic documentation of cultural heritage. Regular maintenance and monitoring for risk reduction of heritage properties, Post-disaster response and recovery programs that are consistent with management plans for heritage sites. But even if these measures are not in place, post-disaster reconstruction is an opportunity to build back better, even for heritage properties, without compromising on their value. Reforms can be made and measures taken to reduce risks to cultural heritage from normal development and from future disasters.

**Coordinating disaster management with heritage authorities** is the important process. Lack of coordination between disaster management and heritage authorities often causes much of the damage to heritage within the framework of emergency operations and reconstruction programs. This can be avoided through an immediate cooperation between disaster management and heritage authorities following a disaster. (The first 48 hours following a disaster are considered very important to avoid irremediable losses to cultural heritage sites.) Natural and cultural heritage sites may be affected by the location of temporary camps for displaced populations that place increased pressure on related resources. It is therefore important to consult with and involve representatives of heritage agencies in planning reconstruction.

**A multidisciplinary approach to damage and assessments is also very important to be taken into consideration.** Damage assessment teams need to be multidisciplinary and include the expertise of heritage and conservation experts, including archeologists, conservation architects, seismologists, engineers, and social anthropologists. As a rule, the damage assessment should be carried on as a comprehensive exercise, avoiding separate assessments, because an integrated assessment allows timely identification of priorities. However, depending on the context, the nature of local heritage assets, and the type of damage, separate damage assessments—including detailed inspection of the building fabric—may have to be undertaken for cultural heritage buildings and sites. Temporary works may also be needed, including strutting and shoring walls, temporary roofing, underpinning, and protection of integral works of art/cultural property (e.g., carvings, murals).

Another important process is **Recognizing the value of built vernacular heritage.** Vernacular housing and building practices often offer an affordable, environmentally sustainable, aesthetic and culturally appropriate response to people’s sheltering needs. Their value, however, is often not recognized. While post-disaster reconstruction can be an opportunity to upgrade a community’s housing condition, it should not result in the systematic demolition of vernacular houses and their surrounding habitat. Such practices can be avoided through culturally sensitive planning that recognizes the functional and aesthetic value of the vernacular.

Next is **Creating incentives for the conservation of vernacular housing.** If new houses are provided for free without timely, adequate support for repair and retrofitting, reconstruction policies may directly encourage the demolition of undamaged or partially damaged vernacular houses. Reconstruction policies often give priority to the construction of new houses. Even though repair and retrofitting programs can at times be initiated almost immediately and at lower cost, they are often given marginal attention as housing strategies or incorporated only at a later stage.

**Harmonizing new housing and settlements with local cultural and natural heritage.** It is important that new construction be built in harmony with local building culture and settlement layouts, especially when building new houses within or near existing historical or vernacular settlements. If reconstruction entails relocation, the heritage value of a new site needs to be assessed so that irreversible losses can be mitigated or avoided altogether.

** Provision of storage place for movable heritage properties** is the other process. Storage facilities allow communities to store salvaged materials with heritage value and use them later during reconstruction, helping ensure much-needed cultural continuity after a disaster. Without adequate inventory and storage facilities, movable heritage properties with high cultural and emotional value for their owners or the community may be subject to looting and further damage.

**Using authentic materials and skills for repairing and retrofitting heritage buildings** would strengthen the building further. Repairing and strengthening heritage buildings may be necessary elements of a post-disaster reconstruction program. Ideally, repairs should have no impact on the heritage value, authenticity, or integrity of a building and its surroundings. However, in cases where this is not possible, the impact should be minimal and reversible and the work should reflect recommended international practices. Using local skills and materials may be the best way to achieve these aims. If traditional craftspeople are given a significant role in restoration activities, conserving cultural heritage can also help restore local livelihoods.
Ensuring community participation, the cultural heritage significance of a place or element may be very localized. Even within a community, there may be variations in the spiritual and emotional importance attributed to specific sites or elements. Accordingly, effective protection of cultural heritage can be achieved only through wide community participation in recovery and reconstruction planning. This participatory planning should focus both on cultural importance and on the cultural and livelihood activities that depend on the conservation of these properties.

Cultural heritage is affected by primary risks, that is, direct damage from the natural disaster and is also threatened by secondary risks that arise during recovery and reconstruction including rescue and relief measures that are carried out with no regard to heritage value of damaged areas e.g., water damage from fire fighting and debris removal with no regard to heritage value, looting of heritage buildings; and reuse of cultural and natural heritage resources as fuel, food, and reconstruction materials. Infrastructure repair or replacement (e.g., road widening) disregards or encroaches upon cultural assets. Temporary camps are sited without regard to cultural heritage concerns, illegal and uncontrolled relocation and reconstruction spoil heritage landscapes or damage other assets, Financial assistance policies encourage demolition of heritage buildings, Authenticity and integrity may be lost because of inadequate repair and retrofitting measures.

Some of the recommendations for conserving the Heritage would be as follows;

- Coordinating the disaster management with heritage authorities in the first 48 hours following a disaster to avoid irremediable losses to cultural heritage sites,
- Incorporation with heritage and conservation experts in housing damage assessment teams or conduct specific assessments of cultural heritage housing and community resources,
- Determining whether temporary works such as strutting and shoring walls or temporary roofing are needed to protect cultural properties or specific components,
- Avoiding the systematic demolition of vernacular houses and their surrounding habitat in an attempt to upgrade a community’s housing condition is usual in post-disaster reconstruction process,
- Should create incentives for the conservation of vernacular housing, or consider declaring historic properties community property if the owners are not able or willing to save them,
- Building guidelines and codes that are compatible with vernacular building practices is much needed,
- Harmonizing designs and building materials of new housing and settlements with local cultural and natural heritage is a necessary process,
- Should provide storage facilities for movable heritage properties so that they are not looted, sold, or removed from the community,
- Authentic materials and skills is applicable while repairing and retrofitting heritage buildings,
- Community participation in decisions regarding heritage conservation must be ensured and realize that the cultural and spiritual importance of heritage sites and properties may be very location-specific.

End Notes