9

**ANDREA CANNONE** (a cura di)

La protezione internazionale ed europea dei beni culturali





In copertina:

S. Michele uccide il drago.

Particolare dal portale nord di S. Leonardo in Lama Volara presso Siponto (FG).

«iuxta strata peregrinorum»

Secolo XII

Foto gentilmente fornita da Pina Belli D'Elia

# **ANDREA CANNONE**

(a cura di)

# LA PROTEZIONE INTERNAZIONALE ED EUROPEA DEI BENI CULTURALI





#### REGIONE PUGLIA

#### ASSESSORATO AL MEDITERRANEO, CULTURA E TURISMO

Il presente volume è stato pubblicato a spese del progetto di ricerca "Il ruolo della Regione Puglia nella conservazione e valorizzazione del patrimonio culturale e mondiale a 40 anni dall'adozione della Convenzione UNESCO sulla protezione del patrimonio mondiale culturale e naturale del 1972" finanziato dalla Regione Puglia, Assessorato al Mediterraneo, Cultura e Turismo.

PROPRIETÀ LETTERARIA RISERVATA

© 2014 Cacucci Editore - Bari

Via Nicolai, 39 - 70122 Bari – Tel. 080/5214220 http://www.cacucci.it e-mail: info@cacucci.it

Ai sensi della legge sui diritti d'Autore e del codice civile è vietata la riproduzione di questo libro o di parte di esso con qualsiasi mezzo, elettronico, meccanico, per mezzo di fotocopie, microfilms, registrazioni o altro, senza il consenso dell'autore e dell'editore.

# **INDICE**

Introduzione	VII
Indirizzi di saluto	IX
Tullio Scovazzi, La Convenzione per la protezione del patrimonio culturale e naturale mondiale nella sua applicazione ai beni culturali	1
RAYMOND BONDIN, La 'Lista' a 1000 siti: i problemi per i nuovi ricono- scimenti UNESCO	19
Andrea Cannone, Listing e delisting nella Convenzione sul patrimonio mondiale culturale e naturale del 1972	23
Marina Castellaneta, Il marchio del patrimonio europeo e il meccanismo Ue sulla valorizzazione del patrimonio culturale	37
Antonietta Damato, L'azione del Consiglio d'Europa a tutela del patri- monio culturale europeo	59
GIOVANNA IACOVONE, I piani di gestione relativi ai beni inseriti nella Li- sta del patrimonio mondiale culturale e naturale	77
EMILIA MARIA MAGRONE, L'azione dell'UNESCO per la protezione dei beni culturali inseriti nella Lista del patrimonio mondiale culturale e naturale in caso di conflitti armati	91
CLAUDIA MORINI, The Protection of the World Heritage from Natural and Man-Made Disasters' Risks	105

VI Indice

APPENDICE DI DOCUMENTAZIONE	
Emblemi e segni distintivi di protezione	119
Bibliografia selezionata	120
Sitografia selezionata	121
Elenco dei beni italiani inseriti nella Lista del Patrimonio mondiale culturale e naturale	123
Elenco dei beni italiani inseriti nella Tentative List	125
Schede relative ai beni presenti nella Regione Puglia di cui alla <i>Tentative List</i> sottoposte dal governo italiano e tratte dal sito del WHC	127

#### CLAUDIA MORINI\*

# THE PROTECTION OF THE WORLD HERITAGE FROM NATURAL AND MAN-MADE DISASTERS' RISKS

Sommario: 1. Introduction. – 2. The definition of 'risk'. – 3. The International Legal Framework: the 1972 World Heritage Convention and the Operational Guidelines for the Implementation of the World Heritage Convention. – 4. The 2007 Strategy for Risk Reduction at World Heritage Properties. – 5. The Olympia Protocol for International Cooperation. – 6. Practical cases. – 7. Future Prospects.

#### 1. Introduction

In recent years, as natural and man-made disasters are increasing in number and intensity all over the World, it is undisputable that World Heritage properties are exposed, as well as other properties, to the consequences of those disasters, which threaten their entirety and may compromise their value<sup>1</sup>. Due to different

<sup>\*</sup> Assegnista di ricerca presso la Scuola Superiore di Studi Universitari e di Perfezionamento Sant'Anna di Pisa – Progetto FIRB, Futuro in Ricerca 2012, *International Disaster Law Project*.

<sup>&</sup>lt;sup>1</sup> On Disaster Risk Management of Heritage Properties see: UNESCO-WHC, Desirability of adopting an international instrument on the Protection of the cultural heritage against natural disasters and their consequences", Report of the Director General, 1983, http://unesdoc.unesco. org/images/0005/000560/056088eo.pdf; B. Feilden, Between Two Earthquakes; Cultural Property in Seismic Zones, ICCROM and Getty Conservation Institute, 1987; H. STOVEL, Risk Preparedness: A Management Manual for World Cultural Heritage, Rome, ICCROM, 1998; C. MENE-GAZZI, Cultural Heritage Disaster Preparedness and Response, Proceedings of the International Symposium held at Salar Jung Museum, Hyderabad, India, 23-27 November 2003, ICOM Paris, 2004, available at http://icom.museum/disaster\_preparedness\_book/copyright.pdf; S. MICHALSKI, "Care and Preservation of Collections", in Running a Museum, A Practical Handbook (ed. P. BOYLAN), ICOM, Paris, 2004, pages 51 – 91; R. JIGYASU, K. MASUDA, Proceedings; Cultural Heritage Risk Management, World Conference on Disaster Reduction Kyoto; Research Center for Disaster Mitigation of Urban Cultural Heritage, Ritsumeikan - Kyoto, Japan, 2005; UNESCO-WHC, Policy Document on the Impacts of Climate Change on World Heritage Properties, Paris, 2008, http://whc.unesco.org/en/CC-policy-document/; UNESCO, Case Studies on Climate Change and World Heritage, 2007, Paris, http://unesdoc.unesco.org/images/0015/001506/150600e. pdf; A. RICCARDI, Protection and safeguard of cultural heritage from risks connected to natural

climatic, geographical and socio-economic conditions, the types and degree of disasters vary from region to region. Anyway, existing or potential dangers from man-made and natural hazards could be the same for all the World Heritage sites. All these dangers would have the potential to menace them with severe deterioration, damage, destruction or any other kind of permanent alteration.

Each World Heritage site may be characterized by a different extent of vulne-rability. This will of course depend on many causes, such as its geographical position, environmental and geological factors and the current degree of conservation of the site itself. In the light of this peculiarity, when dealing with actions to be taken in order to protect WH sites from the adverse effects deriving from disasters, the relevant stakeholders should focus their attention on the elaboration of detailed risk analysis allowing them to effectively assess severe, detailed, ascertained and possible dangers that could threaten the conservation of each site. In fact, even if earthquakes, floods, oil spills, and the outbreak of disease cannot be entirely prevented, mitigation measures can effectively reduce risks and provide a valid basis to cope with post-disaster situations.

According to a recent study, notwithstanding many existing dangers, «the number of World Heritage properties that have developed a proper disaster risk reduction plan is surprisingly low. This is often due to a series of misperceptions. On the one hand, there is a widespread belief that disasters are events beyond human will and control, against which little can be done. On the other hand, heritage managers and policy-makers tend to concentrate their attention and resources on what they perceive as the real priorities for their properties, *i.e.* pressure from development and the daily wear and tear of sites as a result of slow, cumulative processes that can be 'seen'. Finally, and somewhat ironically, the vulnerability of heritage properties to disasters is normally recognized after a catastrophic event has taken place – including by the media and donor community – when it is often too late»<sup>2</sup>.

The main purpose of this paper is to give an overview of the international legal framework protecting World Heritage sites in the event of natural or manmade disasters and to give practical examples of the consequences of catastrophic events on World Heritage. In this context, the 1972 World Heritage Convention represents the most important legal instrument for the protection and preservation of cultural heritage at international level<sup>3</sup>. However, before investi-

and man-made disasters. International, European and national perspectives, International Law and Disasters Working Paper 01 (2014), available at http://disasterlaw.sssup.it/?page\_id=314, Risk Preparedness; Heritage at Risk, Bibliography, UNESCO-ICOMOS Documentation Centre, Paris http://www.international.icomos.org/centre\_documentation/bib/riskpreparedness.pdf.

<sup>&</sup>lt;sup>2</sup> See Managing Disaster Risks for World Heritage. World Heritage Resource Manual, UNESCO, 2010, p. 2.

<sup>&</sup>lt;sup>3</sup> For an in-depth and complete analysis of the Convention see the essay on this Book written by Prof. Tullio Scovazzi and, as a key reference book, F. Francioni, F. Lenzerini, *The World Heritage Convention. A Commentary*, Oxford, 2008. On Cultural Heritage see J.A.R. NAFZIGER, T. SCOVAZZI, *Le patrimoine culturel de l'humanité-The Cultural Heritage of Mankind*, Leiden-

gating its provisions, it is important to try to first identify the effective and potential risks that could endanger World Heritage sites.

#### 2. The definition of 'risk'

When a disaster occurs different risks may jeopardize World Heritage sites. Before turning our attention to the consequences of a disaster for WH sites, it is important to give some key definitions. First, when we refer to 'disaster', according to the accepted definition adopted by the United Nations Office for Disaster Risk Reduction (UNISDR), we mean the «serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses which exceeds the ability of the affected community or society to cope using its own resources»<sup>4</sup>. More specifically, the term 'disaster risk' refers instead to «the potential disaster losses, in lives, health status, livelihoods, assets and services, which could occur to a particular community or a society over some specified future time period» (UNISDR). It is, thus, the result of the combination of 'hazard' and 'vulnerability'. While the first is an 'external' event that potentially could disrupt or damage cultural property, 'vulnerability' is an intrinsic weakness of cultural heritage, its propensity or exposure to the hazardous event.

There are many types of hazard that may cause disasters: meteorological (hurricanes, tornadoes, heat-waves, lightning storms, fires), hydrological (floods, flash-floods, tsunamis), geological (volcanoes, earthquakes, falls, slides, slumps), astrophysical (meteorites), biological (epidemics, pests), man-made (fire, pollution, infrastructure failure or collapse), climate change (increased storm frequency and severity, glacial lake outburst floods).

In sum, natural disasters constituting the greatest potential threat to WH sites would be earthquakes, volcanic eruptions, landslides, floods, tsunamis, serious fires and changes in water level. Among the man-made disasters, instead, technological, radiological or environmental accidents, including accidental marine pollution, are the most serious threats to the integrity of World Heritage sites.

It is now important to briefly clarify the distinction between 'ascertained' and 'potential' risks.

As to the first category, it would be possible to affirm that a specific site is threaten by clearly identified and imminent risk when a natural or man-made danger would provoke serious deterioration of materials and/or severe deteriora-

Boston, 2008, C. Forrest, *International Law and the Protection of Cultural Heritage*, Abingdon, 2010; K. Siehr, *Cultural Property*, in *The Max Planck Encyclopedia of European Private Law*, vol. I, Oxford, 2012, p. 433 ff.; F. Francioni, *Cultural Heritage*, in *Max Planck Encyclopedia of Public International Law* (updated February 2013).

<sup>&</sup>lt;sup>4</sup> See the UN International Strategy for Disaster Reduction website: http://www.unisdr.org.

tion of structures and/or ornamental features and of urban or rural space, or of the natural environment.

'Potential risks', instead, are those implying that the inherent characteristics of a certain WH site may face different threats, including gradual changes due to geological, climatic or other environmental factors or an impending natural or man-made disaster or the outbreak or threat of armed conflict<sup>5</sup>.

## 3. The International Legal Framework: the 1972 World Heritage Convention and the Operational Guidelines for the Implementation of the World Heritage Convention

Even if the 1972 World Heritage Convention does not make any specific reference to disasters, some of its norms may nevertheless be relevant as legal basis for the protection of the World Heritage in case a natural or man-made disaster occurs. For instance, Article 5 states that «[t]o ensure that effective and active measures are taken for the protection, conservation and presentation of the cultural and natural heritage situated on its territory, each State Party to this Convention shall endeavor, in so far as possible, and as appropriate for each country: [...] (c) to develop scientific and technical studies and research and to work out such operating methods as will make the State capable of counteracting the *dangers* that threaten its cultural or natural heritage; [...]. This generic reference to 'dangers' may be easily understood as to include the notion of disaster.

Another relevant provision is the one contained in the fourth paragraph of Article 11 where it is affirmed that «[...] 4. The Committee shall establish, keep up to date and publish, whenever circumstances shall so require, under the title of "list of World Heritage in Danger", a list of the property appearing in the World Heritage List for the conservation of which major operations are necessary and for which assistance has been requested under this Convention. This list shall contain an estimate of the cost of such operations. The list may include only such property forming part of the cultural and natural heritage as is threatened by serious and specific dangers, such as the threat of disappearance caused by accelerated deterioration, large-scale public or private projects or rapid urban or tourist development projects; destruction caused by changes in the use or ownership of the land; major alterations due to unknown causes; abandonment for any reason whatsoever: the outbreak or the threat of an armed conflict: calamities and cataclysms; serious fires, earthquakes, landslides; volcanic eruptions; changes in water level, floods and tidal waves. The Committee may at any time, in case of urgent need, make a new entry in the List of World Heritage in Danger and

<sup>&</sup>lt;sup>5</sup> The above mentioned categories are those used in the *Operational Guidelines for the Implementation of the World Heritage Convention* (the last available version is dated July 2013).

publicize such entry immediately»<sup>6</sup>. In this article, thus, the reference to specific disastrous events is clearly expressed. In this way, when a disaster affects a World Heritage site, its inscription in this List allows the Committee to allocate immediate assistance from the World Heritage Fund to the endangered property. Furthermore, the inscription is also useful to make the international community aware of these critical situations and to stimulate its prompt and effective effort to intervene to save the endangered site.

A fundamental tool to interpret and apply the 1972 Convention are the *Ope*rational Guidelines for the Implementation of the World Heritage Convention. They are periodically revised in order to reflect the decisions of the World Heritage Committee. In the part "IV.B The List of World Heritage in Danger", dealing with the inscription of properties on the List of World Heritage in Danger, the Guidelines specify the criteria for the inscription in that list. In particular, these criteria are: «In the case of cultural properties: a) ASCERTAINED DANGER -The property is faced with specific and proven imminent danger, such as: i) serious deterioration of materials; ii) serious deterioration of structure and/or ornamental features; iii) serious deterioration of architectural or town-planning coherence; iv) serious deterioration of urban or rural space, or the natural environment; v) significant loss of historical authenticity; vi) important loss of cultural significance. b) POTENTIAL DANGER - The property is faced with threats which could have deleterious effects on its inherent characteristics. Such threats are, for example: i) modification of juridical status of the property diminishing the degree of its protection; ii) lack of conservation policy; iii) threatening effects of regional planning projects; iv) threatening effects of town planning; v) outbreak or threat of armed conflict; vi) threatening impacts of climatic, geological or other environmental factors. 180. In the case of natural properties: a) ASCER-TAINED DANGER - The property is faced with specific and proven imminent danger, such as: i) A serious decline in the population of the endangered species or the other species of Outstanding Universal Value for which the property was legally established to protect, either by natural factors such as disease or by manmade factors such as poaching. ii) Severe deterioration of the natural beauty or scientific value of the property, as by human settlement, construction of reservoirs which flood important parts of the property, industrial and agricultural development including use of pesticides and fertilizers, major public works, mining, pollution, logging, firewood collection, etc. iii) Human encroachment on boundaries or in upstream areas which threaten the integrity of the property. b) POTENTIAL DANGER - The property is faced with major threats which could have deleterious effects on its inherent characteristics. Such threats are, for example: i) a modification of the legal protective status of the area; ii) planned resettlement or development projects within the property or so situated that the im-

<sup>&</sup>lt;sup>6</sup> On the List of the World Heritage in Danger see G.P. BUZZINI, L. CONDORELLI, *Article 11 List of World Heritage in Danger and Deletion of a Property from the World Heritage List*, in F. Francioni, F. Lenzerini, *The World Heritage Convention*, cit., p. 175 ff.

pacts threaten the property; iii) outbreak or threat of armed conflict; iv) the management plan or management system is lacking or inadequate, or not fully implemented; v) threatening impacts of climatic, geological or other environmental factors».

As to the request for Emergency Assistance, the Guidelines specify that it would be necessary to describe the actual or potential threat/danger affecting the property and that the relevant funds will not be automatically granted after a major disaster occurs. This type of assistance, in fact, would «be provided only in cases when an imminent danger related to a natural or human-made disaster is threatening the overall Outstanding Universal Value of a World Heritage property and its authenticity and/or integrity, to prevent or at least significantly mitigate its possible negative impact on the property» (par. 241).

According to the Guidelines, another circumstance in which Emergency Assistance may be provided would be in order «to assess whether or not imminent danger is present, for example as a result of a major disaster».

Finally, in case a disaster has already caused damages to the heritage, but there is no more imminent risk that needs to be urgently addressed, other forms of assistance, such as conservation and management assistance, could be considered more fitting.

The Inscription of a site on the List of World Heritage in Danger requires the World Heritage Committee to promote and adopt, in consultation with the State Party concerned, a detailed programme for corrective measures; subsequently the Committee has to monitor the situation of the site in order to speed up the removal of the site from the List of World Heritage in Danger<sup>7</sup>.

The listing of a site as World Heritage in Danger and the possibility to request specific assistance can be seen as an efficient system established to respond to *ad hoc* conservation needs<sup>8</sup>.

The Convention, thus, also in case of natural or man-made disasters, provides two forms of International Assistance to States Parties for the protection of cultural and natural sites located in their territories and inscribed, or potentially suitable for inscription, on the World Heritage List: Emergency Assistance and Conservation and Management Assistance.

<sup>&</sup>lt;sup>7</sup> It is worth noting that the inscription on the List of World Heritage in Danger is not perceived in the same way by all States. Some applies for the inscription of a site to obtain expert assistance in solving problems while others try to avoid an inscription because they consider it a discredit.

<sup>&</sup>lt;sup>8</sup> On the issue of *listing* and *delisting* in the 1972 Convention see the essay of Andrea Cannone in this book.

#### 4. The 2007 Strategy for Risk Reduction at World Heritage Properties

In 2004 the World Heritage Committee invited «the World Heritage Centre, in co-operation with the States Parties, Advisory Bodies, and other international agencies and non-governmental organisations concerned by emergency interventions, to prepare a risk-preparedness strategy». The Strategy was first presented to the World Heritage Committee at its 30<sup>th</sup> session in 2006. Subsequently, the revised *Strategy for Risk Reduction at World Heritage Properties* was presented and approved by the World Heritage Committee at its 31<sup>st</sup> session in 2007<sup>9</sup>.

The main purpose of the Strategy is to strengthen the protection of World Heritage while contributing to sustainable development by assisting States Parties to integrate concern for heritage into national disaster reduction policies and to incorporate concern for disaster risk reduction within management plans and systems for World Heritage properties in their territories.

Five are the objectives identified in the Strategy:

- 1. Strengthen support within relevant global, regional, national and local institutions for reducing risks at World Heritage properties;
- 2. Use knowledge, innovation and education to build a culture of disaster prevention at World Heritage properties;
- 3. Identify, assess and monitor disaster risks at World Heritage properties;
- 4. Reduce underlying risk factors at World Heritage properties;
- 5. Strengthen disaster preparedness at World Heritage properties for effective response at all levels<sup>10</sup>.

As to the first objective, "Strengthen support within relevant global, regional, national and local institutions for reducing risks at World Heritage properties", it implies that all the global actors involved in disaster reduction activities should pay more attention to cultural and natural heritage among the issues to be considered when defining their strategies. Moreover, all regional, national and local disaster reduction policies and mechanisms must reflect adequate concern for world cultural and natural heritage.

In order to reach this goal, two kind of actions would be of vital importance. First, to raise support for the protection of heritage from disasters, the promotion of cultural and natural heritage, and of its potential helpful role for disaster reduction as part of sustainable development, within significant international development institutions, conventions and global forums and with other possible financial partners, could be a feasible approach; second, the strengthening of

<sup>&</sup>lt;sup>9</sup> See Document WHC-07/31.COM/7.2 available online at http://whc.unesco.org/archive/2007/whc07-31com-72e.doc.

<sup>&</sup>lt;sup>10</sup> The objectives are structured around the five main priorities for action defined by the *Hyogo Framework for Action*, the main UN-wide policy on the subject of Disaster Reduction (see http://www.unisdr.org/2005/wcdr/intergover/official-doc/L-docs/Hyogo-framework-for-actionenglish.pdf), and are also in line with Article 5 of the World Heritage Convention as well as the Strategic Objectives established through the *Budapest Declaration* of 28 June 2002 (see http://whc.unesco.org/en/decisions/1217/).

policies and funding provisions for disaster reduction within the World Heritage system itself, for instance by including disaster and risk management strategies in the preparation of Tentative Lists, nominations, monitoring, periodic reporting and International Assistance processes, would constitute an important incentive.

As to the second objective, "Use knowledge, innovation and education to build a culture of disaster prevention at World Heritage properties", the building of a culture of prevention, at all stages of action, should be considered one of the decisive elements in any successful disaster reduction strategy. In this perspective, research, training, and education are among the most effective means of developing a culture of preparedness and UNESCO itself, thanks to its specific mandate, could play a vital role. Specific actions that could facilitate the achievement of this objective could be the development and dissemination of teaching/learning and awareness-raising resource materials, such as guidelines, training kits, case studies and technical studies and glossaries dealing with disaster reduction for World Heritage, and, the strengthening of the capacity of World Heritage property managers and community members, through training programmes, to develop and implement risk management plans concerning their sites that would effectively contribute to national and regional disaster reduction strategies and processes.

As to the third objective, "Identify, assess and monitor disaster risks at World Heritage properties", it is known that the first step to reduce disasters and mitigating their impact would be the early identification of potential risk factors. All the elements of vulnerability of World Heritage sites need to be identified, assessed and monitored in order to arrange appropriate risk management strategies. Actions that would facilitate this important target would be the involvement of all necessary expertise and of relevant stakeholders to support risk identification and assessment activities and the elaboration of global or regional World Heritage Risk Maps that would assist States Parties and the World Heritage Committee to develop appropriate and prompt reactions.

The fourth identified objective of the Strategy is to "Reduce underlying risk factors at World Heritage properties". When a disaster strikes, many underlying factors (such as land/water and other natural resources management, industrial and urban development, and socio-economic practices) could drastically aggravate its impact on properties and populations. Often, the elimination, or at least mitigation of ascertained root causes of vulnerability, implies the possibility of a reduction of an important number of underlying risk factors. This achievement would be better reached if resources of international assistance are allocated to aid State Parties in implementing successful emergency measures to mitigate major risks from disasters that are likely to affect the Outstanding Universal Value, including the authenticity and/or the integrity of World Heritage sites within their territories.

Finally, the objective "Strengthen disaster preparedness at World Heritage properties for effective response at all levels", implies the awareness that, often, the worst consequences of natural or human-made disasters could be avoided or

at least mitigated if all those concerned are ready to act according to existing risk reduction plans, and only if the necessary human and financial resources, and equipment, are promptly accessible. When dealing with World Heritage sites, the purpose of these plans should specifically address ways of protecting the fundamental assets that contribute towards the Outstanding Universal Value and should also include the safeguard of any significant original archival records able to contribute to their heritage value.

Since 2007, many efforts have been made to implement the Strategy. In particular, UNESCO and its partners have developed a number of resource materials and conducted numerous capacity-building initiatives<sup>11</sup>.

## 5. The Olympia Protocol for International Cooperation

The *Olympia Protocol for International Cooperation* is one of the outcome of a Workshop on Disaster Risk Management at World Heritage Properties, jointly organized in November 2008 at Olympia (Greece) by the Hellenic Ministry of Culture and the UNESCO World Heritage Centre<sup>12</sup>. It was elaborated with the aim of constitute a general framework for States Parties to develop cooperation among them in the field of disaster risk reduction at World Heritage sites in order to translate the Strategy for Reducing Risks from Disasters at the World Heritage Properties into concrete actions at the site level.

The Olympia Protocol was based on a combination of global and site-based activities complementing each other and contributing to its successful application.

Its first feature is the establishment of a Clearing House of resource materials on Disaster Risk Reduction. According to the Protocol, this would include « policy texts, guidance, case studies and illustrations, drawing also from submission by States Parties in the context of Nominations and the Periodic Reporting exercise» and also «information on existing initiatives and twinning arrangements between World Heritage properties».

Another objective was the organization of International Workshops to make known the 2007 Strategy for Risk Reduction at World Heritage Properties and the scope and contents of the Protocol for Cooperation: the November 2008 Workshop held in Olympia served this scope. Many other need to be organized with the involvement of «key management personnel from selected sites together with disaster risk reduction experts for cultural and/or natural heritage, depending on the selected sites». Furthermore, «the Protocol for International Cooperation and its strategy for implementation will be presented, and case studies reviewed. In selecting potential sites, attention will be paid to ensure diversity of typologies

<sup>&</sup>lt;sup>11</sup> See http://whc.unesco.org/en/activities/630/.

<sup>&</sup>lt;sup>12</sup> See the Proceedings of the *International Workshop on Disaster Risk Reduction at World Heritage Properties* at http://whc.unesco.org/uploads/events/documents/event-526-5.pdf.

(including presence of movable heritage), of disaster risks – with consideration given to post-disaster areas and linkages with Climate Change - and of geographical regions, with priority given to properties exposed to multiple hazards».

The improvement of disaster risk reduction strategies on pilot properties inscribed on the World Heritage List, selected among those more exposed to possible hazards in different regions of the World is among the other goals foreseen by the Protocol, as well as the organization of International Workshops to evaluate the progress made at different pilot sites, harmonize the approaches and share the lessons learnt and the development of complementary capacity-building, educational and communication initiatives.

#### 6. Practical cases

As known, World Heritage properties are those defined in Articles 1 and 2 of the World Heritage Convention and inscribed on the World Heritage List on the basis of their outstanding universal value, which is fulfilled through meeting one or more of the ten criteria defined in the Operational Guidelines for the Implementation of the World Heritage Convention. All World Heritage sites, particularly those most vulnerable, can be exposed to the devastating effects of natural or man-made disasters.

Over the last few years, in fact, different disasters have already caused enormous losses to World Heritage sites. Examples include Bam (Islamic Republic of Iran) due to earth-quake in 2003; Prambanan Temple Compounds (Indonesia) due to earthquake in 2006; the Old Town of Edinburgh (United Kingdom) due to fire in 2002; the destruction of the Bamiyan Buddhas in Afghanistan due to armed conflict and vandalism in 2001; and the Temple of the Tooth Relic in Kandy (Sri Lanka) after terrorist attack in 1998.

So far we explained the rationale and the functioning of the List of World Heritage in Danger. Here some illustrative cases of sites inscribed on this List.

The ancient Citadel and surrounding cultural landscape of the Iranian city of Bamwhere, where 26,000 people lost their lives in the earthquake of December 2003 was simultaneously inscribed on UNESCO's World Heritage List and on the List of World Heritage in Danger in 2004. There, important international efforts were mobilized to salvage the cultural heritage of this devastated city.

The Bamiyan Valley in Afghanistan was as well inscribed on the List of World Heritage in Danger in 2003 simultaneously with its inscription on the World Heritage List. This site is in a weak state of conservation considering that it has suffered from abandonment, military action and dynamite explosions. Unfortunately, parts of this site are also inaccessible due to the presence of antipersonnel mines. UNESCO, at the request of the Afghan Government, is coordinating all international efforts to safeguard and enhance Afghanistan's cultural heritage.

The outstanding archaeological and historical heritage of the Historic Town of Zabid in Yemen has seriously deteriorated in recent years. Indeed, 40% of its original houses have been replaced by new buildings. In 2000, at the request of the State Party, the Historic Town of Zabid was inscribed on the List of World Heritage in Danger. There UNESCO is helping the local authorities to develop an urban conservation plan and to adopt a strategic approach for the safeguarding of this World Heritage site.

The Humberstone and Santa Laura Works in the remote Pampas contain over 200 former saltpeter works where workers from Chile, Peru and Bolivia lived in company towns and forged a distinctive communal *pampinos* culture. Situated in one of the driest deserts on Earth, thousands of *pampinos* lived and worked in this hostile environment for over 60 years, from 1880, to process the largest deposit of saltpeter in the world, producing the fertilizer sodium nitrate that was vital to transform agricultural lands in North and South America, and in Europe, and produced great wealth for Chile. Because of the vulnerability of the structures and the impact of an earthquake, in 2005 the site was placed on the List of World Heritage in Danger to help mobilize resources for its preservation.

Here, instead, some practical cases for which Emergency Assistance was granted by the Committee.

The first one is the Post-Earthquake Assistance for the Field Investigation and Rehabilitation of the Sichuan Giant Panda Sanctuaries in China. After the earthquake in Sichuan in 2008 that severely damaged the ecological system of Panda Sanctuaries, in fact, the International Assistance was granted to a project to help the management agency to effectively deal with the post-earthquake situation, including disaster evaluation of the sites, needs assessment and re-building of capacity of the site management authority. The project aimed to carry out detailed assessment of damage to the site from the earthquake through a rapid assessment of the risks and needs, to make detailed plan for reconstruction of the earthquake affected, and to support restoring the management capacity of the site.

Another case was that of the Emergency Assistance request for Galapagos Islands (Ecuador). Here, the emergency assistance was granted to assist Ecuadorian authorities to mitigate the negative environmental impacts caused by the oil tanker accident that took place on 16th January 2001 near San Cristobal Island, in the archipelago of Galapagos. Project activities included, among others, efforts to collect the majority of the oil leaked into the sea, the reinforcement of the circle around the tanker in order to control the oil from spreading, the collection of the majority of the oil manually, using absorbing cloths and dispersants in the affected area and the constant monitoring of the sensible species affected by oil, for example sea-lions, sea turtles, marine birds and iguanas.

As we have seen, another way to provide assistance when a disasters strikes is by funding Conservation and Management Assistance activities. An example of Conservation and Management Assistance is that granted in 2002 for the Annual Seminary Workshop on Cultural Heritage Risk Prevention for the Caribbean

and Central America (Dominican Republic). Here the national authorities were helped to hold a follow-up meeting of a workshop on Risk Prevention for the Caribbean and Central America, which was organized in 1998, following damages caused by Hurricane George.

### 7. Future Prospects

Because it is vital to learn lessons from the past, in drawing some conclusions we will focus our attention on the key element for the protection of World Heritage sites from the dangerous and destructive consequences of natural and manmade disasters: risk preparedness.

To potentiate all preparedness activities it is absolutely necessary to document and list the most vulnerable cultural properties, understanding the risk factors and look at the most adequate strategies required. Advanced planning is a key element in preparedness as well as on-site training and periodical review of all the relevant elements that could affect the integrity of the site. Furthermore, risk preparedness plans need to be situation-specific but, at the same time, developed through general guidelines prepared on the basis of past experience around the World.

However, when preparedness is not enough and damages to the sites have occurred as a consequence of disasters, when repairing and restoring the affected sites appropriate restoration activities should take place. These activities must be absolutely aimed at retaining the heritage values of the properties. In this phase, moreover, local communities should be actively involved, as they are the primary depositary of precious traditional knowledge systems vital for reconstruction.

Finally, in our opinion a commonplace on the protection of cultural and natural heritage must be fought: the idea that heritage would constitute a charge when dealing with disasters, because it requires resources and efforts for its safeguard, when, for instance, attention should be committed to saving lives and other properties. But, we share the idea that «[e]xperience shows, on the contrary, that heritage if well maintained can positively contribute to reducing disaster risks. This is true not only for natural heritage resources that guarantee the proper functioning of ecosystems and the beneficial effect of their goods and services, but also for cultural heritage properties that – as a result of traditional knowledge accumulated over centuries – have proved to be resilient to disasters while providing shelter and psychological support to affected communities»<sup>13</sup>.

<sup>&</sup>lt;sup>13</sup> See Managing Disaster Risks for World Heritage...cit. p. 2.



ISBN 978-88-6611-385-0

