CULTURE

PDNA GUIDELINES VOLUME B

GFDRR
Global Facility for Disaster Reduction and Recovery

WORLD BANK GROUP

CONTENTS

INTRODUCTION

"Cultural matters are integral parts of the lives we lead. If development can be seen as enhancement of our living standards, then efforts geared to development can hardly ignore the world of culture."

Amartya Sen

It is fundamental for all sectors for which a Post-Disaster Needs Assessment (PDNA) is planned or is carried out to consider the cultural context in which the disaster occurred and where recovery and reconstruction will take place. The resilience of social systems to disasters is profoundly influenced by cultural aspects since cultures frame people's relationship to others in their society and the world around them, including the natural environment, and condition their behaviours.

Integrating culture into post-disaster recovery programmes, therefore, fundamentally contributes to their effectiveness and sustainability while also enhancing ownership by target beneficiaries. In this respect, culture can be understood as an 'enabler' and a cross-cutting consideration to be mainstreamed within all sectoral assessments, similarly to aspects such as gender equality, governance or disaster risk reduction. (See Annex 10.3, which gives a hypothetical but illustrative case study on this type of issue.)

At the same time, the specific impact of the effects of disasters on the culture sector (see chapter 3 for a definition of its components) should also be assessed as a self-standing component of economic and human development; hence the need for a specific sectoral assessment and for this guidance.

We are all familiar with the intrinsic value of culture as a repository of symbols and identity, and aware of the profound psychological impact that the loss of cultural assets (e.g. places of worship, rituals and traditions) may have on human beings, which may seriously affect their ability to cope with and recover from difficult situations. Many stakeholders, however, are also becoming aware of the powerful contribution culture can make to the economic, social and environmental dimensions of sustainable development. Culture, indeed, has a tremendous role to play in creating green jobs, reducing poverty, making cities more sustainable, providing safe access to water and food, preserving the resources of oceans and forests, and even strengthening the resilience of communities in the face of disasters. United Nations Organization for Education, Science and Culture (UNESCO), among others, has explored the nexus between culture and development, and produced a number of relevant reference documents.[1]

The contribution of culture to strengthening the resilience of communities is of particular relevance for an assessment of the impact of a disaster on the culture sector, which may take many forms. The preservation of local

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[1] See http://en.unesco.org/themes/culture-sustainable-development

heritage and landmark structures, the respect for cultural diversity and the endurance of cultural beliefs, values, practices and knowledge, and their transmission across generations are critical in building a strong and cohesive society before a disaster, as well as in restoring hope and rebuilding a sense of community after a disaster has occurred, in the recovery and reconstruction processes. A community with a strong cultural capital built on the continuity of knowledge and symbols will be better able to recover from a disaster, drawing on its collective memory, shared values, traditional skills and robust social connectedness. The culture sector, moreover, is by its very nature, often able to provide a major contribution to local employment and to sustainable and inclusive economic development, particularly in post-disaster situations.

Similarly, culture – through its multiple tangible and intangible manifestations, such as built heritage, rural landscapes and traditional knowledge – is an important resource in reducing underlying risk factors and vulnerabilities associated to the physical environment. For example, experience has shown that most traditional buildings and historic landscapes, when well maintained, perform much better than poorly built modern structures (poor quality and defects in materials, improper bonding, etc.) and provide effective 'buffers' in the event of major hazards. When integrated into modern disaster risk reduction (DRR) approaches, indeed, traditional knowledge systems have proven to be efficient and cost-effective tools to mitigate environmental risks and reduce vulnerability.[2]

The inherent link between culture and resilience is due to the fact that cultures are always rooted in a time and a place. Culture defines how people relate to nature and their physical environment, to the earth and to the cosmos, and express their attitudes to other forms of life, both animal and plant. At a fundamental level, biological diversity and cultural diversity are closely interdependent. They have developed over time through mutual adaptation between humans and the environment, interacting with one another in complex ways in a kind of co-evolutionary process. This suggests that any effort to reduce disaster risks to populations and their environment will necessarily also have to take into consideration, and act upon, the culture of the concerned communities.

AIM AND TARGET OF THIS GUIDANCE

This guidance should be used as a complement to the Volume A Guidelines of the PDNA methodology. It is aimed to assist in carrying out a PDNA of culture sector in order to conduct an integrated assessment of the impacts of disaster effects on the sector, and to define the main lines of a recovery strategy that would incorporate DRR considerations. In the process, this guidance should enable the PDNA Culture Team to identify increased risks to culture that may arise from the effects of the disaster or from reconstruction of other sectors, as well as the opportunities associated with the sector for supporting the recovery process in general.

The guidance assume that the Team will have good knowledge of the range of cultural properties and expressions (tangible and intangible) present in the area affected by the disaster, of the relationship between these assets and general livelihoods, as well as of the strong linkages between sustainable development and cultural diversity. The PDNA for culture sector aims to be a strategic rather than an exhaustive assessment, to be conducted in a timely fashion and in the short timeframe dictated by the overall PDNA process, closely coordinated with other sector analyses.

Finally, it should be considered that implementation of PDNA for the culture sector is still in its infancy. When more PDNAs Culture will have been carried out, it is envisaged that this guidance will be significantly enriched through the experience accumulated. At the same time, it is expected that future versions of this guidance will benefit from a more consolidated and internationally accepted conceptual framework that defines the contri-

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[2] See Heritage and Resilience, at: http://whc.unesco.org/en/events/1048/

bution of culture to human development, as well as from further knowledge, case studies and practical tools to express this in post-disaster situations.

CHALLENGES AND OPPORTUNITIES IN CARRYING OUT POST-DISASTER INTERVENTIONS IN THE CULTURE SECTOR

Carrying out a PDNA for the Culture Sector is likely challenging, culture being a broad concept encompassing a very wide range of elements, from a community's identify-enforcing rituals, which contribute to social cohesion, to national iconic heritage sites representing deep-rooted cultural reference points.

As clarified in Volume A of the PDNA Guidelines, the approach used in the PDNA integrates both the economic dimension based on the Damage and Loss Assessment (DaLA) methodology, and human development concerns. As far as the culture sector is concerned, while damages and losses to tangible heritage as a result of a disaster can be often quantified, and recovery needs and plans framed in a short time, this is not always the case for some iconic cultural assets charged with symbolic meaning and deemed 'irreplaceable'. It is also difficult to make a quantitative assessment of a disaster's effects on intangible heritage and creativity.

Thus, the challenge in carrying out a PDNA for culture often lies in finding ways of recovering from the disaster, even when the reconstruction of a lost asset is not possible. Recovering, in cultural terms, is not necessarily a question of reconstructing physical assets, but rather of re-establishing broken connections among people and between people and their environment. This can be achieved through a deep understanding of the dynamic features and processes that characterize the relationship between the affected populations and their cultural assets, and how the disaster has impacted on them, which would enable the identification of the necessary recovery measures (and of their cost). In this regard, it should be also kept in mind that culture is a dynamic and highly permeable process, sustained by bottom-up forces, represented by communities, groups and, in some cases, individuals, playing an important role in shaping it and ensuring its safeguarding, maintenance and re-creation.[3]

Another challenge in assessing the impact of a disaster on culture is related to the fact that this is often nurtured by non-formal activities (e.g. often representing a person's second job), which may not feature in official statistics. In some cases, moreover, it could be difficult to distinguish clearly between the roles of the public and the private sectors. In many countries, for example, creative industries have a great potential as drivers of economic and social development. In developing countries, most are household-based or small and medium-sized enterprises (SMEs), often owned and operated by women. Similarly, one must be mindful of the community-based organizations (CBOs) and SMEs that operate in the cultural tourism sector, both in terms of services related to tourism facilities, or in cultural and natural resources management and maintenance.

An additional challenge lies in expressing – in human development terms – the added value of culture in post-disaster recovery, since this is not yet recognized within standard parameters and frameworks such as the Millennium Development Goals (MDGs) or the various Human Development indexes. As stated above, the intrinsic contribution of culture to sustainable development and resilience is important, supported by an increasingly large body of literature and concrete experiences. The PDNA for culture should thus reflect this both in terms of the impact of a disaster and of the potential of culture as a sector that could drive the recovery process by re-establishing societal reference points.

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[3] See the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage (2003), where, in particular, Arts. 11, 12 and 15 state the fundamental and proactive role of communities and repositories of data in general to document and safeguard such heritage, as well as UNESCO Convention on the UNESCO Convention for the Protection and Promotion of the Diver sity of Cultural Expressions (2005), in which Art. 11 acknowledges the fundamental role of civil society in protecting and promoting the diversity of cultural expressions.

At the same time, the PDNA Culture offers important opportunities to improve the foundations upon which other post-disaster recovery efforts are built, and to make those efforts more sustainable and effective. The linkages between culture and other dimensions of human development are manifold.

Cultural resources have been translated into important sources of employment and revenue generation for individuals and governments, either as part of the formal or informal economy in sectors such as trade, tourism and creative industries. Culture is also a sector in which marginalized members of society can easily engage, either for their own spiritual needs or for a source of income. In terms of social development, safeguarding heritage in times of disaster provides the affected community with a sense of continuity and shared identity; it mitigates the psychosocial impact of disaster, helping overcome trauma and providing a sense of normalcy, stability, inclusiveness and hope for the future.

Given its prominent place in the community, the cultural heritage is also a key consideration for promoting ?dialogue and preventing tensions and conflicts that might arise (e.g. using familiar cultural paradigms facilitates comprehension, learning and communication in a given community). Communities, practitioners, artists, artisans and craftworkers could substantially contribute to the reconstruction process, bridging together traditional and innovative production aspects, and the quality and continuity of traditions.

The assessors responsible for the PDNA Culture, therefore, should be able to identify and emphasize all these opportunities and, working in close consultation with other sectors, harness their potential to support the recovery and reconstruction process.

Since culture playing a fundamental role in the social fabric of communities, its manipulation and exploitation may also lead to abuses whereby the alleged respect for traditions may be presented as an excuse for discriminatory practices, legitimizing, for instance, gender inequality or marginalization of a particular sub-group (UNDP Oslo Governance Centre/UNIFEM, 2009). As stated in the UNESCO 2001 Universal Declaration on Cultural Diversity: "no one may invoke cultural diversity to infringe upon human rights guaranteed by international law, nor limit their scope". The universal nature of human rights is clearly established as international law in the United Nations Charter "for all without distinction". The approach of UNESCO, through all of its cultural Conventions, is firmly grounded on this principle. The emphasis is on acknowledgment, understanding and tolerance of other cultures on the basis of a binding global ethic founded on universal values and mutual respect across cultural boundaries.

Conversely, human rights include many very important cultural rights, which should be given equal attention, such as the right to participate in cultural life and enjoy one's culture, etc. However, they are not unlimited. In accordance with international law, the right to culture is limited at the point at which it infringes on another human right. The PDNA Culture Sector Assessment Team should, therefore, ensure that implementation procedures are in place to involve women and men of all ages as well as sub-groups of the population in decision-making, as well as to promote right-based practices and increased social equality.

EXPECTED RESULTS AND COMPONENTS OF THE PDNA CULTURE

The PDNA Culture Report should aim at identifying the affected people, the effects of a disaster that relate to the culture sector and their impacts on the affected people, the urgent safeguarding measures required as well as the strategy for long-term recovery, which would integrate disaster risk reduction (DRR) considerations. Defining the recovery strategy statement on the basis of the desired long-term outcome for culture, the PDNA Culture should aim not only to lay the basis for the restoration of the pre-disaster situation, but also seek to establish the foundation for consolidating the culture sector and rebuild more sustainably (BBB) by addressing the weaknesses or gaps identified in the sector while carrying out the assessment.

The PDNA shall issue a 20-30 page report including an executive summary of three to five pages. In addition to an executive summary and an introduction, the PDNA for culture, just as for all other sectoral assessments, should include the essential components listed in Table 1.

Table 1: PDNA Cultural Sector Features and Components

PDNA Cultural sector features	Components
1. Pre-disaster Baseline	Main features of the culture sector in the country with specific reference to the affected people and geographic areas (using the lists identified for the pre-disaster baseline, see chapter 3 on baseline information).
2. Effects of the disaster	Effects of the disaster on cultural assets and infrastructure; on service delivery, production and access; on governance and decision making processes; as well as on risks and vulnerabilities. Particular attention shall be paid to affected population and cultural aspects relevant to their lives, strengths and potential elements that can contribute to a sustainable recovery, as well as to limiting risks of exclusion or discrimination.
3. Economic value of the effects of the disaster	Costs related to the damage and losses incurred as a result of the disaster.
4. Impacts of the disaster	Economic and human-development impacts of the disaster, with specific reference to cross-sectoral considerations.
5. Sector recovery strategy	Statement of recovery needs and provide a vision for the full recovery process. It will also include a sector recovery plan, with related estimated costs, monitoring framework and proposed implementation arrangements.

Annex 10.4 contains some examples of questions that help guide each of the aforementioned sections of the Culture Report.

THE ASSESSMENT PROCESS

ESTABLISHING RECOVERY COORDINATION MECHANISMS

Carrying out a strategic assessment starts by identifying the coordination mechanisms that shall be in place, the human resources available to respond to the disaster and the logistic resources available and those required to support the proposed plan.

When it has been decided to carry out a PDNA, a national focal point (FP) for the overall process shall be identified by the government in one of the relevant ministries or national authority, to form a steering committee (SC) and oversee the assessment and the recovery framework, with the participatory role of women and men of all ages from the affected communities and shall ultimately validate and monitor the recovery strategy and plan. The SC will further supervise the monitoring of the entire appraisal. When present, inter-ministerial coordination committees should be used for the SC.

If it is decided that culture should be one of the sector subjects of the PDNA, UNESCO will support the leading Ministry FP and the established SC in creating the appropriate structure for the assessment process. Ideally, the government should identify a specific FP for the PDNA for culture within the appropriate institution to act as a counterpart for UNESCO and other players.

Because of the multifaceted aspects of culture (traditions, crafts skills and knowledge, monuments, natural resources, etc.) and the possible diversification of the managing structure in a country, it is fundamental to identify

the relevant ministries and the leading authority for the PDNA. (In various countries, there is not a specific ministry of culture, but its functions are covered by different ministries, for instance, the ministry of antiquities and heritage or the ministry of tourism, crafts and social economy.) In this context, it is important to recall that culture is sometimes considered a sub-sector of the larger group of the social sector, together with health, housing and education, the other two main sectors being the productive and the infrastructure ones.

A coordination mechanism for the PDNA for culture should be then established, and clear roles devised for the national FP, national experts, intergovernmental organizations and other international partners. In this framework, as far as possible, in addition to the central government, it is advisable that the local authorities (e.g. municipalities) and concerned ministerial departments from affected and vulnerable areas be represented, in order to ensure that the plans to be implemented correspond to on-site reality.

In supporting the government, and as appropriate, UNESCO will mobilize its extensive network of partner institutions with specific competence in the subject, including the International Council on Monuments and Sites (ICOMOS), the International Union for the Conservation of Nature (IUCN), the International Centre for the Study and the Preservation and Restoration of Cultural Property (ICCROM), the International Council for Museums (ICOM), the International Council for Archives (ICA) and the International Federation of Library Associations (IFLA). The International Blue Shield and various on-governmental organizations (NGOs) that are active in the culture sector.

LINKS TO HUMANITARIAN AND DISASTER RISK MANAGEMENT FRAMEWORKS AND OTHER DEVELOPMENT STAKEHOLDERS

Further liaising should be ensured with humanitarian response, disaster risk management (DRM) and development stakeholders. The designated national FP for the PDNA for culture will work together with FPs appointed within other sectors in order to ensure that culture is taken into due consideration and that relevant cultural issues are properly addressed in humanitarian interventions as well as in the Recovery Strategy and Plans. If a National Disaster Risk Platform is in place, a liaison person should be identified to ensure that the culture sector response is consistent with the work of the DRM group and that cultural concerns are integrated into national plans.

Due to the generally weak understanding of and low priority given to culture in emergency plans, decision-makers, key development stakeholders and political partners must be involved from the beginning, with a view to: (i) facilitating access and initial steps for PDNA, in both rapid survey and detailed analysis; (ii) preparing the basis for the sustainability of the reconstruction process, appropriately addressing the reconstruction process and integrating the considerations for cultural heritage into the general framework of development and planning; and (iii) strengthening or setting up the country disaster risk reduction(DRR) and early warning mechanisms for the culture sector, and integrating it into the overall national DRR Plan.

IDENTIFYING HUMAN RESOURCES AND STAFFING REQUIREMENTS FOR THE PDNA CULTURE TEAM

While there are optimal plans, the selection of the more appropriate option is context-oriented and in particular takes into account the human and logistic resources that can be quickly mobilized. It is fundamental to identify clear qualifications needed and criteria for selecting appropriate experts.

The PDNA for culture sector will require a team of up to four or five specialists, including one Team Leader and supported by one or two backstopping and secondary data collection agents. Expertise within the team should include, as a minimum: an architect/conservator or structural engineer, an archaeologist, a collection/

libraries/archives expert and a cultural anthropologist, as well as an economist with knowledge of the culture sector. Ideally, all of these professionals should have some experience in disaster situations and familiarity with the local cultural context. It is advisable that the team include both female and male members to facilitate and ensure interaction with various groups of women and men of the affected population.

The team should coordinate with specialists involved in the PDNA of the Housing Sector to ensure that there is no duplication of estimates for structures containing cultural institutions (when built heritage is not listed per se on national or international inventories). Further liaising should be ensured with the gender specialist in order to better frame the interviews and to estimate the differential impact of the disaster by gender. At times, the assessment may be coordinated with experts from the Education Sector in order to link culture to formal and non-formal education, vocational training and other relevant matters, as well as interactions with the environment and employment specialist (e.g. entrepreneurship and business skills for arts and crafts SMEs and vocational training). This intersectoral coordination should take place along the whole PDNA process.

The PDNA Culture Team, in consultation with the national FP, should also identify, including all relevant contact information, resource persons on the ground, based on their safety and operational capacity, to support the entire process: rapid survey, assessment, response formulation, implementation, monitoring and evaluation (M&E) of interventions and the Recovery Framework (RF). Resource persons may be: (i) technical and professional staff, connected with cultural institutions, and site managers; (ii) contact persons for any cultural associations of practitioners, craftworker cooperatives, community-based organizations (CBOs), or community or religious leaders.

LOGISTICS RESOURCES AND POSSIBLE SUPPORTIVE SCENARIOS

Logistics arrangements concern transport for the PDNA team to reach affected and vulnerable areas during the assessment, in addition to basic arrangements for temporary office space to support the field assessment and the data collection, as well as to launch monitoring in the very first stages of formulating the PDNA and Recovery Framework (RF). Office space for the PDNA for culture should ideally be located together with the other PDNA sectoral teams, to facilitate integration and coordination. There should be a clear management definition of the role and responsibilities of each stakeholder and operator.

PRE-DISASTER BASELINE INFORMATION AND SECTOR OVERVIEW

Pre-disaster conditions are fundamental in assessing the extent and impact of catastrophes and constitute the baselines of what is considered 'normal', for example, whether structural changes in a historic building are due to the normal decay process or to the disaster. Thus, it is fundamental to understand the main features and mechanisms of the sector prior to the disaster, particularly to compare the changes (gap) between pre- and post-disaster conditions.

OVERVIEW OF THE CULTURE SECTOR

Although culture takes many forms, with deep-seated interdependence between the intangible cultural heritage and the tangible cultural and natural heritage,4 for the immediate purposes of these guidelines, the following

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4   Terminology and definitions are those adopted in UNESCO conventions. In particular, for the definition of tangible heritage's domains see especially Art. 1 of UNESCO Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of

five main forms have been identified that the PDNA shall assess:

1. **Built heritage and cultural/natural sites:** This includes buildings/structures recognised as having cultural significance, ranging from a coherent grouping of structures (e.g. historic districts, rural and urban settlements) to a single building or site (places of worship, archaeological sites, monuments, modern and contemporary masterpieces) to infrastructure (bridge, port facilities) imbued with recognized cultural values (by local, national or international mechanisms of designation). It also include natural protected areas of particular aesthetic and biodiversity significance, both within urban settings and in the hinterlands, regional and national parks, etc

2. **Moveable properties and collections:** This includes works of art, archaeological and ethnological artefacts, archival records and manuscripts, etc.

3. **Intangible cultural heritage**: This includes the practices, representations, expressions, knowledge, skills recognized as meaningful by communities and practitioners. The intangible heritage includes also traditional knowledge systems and practices focusing on knowledge of nature and the universe, and customary systems of resource allocation, dispute resolution and practical utilization of natural resources.

4. **Repositories of heritage**: This includes museums, libraries and archives, cultural institutions, vocational training structures, zoological/botanical gardens with their auxiliary installations (specialized laboratories, storerooms, etc.).

5. **Cultural and creative industry:** This includes infrastructure, resources and processes for the production, distribution and sale of creative cultural goods such as music, crafts, audio-visual products, cinema, books, etc.

For each of these forms, it is critical for the PDNA Culture Team to identify the affected persons. Annex 10.1 to this guidance provides, for each of the five forms, a list of the typical related assets and infrastructure, and of the associated human resource components.

Because culture is fundamentally in the mind of people, moreover, one should also consider that certain individuals may be, themselves, a cultural asset and a repository of heritage, which may be affected by a disaster either physically or in their ability to perform their social function. In some countries, indeed, persons having acquired during their life exceptional degrees of cultural knowledge are designated as 'national treasures' (for example, in Japan) and are supported by the public authorities for the contribution they make to culture in general.

Ownership of Cultural Property (1970) and Arts. 1-2 of the UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage (1972). For the definition of intangible cultural heritage, See Art. 2 of the UNESCO Convention for the Safeguarding of Intangible Cultural Heritage (2003), here reported for clarity: "1. The 'intangible cultural heritage' means the practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artefacts and cultural spaces associated therewith – that communities, groups and, in some cases, individuals recognize as part of their cultural heritage. This intangible cultural heritage, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity. For the purposes of this Convention, consideration will be given solely to such intangible cultural heritage as is compatible with existing international human rights instruments, as well as with the requirements of mutual respect among communities, groups and individuals, and of sustainable development. 2. The 'intangible cultural heritage', as defined in paragraph 1 above, is manifested inter alia in the following domains: (a) oral traditions and expressions, including language as a vehicle of the intangible cultural heritage; (b) performing arts; (c) social practices, rituals and festive events; (d) knowledge and practices concerning nature and the universe; (e) traditional craftsmanship." For the definitions of cultural expressions, cultural industries and related concepts, see Art. 4 of the UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions (2005).

When compiling information on the culture sector, it is good practice to also include data related to areas surrounding the region affected by the disaster, since this may provide useful inputs in the design and implementation of a recovery strategy.

A PDNA for culture sector should include a general overview of the culture sector within the affected areas, framed within a historic and geographic perspective. In addition to this overview, the PDNA should provide baseline information on the following four dimensions:

- infrastructure and physical assets;

- service delivery of cultural goods and access to cultural resources;

- governance and decision making processes;

- risks and vulnerabilities that affected the culture sector before the disaster.

INFRASTRUCTURE AND PHYSICAL ASSETS

By infrastructure and physical assets of the culture sector, reference is made primarily to tangible heritage, both immoveable (all of those listed under item 1 above) and moveable (see above, points 2 and 3), but also to the places that host intangible heritage practices, such as theatres or any urban or rural cultural space, indoor or outdoor, where rituals, performances and other traditional events take place. Infrastructure and physical assets also include buildings that host cultural institutions (see item 4 above), but also those where culture is governed, such as ministries or local branches of the cultural administration, as well as structures where cultural goods are produced and accessed, with their equipment and associated facilities. In some cases, as mentioned above, individual persons may be also considered a physical cultural asset.

The type of information to be collected would include the number and main features of physical, cultural, / natural assets and institutions within the areas affected by the disaster, with their contents, specialized or general equipment, different types of infrastructure, typical furniture, broken down by urban and rural areas (and administrative district), and by public and private ownership.

SERVICE DELIVERY, PRODUCTION OF GOODS AND ACCESS

By service delivery, production of goods and access in the culture sector, reference is made to the very large range of activities whereby, before the disaster, the people affected were able to benefit from culture in all its manifestations. This includes the ability to: visit a heritage site or a museum; enter a sacred place such as a religious building and practise traditional rituals; the possibility to express one's intangible heritage in all its forms, including, for example, using one's mother tongue; enjoy a cultural event; to transmit and access information of a cultural nature, for example, through educational activities; produce, distribute and obtain cultural goods (e.g. to purchase audio-visual materials or books); and in general, take an active part in the creation and appreciation of culture.

The type of information to be collected in relation to service delivery, production of goods and access would normally include the number of people having access to cultural resources and their nature; the quality, availability and prevailing costs prior to the disaster of specialized materials and equipment required, for instance, in conservation, restoration and maintenance of cultural institutions and built heritage; the number of people expressing intangible heritage (practitioners, artists, holders of traditional knowledge) and the number and nature of these expressions, including festivals, ritual events etc.; the type and number of cultural goods produced, notably in the

creative and cultural industries, including the tourism sector, and by whom (number and characteristics of staff enrolled in the sector) as well as number and nature of the associated enterprises (public and private), markets and local, national and/or international fairs.

As much as possible, this baseline information should be disaggregated by administrative districts, age groups, ethnicity and gender. Particular care should be paid to avoid duplication with other sectors conducting a PDNA, notably with those involved in trade, tourism and housing, among others.

GOVERNANCE AND DECISION-MAKING PROCESSES

Governance and decision-making processes in the context of culture refers to the systems that were in place before the disaster to develop and apply policies, regulations and programmes for the sector and to manage the related assets and infrastructure. These systems include the legal and policy framework in place that regulates the sector; the strategies and programmes in place; the institutional framework that was in place before the disaster, including agencies responsible for the management, conservation and transmission of cultural heritage, museums, cultural institutions, etc. with their government ministries and departments; NGOs and cultural associations; and the human resources that were involved in these processes before the disaster (decision-makers, managers, specialized professional and technical staff, security and cleaning staff).

The type of information required in this regard would include: existing laws, policies, guidelines and protocols for the safeguarding and promotion of cultural heritage and cultural and creative industries; the number and nature of the institutions involved in the governance of the sector, with their organizational charts, budgets, equipment and other facilities; and basic statistics on the productivity of these institutions, in terms of number and nature of actions taken over a given period (prior to the disaster).

RISKS AND VULNERABILITIES

Risks and vulnerabilities refer to the level of exposure to known hazards and to the inherent vulnerabilities (and resilience) of the Culture Sector to these hazards prior to the disaster. This includes information on: whether an overall disaster risk reduction strategy was in place for the sector (or any of its sub-sectors); the risk mitigation measures that were in place to reduce the impacts of possible disasters across the sector; the state of conservation of cultural assets and infrastructure and the known level of risks to which they were exposed; the risks that affected the delivery of services, the production of goods and access to cultural resources; and finally, the risk of disruption to which were exposed the governance processes for the sector.

Typical information to be collected would include, inter alia: DRM strategies and plans elaborated within the culture sector; risk maps, for example, of cultural heritage sites; risk assessments conducted prior to the disaster for cultural institutions (museums, archives, etc.); back-up copies of essential documentation; availability of stocks of essential equipment and materials for emergency interventions; and the ability of individual units within the government to function independently in the event of a disruption of communication infrastructure. .

GENERAL CONSIDERATIONS

QUALITY AND SOURCES OF BASELINE DATA
In many countries, baseline data for the culture sector are available to varying degrees or in different formats (comprehensive digitalized database and/or portal, websites), although it often overlooks significant aspects, such as intangible cultural expressions and the creative industries. The quality of the data, furthermore, can

sometimes be questionable due to the lack of standardized indicators and statistics. Finally, the baseline information may have been stored in vulnerable conditions and may not be available after a disaster.

Ideally, baseline information should be established before the assessment, with corresponding indicators, to serve for future sound monitoring and evaluation work. It is recommended ensuring that data collection and recording are coordinated with the existing relevant central database and inventories of the ministries, local municipalities and institutions concerned. This requires aligning with and adopting the same indicators; if considered appropriate, new indicators should be added. The new data collected should also then be integrated in the central database/national inventory/culture sector portal, with a view to strengthening post-disaster response planning.

Generally, data can be obtained from different sources:

- at government level;
- in-country associations of cultural practitioners, society of authors, cooperatives of craftworkers and cultural producers;
- aid banks and foundations; in-country cultural, academic institutions, research departments on cultural heritage;
- internationally available data from cultural, research and academic institutions.

In addition, to better understand the local context and its challenges, it may be useful to analyse previous programmes to ensure consideration of success and failure factors or, whenever initiatives/projects are rejected by a given community, to identify the core reasons.

ASSESSMENT OF DISASTER EFFECTS

Once baseline data have been collected, or often even before, the PDNA Culture Sector Team will start compiling information on the effects of the disaster, i.e. its direct consequences. This will be achieved through secondary data collection, i.e. data that have been collected by others and already available; and primary data collection through field visits and/or interviews.

This section of the PDNA will begin with a general description of the disaster (the nature and magnitude), the areas and population affected, which is likely to be common with other sectors. It could be placed at the beginning of the overall PDNA Report. Nevertheless, it may be useful to recall within the PDNA for culture sector the main characteristics of the disaster from the specific perspective of the sector. The PDNA Culture Team will then carry out a comprehensive data analysis and validation to determine the specific effects of the disaster on the four dimensions described in Section 3. These effects will be then compared to baseline data to establish the 'gap' caused by the disaster.

EFFECT ON INFRASTRUCTURE AND PHYSICAL ASSETS

The effects of a disaster on physical assets and infrastructure will be assessed primarily in terms of damage, with a view to translate this later into an economic valuation of the impact of the disaster (see Sections 5 and 6 below). The damage resulting from a disaster to physical cultural assets and infrastructure (the 'stocks' of the culture sector) will often include their partial or total destruction. This may result both from the direct and secondary effects of a disaster. For example, a violent earthquake can partially destroy a museum (primary effect), whose collections are then lost as a result of looting (secondary effect) while law enforcement is disrupted.

Here, it is important to clarify that all effects on physical assets and infrastructure, which have already occurred and are related, in one way or another, to the disaster, should be considered by the PDNA Culture Team at the time of their assessment, and costed accordingly. If, at the time of conducting a PDNA for culture sector, a possible secondary effect from a disaster on physical assets and infrastructure has not yet taken place, then this should obviously be considered. The effects on infrastructure and assets should also consider new risk resulting from the primary effects of a disaster (see below).. Examples of damage to cultural assets and infrastructure may include:

- partial or complete collapse of buildings, sites and of infrastructure;
- collections and movable properties can be partially or completely destroyed;
- nature parks, particularly small ones, can be destroyed;
- damage to physical assets pertaining to the administrative functions of the sector;
- the destruction of communication, water, sewage, electricity, fuel supply lines and pipes;
- the death of some individuals.

The physical assets and infrastructures to be assessed as a priority should be those which carry the greatest cultural value and/or support essential basic services, especially in the extreme circumstances of the emergency. In assessing the damage to physical assets and infrastructure, the PDNA team may consider different levels of gravity according to a given scale (e.g. from slight to severe) from structures that can be easily rehabilitated, to those requiring a more in-depth structural analysis of their conditions, all the way to those beyond repair which cannot be reoccupied. Average costs can be assumed for the less important cultural assets, whereas detailed information on the actual cost for reconstruction/repair of priority cultural resources should be ideally collected. When, for practical reasons, it is not possible to obtain complete data on all areas affected by a disaster, the assessment could be conducted on a sample area, to be previously agreed with other members of the assessment team, providing also justifications on the criteria adopted in its selection.

It should be noted that when the effects of a disaster are significant, there will very likely be a particular damage intrinsic in the partial or total loss of an original structure of particular spiritual and cultural value, which will never be possible to fully recover through reconstruction, and therefore to assess in economic terms. Even though the economic value of the disaster effects cannot be estimated into direct costs as presented in Section 5 below, the effects of the disaster, in such circumstances, could be assessed in terms of impaired access (see below) or more broadly in terms of human development impact (see Section 6 below). The determination of the corresponding recovery needs (and their costs) will depend on the strategy adopted, which will have to take into consideration their feasibility in the local cultural and socio-economic context (see Section 8).

SERVICE DELIVERY AND ACCESS TO GOODS AND SERVICES

The PDNA Culture Team should also assess the effects of a disaster on the continuity of service delivery, goods production and access to cultural resources, which may lead to additional financial costs. Considering this type of effects is essential to capture the full economic and human development impact of a disaster. Some examples are given below:

- closure of heritage sites, places of worship, museums, theatres and cultural institutions;
- loss of ecosystem goods and services provided by natural heritage, cultural landscapes and historic urban centres;
- limited access to heritage sites, places of worship, museums, theatres and cultural institutions;

- loss of historic documents, archival records or electronic databases;

- the disruption of household and community-based services;

- interruption of intangible heritage practices and transmission of traditional knowledge, including the possibility of using one's mother tongue;

- reduced or no access to cultural spaces/places and materials necessary for the practice of intangible cultural expressions;

- the disruption of the production of cultural goods;

- the interruption of basic infrastructural services (communication, electricity, water, etc.);

- limited access to conservation products and specialized equipment required for the preservation of endangered assets.

The type and structure of the data related to the effects of a disaster on the continuity of service delivery, goods production and access to cultural resources should mirror as much as possible the data collected for the baseline (see Section 3 above) so as to enable a comparison.

When assessing the effects of a disaster on the continuity of service delivery, goods production and access to culture, it is very important to apply a gender perspective, consider age groups, and break down data accordingly, as much as possible, given the often informal nature of the sector.

Most of these effects can be translated in terms of economic losses, that is, of additional expenses incurred by the public and private sector, as well as individuals, to ensure the continuity of services, production and access until a full recovery from the disaster is achieved (see Section 5 below). With respect to damages to physical assets and infrastructure, however, losses to cultural services, production and access cannot always be easily translated in financial terms. In such cases, a qualitative description of the socio-cultural value of the loss should be provided.[5] Once again, the determination of the recovery needs (and their costs) to address the losses incurred by the affected population will depend on the strategy adopted, which will have to take into consideration their feasibility in the local cultural and socio-economic context (see Section 8).

GOVERNANCE AND DECISION-MAKING PROCESSES

A major disaster will usually have considerable effects on governance and decision-making processes. The PDNA Culture Team should assess these effects on the governance of the sector, at national and local levels, including on administrative functions and capacities. As mentioned in Section 3 above, governance and decision-making processes in the context of culture refer to the systems in place to develop and apply policies, enforce regulations and implement public programmes for the sector and manage the related assets and infrastructure. After a disaster, it will include the ability of the public authorities to respond to the emergency and plan for a long-term recovery, if relevant comparing the reality post-disaster with the provisions of the plans in place before the disaster took place.

The damage suffered as a result of the disaster by buildings, structures and major equipment (including communication infrastructure) that is essential for the proper functioning of administrative authorities, at the central and local levels, will have been already assessed under the component on "effects on physical assets and infrastructure" (see section 4.1). As far as effects on processes are concerned, the focus should be on the level of

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[5] For example: "*This festival, though not of significant economic impact, has been held annually for the past 233 years, and represents the most important community rallying point for the entire region. Ensuring the holding of this festival, despite the ravages caused by the disaster, would send a strong message to the entire community/affected region – that the disaster and its impacts will be overcome.*"

the post-disaster capacities of the public authorities and of civil society, both in general and specifically to lead and implement the recovery in the culture sector. These capacities should be assessed at two levels: in terms of coordination and strategy development, on one hand, and in terms of technical professional knowledge, on the other hand. Aspects to be considered may include the following:

- loss of human resources, minor equipment, financial resources and supplies;
- loss of documentation and baseline data, both in paper and electronic forms;
- disruption of administrative functions;
- disruption of key decision making, policy and strategy formulation and coordination mechanisms;
- disruption of community social structures, power relations (including gender roles),the presence of latent conflicts (often along ethnic and cultural divides), etc. associated with cultural assets and practices.

Among the institutions and organizations that should be considered, primary attention should be paid to the following:

- the ministry of culture, other relevant ministries or national agencies with a mandate over heritage and cultural industries;
- fire brigade, civil defence agencies, cultural heritage police;
- national and local community associations, NGOs involved in culture;
- religious institutions;
- educational, vocational training and research institutions.

INCREASED RISKS AND VULNERABILITIES

Because of its inherent characteristics, culture is a sector that is often exposed to new and higher risks following a disaster. This is due to a number of factors, including: the misperception or perception whereby culture would not be a priority, in general, but even more so in times of emergency; the informal nature of many of its productive processes, which once disrupted are difficult to re-establish; the often fragile state of many of its assets, such as historic buildings that are rarely maintained as they should; and in general, since culture is a sector intrinsically associated with the socio-economic fabric of society, when society is affected by a disaster, so is culture. Sometimes, the greatest impact on culture is not the direct result of a disaster, but of the changes that this has brought, over the medium and long term, to the social and economic context (e.g. driven by a general aspiration to modernity, regardless of the opportunities offered by the local cultural context). In many cases, the reconstruction itself has been conceived and implemented without consideration for culture and heritage, leading to the loss of substantial cultural resources, which had survived the primary effect of a disaster. Aspects to be considered when assessing the effects of a disaster on risks and vulnerabilities in the culture sector include the following:

- exposure to the direct or indirect consequences of potential new hazards;
- increased vulnerability of cultural assets from inadequate protection or other reconstruction operations;
- increased vulnerability of cultural expressions due to temporary or more permanent disruption;
- increased vulnerability of cultural production due to the displacement of producers or to the disruption of the markets;

- new risks to heritage sites as a result of vandalism, looting, conflicts and the introduction of culturally inappropriate (external) practices;
- loss of authenticity or falsification of tangible heritage and movable cultural properties;
- emergency response and recovery measures that are carried out with no regard to the heritage value of damaged areas;
- encroachment and pressure on cultural heritage resources from illegal or uncontrolled development.

CALCULATING THE VALUE OF THE EFFECTS OF THE DISASTER

Once the effects of a disaster have been determined, the PDNA Culture Team should assess the corresponding economic value, insofar as possible. This will be achieved through the Damage and Loss (DaLA) methodology developed by the World Bank, building on the experience developed by the United Nations Economic Commission for Latin America and the Caribbean (UN-ECLAC) in the 1970s.[6] In this framework, damage and losses are defined as follows:

- **Damage:** total or partial destruction of physical assets existing in the affected area;
- **Losses:** the changes in flows of goods and services — diminished revenues and/or additional costs, expressed in current values— caused by the disaster that may extend throughout the rehabilitation and reconstruction periods.

Although it will not be always possible to recover from all damage sustained or to compensate the losses from for every disruption in services, production or access, the aim of the PDNA for culture is to identify as much as possible the economic value of these effects. This will then be aggregated and contribute to the macro-economic and human development impact of the disaster, for the part pertaining to the Culture Sector. Human development impact (see Section 6 below) will also reflect aspects that are impossible to translate in monetary value. In calculating the economic value of damage and losses, the monetary value of damage will be expressed in terms of replacement costs according to prices prevailing just before the event, while the monetary value of losses will be expressed in terms of reduced revenues and additional costs incurred as a result of the disaster, in current values.

Since the extent of the losses will be determined based on an estimate of the time required until full recovery has been achieved and of the capacities of the sector to implement the necessary measures, the calculation of their economic value will be based on a realistic assumption of a post-disaster scenario, including timeframe, the possibility of adopting certain temporary solutions, etc. These assumptions will be reflected in the sector recovery strategy (see Section 8).

ESTIMATING THE ECONOMIC VALUE OF DAMAGE
The economic valuation of damage to public cultural assets is particularly complex, because cultural goods, in the largest sense, have usually important non-use (non-market) values (e.g. spiritual, symbolic, existence, option and bequest) as well as to the characteristics of private cultural assets (e.g. historic residential buildings or valuable artistic objects in private hands) to possess at the same time a certain degree of public interest. It is very difficult

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[6] See the 2010 DaLa Guidance Notes (in particular Guidance N. 2) issued by the World Bank: https://www.gfdrr.org/DaLA_Guidance_Notes

to translate these non-use values and peculiar characteristics into monetary terms. Moreover, the replacement of certain cultural assets (such as an archaeological site or a historic building with precious decorations), when technically feasible, may not be possible without a considerable loss of authenticity.

In the fact of the difficulty of restoring the pre-disaster situation, the recovery measures that will be identified and implemented in the culture sector will often focus on alternative, creative solutions, aimed at compensating for the benefits from cultural assets lost by the affected population. They will have to be developed in the framework of an overall recovery strategy defined through a participatory approach and sensitive to local socio-cultural and economic context. For this reason, estimating the economic value of the effects of a disaster, based only on an understanding of these effects, will necessarily be an exercise, based on assumptions, which will have to be reviewed and validated at the stage of defining the final recovery strategy.

For the specific purpose of calculating the economic value of the effects of a disaster on the culture sector, it is proposed to refer to the methodology laid out in the study carried out by Kaspars Vecvagars, entitled: "Valuing damage and losses in cultural assets after a disaster: concept paper and research options".[7] The approach that this study considers the most effective in post-disaster situations is based on the 'benefit transfer method', which assesses the value of a good or service based on the value of an appropriate substitute. This is preferred among other methods because it is more rapid and requires fewer resources; however, some valuation of the benefits derived from the cultural assets must be available. Annex 10.6 provides a list of primary and secondary benefits that may derive from cultural assets, which may be useful to consider in calculating their replacement cost. The study by Vecvagars acknowledges that finding an appropriate substitute to a cultural asset damaged as a result of a disaster may be very difficult. For this reason, the study explores a variation of the benefit transfer method, which the author calls the **'advanced' or 'enhanced replacement cost method'**:

> Based on the standard replacement cost method where the cost of replacing the good or service is used as a proxy for the good's/service's value. However, under this method the costs and, hence, the value would not be calculated based on the creation of a replica or reconstruction of the original, but rather based on the creation of a new, possibly different and/or enhanced cultural asset.[8]

This method requires more time than the standard benefit transfer method (due to the process for determining the 'enhanced' cultural asset, which may involve consultations, design competitions, etc.) and may therefore be used when time is less of an issue.

When repair and reconstruction of damaged cultural assets is possible and desirable, the related cost should be calculated, based on actual market prices of labour, materials and management. These costs should be broken down by public and private sector in order to determine where the weight of the reconstruction effort might fall. When historic structures are concerned, these costs will have to consider the special requirements of such a complex undertaking, which cannot be compared to the simple replacement of a normal modern building. In some countries, there are compilations of unit costs for standard intervention in the area of heritage conservation, which can be used as a reference. The feasibility and cost for the restoration of movable objects such as paintings, archaeological relics, textiles etc. requires expert advice and can be very expensive. Annex 10.5 summarizes how damage may be calculated for different types of cultural assets, suggesting the most appropriate valuation method.

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[7]   This study was carried out in 2006 as a consultancy for the ECLAC, under the World Bank/ECLAC Project "Economic social and environmental impact of disasters: valuation as a tool for the reduction of disaster risk in developing countries". It is accessible online at: http://www.eclac.cl/publicaciones/xml/8/26728/L731.pdf. One of the limitations of this study is that it defines culture as tangible and intangible heritage, with no consideration for cultural and creative industries.
[8]   Ibid. p 8.

ESTIMATING THE ECONOMIC VALUE OF THE CHANGE IN FLOWS OF ECONOMIC RESOURCES (LOSSES)

In addition to damage, it is important to assess the effects to physical assets and infrastructure in terms of change in economic flows (losses), that is, diminished revenues and additional costs incurred as a consequence of the disaster, until full recovery and reconstruction is completed. Change in economic flows may be associated to all kinds of effects of a disaster, from the destruction of physical assets to increased risks. The typical change in economic flows (losses) that may be observed in the culture sector include the following:

- the loss of revenues associated with the temporary closure or non-availability of the culture assets, and the loss of revenues associated with annual or recurring cultural events;

- the costs associated with implementing temporary emergency measures to prevent further damage to the culture assets;

- the loss of revenues associated to the disruption in the production of goods in the cultural and creative industries;

- the costs associated with temporary measures to ensure the continuity of essential cultural services and access to basic cultural resources;

- the costs associated with mitigating new risks and increased vulnerabilities that have resulted from the disaster.

Section 4 above provides examples of effects that typically may generate losses. Annex10.5 summarizes how losses may be calculated, for different types of cultural processes, suggesting the most appropriate valuation method.

TOTAL EFFECTS

Once the costs associated to damage and losses have been calculated based on data collected through various kinds of analysis (primary and secondary data, field visits, interviews, etc.), they should be aggregated; the total damage should not be added to the total losses, but kept separate. The PDNA Culture Team should pay particular attention to avoid double accounting with other sectors, by sharing and comparing data with other sector teams. As much as possible, totals of damage and losses should be broken down by public and private sectors.

ASSESSMENT OF DISASTER IMPACT

MACRO-ECONOMIC IMPACT

The calculation of the economic value of the effects of the disaster on culture will inform the determination of the country's main macro-economic aggregates. This is usually assessed in terms of impact of the disaster on the country's GDP, the balance of payment (BOP) and the fiscal sector.

These impacts can also be analysed over a reduced geographical scale (municipality, district/province, region), providing that pre-disaster statistics on the contribution of culture to GDP, BOP and the fiscal sector are available. It should be kept in mind that much of the economic activity associated to culture takes place in the informal sector and therefore may not have been accounted in official national statistics. The macro-economic impact of a disaster derived from its effects on culture, therefore, is likely to be higher than that resulting from available data, and the gap will be particularly relevant for women and poorer sections of the population.

At the macro-economic level, the overall impact on the culture sector corresponds to the decrease in percentage of the sector's contribution to national GDP and potential losses of cultural good exports, main components of macro-economic impacts are presented in Table 2.

Table 2: Assessment of Macro-economic Impact

Macro-economic Components	Calculation of the Economic Value of the Effects
Losses in revenues incurred by the private and public sectors caused by the destruction of culture assets	Analysis of GDP impact
Costs of temporary works for protecting cultural assets and costs of demolition and debris removal	Analysis of GDP impact
Foreign exchange losses due to temporary absence of foreign visitors to culture sites	Analysis of the balance of payments (BOP) impact
Imported components of the culture assets reconstruction or repairs (including materials, equipment and machinery and expertise) that are not produced in country and must be imported from abroad	Analysis of impact on the BOP
Reinsurance proceeds that may come from abroad to cover the cost of any destroyed culture assets that were insured	Analysis of disaster impact on the BOP
Higher expenditures and lower revenues that will affect the government´s budget due to the losses caused by the disaster	Analysis on the fiscal position
Any possible loss of employment caused by the destruction of culture assets – excluding those that belong to formal sectors of economic activity such as tourism, commerce, etc.– that will affect workers of cultural activities	Analysis of overall employment and personal income impact

THE HUMAN DEVELOPMENT IMPACT

The impact of a disaster on human development at personal and household levels, which is caused by its effects on the culture sector, will depend on the nature of the disaster.

No reference to culture or heritage was made in the Millennium Development Goals (MDGs) or in the current variations of the Human Development Index (HDI). Nevertheless, a number of indicators have been proposed to define the contribution of culture to human development, some of which are intrinsic to culture, i.e. they reflect benefits that typically culture may provide better than any other sector, such as aesthetic enjoyment, learning and sense of belonging. Others highlight the specific added value of culture to other more general dimensions of human development, such as social and economic development, and the protection of the environment.

UNESCO and other institutions are working to address the gaps in the MDGs with a view to integrating consideration of culture in the post-2015 Development Agenda. In this context, it was suggested, as a working hypothesis,[9] that the contribution of culture to human development might be divided into five main areas:

POVERTY EDUCATION
Culture is a driver for inclusive economic development. Cultural heritage, cultural and creative industries, sustainable cultural tourism, culture-led urban revitalization and cultural infrastructure can serve as strategic tools for income generation and job creation, and for fostering new market opportunities. Cultural and creative industries represent one of the most rapidly expanding sectors in the global economy, with an annual increase of between 5 and 20 percent. Moreover, culture is an enabler of inclusive social development. Access to traditional knowledge, support and solidarity from the social group or access to credit, for example, are means to increase social inclusion and thereby to reduce relative poverty.

QUALITY EDUCATION AND LIFE-LONG LEARNING
The ways people learn and transmit knowledge vary according to their different geographical, historical and linguistic backgrounds. Therefore, education strategies that are most responsive to local cultures, contexts and

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9   Consult the website of UNESCO at http://en.unesco.org/themes/culture-sustainable-development for updates on this process.

needs are most likely to be effective in fostering more cohesive societies. In addition, culturally adapted educational programmes support and improve quality education.

THE ENVIRONMENT

Access to essential environmental goods and services for the livelihood of communities should be secured through the stronger protection and more sustainable use of biological and cultural diversity, as well as by safeguarding relevant traditional knowledge and skills. Indeed, there is a significant interrelationship between culture and environmental sustainability due to the intrinsic link between cultural diversity and biodiversity, its ability to influence more responsible consumption and its contribution to sustainable management practices as a result of local and traditional knowledge. Moreover, the appropriate conservation of the historic environment, including cultural landscapes, and the safeguarding of relevant traditional knowledge, values and practices, in synergy with other scientific knowledge, enhance the resilience of communities to disasters and climate change.

SUSTAINABLE CITIES AND URBANIZATION

A vibrant cultural life and the quality of urban historic environments are key for achieving sustainable cities. Culture-aware policies in cities promote respect for diversity, the transmission and continuity of values, and inclusiveness by enhancing the representation and participation of individuals and communities in public life and improving the conditions of the most disadvantaged groups. Cultural infrastructure, such as museums and other cultural facilities, can be used as civic spaces for dialogue and social inclusion, helping to reduce violence and foster cohesion.

INCLUSION AND RECONCILIATION

In the context of globalization, and in the face of the identity challenges and tensions it can create, respect for cultural diversity and intercultural dialogue can forge more inclusive, stable, peaceful and resilient societies as they foster an environment conducive to tolerance and mutual understanding. Guaranteeing cultural rights, access to cultural goods and services, free participation in cultural life, and freedom of artistic expression are critical to forging inclusive and equitable societies. Fostering cultural participation contributes to promoting active citizenship. In particular, culture-related projects contribute to the empowerment of women and youth.

Under each of these five main areas, work is under way to develop specific indicators that would express the contribution of culture. Some of them, such as number of jobs created (or lost, as a result of a disaster) by the Culture Sector, would simply reflect the contribution of culture to existing HDI indicators; others, however, will be new indicators that pertain specifically to culture based on a new understanding of its importance for human development, which could be used to provide a more comprehensive account of the possible impact of a disaster on human development. Although this is work in progress and a finalized framework is not yet available, the following indicators might be considered:

- loss of the historic urban and rural environment, in % (compared to pre-disaster)

- variation in attendance at cultural institutions;

- reduction in access to cultural resources;

- reduction in the number delivered educational programmes and/or training in arts and culture;

- variation in the number of children studying arts and/or cultural subjects in school;

- variation in the number of children engaged in extra-mural artistic activities;

- variation in the number of graduates from arts training institutions;

- reduction in the access to traditionally recognized biological resources;

- variation in the number of citizens who are actively involved in cultural practices;

- proportion of women working in the Culture Sector;

- reduction in household income, in %, compared to pre-disaster, due to disruption of economic activities associated
  to culture;

- recognition of appropriate cultural rights and consistency with human rights;

- levels of public funding for culture (gap between pre- and post-disaster);

- integration of traditional knowledge and practices into environmental and urban development schemes;

- integration of a culture-sensitive approach into DRR and climate change mitigation and adaptation policies and plans;

- loss of energy – in equivalent CO_2 emissions – embedded in damaged historic fabric.

The choice of the appropriate indicator will depend, on a case-by-case basis, on the specific nature of the disaster and on the local context. Considering the constraints under which a PDNA is taking place, notably in terms of time to collect data, it is advisable to concentrate on indicators that express the level of access by the population to cultural assets and activities (across all of their manifestations) and the loss in jobs and revenues, at household levels, related to disruption in activities related to culture.

Since it may not be possible to capture community and societal impacts from secondary data (either because culture is not considered in statistics or because of its informal nature), attention should be paid to damage and losses at the community level, during the field assessment, through liaising with community leaders (interviews, forums, etc.). See Annex 10.4 questions under household/community impact, and Annex 10.5 for suggested methodologies for calculating them. Attention should be paid to recording damage and losses directly affecting women's income-generation activities in the field of culture, including the informal sector. This entails collecting sex- and age-disaggregated data (SADD) and undertaking inclusive consultations in order to identify particular needs and priorities of women, girls, boys and men of all ages, as well as of sub-groups of the population.

CROSS-SECTORIAL LINKAGES INCLUDING CROSS-CUTTING ISSUES

Given the ramifications of the effects of cultural heritage and socio-cultural expressions in all sectors of society, understanding cultural behaviours and practices and mainstreaming them into recovery plans contribute to achieving more effective programmes of response. The results of the culture sector assessment should complement and inform other sectors, for instance, as indicated in table 3.

Table 3: Summary of the Culture Sector's Contribution to Other Sectors/Themes

Sector	Themes	Examples of Culture's Contribution to the Sector/Theme
Shelter	Housing, temporary camps	Designs of housing and temporary camps should integrate specific features embedded in the affected community's cultural/religious behaviour in order to better accommodate traditional lifestyles such as location of shelter, community gathering points, gender issues vs. services access and timing (e.g. latrines), spaces for sport opportunities for youth, etc. Ensure that traditional communication and decision-making systems are maintained, thus reducing a sense of displacement; (disaster resilience) traditional construction materials and techniques should be integrated in design and construction requirements.
	Land management	Issues related to customary laws/local cultural behaviour: taboos may hinder access/use/oc-cupation modalities of specific plots of land (e.g. due to their sacred features, the growing of species considered impure for specific tribes) as well as land inheritance rights (women not allowed to own land, etc.); reactivation of ancient moats and channels, etc. can foster better land management.
Livelihoods	Livelihoods, social protection and nutrition	When performing the baseline and analysis of the damage and loss, the needs in the culture sector are important to be considered when compiling statistics related to: livelihoods, employment and social protection: e.g. discriminatory practices due to cultural beliefs (e.g. ethnicity; early marriages, female genital mutilation, corporal punishment due to cultural practices); nutrition: reluctance of a community to consume specific foods due to cultural and religious beliefs, etc.
Food secu-rity		Issues related to customs, cultural traditions and socio-cultural factors conditions giving access to, and control over food to members of household/community and the population at large (e.g. religion-based food restrictions/preferences in the community for women and men and cooking practices).
Education	Education for all	Examples are issues related to languages, cultural contents to support quality education, both formal and non-formal education; the performing arts are used to enhance learning, etc.
Health		Examples include socio-cultural traditions and taboos that may aggravate transmission of diseases, pandemics, etc. and limit access to health services; better communication and effective, participation and role of community members (e.g. matrilineal or patrilineal communities) in sectoral specific programmes (education, health, etc.).
HIV and AIDS		Socio-cultural behaviour that may hamper HIV and AIDS prevention (e.g. widow-cleansing practices, etc.); Promotion of a culturally appropriate approach to HIV and AIDS (e.g. using traditional tales, music and performing arts as vehicle for transmitting the campaign message)
Gender		The mapping of the contribution of women and men of all ages to the culture sector, the needs and priorities of women and men of the affected populations as well as any harmful cultural practices and norms that should be counteracted in order to support and consoli-date sustainable and equity-based post-disaster recovery efforts.

SECTOR RECOVERY VISION

In moving from an understanding of the effects and impacts of a disaster to the development of a comprehensive recovery strategy, it is essential to start by defining the overall vision for this recovery, that is, the desired situation at the end of the recovery process with respect to the culture sector, and to establish the key principles that should guide it. This vision, in turn, should be based on a deep analysis of the context, of what is possible to achieve in the given conditions, and of the constraints and opportunities that will drive the post-disaster transition, which is referred to as a 'post-disaster scenario' as mentioned in Section 5 above.

In devising the vision and sector outcomes, it will be also essential to align the recovery strategies with the country's development plans (and explain how this has been achieved) and to build on local mechanisms, which is also fundamental to strengthen ownership and sustainability. The vision shall also integrate a BBB component, i.e. considerations for strengthening the resilience and disaster risk preparedness of the sector through the recovery and reconstruction.

The following section describes the steps required to develop a Sector Recovery Strategy. Experience shows that the planning process will be made of several cyclical iterations, rather than a progressive sequence of individual steps. Considerations made on implementation arrangements, costs, assumptions and constraints (see Section 8.4 and 8.5 below), might lead to a reconsideration of priorities and indeed of the overall strategy.

STAKEHOLDER CONSULTATIONS

Despite the constraints in terms of time, resources and logistics in which a PDNA takes place, it is essential that the formulation of the recovery strategy includes the meaningful consultation of the concerned stakeholders. This would be a requirement for any sector, but for culture, it will be even more imperative, considering that, ultimately, it is only the affected population that will be able to decide on the cultural value of assets, services and goods. and to determine what is to be reconstructed and what can be left behind.

Translating effects of a disaster and their estimated economic value into recovery needs and plans is not automatic. In the process, a complex negotiation process will have to take place, taking into account the local socio-economic context. In fact, disasters often provide opportunities to reassess the priorities of a community, and the pros and cons of different options will be thorough debated. The advocates of 'as it was, where it was' will confront those in favour of a new beginning, and dividing lines may emerge across social status, gender, ethnicity and age groups.

The PDNA Culture Team should – as much as possible – facilitate this consultation with the help of their national and local direct counterparts, and integrate their results in the recovery strategy. Because of the characteristics of the sector, closely associated with identities and locales, the consultations should be as inclusive as possible, giving special attention to ethnic minorities, women and youth, whose specific perspective of what is culturally significant might be overlooked by a top-down approach.

RECONSTRUCTION AND RECOVERY NEEDS, INCLUDING BUILDING BACK BETTER

IDENTIFYING AND ADDRESSING NEEDS

Recovery needs should derive from the effects of the disaster in terms of: reconstructing or repairing the damaged assets and infrastructure; restoring service and the production of goods; resuming access to cultural resources; re-establishing the functionality of governance and decision-making processes; and mitigating the new risks and vulnerabilities emerged as a result of the disaster.

A general principle to be considered when defining recovery needs is to avoid any possible further damage and harm to cultural assets and heritage through appropriately balancing the concerns of speed versus quality in the reconstruction process. As mentioned above, identified needs should also address opportunities to contribute to the long-term development goals set by the country, including in policy-setting and institutional frameworks; however, there will clearly remain a distinction between recovery and development plans.

Finally, recovery needs should include a concern for building back better (BBB), which would clearly be beneficial in general for the sector and more cost-effective if executed in the context of the planned recovery and reconstruction process. BBB-related needs should be identified with a view to strengthen the resilience of all of the four aspects considered under the PDNA. Insofar as possible, BBB recovery needs (and their cost) should be listed separately from recovery needs aimed at restoring the pre-disaster level. This is because BBB considerations are often regarded as desirables, as opposed to the essential reconstruction, and decision-makers wish to be able to appreciate the additional costs involved.

Typical needs concerning the repair and **reconstruction of physical assets and infrastructure** may include the following:

- implementing first aid measures and urgent safeguarding interventions for the most critically damaged buildings, artefacts and collections;
- repairing or reconstructing damaged monuments, built heritage, museums, and other physical assets and infrastructure affected by the disaster, incorporating disaster reduction solutions;
- ensuring security systems for museums, libraries and archives, storage facilities, standing monuments, major sites;
- providing a platform for requesting the return of stolen and illicitly exported property to the country if such acquisition and/or export has already taken place.

Recovery needs related to the restoration of services, **production and access** may include the following:

- restoring fundamental services provided by culture and ensuring access to cultural institutions, vocational training structures, libraries, archives, museums, as well as to cultural and natural sites;
- restoring intangible cultural practices by providing the appropriate space and materials, addressing psycho-social aspects to help weaker groups within society, fostering respect for cultural and human rights, and intercultural understanding;
- restoring basic revenues of affected population involved in cultural industries and other activities associated to culture by offering financial support or devising temporary alternative market and/or working opportunities;
- delivering tailored training programmes for small and medium-sized enterprises (SMEs) and CBOs (F/M) to foster their entrepreneurship and business skills as well as to upgrade the quality of their cultural products;
- creating a legal environment conducive to cultural industries through multi-sectoral policies development.

The re-establishment and strengthening of **governance and decision-making processes** may include the following recovery needs:

- restoring the administrative functionality of governmental institutions, at central and local levels;
- providing extra staff and resources to disrupted public authorities, possibly reassigning them from surrounding districts;
- recovering the lost databases, records and essential working equipment;
- re-establishing disrupted mechanisms or creating new one, if they did not exist pre-disaster, for consultation, coordination and decision-making.

The restoration of governance and decision-making processes often lend themselves to introducing substantial improvements (BBB) to strengthen the formulation of policy and their implementation. These may include the following:

- rethinking the mandate and vision of the affected cultural institutions and achieving a more rational and efficient structure;
- improving an inventory and documentation of culture reflecting a contemporary understanding of the sector or establishing one where it does not exist (e.g. with intangible heritage and creative industries);
- aligning national legislation and guidelines with international standards and best practices;
- disseminating guidelines and other relevant materials to all stakeholders to ensure correct practices of recovery, rescue techniques and procedures, setting or reviewing local or national building codes, specifically concerning traditional and historical built heritage and its particularities in conservation requirements, and introducing sustainable and ecologically appropriate materials, which would reduce energy consumption and preserve the environment;
- reinforcing capacities within cultural institutions that are conducive to the promotion of appropriate management, restoration or reconstruction. This should include: training in performing urgent tasks; visual inspection; rapid identification of structural cracks that may quickly worsen; documentation of cultural heritage; rescue and collection of fragmented properties; use of treatment boxes; conservation freezing and drying of cultural objects, especially books, etc.; and the development of specific training for architecture, engineering and planning professionals to enable them to act appropriately in response and recovery activities involving culture;
- strengthened inclusiveness within decision-making processes, promoting in particular the equal participation of women and men from local communities and broad public awareness.

With respect to the mitigation of **new risks and increased vulnerabilities**, in addition to the needs already reflected in BBB measures in the other three components of the PDNA, there are recovery needs may include the following:

- strengthening disaster risk reduction at heritage sites, museums, cultural repositories, by developing the appropriate disaster risk management plans;
- creating protocols for the systematic integration of culture (across all of its manifestations) within national and local disaster risk reduction strategies, plans and procedures;
- integrating traditional knowledge and modern science and technology in DRR strategies and plans at all levels, including by exploring the relevance of traditional building materials and techniques as well as of traditional social systems and practices, when proven that they augment resilience;
- creating awareness-raising and educational programmes, at all levels, to promote the role of culture;

- reviewing the legal and regulatory framework, policies and norms, to improve structural resilience of culturally significant buildings and sites and cultural repositories (for example through tailored made safety building codes that take into account the specific characteristics of historic structures);
- reinforcing the capacities of the concerned staff of public authorities, as well as of the local authorities and civil society, as appropriate (both women and men), to strengthen the resilience of cultural assets, activities and processes against the risk of disasters and emergency situations in general. this may involve the development of training initiatives, resources and materials, drawing from the numerous existing models and tools developed over the years by UNESCO, ICCROM, ICOM, IFLA.

NEW EMERGING OPPORTUNITIES

It may be difficult to immediately capture complex dynamics related to culture during the PDNA and to clearly evaluate how, in the aftermath of disaster, new perspectives and factors driving the transition will affect shared cultural values and the significance of some places and assets.

Opportunities may arise in this process, which can be reflected in recovery needs and integrated in the final Recovery Strategy. For instance, cultural assets and values that were not considered particularly significant by a community before the disaster, or only by a minority group, may become suddenly a pivotal bonding factor in post-disaster situations, providing a sense of shared identity for a larger group within the affected population. This may occur because of shared living conditions and disaster experiences, new forms of aggregation and exposure of a community's socio-cultural practices and beliefs to other new communities, encouraging cultural exchange and creation of shared values among groups, etc.

Furthermore, the scarcity of traditional raw materials may in turn enhance creativity, stimulating opportunities to explore new forms of artistic production and cultural performances, introduce alternative (locally available) and innovative materials, produce new cultural goods and assets, and promote a more sustainable use of natural resources (e.g. energy-saving systems).

Multi-level socio-anthropological surveys, through key informant, purposive interviews and questionnaires as well as Internet networks and visual inspections, can assist in acquiring evidence of previously undocumented practices or practices, which, although previously attested, have changed in meaning together with the shift in post-disaster and emergency circumstances. This information, when incorporated into the recovery framework, is also useful in evaluating and monitoring the outcomes, needs and activities of the recovery framework.

THE SECTOR RECOVERY PLAN

Once all recovery needs have been identified, the next steps involve their costing, prioritization and sequencing over time.

PRIORITIZING AND SEQUENCING RECOVERY NEEDS

Following the rational of the vision developed for the recovery, which takes into account constraints and opportunities, the recovery needs should be prioritized and sequenced over time (in the short, medium and long term). As stated above, interventions that are related to restoring the pre-disaster situation should be distinguished, as much as possible, from BBB interventions. The following considerations should be taken into account for the prioritization of needs:

- Be informed by and aligned with the consultative process under way and with the national development objectives. It is important that the integration of BBB concerns in recovery does not take on the national development agenda, and be not driven by international experts or development partners.

- Address/prioritize key risks and vulnerabilities that contributed to the extent of the effects/impact on communities, systems and infrastructure, and that can be avoided.
- Where possible, the BBB should also have a positive contribution on the recovery from the current disaster.
- Consultations and communications with the other sectors are essential in order to avoid contradictory recommendations, gaps or overlaps.

Priorities (five to ten at the most) should be assigned to interventions that contribute directly to agreed human development objectives which are considered pre-requisites/indispensable for the human development and is feasible in the context.

COSTING

Costs for reconstruction and recovery are estimated based on the projected needs to the four dimensions of the PDNA. BBB needs are also estimated for the four dimensions in proportion to basic recovery costs, to existing national budgets, and absorption capacity.

Costs for the repair and restoration of heritage buildings, sites and moveable cultural properties vary enormously depending on the context, the nature of the assets, the available capacities and cost of human resources on the ground, etc. It is impossible to provide average costs in the context of this guidance. The cost for integrating BBB depends also on the nature of the intervention and the characteristics of the asset (technology of construction and state of conservation). At present, there is a lack of data on average costs for retrofitting historic buildings against various kinds of hazards. The following considerations should be taken into account in costing for BBB:

- The costs for BBB should be proportionate to the costs of recovery and reconstruction needs (typically a relatively small percentage), as well as to the type of hazards.
- The costs for BBB should be realistic compared to the financial envelope pledged by the government and international development partners, taking into account that most funds will be needed for physical reconstruction and compensation of losses.
- The costs for BBB should be realistic toward the absorption capacity of the country and what is feasible to achieve over a three-year period.

Monitoring and evaluation (M&E) should be also built into the cost of the proposed interventions. Cost for the M&E system can be calculated below 5 percent, proportionate to the interventions for the culture sector and size of the affected population serviced through the interventions.

In general, the amounts estimated under the damage and Loss assessment should correspond to the cost for the recovery plan, exception made for BBB concerns. Excessive gaps between the damage and losses assessed and proposed recovery costs should be avoided, because donors and governments would not be inclined to support interventions that are not clearly tied to the effects of the disaster. In estimating the cost of the proposed recovery interventions, it is important to make all assumptions explicit, as well as to provide any formulas and references used for unit costs for each budget line item, and attach this as an annex to the sector report.

THE SECTOR RECOVERY PLAN

In line with the PDNA guidance on the recovery strategy (in Volume A), the sector recovery plan should be formulated following the results-based model, and therefore include: (i) priority needs; (ii) interventions required; (iii) expected outputs; (iv) recovery costs; and (v) intended outcomes. Table 4 provides an example of recovery strategy for the Culture Sector.

Table 4: Indicative Example of a Results-based Recovery Strategy in the Sector

Priority Recovery Needs	Interventions	Expected Outputs	Recovery Costs	Intended Outcomes
Restore endangered monuments and built heritage	1) Guidelines and protocols for appropriate restoration	Guidelines and regulations in place and enforced		# of threatened properties protected and available for compatible use
	2) Mapping and survey (authorized specialized staff) conditions of endangered/ threatened buildings	A map produced of endangered areas/contexts for priority intervention		# of contexts in which the collapse and rapid decay have been prevented
	3) Training of technical staff in first-aid skills	# of historic buildings surveyed, assessed and checked		
	4) First-aid measures, consolidation and restoration interventions for the most critically damaged buildings	# of trained staff		# of collections secured or moved in a temporary, secure location
				Increased enrolment of qualified professional staff
	5) Prioritize and plan subsequent interventions	# of priority consolidation interventions carried out		
		Plans established		

IMPLEMENTATION ARRANGEMENTS

PARTNERSHIPS, COORDINATION AND MANAGEMENT

This section of the sector recovery strategy should describe key partnerships, coordination, management and inter-agency management arrangements for the recovery process of the culture sector with the cluster, government, civil society and the private sector.

CROSS-SECTORAL THEMES

This section should describe how cross-cutting issues will be addressed during implementation, such as disaster risk reduction, governance and the environment, as well as cross-cutting issues such as gender, human rights, HIV/AIDS and any others deemed necessary (see Section 7).

It will also describe inter-sectoral considerations, such as education (formal and informal, vocation training, high education), employment schemes linked to culture, camp management, housing, environment, tourism and other livelihood programmes.

LINKS TO DEVELOPMENT

The PDNA team should ensure that the PDNA incorporates a recovery exit strategy with indicators, linking with and supporting the country's sectoral development goals and priorities, aligning where possible the recovery process to the broader strategic development objectives for the sector. Examples are given in Box 1.

> **Box 1: Example of strategic areas to prepare the recovery exit:**
>
> **a. Integrate PDNA with other emergency response planning, especially the Post-Conflict Strategic Response, and joint post-crisis and development planning instruments.**
>
> - Indicator 1: Coherence and correspondence among different emergency tools
>
> - Indicator 2: Quality and number of joint programming effectively implemented
>
> - Indicator 3: Incorporated with concurrent joint appraisal at the country level for post-crisis transition/development framework, i.e Country Strategies and United Nations Development Action Framework (UNDAF)
>
> **b. Link the PDNA Culture results to the sector national strategic planning, policies and strategies, both at the recovery and development level, including poverty reduction strategies.**
>
> - Indicator 1: Commitment and coordination between national stakeholders.
>
> - Indicator 2: How far is the PDNA mainstreamed in country planning at the national, regional and local level.
>
> - Indicator 3: Alignment with national objectives for meeting the Millennium Development Goals (MDGs), in particular MDGs 1 and 3.
>
> **c. Effective investment made in institutional and technical capacity-building in the Culture Sector.**
>
> - Indicator 1: Effective investments made in the country's comprehensive database for culture (with baselines and statistics), management and continuous update.
>
> - Indicator 2: Alignment with international operative requirements.
>
> - Indicator 3: Linkages with existing international technical networking and bridging with the regular training programme
>
> - Indicator 4: Number of effective partnerships with civil society.

MONITORING AND EVALUATION

Include in this section the plan for monitoring and evaluation in the sector, by considering the following:

- what is to be monitored and evaluated, and which indicators are more appropriate to measure progress;
- the activities needed to monitor and evaluate (and their cost);
- who is responsible for monitoring and evaluation activities;
- when monitoring and evaluation activities are planned (timing);
- how monitoring and evaluation are carried out (methods);
- what resources are required and where they are committed.

KEY ASSUMPTIONS AND CONSTRAINTS

This section of the PDNA shall identify key assumptions made to successfully complete the recovery of the Culture Sector, and the major constraints likely to be encountered during the recovery process indicating how they might be overcome.

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MDG-F Culture and Development: A Closer Look

(http://www.unesco.org/new/en/culture/achieving-the-millennium-development-goals/mdg-f-culture-and-development/mdg-f-culture-and-devel1opment-a-closer-look/)

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MEP-Museum Emergency Preparedness: for Web Sites Emergency Preparedness and Response (http://archives.icom.museum/disaster_preparedness_book/resources/websites.pdf)

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(http://www.ifla.org/pac)

RECOMMENDED PRACTICAL METHODOLOGICAL APPROACH AND TOOLS: ASSESSMENT STAGES

Timing the assessment is essential to prevent the further deterioration of damaged tangible and living heritage. The assessment should start with a rapid survey to help gauge the extent and nature of the disaster impact on culture, followed by a more in-depth exercise to define recovery needs in greater detail.

RAPID SURVEY

A rapid survey should be carried out within four weeks of the disaster and last no more than one week. It should be carried out by three to four staff members and involve meeting the authorities concerned (local, district, national) in order to identify FPs in the field (contact persons) and the main resources available that can be mobilized. These resources include: human capacity such as e.g. fire brigade and the police: infrastructure capacity such as buildings to secure cultural properties; means of transport to evacuate fragile properties/manuscripts from endangered buildings, etc.; and the specific expert profiles required for the full assessment, and possibly to quantify an initial evaluation of damage and losses in the Culture Sector. It should provide clear terms of reference for carrying out the PDNA and identify the most urgent interventions.

FULL ASSESSMENT

This should be completed within a three-week time frame by a small team of experienced professionals. It serves to complete the damage and loss evaluation carried out in the rapid survey, update resources available and needs, formulate priorities of cultural heritage issues, provide baseline data to be used in the monitoring and evaluation of cultural heritage-related interventions, and provide inputs for early recovery planning. It should include a plan of action validated by the country's reference ministry (e.g. ministry of culture) and other pertinent ministries (tourism, industry, etc.), and a quantified budget. Figures should be justifiable as far as possible. The assessment should look at affected areas, but should also consider areas that could be further affected, depending on the nature of the catastrophe. This latter consideration can be helpful in developing a Risk Preparedness Plan and assembling, if lacking, reliable baseline information.

PREPARING THE ASSESSMENT

Four to five days should be dedicated to gathering and analysing background materials from diverse sources. This will help to save time on the ground during the assessment and to identify the most pertinent fields of culture that need to be assessed with priority (selected geographical and/or thematic areas). It will also help formulate questions to guide primary data collection and to define target profiles, the sampling size and the minimum number of informants required per topic or geographical area. This latter will contribute towards achieving substantive and reliable results. Moreover the gathering and analysis of background materials will also serve to verify available baseline information and possibly to make an initial comparison of existing data. This exercise can be useful especially when resources are insufficient to cover the affected areas. Secondary data collection could be collected from: (i) locally available resources; (ii) local knowledge (existing databases in the country); and (iii) synergies and coping mechanisms (data available from national and international institutions, scientific and cultural networks, cultural associations, media).

COLLECTING FIELD DATA

If it is not possible to carry out rapid pre-assessment surveys, the assessment should combine the full assessment with in-depth analysis of selected representative areas. Results thus generated could then be extrapolated to the totality of the affected region. Data related to the affected population should be disaggregated by sex and age to the extent possible. Annex 10.4 draws together some key sample questions that the post-disaster Culture

Needs Assessment Team should strive to answer, together with recommended indicators. The Assessment Team should rely on the gathering of primary data obtained through visual inspections (including flyover and satellite imagery, etc.) and key informant surveys (household surveys, first-hand knowledge) in order to validate available secondary data and further integrate them when needed. Random or purposive interviews could be organized when the affected area/population is particularly vast or inaccessible. Interviews with both female and male representatives of the affected communities should be undertaken in order to ensure that women's and men' concerns are equitably represented and inform the gender analysis. Interviews and consultations should take place in a safe environment that protects the anonymity and privacy of informants.

If primary data gathering is constrained by the inaccessibility of affected/vulnerable areas, the Assessment Team should rely on secondary data. Ideally, it should inspect at least three representative affected areas per culture field. Thematic maps for cultural resources (i.e. archaeological sites), state GIS inventories, (United Nations Operational Satellite Applications Programme (UNOSAT) mapping tools and satellite images (Google Earth) for large areas, onsite, aerial or satellite photographs or films could render reasonably accurate definitions of the state of the built heritage, natural protected areas and other cultural assets before and after the disaster occurred. Gathering this information should allow the culture specialist to undertake a comprehensive qualitative and quantitative study, and enable further monitoring of large-scale site and natural resources, especially when it proves difficult to provide land transport and patrols (lack of vehicles and communication systems, roads closed, etc.).In addition, this phase should identify areas requiring in-depth analysis and research.

DESK REVIEW: SUMMING UP AND FORMULATING RESULTS

Once the field assessment has been completed, data should be compared to identify affected areas and contexts where immediate intervention is needed or where damage is quickly reparable, and to assess the related projected risks. All these elements should enable the desk review to evaluate damage and losses, and capacity and prioritize subsequent needs. The assessor might identify heritage not yet listed that requires attention and protection (tangible and intangible) on the national/local inventories or on international lists of heritage in danger (UNESCO, ICOMOS, etc.). These cases should be highlighted to the relevant authorities.

Table 1 Summary of Overall Assessment Process

Steps	Targets	Timeframe
Rapid survey 3-4 staff	Elaborating the terms of reference for the PDNA (including the identification of the specific expert profiles required for the on-site assessment) Establishing local focal points (FPs) for geographical areas or themes	3-5 days
Preparatory desk study 1-2 back-stopping staff	Gathering and analysing background material available for an initial mapping Identifying culture fields that are more pertinent to the situation, prioritizing assessments (selected geographical and/or thematic areas) Checking available baseline data and possibly making an initial comparison of data	Up to 4-5 days It could be undertaken concurrently with the rapid survey
Field assessment 4-5 staff members	Elaborating the initial Recovery Action Plan Gathering primary data and conducting interviews, testing and verifying secondary data previously collected Assessing the response capacities of the ministry of culture and other pertinent ministries and resource persons on the ground Assessing the capacity of cultural institutions to actively participate in the reconstruction of the country Assessing damage and losses in the affected and vulnerable cultural fields Identifying prevailing risks and threats Identifying sub-fields/themes requiring in-depth analysis and research	Up to 15 days, according to the magnitude of the disaster's effects and scope
Desk Review Assessment Team	Prioritizing needs (early recovery, recovery), defining areas of action, targets, indicators, Early Recovery Action Plan Damage and losses results, and RF initial formulation	Up to 6 days

GENDER AND DISAGGREGATED DATA

The PDNA Team should ensure that throughout the entire assessment process, different voices – in terms of ethnicity, gender, age, profession, state, religion – are heard, consulting different segments of the affected society and taking into account the non-homogeneous socio-cultural background of the affected population (religious, ethnic composition, stable or migrating groups, etc.). The definition of age categories of respondents and that of disadvantaged or marginalized groups should be consistent with those used by other sectors carrying out separate PDNAs, in order to allow for easy compilation, exchange and interpretation of intersectoral data.

SUMMARY OF TYPICAL PHYSICAL ASSETS, INFRASTRUCTURE AND HUMAN RESOURCE COMPONENTS IN CULTURE SECTOR

The following table is designed to help PDNA team members to develop a quick understanding of the scope of elements that may require attention. These include both the physical assets and infrastructure and the associated human resources. The latter should be identified by consulting equally with women and men of the affected population and the technical experts. The human resources, practitioners and users identified should be disaggregated by sex and age.

Table 2 Physical Assets, Infrastructure and Human Resource Components in Culture sector

Governance Processes	Assets and Infrastructure	Personnel, Practitioners and Users Involved
Adherence to the legal framework, policies and overall management of the sector	Office infrastructure and refurbishing general management and administration equipment (e.g. computers) Transportation and communication equipment	Ministerial bodies, at central, regional and local level (management staff of directorates/administrative staff/general services); their families.

Cultural Domain	Assets and Infrastructure	Personnel, Practitioners and Users Involved
1. Built heritage and cultural and natural sites, which can range from a coherent group of structures (e.g. historic districts, rural and urban settlements) to a single building or site (archaeological, monuments, modern and contemporary masterpieces) and infrastructure (bridge, port facilities) imbued with recognized cultural values (by local, national or international mechanisms). It also includes natural protected areas of particular aesthetic and biodiversity significance, such as regional and national natural parks and their management infrastructure, zoos, etc.	Historic districts: Infrastructure/refurbishing Equipment	Maintenance and conservation staff operating often from a centralized conservation centre (cultural institution)
	Historic buildings, modern and contemporary architecture: Infrastructure/refurbishing equipment components (security, fire-control, temperature control, air-conditioning system, etc.)	Human resources, sometimes limited/inexistent if private property and use: management staff/administrative staff/general services (cleaning and security) Maintenance and conservation staff operating often from a centralized conservation centre (cultural institution)/ministerial branches
	Archaeological sites, historical gardens Infrastructure/refurbishing Equipment (site interpretation, presentation, information centres and facilities, visitor services)	Human resources (at least management staff/administrative staff/general services delivery staff (including cleaning), visit (guides) and security (guards) related staff Maintenance and conservation staff (which may refer only to a central entity and not be site-specific) Communities living within and round the protected area, associations of 'site friends', volunteer networks
	Infrastructure, buildings Equipment/refurbishing (site interpretation, presentation, information centres and facilities, visitor services) For zoos – ongoing care of animals	Specific natural resources specialized staff (i.e. monitoring) (which may refer to a central entity and not be site-specific) Park rangers Communities living within and round the protected area, associations of park, zoo supporters, geological associations, volunteer networks
2. Moveable cultural properties and collections	Museums and premises that host public and private collection.	Specialized human resources mainly operating from a centralized conservation/training centre

Cultural Domain	Assets and Infrastructure	Personnel, Practitioners and Users Involved
3. Intangible cultural heritage recognized by the communities and practitioners, including traditional knowledge systems/practices: the aspects of cultural manifestations made vulnerable by the disaster	Cultural, religious and spiritual places: Infrastructure/refurbishing (sometime modest: open air space, etc.) Stadium, theatres, etc. Related equipment, tools and materials Infrastructure/refurbishment (sometimes modest) Equipment (sometimes modest)	Communities and practitioners Human resources (religious/services, etc.) Associations, volunteer services and religious practitioners Logistics personnel Users and cultural practitioners and producers, usually an important component
4. Repositories of culture, such as museums, libraries and archives, cultural institutions, vocational training structures, zoological/botanical gardens with their auxiliary installations (specialized laboratories, storerooms, etc.).	Infrastructure/refurbishing of premises and auxiliary installations (laboratories, storerooms, deposits, etc.) Consistent component of specialized equipment for labs (conservation, diagnosis, documentation, photos), including temperature control, appropriate lighting system, etc.	Management staff/administrative staff/general services staff Specialized personnel for specific functions (conservation, documentation, marketing, promotional and educational activities, etc.) Teachers and apprentices Volunteers and 'Friends of Museums' associations
5.Cultural goods industry (formal and informal): production, distribution and sale of music, crafts, audio-visual products, books, etc.	Infrastructure/refurbishing (sometimes modest, mainly at the household level), production studios, printing establishments Equipment Distribution infrastructure/warehouses	Business owners/personnel (usually households and SMEs) Users, cultural practitioners and producers

HYPOTHETICAL CASE STUDY ILLUSTRATING HOW POST-DISASTER INTERVENTIONS MAY BENEFIT FROM A SOCIO-CULTURAL IMPACT ASSESSMENT IN PLANNING PHASES

The hypothetical case study below relates to a potential intervention in the field of culture and crafts . However, the considerations raised in this case study are illustrative of the many challenges and pitfalls involved in planning post-disaster interventions, not only in the culture sector, but also in other sectors. The purpose of this case study is to convey to those carrying out PDNA and those planning for post-disaster interventions, the importance of taking full account of the socio-cultural context in which their work is taking place. This will increase efficiencies and the likelihood of longer-term sustainability of their efforts.

CATASTROPHIC FLOOD IN PATRIMONIA

A thousand-year flood has inundated large parts of the territory of the Republic of Patrimonia. Some 60 percent of the region's farmland has been underwater for six weeks, and with it, the homes of 70 percent of the Republic's population. Planning is underway to resettle large numbers of the flood-displaced population into temporary camps, with the expectation that it will take from 24 to 36 months to replace a substantial part of the housing stock and allow people to return to their ancestral villages. A PDNA field team is assessing possibilities for income generation and social recovery during the anticipated displacement period of up to three years. One of the three large ethnic groups that makes up Patrimonia's population, the Broder people, is well-known for its intricate embroidery skills, and at the suggestion of the Minister of Industry (herself a native of the region and a member of the Broder ethnicity), the PDNA team is exploring whether this traditional handicraft might appropriately be the subject of development and recovery efforts. What questions could the PDNA team be asking?

- Are the skills of embroidery in the Broder tradition, actively practised and transmitted? Are the skills evenly distributed among different age cohorts or practised more by women or men of a certain generation, and if so, which? What are the contexts within which transmission takes place

(mother/father to girl/boy child? Grandmother/father to girl/boy grandchild? Within kin groups?) Or is there institutionalized transmission in schools, workshops or other settings?

- What are the other gender dimensions of Broder embroidery? Is it practised by men, women or both? Does one gender take responsibility for certain aspects (harvesting, spinning, dying, weaving, embroidering)? Does one gender take responsibility for purchasing materials and selling finished goods?

- Are Broder embroideries bought and sold through commercial channels, bartered, gifted or conveyed through non-monetary exchanges? Are there wholesalers, entrepreneurs, pieceworkers, or other specialized roles within the division of labour? Are these gender-stratified, age-stratified or ethnicity-stratified? Is everything related to producing embroideries self-sufficient within the community or are materials and tools, etc. brought in from outside? Has embroidery production been disrupted and is there a need for recovery? Who controls/owns the resources needed for producing embroidery? Have the roles and time-use patterns of women and men changed due to the flood?

- If Broder embroideries have been a source of family income, who controls the household economy? Are embroiderers the primary wage-earners, or supplementary wage-earners? How does the income from embroidery compare to other sources of income (farming, fishing, industry, professions)? If embroidery becomes the subject of economic intensification, how would it affect time-patterns and resources of women, men, girls and boys of all ages?

- Has there been a value-chain analysis of Broder embroidery? What is the potential for new markets? What is the potential for new products? To what extent are the embroidery skills of the Broder people appropriate to intensify production?

- When is Broder embroidery produced (seasonally, year-round, by day or by night, during leisure time or during working hours)? Where is Broder embroidery produced (at home, in the field between agricultural tasks, in a workshop, etc.)?

- In the displacement camp setting, how could embroidery provide meaningful activity for a part of the flood survivors, and how could it provide them a sense of fulfilment and contribute to psychological wellness?

- Within the multicultural environment of Patrimonia, do other ethnic groups produce similar needlework skills? Who? Do people of other ethnic groups acquire and use Broder embroideries? Who? Are there traditional trade and exchange relations in which Broder embroideries are provided to other ethnic groups? Can people of other ethnic groups learn Broder embroidery and produce it without creating cultural tensions or conflict?

- Are there one or more inventories of the intangible cultural heritage of Patrimonia? Is Broder embroidery already included in such inventories? Are there specialized inventories of Broder heritage or of needle crafts throughout Patrimonia? Are there archives or museum collections (in Patrimonia or abroad) in which historical examples of Broder embroideries can be studied and their techniques and motifs documented? Any useful supports to help revitalize the transmission?

- Does the domestic law of Patrimonia provide intellectual property (IP) protection for embroidery motifs, patterns, or techniques? Have they already been registered within the IP system? If so, will this create obstacles to or cause any objections to the planned intensification of production? If not, are IP protections needed to reduce the likelihood of misappropriation?

- If only Broder can produce their particular style of embroidery, are there other handicrafts among other ethnic groups that could be the subject of development or recovery interventions, so that social or cultural inequality is not created or aggravated?

- Are there health or safety considerations (dyestuffs, working conditions)? Are there environmental issues with regard to access to resources (fibres, dyestuffs, etc.)? Are there sensitivities with regard to child labour?
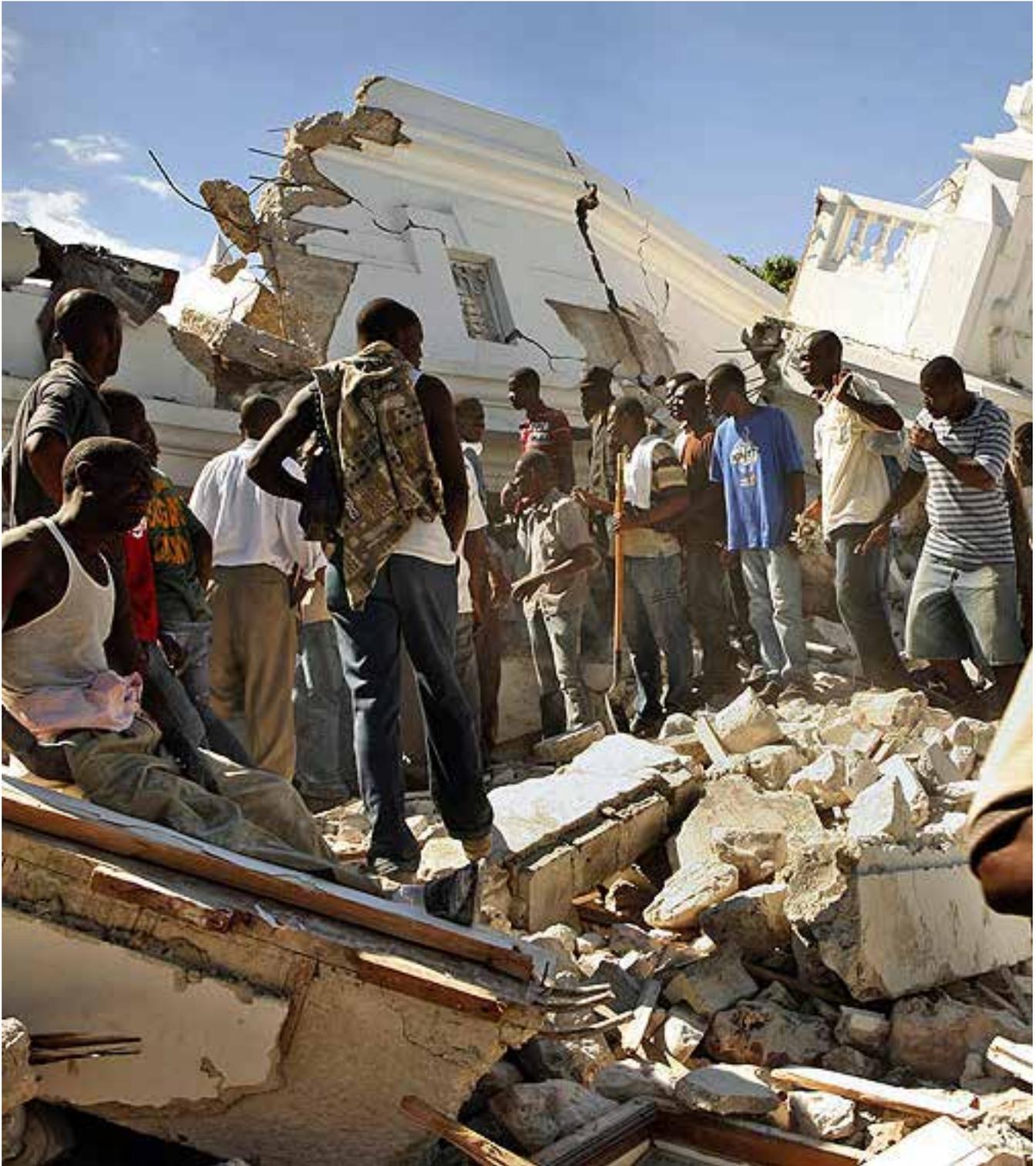
EXAMPLES OF QUESTIONS/INDICATORS THAT CAN BE USED IN THE ASSESSMENT

When formulating questions, prior thought should be given to how the data will be used.

Table 3. Indicators for Assessment

Themes	Assessment Questions	Respondent		Poten-tial In-dicators and Steps
CORE THEMES				
Direct Physical Damage to Institutions, Cultural Site Structures	• Mission and function of the assessed institution/context	Directors/ managers of institutions, built heritage, archae-ological sites, natural parks, gardens	• % of existing cultural institutions affected by the disaster and their relative significance in local/na-tional/global terms • Proportion of evident structural and non-structural damage, loss-es (from visual assessment)	
	• State of the structural and non-structur-al damage to infrastructure, refurbish-ment, equipment	Owner(s) of private dwellings/ director or man-agers of institu-tions and built heritage	• Structural damages ratio (pre- and post-crisis) • % of equipment no longer func-tioning/lost • Type of equipment lost/damaged.	
	• Personnel (#, qualification, sex)	Directors/manag-ers of institutions, archaeological sites, natural parks, gardens		
	• Eventual relation between central institution and periphery affiliation in different districts			
	• Shortcomings, deficiencies of the insti-tution/building already present before the disaster	Directors of insti-tutions, archaeological sites, natural parks, gardens, private owner(s) of buildings, spe-cialized staff	*-Verify carrying capacity and stability of structural systems, identifying (rec-ommended tool: ICOMOS assessment structural capacity sheet):*	
	• Deficiencies/shortcomings aggravated/ caused by the crisis		*-parts that are in urgent need of sup-ports to stop their collapse (emergency shoring and propping)*	
	• National and international projects interrupted by the crisis		*-personnel available to carry out their tasks, additional assistance needed*	
	• Actions and projects which need to be developed in response to the current situation		*Requirements/needs in terms of:* *-appropriate supplies*	
	• Priorities in the needs ranking		*-equipment* *-technical assistance, immediate training.*	

Table 4: Assessment per Field/Theme

Theme	Assessment Questions	Respondent	Potential Indicators and Steps
CORE THEMES			
Government capacity, coordination and national policies	• Are there policies and plans in place concerning the cultural heritage in emergencies? • Were local policy-makers and the community as a whole made more aware of the potential role of the cultural heritage, intangible heritage, and cultural and creative industries in post-disaster situations?	Central and local authorities	• % of affected districts with emergency preparedness plans in place that cover culture
	• What types and level of support are needed for local authorities to be able to best respond to identified culture sector needs?	District, local authorities (F/M)	• Effectiveness of local and regional government bodies and coordination
	• How can cultural heritage international and national organizations (e.g. United Nations Economic Social Cultural Organisation UNESCO), institutions and associations (e.g. International Centre for the study of the Preservation and Restoration of Cultural Property (ICCROM), International Council on Monuments and Sites (ICOMOS), ICA, IFLA) cope?	Central and local authorities (F/M)	• Quality of the intervention and coordination among cultural heritage stakeholders and associations involved in emergency plans
Community involvement	• What community-based efforts already under way can be built upon during the culture sector emergency response?	Community leaders and members (F/M)	• % of districts in the affected area with active community-based efforts undertaken
	• What resources to support equal participation of women and men are available and how can additional resources be mobilized?	Community leaders and members (F/M)/local authorities (F/M)	• Types, amount of resources available and # of initiatives begun by community members to mobilize assistance/rescue threatened cultural heritage, as well as to prevent/support the fight against looting
	• Are marginalized or disadvantaged groups included and consulted in community efforts? How are they given a voice?	Community leaders and members (F/M)	• % of youth, women, others from key identified marginalized or disadvantaged groups involved and actively participating • Use of community, social media or other appropriate channel of communication identified by the community to express marginalized voices

	Questions	Stakeholders	Indicators
Knowledge based and information sharing	• Is there a comprehensive database for the culture sector/portal? • If yes, at which level is the database/portal accessible to users? • How frequently are statistics for culture updated?	Central and local authorities/institution directors	• # of directorates and public using the national database and portal • # of users accessing the database/portal, representing different stakeholders and at different level (central, regional, district, etc.) • Quantitative baseline data generated
Disaster Risk Preparedness (DRP) Plans	• Are adequate risk management plans devised and in place for the cultural heritage? • Are the staff and civil society persons concerned (e.g. occupants and users) familiar and comfortable with emergency and risk management plans? • Have the relevant officials been involved and familiar with the set emergency plans?	Central and local authorities/site managers	
	• Do other areas have a Disaster Risk Preparedness (DRP) Plan? Is it effectively tested /functioning?		Yes/no, describe how • # of risk management plans developed for World Heritage Sites
	• In cultural institutions and sites, have disaster response and/or risk prevention officers been appointed from the institutions' staff? • Have places in which emergency conservation treatment of collections can be carried out?		• % of potential threatened sites/institutions with DRP in place
	• Have lists of contact persons, external staff, services providers, etc. been drawn up? • Are these lists readily accessible? Where are they kept? • For institutions, have back-up copies data been secured and made available?		• Availability of guidelines and other relevant materials to help site managers and others design risk preparedness strategies for the cultural heritage • # of civil society associations established to support rescue operations for the cultural heritage in the event of a disaster • Effectiveness of the DPR plans • Yes/no
	• Is there traditional knowledge which promotes disaster resilience/prevention/alerts for future disasters?	*Idem*	• Names of the officers • Yes/no, list of places (if possible) • Yes/no, location of list of contacts and back-up copies
	• Is training available for staff/civil society organizations and does it correspond to prioritized needs? Who benefits from such training (F/M)?	Central and local authorities/community leaders/site managers	• Recognition of traditional knowledge in DRP

	• Is there a cultural police service in place? With which body do the police/army currently cooperate in cordoning off cultural properties at risk of collapse?		• % of officials, professional staff and civil society organization (F/M) trained on crisis-related topics and risk management at cultural sites/world heritage sites • % of property occupants, users and the concerned community in general involved in planning for disaster risk reduction plans Please refer to tailored tools for specific fields, for example: -*UNESCO/ICOM Museum Training Kit (Manual, Trainer's Manual and Needs Assessment Sheet)* -*UNESCO/ICCROM/ICOMOS/IUCN Resource Manual, Managing Disaster Risks for World Heritage 2010 (http://whc.unesco.org/en/activities/630)*
Basic services, access and safety of staff	• How many people (officials, staff, users, etc.) were present at the time of the event?	Central and local authorities	• Safety and coordination Government, cultural institutions, etc.
	• In ministerial offices/cultural institutions are essential services functioning (electricity, water)? How does it compare with the pre-disaster situation?		• # of persons (F/M), staff, personnel injured
	• Can staff safely reach the institutions/ museums/working spaces to perform their tasks?	Central and local authorities	• # of staff, personnel (F/M) injured • Reduction in institutions' operating hours
	• Which cultural heritage protection services are now available? Do they sufficiently cover all relevant fields? How does this compare to what existed before the crisis? • Is acceptable access ensured to cultural sites/ institutions, centres?	Institution directors and staff (F/M)	• Estimated attendance rate (F/M/total) • Report of personnel (F/M) who feel safe travelling to and from working places in the affected areas
	• Do digital/paper inventories (still) exist for archives and libraries? • Are documents/books still on shelves (original location as per the inventories?) • May the above be used to ascertain whether documents, manuscripts, etc. are dispersed/lost?	Central and local authorities/ institution directors	• % of existing cultural institutions able to continuing providing (basic) services

Archives and libraries			
• Is security ensured? Since the disaster occurred, has there been any theft and plundering and what has been the target? How does this compare with the pre-disaster situation?	Institution director and staff	• Documentation of tangible heritage	
• Is there a complete inventory of the collections?		• % of secured properties. Targets: furnishing & equipment, supplies (electrical plugs, etc.)/hosted inventories (books, manuscripts, documents, etc.)	
• Are the premises regularly inspected?		• Yes/no (documentation of tangible cultural heritage)	
• Does the building ensure present conservation/protection for the hosted collections or there is a need to move them to a temporary safe location/storage?		• Yes/no [relevance for disaster risk preparedness]	
• Are there manuscripts/specific documents/books which require particular conservation measures? Are these measures still ensured and were they provided before the disaster? • Current needs		• Protection of collections and properties	
• Are archives sufficiently organized to ensure the safeguarding, proper protection and public accessibility of the affected population's collective memory ?		• Conservation of manuscripts, documents • *Needs in terms of:* *-appropriate supplies, equipment, appropriate treatments, restoration laboratories, storage conditions for archives, libraries*	
• Are libraries sufficient in size and number to meet the learning needs of the affected populations?	*Idem*	• *[Relevance for good governance and democracy]*	
• Does the building ensure present conservation/protection for the hosted collections or there is a need to move them to a temporary safe location/storage?	Idem/users (students, citizens)	• % of library/archive space (re)opened (pre-crisis compared to in/post-crisis) • *[Relevance for non-formal education and education for all]*	

Museums and cultural institutions			
Is security sufficiently ensured for artefacts? Has there been theft and plundering? How does it compare with the pre-disaster situation?	Institution director and staff	Protection of collections and properties
• Are there any inventories/databases/information management systems for collections in place? • Are collections fully inventoried?	Institution director and staff	• % of secured properties. Targets: furnishing and equipment, supplies (electrical plugs, etc.)/hosted inventories
• How many artefacts, which types and which conservation measures need urgently to be ensured? • What are the conditions of store-rooms and in what condition were they before the disaster occurred?		• Documentation of tangible cultural heritage • Collections fully inventoried/partially inventoried
• Are there conservation laboratories to fulfil the museum's requirements? And compared with the pre-disaster situation?		• Conservation of cultural property • *Needs in terms of:* *-appropriate supplies, equipment, treatments, restoration laboratories, storage conditions for museum collections*
• From where has specialized equipment been procured?		• Proportion of museum and cultural institution furniture lost
• Are the premises regularly inspected?		• In-country availability
• Do museums provide outreach activities for the general public, schools and amateurs, links with the educational system and on-site hands-on courses/experiences? • Are the following in place: voluntary mechanisms, alliances, supporting mechanisms • How can these efforts contribute to mobilizing support for urgent interventions and then returning to normalcy?		• Yes/no [Relevance for disaster risk preparedness] • Yes/no • Primary and secondary school/university • Programmes enhanced through partnerships/linkages with the education system • Learning platform supporting the notion of 'life-long learning'
• What have been the damages and losses? Infrastructure/equipment and essential material?		For museums' needs, please refer to the UNESCO/ICOM museum management evaluation questionnaire (http://portal.unesco.org/culture/en/ev.php-URL_ID=35511&URL_DO=DO_TOPIC&URL_SECTION=201.html) covering: A. General Information; B. Governance; C. Governing Body; D.Staff; E. Space Allocation; F. Safety and Security; G. Collections; H. Research; I. Preservation and Conservation; J. Public Relations and Marketing; K. Exhibitions; L. Programmes/Education; M. Publications; N. Training Needs

Built heritage (single and clustered heritage)	• What can be conserved of the authenticity of the heritage and what requires a new project intervention to ensure the compatible use of such heritage?	Institution director and staff	• Proportion of evident structural and non-structural damages, losses (from visual assessment) Identify: parts which are in urgent need of supports to stop their collapse
	• Is the property threatened by theft and plundering? How does it compare with the pre-crisis situation?	Institution director and staff	• Conservation and compatibility of use • % of existing historical buildings requiring immediate stabilization/preservation measures
	• Are experienced and qualified professionals available to carry out urgent necessary repair, stabilization and conservation? • What are the local skills available for conservation, restoration and new project intervention? • Are the necessary conservation materials, equipment and products available?	Institution director and staff	• Security
	• Does the protected area cover the actual scope of the site?	Specialized staff	• Availability of restoration material, labour, architects, structural engineers, specialists, etc.
Archaeological sites	• Has the full potential for research and on-site studies been determined?	Site director/ specialized staff	• Integrity of cultural heritage sites
	• Among sites not directly affected, which are inaccessible due to the disaster's effects? • Which sites could be further damaged by further effects of the disaster?	Site director / specialized staff	• Research
	• Are there comprehensive plans (conservation, management, marketing) for listed heritage sites? • Are they implemented?	Site Director / specialized staff	• Accessibility of sites • Prevention
	• What is the general role of local communities (F/M) in the management/ presentation/maintenance plans?	Site Director/ specialized staff	• Proportion of sites with comprehensive plans implemented
	• Is there a first-aid system in place for archaeological sites?	Site manager/ community leader and members (F/M)	• Role of communities in management, maintenance, monitoring systems
	• Are there cases of illegal digging activities? How does this compare with the pre-disaster situation? • What can be done to stop it?	Site director/ specialized staff	• Role of preventive conservation
	• How vulnerable are sites to natural hazards?	Site director/ specialized staff/ community leader and members (F/M)	• % of illegal excavation reduced • Rescue excavation could be taken into consideration for worse cases

Natural resources	• Does the site management plan effectively address the site's critical issues?	Site manager/ specialized staff	
	• Are communities and users (F/M) aware of the value and sustainable use of such resources?	Site manager / specialized staff	
	• What have been the effects of the disaster on the culture sector's staff?	Site director/ specialized staff/ community leader and members (F/M	
Staff of cultural institutions	• Who is available to perform urgent priority tasks? (location qualification) • Are staff wages still paid as before the disaster? • Are staff receiving incentives from other sources?		• % of staff (F/M) affected by the disaster: dead, missing, injured, displaced • Estimated attendance of staff (F/M)
	• In normal conditions, is on-job training and continuing professional development available for staff and does it cover priority needs? • What should it cover?		• % of available qualified staff (based on national standards) • Ratio of female to males in institutions management • % of staff receiving salaries from the government and/or incentives or support from the community or other sources
	• What are the conditions of work for the other cultural heritage personnel? • Are administrators, guards, etc. still available?		
	• Training needs? Priorities?		
	• Are there national/local inventories of the intangible cultural heritage? What is their coverage?		

Intangible Heritage and Traditional Knowledge *(such as oral traditions and expressions, performing arts, social practices, rituals and festive events, knowledge and practices concerning nature and the universe, traditional* **craftsmanship)**			
	• In which cultural manifestations/ believes/ practices/expressions/knowledge/skills does your community recognize fundamental shared values, and which should be protected? How does it compare with the pre-disaster situation?	Central and local authorities/ community leader and members (F/M)	• Documentation of Intangible Cultural Heritage with the participation of the concerned community (F/M)
	• What losses and damages in cultural values do the affected communities feel?		
	• What are the conditions/organizational requirements to allow people to continue holding and performing the relevant intangible cultural heritage expressions and manifestations (i.e. festivals, parades, etc.)? Which materials/supports could be used to enable ICH manifestations and practices to be carried out replacing unavailable traditional materials?	Community leader and members (F/M)	
	• Do you feel that community traditional practices/beliefs have space enough to be expressed?		• % of interrupted activities *Identify requirements*
	• Are cultural traditional knowledge systems accessible and integrated into the education system and professional curricula (i.e. urban planning, building construction, etc.)? Are there any customary practices to regulate access to the intangible cultural heritage?		• Recognition of knowledge, skills, social practices, rituals, etc.
	• Do cultural/creative industries represent your main source of income? Are they a fulltime job?		• Traditional knowledge integrated in formal education systems/curricula • Transmission through formal and non-formal education

Intellectual Property (IP)	• Under normal circumstances, at this time of the year, what are the most relevant ways in which households in this area sell their cultural goods/cultural performances? • Roughly, what proportion of households in the district/area are equally engaged in this kind of activities? • What would be the (projected) average income from such activities? What are current incomes? • How many persons work on the production of cultural goods in your enterprise?	Household (male-,female-, child-headed households) SME/CBO manager	• # of women and men for whom cultural and creative industries jobs are their main source of income • # of women and men for whom cultural performance represents a second job/hobby
	• Do you receive incentives/financial support, and from which private/public credit institution? Is this sufficient to boost your enterprise? • Monetary value of the incentive?		• Poverty and income rate of households • Cultural enterprises: small/medium enterprise
	• Disaster-related damages and loss to your household/community / Time pattern? • Where do you get your stock/raw materials, supplies from? Has there been any disruption to supplies since the disaster? Why?		• % of supported, boosted enterprises (disaggregated by sex of owner) • Monetary value per SME
	• What are the priority needs for your enterprise to be able to restart operations? • Are there suitable raw materials to replace materials unavailable due to the disasters or which could produce alternative/new valuable cultural products?		• Procurement of raw material, stock, goods
	• Is the legal and operational framework/environment of the market conducive to cultural industries? • Which restrictions have you observed?		• *Identify priority needs for cultural and creative SMEs and CBOs:* *-premises and workshop infrastructure, equipment, incentives for setting up/reviving cultural and creative industries* -Opportunity identification
	• Are there specific market events, national, regional fairs, cultural events on the agenda which have been disrupted due to the emergency? • How can these be rescheduled with minimal disruption to performance?		• # of local cultural/traditional markets boosted and revived (who benefits?)

Intellectual Property (IP)	• Is there any loss of property, cultural goods (private historic or traditional dwellings, collections), traditional inventories (e.g. weaving tools)? • Is there a loss of income (goods and services, i.e. cultural tourism services)? • Have costs increased for household cultural production? • Has there been a loss of business opportunities (i.e. fairs, cultural events, cultural tourism services)? • Is there difficulties in access to market? • Have the living conditions of the youth and women improved through the income generated by the sales of their products? • Could cultural goods production enable a diversification of income sources for households and the community as a whole? • Has the self-confidence of cultural producers and artisans improved?		• % of disrupted activities *Quantify the losses*
Household/community Impact	• Are there tour guides, community tour guides? Are they formally trained? • For those informally trained but performing well, is recognition by the formal system of accreditation envisaged/foreseeable?	Household/community leader and members (F/M)	• % of households – particularly women-headed households - with income from cultural goods production and from cultural tourism (MDG1) • % of increase in (target) community members (particularly women and youth) wage and regular income deriving from the cultural goods market and cultural tourism-associated service provision • Opportunity to diversify sources of incomes at community and household levels
	• Do you feel that there is increased social stress? • Do you sense any resurgence of tension (ethnic, social, religious)? Why? • Has there been significant impact on the living circumstances of communities, disruption of community ties, high levels of displacement – etc.?	Community leader and members (F/M)	• Formal and informal training of community guides (disaggregated by sex)
Respect for cultural diversity and rights (social impact)	• Do you visit to historical sites, public parks and zoos, and how much do you spend on such visits?	All respondents	• # and relevance of initiatives *Describe briefly reasons*

	Guiding questions	Target group	Indicators
Cultural Tourism	• How many related operators/services other than at the community level are still operating in the culture and tourism sub sectors? • What is the difference in income between the pre-disaster situation and the current one?	National and international operators	• Household expenditure on visits to historical/cultural/ archaeological sites, parks and zoos
	• Do cultural practitioners and cultural goods producers feel that their intellectual property rights (IPR) are sufficiently protected? Why?		• % of operators receiving regular income deriving from cultural tourism
Intellectual Property (IP)		Cultural practitioners and producers (F/M)	• # of people sensitized to issues on piracy and intellectual property related to handicraft products; market linkages and opportunities fostered • % of cultural practitioners, producers who feel insufficiently protected. *Provide reasons*

Table 5: Cultural Contribution to Other Sectors (Cross-Cutting Issues)

	Guiding questions	Target group	Indicators
Youth	• What are the main occupations of youth and children in temporary camps by sex and age? • Which cultural and creative activities could be performed? • Is there a mobile library and are there spaces available to allow groups to express their cultural forms? • Which kind of equipment and facilities should be provided? • What is the time-use pattern of girls and boys? Are there restrictions on the creative activities allowed for girls and boys?	Affected population (F/M)	• Access to cultural heritage *Identification of needs, projects*
Shelter	• How can designing housing and temporary camps take into account and integrate issues embedded in the community's cultural/religious behaviour? • What kind of activities and work are forbidden to men or women by local customs? Is anyone in the community challenging these customs?	Affected population (F/M)	• Respect for human and cultural rights
Land tenure	• Customary law vs. land ownership. Who benefits and who is disadvantaged?	Affected population (F/M)	• Sustainable utilization of cultural/natural assets
Food Security	• What are the customs, culture and traditions that limit access to and control over food to any member of the household/ community/ population at large? • What are the religious-based food restrictions/preferences in the community (for women and men) and cooking practices?	Affected population (F/M)	• Improvement in effectiveness of access to food security

Health	• What are the cultural beliefs and practices, for instance regarding pregnancy and birthing, the disposal of dead bodies, care of the sick, menstruation, sexual and gender based violence (SGBV), harmful cultural practices? • Are there linguistic factors which may affect access of certain gender/groups/communities to health care services and information?	Affected population (F/M)	• Improvement in effectiveness of health access to services and campaigns
WASH	• Are there cultural and symbolic barriers hindering Water, Sanitation and Hygiene campaigns?	Affected population (F/M)	• Improvement in effectiveness for WASH programmes
Education	• Are local languages used in the promotion quality education and education for all?	Affected population (F/M)	• Improved education objectives
HIV and AIDS prevention	• Are there cultural issues and practices hindering HIV and AID pandemic prevention? • How can musicians and artists positively contribute to HIV and AIDS prevention campaigns?	Affected population (F/M)	• Improvement in HIV and AIDS prevention awareness campaigns
Protection	• Are there traditional justice mechanisms in the community and are they influenced by cultural systems that in some instances may discriminate against certain gender/sub-groups of persons? • Has emergency assistance introduced practices which you feel contrasting with your cultural religious beliefs? Which and why?	Affected population (F/M)	• Respect for human and cultural rights Identification of cultural factors and their needs
Gender	• Are all voices heard, including those of women? • Is the data collected disaggregated by sex and age? • Is there a differential impact on culture depending on gender? • Is there a specific contribution that women can make towards the recovery of the culture sector? • Are there specific gender issues related to the culture sector that may have an impact on the recovery process?	Affected population (F/M)	• Inclusive and non-discriminatory process

METHODOLOGIES FOR ESTIMATING E AND CHANGE IN ECONOMIC FLOWS

Table 6: Summary Matrix for Damage

Domain		Damage	How damage is calculated
Built heritage (isolated/ aggregated), archaeological sites, etc. (including sites on the World Heritage List)	*Single property:*	Restorable	As per Damage and Loss Assessment (DaLA) methodology, damages can be approximated by estimating the cost of rehabilitating or recovering the assets [same standard as the pre-disaster situation]: cost for restoration works (materials and labour) + refurbishment and equipment (for specialized equipment unavailable in the country, maintenance, insurance and transport costs must be included)
	Best calculation method to be identified on the basis of the case's specificity	Destroyed	(i) If the property does not have a market value: enhanced replacement cost method provides credible monetary valuation, although it may require time (hence, it could be more appropriate during the thorough/detailed assessment of damages and needs); (ii) If the asset has a real estate market valuation, the property price should be kept as proxy valuation (DaLA).
	Aggregated: a cluster should be considered as a whole. *Avoid double counting with housing sector)*	Restorable	Same as single building: main difference is that economic damages should be broken down between private and public sector accordingly.
		Destroyed	Destroyed single building heritage. When it is a market property, the bid price identifies the monetary value.
Natural assets and protected areas (including sites on the World Heritage List)	Avoid eventual double counting with the environment sector	Compromised	Same criteria as for built heritage and environment. An indirect estimate made after consulting users about the value that they ascribe to the environmental goods for which there is no market), can be used for both use and non-use values.
		Recoverable	Same as above.
Cultural goods, traditional products		Partially destroyed	As trade-market products, the damages occurred can be appraised directly using the market price of the good/product:
		Destroyed	good's price on the market (+ inflation rate and augmentation
Moveable properties	Rare books, manuscripts, works of art, archaeological, ethnological artefacts:	Recoverable	Restoration cost
		Lost / Destroyed	Although they are not traded-goods, a proxy valuation can be made: price estimated by auction houses, e.g. Christies, Sotheby's (indirect WTP/WTA methods)
Premises of ministerial offices (at central and local level), cultural institutions, libraries and archives, museums	Building not endowed with recognized/recognizable cultural value *Avoid double counting with the housing sector*	Restorable	Damages can be evaluated with the methodology for new buildings (used in the housing sector, DaLA): value of: demolishing + rebuilding the unit + eventual renting/adapting on purpose temporary premises + transportation of contents to, and back again from the new premises)
	Building listed in national/international inventories	Restorable	The evaluation method should follow the same as for the category of built heritage above
	Non-cultural asset	Destroyed	Same as for housing sector
	Cultural asset		Same as for the built heritage field

Table 7: Methodologies for Estimating Change in Flows

Change in flows	Causes	How Change in Flows are Calculated	What is Impacted
Closure/inaccessibility of cultural institutions/ museums, libraries and archives	Lack of basic services (electricity, water, etc.)	Loss of staff incomes x timeframe for the restoration works and recovery of contents (when their recovery is not instantaneous) + loss of institution income from entrance fees, scheduled exhibitions, activity and event earnings (ticket, bookshops, etc.)	• employment • poverty • social capital (accrued lack of service for the entire community imply-ing a reduction of social capital, identity growth)
Closure/inaccessibility of natural assets, zoos and protected areas	Lack of basic services, lack of visitor security	Loss of staff income x timeframe for the resto-ration of infrastructure and natural capital + loss of incomes from entrance fees, scheduled activity earnings (ticket, guided visits, etc.)	• employment • cultural capital
Delay/interruption of production of cultural goods	Inaccessibility/disappear-ance of raw materials and tools	Loss in enterprise incomes linked to cultural goods' production x predictable delay/inter-ruption time	• poverty (price increases, inflation, depreciation of goods) • macro-economy (market stagnation/fluctuation/ • disruption, with conse-quences on country's GDP)
Additional deteriora-tion of cultural arte-facts and buildings	Disruption of services by conservation institutes/ training centres (dam-aged by the disaster)	Additional costs requested to carry out the restoration work (including workers) x the timeframe	• cultural capital
Cancellation of special events/festivals/fairs/ art performances	Inaccessibility/ compro-mising of the location / cultural place	Losses can be calculated with TCM (expected on the basis of previous, expected or already booked travel attendance) or investment costs	• poverty • social capital
Loss of cultural tourism income volume	Fewer/inaccessible assets affecting services associated with cultural tourism destinations (e.g. guesthouses)	% of reduction in the total value of entrance fees or tourist taxes applied in cultural loca-tions/sites + losses in associated performanc-es, hosting services, sub-sector wages, etc.	• poverty (reduction of overall tourist arrival)
Losses in incentives, loans	Damaged production	Value of subsidies/incentives/loans, mi-cro-credit form + (eventual) interests	• poverty

Table 7: Methodologies for Estimating Communal and Social Damage and Losses

Impact on the Culture Sector	Damages and Change in economic flows	How they are calculated
Human losses	• Professionals, management and administration, service staff (functioning of the sector) • Artisans, craft-workers, artists, musicians, traditional dancers, etc. (cultural practitioners and producers, cultural and creative industries)	Victims, the injured, affected persons – no. (F/M)
Households/ community *Assessment questions under households/ community impact of Annex 10.4*	• Loss of property, cultural goods (private historic or traditional dwellings, collections), traditional inventories and equipment (weaving tools, etc.) • Loss of income (goods and services: e.g. cultural tourism services) • Increased household costs • Loss of business opportunities (e.g. fairs, cultural events, cultural tourism services) • No/reduced opportunities to access market • Loss of operating capital (cash/material resources) for women and men, reduction of their share of productive activities in the formal and informal sectors	Direct damages and indirect losses are calculated according matrix above. *Women's capital loss:* no. (or % in a given community) of women who had to leave their job to take care of their family/community; reduction in women's contribution to unemployment rate
Intangible cultural heritage *Assessment questions under intangible cultural heritage of Annex 10.4*	• Disappearance/disruption of oral traditions and use of languages as a vehicle for the intangible cultural heritage, performing arts, traditional crafts, knowledge and practices concerning nature and universe	*If damages can be repaired (disruption):* the costs for ensuring that they continue despite the disaster can be calculated, or the costs for reviving a language, etc., traditional know-how at risk (in terms of documentation, training, incentives for apprentices, over the time required to recover such heritage). However, it might not be possible to evaluate it in the short timeframe owing to the lack of realistic baselines and the lack of reference to immediate beneficiaries'.
		If heritage disappears: inestimable. In a few cases could be evaluated using the contingent valuation method (CVM) (Delphi approach) or other context specificity methods.
Social impact *Assessment questions under social impact of Annex 10.4*	• Increased stress, cultural displacement due to forced migration, etc. • Psychological trauma • Resurgence of tension (ethnic, social, religious)	Analysis of response options and needs of women and men of all age: • identify direct and immediate responses and long-term responses strengthening livelihood options (complementarities between immediate and long-term response options) • pro and cons of various response options

PRIMARY AND SECONDARY BENEFITS OF CULTURAL ASSETS

Source: ICOMOS, 2005

PRIMARY BENEFITS:

- Prices paid – for conservation goods and services including any evidence of willingness to pay for consumer goods and services such as admissions, cultural tourism expenditures, purchases of cultural goods and properties, grants and donations (net of tax deductions), etc.

- Local visitor values – consumer surpluses, values in excess of prices paid, the estimated maximum willingness to pay for conservation goods and services.

- Shares of consumer surpluses appropriated by suppliers – gained by higher prices over and above equilibrium market prices.

- Economic development impact – net incomes to producers and suppliers of cultural goods and services after taxes.

- Net indirect effect incomes to the suppliers of cultural producers and suppliers – of cultural goods and services, net of taxes.

- Net indirect effect incomes to expenditures by employees of cultural producers and suppliers incomes to employees and to the suppliers of the cultural providers. Induced effect incomes – from expenditures in indirect effect round.

- Taxes paid in all rounds.

- Net job creation arising from direct, indirect and induced rounds.

SECONDARY BENEFITS OF CONSERVATION PROJECTS:

- Land value spillover effects;

- Increases of land tax base;

- Energy conservation;

- Stimulation of private investment;

- Potential decrease for protection expenditures;

- Potential decrease in police expenditures;

- Potential reduction in the economic costs of crime;

- Potential reduction in schooling costs;

- Potential reduction in sanitation expenditures;

- Improves public services;

- Higher business formation rates;

- Lower business failure rates;

- Potential increase in accessibility;

- Potential reductions in congestion;

- Potential increases to open space.

SECONDARY BENEFITS THAT COULD BE EXPECTED TO BE GREATER FOR CONSERVATION PROJECTS THAN FOR COMPETING REDEVELOPMENT PROJECTS:

- improved aesthetics of the area;

- reduction in densities;

- increases in arts and crafts employment;

- neighbourhood cohesiveness;

- stronger neighbouring associations;

- economic stabilization of neighbourhoods;

- potential magnet effects for further high quality development;

- cluster effect of business and amenities;

- community image;

- more tourists (more employment but possibly at lower wages);

- attraction of residents and tourists in high-earning labour market

- public goods benefits;

- option values;

- secondary consumer surplus generation.