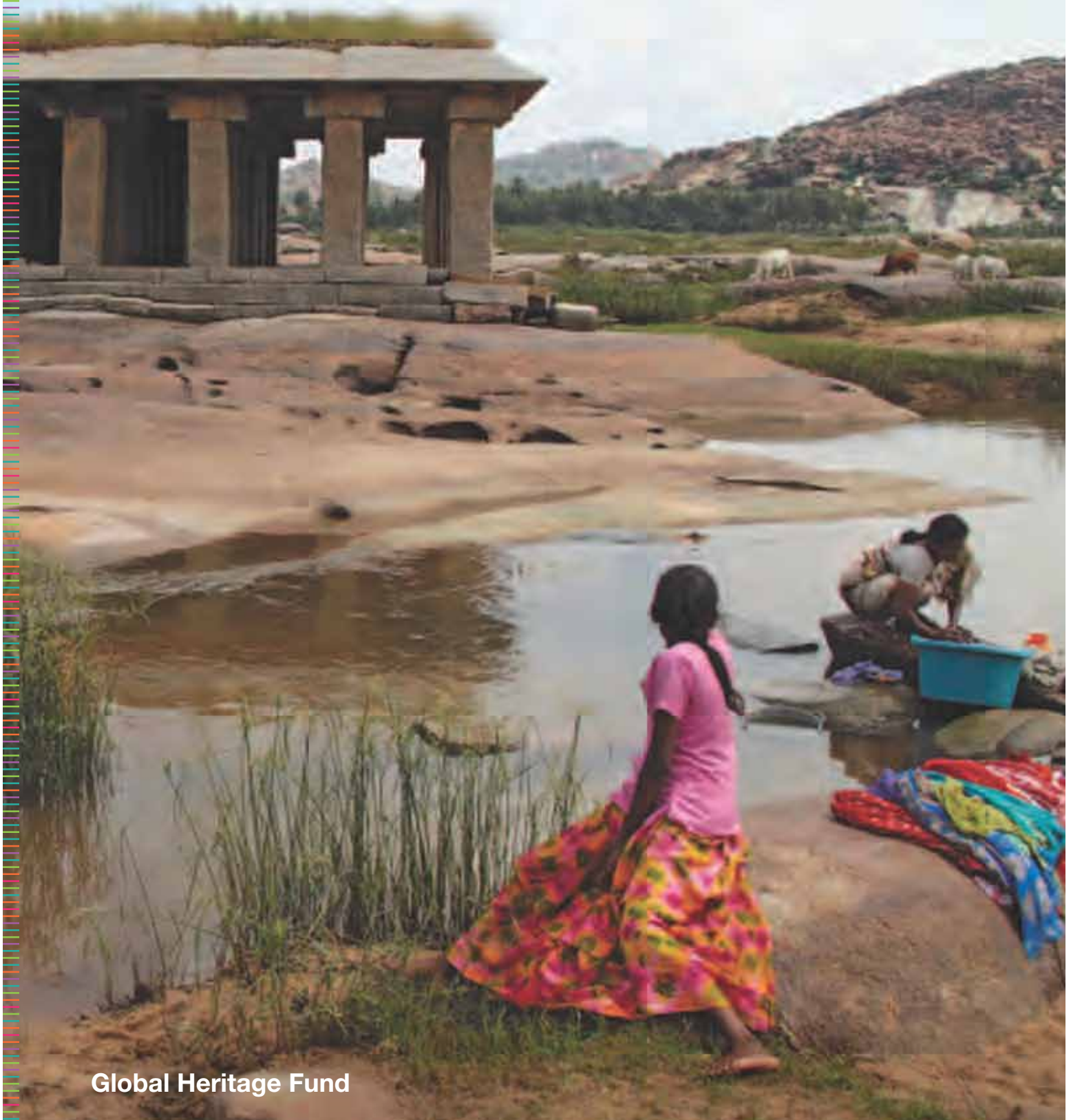


# Saving Our Vanishing Heritage

Safeguarding Endangered  
Cultural Heritage Sites in  
the Developing World



## About Global Heritage Fund

Global Heritage Fund (GHF) is an international conservancy whose mission is to protect, preserve, and sustain the most significant and endangered cultural heritage sites in the developing world.

GHF utilizes our 360-degree *Preservation by Design*<sup>®</sup> methodology of community-based planning, science, development, and partnerships to enable long-term preservation and development of global heritage sites.

In 2010, we launched Global Heritage Network (GHN), an early warning and threat monitoring system using state-of-the-art satellite imaging technology to enable collaboration between international experts and local conservation leaders to identify and mitigate man-made threats.

Since 2002, GHF has invested over \$20 million and secured \$18 million in co-funding for 16 global heritage sites to ensure their sustainable preservation and responsible development.

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*Saving Our Vanishing Heritage:  
Safeguarding Endangered Cultural Heritage  
Sites in the Developing World*

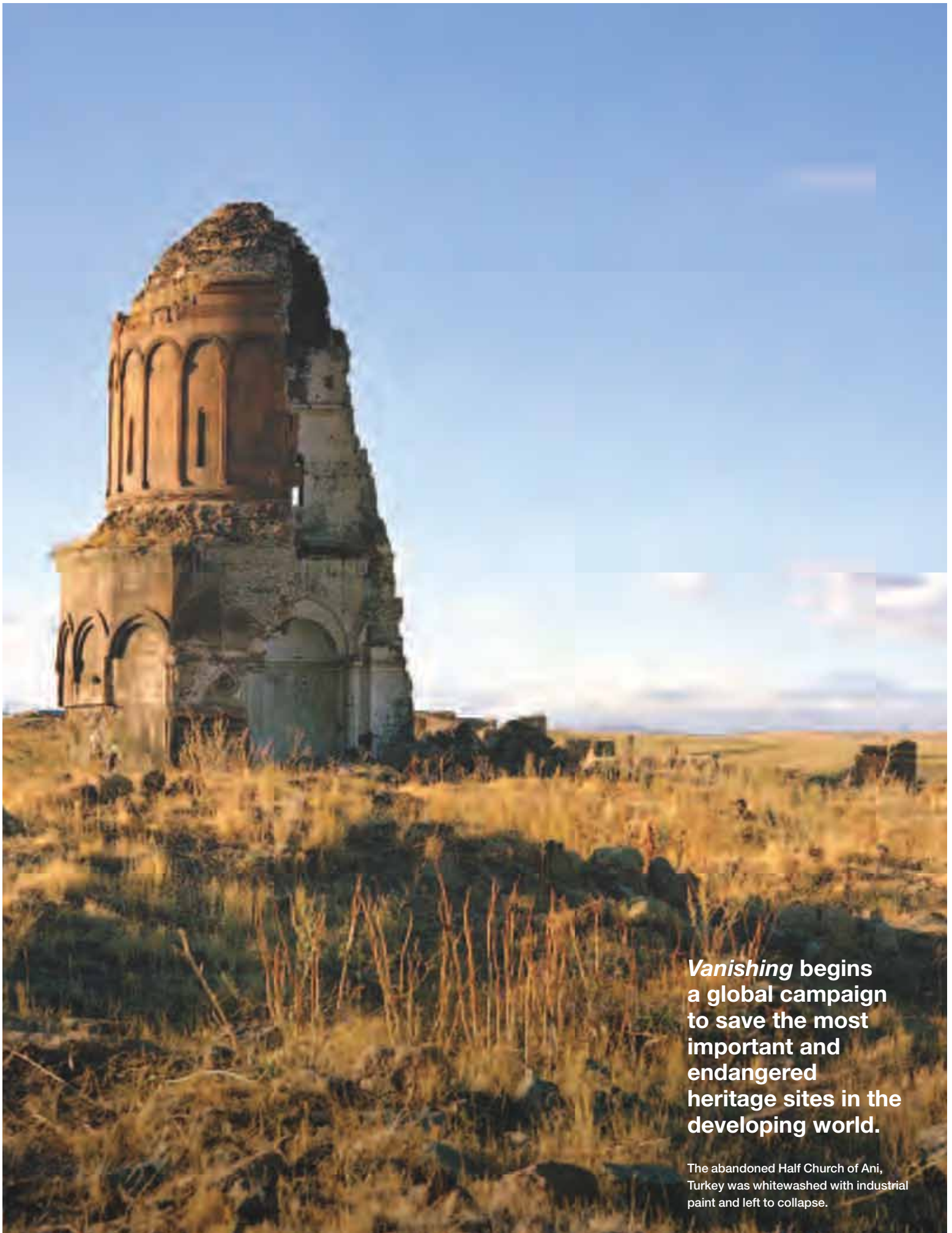
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Sponsor:



Cover: Local women from Anagundi  
wash their clothes in the river next to  
the archaeological sites of Hampi, India.  
Photo: Sourav Dev





***Vanishing* begins a global campaign to save the most important and endangered heritage sites in the developing world.**

The abandoned Half Church of Ani, Turkey was whitewashed with industrial paint and left to collapse.

## Foreword

*Saving Our Vanishing Heritage* explores the challenges facing our most significant and endangered archaeological and heritage sites in the developing world—and what we can do to save them—before they are lost forever.

Our focus on the developing world is driven by the large number of important cultural heritage sites which exist in regions with little capacity to safeguard their existence. In the first decade of the 21st century, we have lost or seriously impaired hundreds of our most precious historic sites—the physical record of our human civilization.

*Vanishing* surveys over 500 global heritage sites and highlights the accelerating threats facing these cultural treasures. Many have survived thousands of years, only to be lost in this generation—*on our watch*.

*Vanishing* was conceived by Global Heritage Fund, an international conservancy that has worked for nearly a decade to protect and preserve the most significant and endangered cultural heritage sites in the developing world.

With the critical review of 24 leading experts working in heritage conservation and international development, this report surveys hundreds of endangered global heritage sites and strives to identify those most in need of immediate intervention, and what the global community can do to save them.

Our primary goals of this report are:

1. to raise critically needed global awareness
2. to identify innovative technologies and solutions
3. to increase funding through private-public partnerships

*Vanishing's* findings strongly suggest that the demise of our most significant cultural heritage sites has become a global crisis, on par with environmental destruction.

GHF surveyed over 1,600 accounts published between 2000 and 2009 concerning the state of conservation of hundreds of major sites in the developing world. The full compendium of articles and reports reviewed is available online in a database searchable at: [www.globalheritagefund.org/vanishing](http://www.globalheritagefund.org/vanishing).

In this report, GHF considered sites with the highest potential for responsible development critical for the sustained preservation of the site. GHF considers the scientific conservation of a site and its potential for responsible development during our design and planning process resulting in an integrated master plan and strategy that goes well beyond traditional monument based approaches to preservation. This report represents the first attempt to quantify the value of heritage sites as global economic resources to help achieve the UN Millennium Development Goals (MDGs).

*Vanishing* focuses on significant global heritage sites that have high potential for future tourism and responsible development, but the report's findings and recommendations can and should be extended to other realms of heritage preservation. Global heritage sites generate extremely high economic asset values, with some worth billions of dollars a year. These sites can help to greatly diversify local economies beyond tourism and sustenance agriculture reducing dependency and alleviating poverty.

*Vanishing* begins a global campaign to save the most important and endangered heritage sites in the developing world.

How we as a global community act—or *fail to act*—in the coming years will determine if we save our global heritage and can realize the untapped economic opportunity these precious sites offer for global development in the world's lowest-income communities and countries.

*Please join us.*

Jeff Morgan, Executive Director  
Global Heritage Fund

October 19, 2010  
Palo Alto, California

## Executive Summary

**Our heritage sites have survived thousands of years. If we don't act now, many will be lost in this generation—on our watch.**

*Saving Our Vanishing Heritage* is a critical call to action alerting the international community on the need to focus precious investment on global heritage conservation, a strategy that has proven to be one of the most effective and targeted ways to help alleviate poverty by creating long-term jobs, income, and recurring investment in developing countries.

*Vanishing* found that of the approximately 500 global heritage sites in 100 of the lowest-income countries of the world—places where the per capita income is less than \$3 to \$5 a day—over 200 are facing irreversible loss and damage today. The trend of loss is accelerating due to the simultaneous man-made threats of development pressures, unsustainable tourism, insufficient management, looting, and war and conflict. Fewer than 80 of these sites are UNESCO World Heritage Sites. The rest are without international recognition.

The unfavorable imbalance in the UNESCO World Heritage List against the developing world is a key reason for lack of corresponding funding and assistance to enable preservation and protection of sites in these countries. While Italy and Spain have 44 and 41 cultural UNESCO World Heritage designations, respectively, Peru—with 4,000 years of history and hundreds of important cultural sites—has only nine. Guatemala, the cradle of Mayan civilization with the world's largest pyramids and ancient cities, has just three.

*Saving Our Vanishing Heritage* brings new urgency and focus to our global heritage in peril.

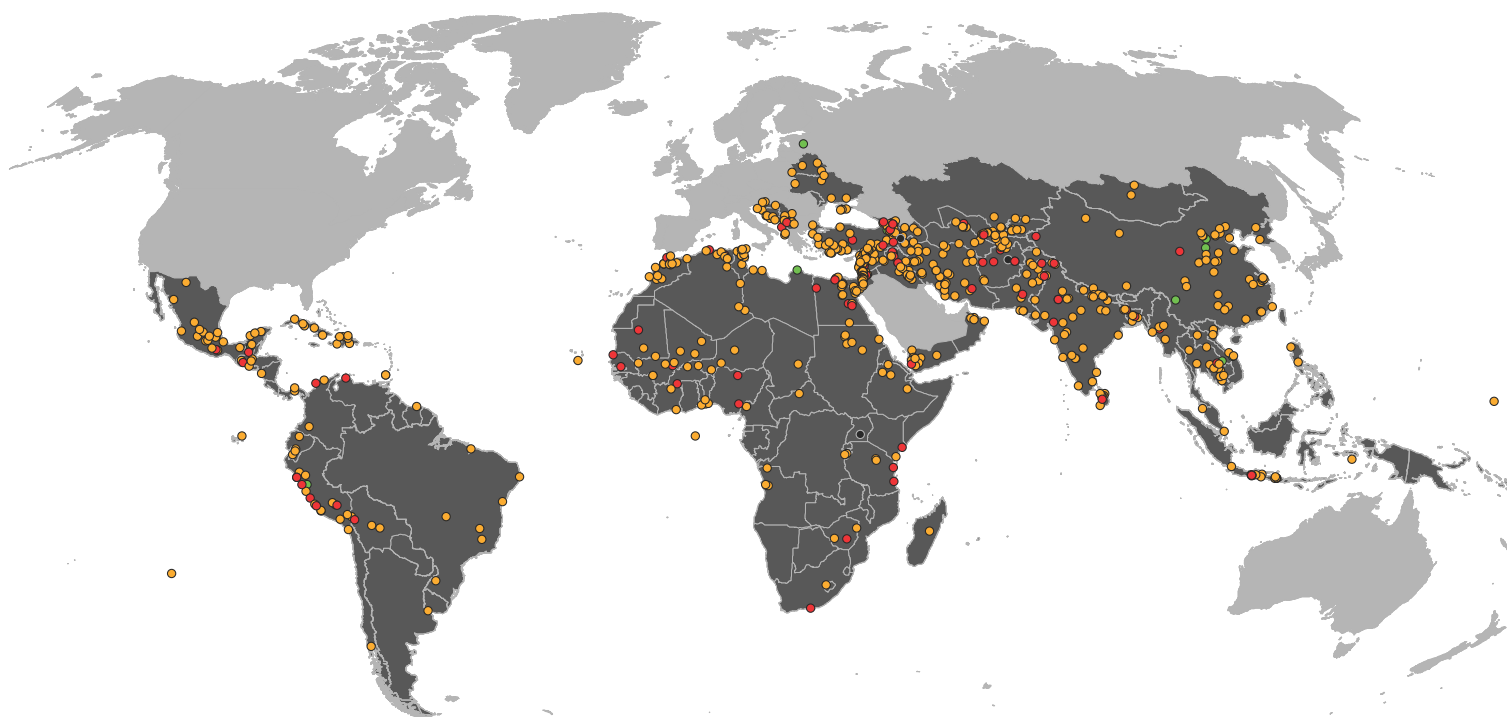
*Vanishing* was developed in collaboration with an Editorial Committee comprised of 24 leading experts in heritage conservation and international development from leading universities, preservation groups, international agencies, and the private sector.

Key findings show that:

- **More than 200 global heritage sites are at risk** and in need of immediate intervention to stem irreparable loss and destruction. Of these, 40 to 50 are in need of immediate emergency rescue and only a handful are considered stable.
- **The years spanning 2000 to 2009 have been highly destructive**—one of the most damaging decades in recent history except for periods of major war and conflict.
- **Five man-made threats** are the cause of 90 percent of the loss and destruction of global heritage sites.
- **The global community can reverse this escalating crisis** through satellite-based site monitoring, proper planning and training, performance-based management, scientific conservation, community-based development, and private-public partnerships—all within our reach and requiring minimal investment.
- **Skyrocketing international and domestic mass tourism is one of the most destructive forces** facing our global heritage sites, and few developing countries are equipped to manage the numbers.
- **Global heritage sites should be recognized as a core asset in the achievement of UN Millennium Development Goals (MDGs)** to alleviate poverty on this planet; they are the necessary economic engines for local and regional development.
- **Many countries have made great progress and can act as examples** of best practices and solutions for other developing nations.

“Over the past decade, we have seen a welcome new trend evolving, mainly in developing countries. I am speaking about culture as an economic driver: a creator of jobs and revenues; a means of making poverty eradication strategies relevant and more effective at the local level.”

UNESCO Director-General Irina Bokova



GLOBAL HERITAGE SITES

- Destroyed
- Rescue Needed
- At Risk
- Stable

**Global Heritage Sites in the Developing World: Countries of the World by Economic Status**

- Developing world countries include low income (\$975 or less), and lower middle income (\$976–\$3,855).
- Advanced economies include upper middle income (\$3,856–\$11,905), and high income (\$11,906 or more).

These definitions are based on World Bank Income Groups where economies are divided according to 2008 GNI per capita, calculated using the World Bank Atlas method. Sources: Global Heritage Network (GHN); Per Capital Gross National Income (GNI); The World Bank, 2008.

Around the world, there are more than 500 major archaeological and cultural heritage sites in developing countries and regions where per capita income is under US \$3-5 a day. Fewer than 80 of these heritage sites are designated UNESCO World Heritage, leaving hundreds of others without international recognition or support.

The map above shows the clear need for global action to protect and preserve the most significant and endangered cultural heritage sites located in the developing world. Nearly 100 are in need of emergency rescue efforts while hundreds of others are at risk. While China’s largest sites are considered stable as the country has vast financial and human resources for preservation, many sites are becoming more at risk due to mass domestic tourism and development pressures.





Development Pressures: Encroaching urban development at Giza, Egypt. Photo: H. K. Tang



War and Conflict: In 2006–2007 the Al-Askari Mosque in Samarra, Iraq, was destroyed by bombing. Photo: AP

### The \$100 Billion Opportunity

- By 2025, global heritage sites can be a \$100 billion a year opportunity for developing countries if a worldwide effort is made for their preservation and responsible development.
- Over 50 global heritage sites today each have annual revenues of over \$100 million, up from a fraction of that number 20 years ago.
- Worldwide tourism to global heritage sites is increasing 8 to 12 percent per year on average, according to United National World Tourism Organization (UNWTO), with many sites doubling or tripling in visitation and revenues every 10 years.
- Beyond their economic value, global heritage sites represent humankind's history, societal development, and scientific progress. The sites also signify great development potential today.

One of the greatest untapped opportunities to help the developing world is to provide funding and technical assistance to save our vanishing global heritage. GHF estimates that global heritage sites in developing countries can generate over \$100 billion a year by 2025 in critically needed income and investment, up from \$20 billion to \$30 billion a year in 2010.

Global heritage sites represent the future as well as the past. They are one of the most important economic assets of sustainable development for poor nations and their people. Women and children—the focus of so much of the developed world's \$200 billion annual giving in global aid—benefit directly from the long-term jobs, income, new infrastructure, and social investments possible around heritage sites.

**Global heritage should be a core strategy for international development.**

In many developing countries, global heritage sites now generate more foreign exchange revenue than other industries including mining, logging, and agricultural exports. An estimated one-third of all international tourism is related to visiting cultural heritage sites.

Global heritage sites should be embraced as a core component of international development, since investment in the protection and conservation of heritage sites is closely correlated with economic growth and improved standards of living. Success in tourism seems to have contributed to stability and peace in many conflict-prone regions. Global heritage sites are important contributors to local and national identity and pride, and act as critical links to show our common history and progress.

**Despite the opportunities presented by global heritage sites, funding for their preservation remains anemic.**

Current funding for heritage conservation from major foundations and corporations is a fraction of what is needed to solve the crisis facing the developing world.

- Less than a quarter of one percent of total U.S. philanthropic funding today goes to cultural heritage preservation.
- GHF estimates that in 2009, total support from all international heritage conservation groups for cultural heritage sites in the developing world was less than \$100 million.
- The annual operating budget for the UNESCO World Heritage Center is less than \$5 million as of 2009; this is not enough to adequately oversee the protection and conservation of the 911 natural and cultural heritage properties as per the World Heritage Convention regulations.





Unsustainable Tourism: Visitors at Giza, Egypt, swarm uncontrolled over ancient monuments. Photo: Sjored Ten Kate



Insufficient Management: Bolivia's Akapana Pyramid may lose its UNESCO World Heritage status due to inappropriate restoration. Photo: Carla Windsor

## The Five Primary Man-Made Threats

The physical record of our human civilization is being lost—*forever*.

*Vanishing* attempts to unify—for the first time—fragmentary anecdotal evidence to produce a coherent picture of the perilous state of cultural heritage sites in developing countries.

Hundreds of sites are endangered and experiencing ongoing neglect and unchecked deterioration. This diminishes their authenticity, integrity, and universal value—key criteria for UNESCO World Heritage designation.

The report identifies five primary threats to humanity's cultural heritage in developing countries:

1. Development Pressures
2. Unsustainable Tourism
3. Insufficient Management
4. Looting
5. War and Conflict

For background on each of these five man-made threats to global heritage, see the report section—*The State of Global Heritage*.



Looting: In Iraq, poor villagers turn to looting as one of the only means of income. Photo: Getty Images

## Recommendations

*Saving Our Vanishing Heritage* outlines six concrete recommendations for the protection and preservation of our global heritage sites and their economic potential for human development and long-term poverty alleviation. See report section—*Recommendations*:

1. Multiply International Private-Sector and Government Funding
2. Reinforce Our Global Institutions
3. Increase Global Awareness of the Crisis
4. Promote New Models for Sustainable Preservation and International Development
5. Advance Innovative Solutions and Technologies
6. Increase Public-Private Partnerships

Investment in the protection and preservation of heritage sites has proven to be one of the most scalable, effective, and targeted means of helping developing nations. Now is the critical time to commit international funds and expertise needed to save our heritage, in the same way that we have committed to combating climate change and the loss of biological diversity as global priorities.

By focusing the dynamic, multi-billion-dollar global industry of heritage tourism and sustainable development on the critical task of preserving the very assets on which they are based, we can help millions rise up out of poverty.

By sharing best practices in site planning and management, historic urban preservation, and integrated community development, we can conserve our most precious global heritage sites and enable major economic growth in new jobs and income for developing countries. A relatively small investment today, combined with global collaboration focused on this crisis, can make all the difference to save this heritage.

## Destruction and Loss of Global Heritage in the 21st Century

Today, human activity is the greatest danger to the world's cultural heritage, far exceeding the combined threats of floods, earthquakes, and climate change.

### 2000

#### **BANTEAY CHHMAR, CAMBODIA**

Half of the bas reliefs of the exceptional Avalokitesvaras from the site's west gallery were recovered after looters stole a 30-meter section from the southern wall. Photo: GHF



### 2001

#### **BAMIYAN BUDDAHS, AFGHANISTAN**

Despite international protest, this UNESCO World Heritage Site was destroyed by the Taliban government with cannons and explosives leaving a gaping hole in the ancient grottos. Photos: Jeff Werner (left); Carl Montgomery (right)



### 2003–present

#### **SUMERIAN ARCHAEOLOGICAL SITES, SOUTHERN IRAQ**

Hundreds of major archaeological sites in Southern Iraq continue to be victim to massive looting even today. Photo: Italian Forces courtesy of Joanne Farchakh-Bajjaly



### 2005–present

#### **LIJIANG ANCIENT TOWN, CHINA**

Mass tourism and resulting commercialization threaten the universal values of Lijiang in Yunnan as an authentic UNESCO World Heritage site. Photo: Flickr Creative Commons



Sites worldwide are being cleared for modern development, while others are suffering from mismanagement and damage due to mass tourism. Over the past decade, cultural sites have been damaged in armed conflict and civil strife, and others, due to lack of prevention funding, have been destroyed by natural disasters. Much of this loss can be controlled through better planning, community involvement, and management, but these are often missing in countries where the need is greatest.

**2006**

**DJULFA CEMETERY, AZERBAIJAN**

Azeri Army units systematically destroyed this exquisitely carved stone Armenian cemetery in a few weeks. Photo: Global Voices

**2008**

**HASANKEYF, TURKEY**

This 10,000-year-old culture will be drowned under the new dam project. Photo: Epoch Times

**2010**

**NATIONAL PALACE, HAITI**

Poor construction and a massive earthquake destroyed the National Palace and all of Haiti's heritage sites in Port-au-Prince, the capital. Photo: Talea Miller

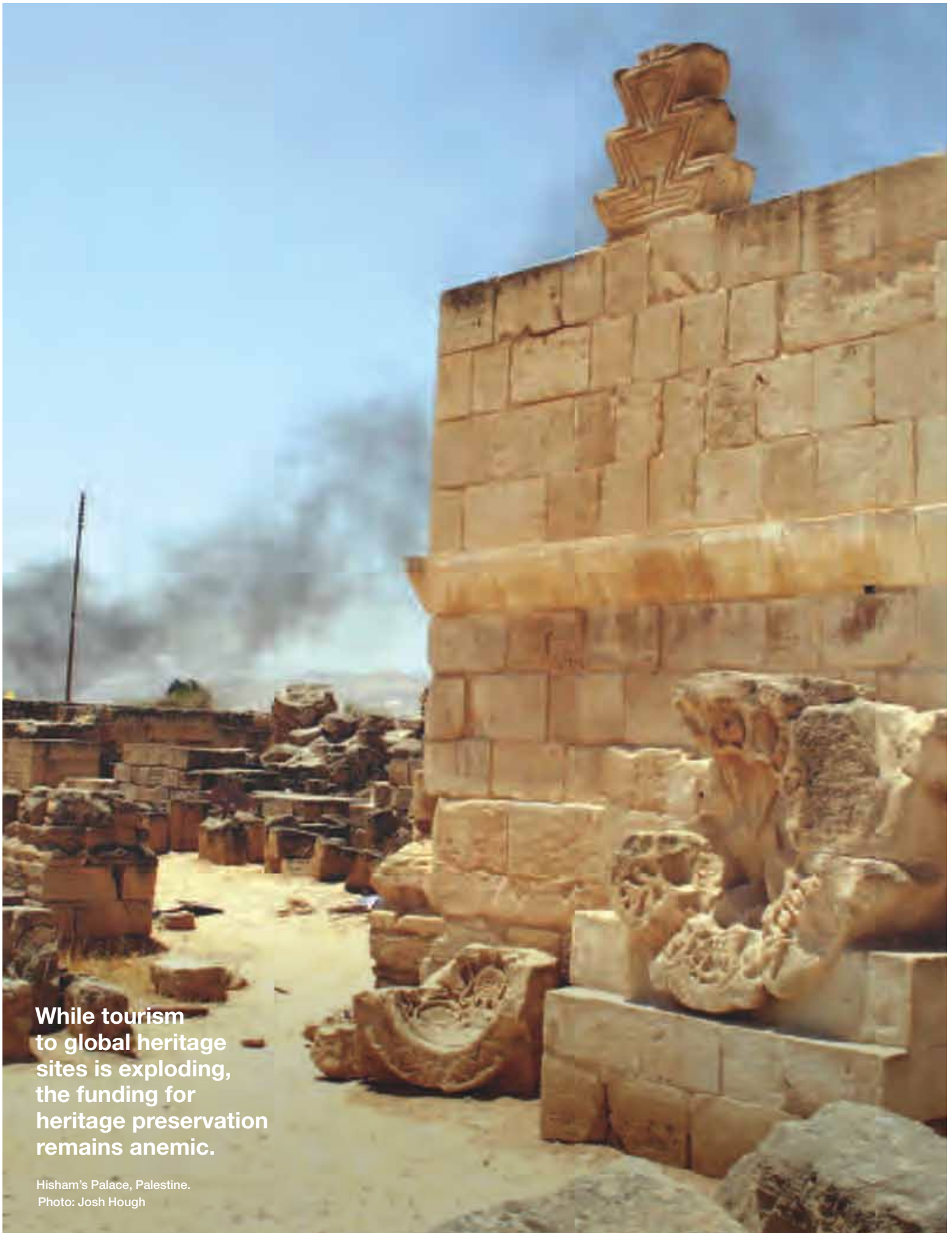
**2010**

**OLD KASHGAR, CHINA**

Demolition of Old Kashgar is part of the government's project to guard against earthquakes and will relocate over 50,000 people. Photo: Gaia







**While tourism to global heritage sites is exploding, the funding for heritage preservation remains anemic.**

Hisham's Palace, Palestine.  
Photo: Josh Hough



# A Silent Crisis: Our Global Heritage in Peril

The 21st century began inauspiciously with the destruction of Afghanistan's Bamiyan Buddhas in one afternoon by cannon fire and explosives. Today, our most sacred and ancient sites—Machu Picchu, Angkor, Petra—are being overrun by mass tourism, with millions of people crawling over fragile archaeological ruins. How long can these irreplaceable ancient sites last?

**Imagine if the Statue of Liberty or Mount Rushmore—the very symbols of the American nation—were damaged and destroyed through neglect or mismanagement.**

Loss and destruction is the status quo for many of the most significant national treasures across the developing world. Hundreds of cultural and archaeological sites face a future of development pressures, unsustainable tourism, insufficient management, looting, and war and conflict.

**While tourism to global heritage sites is exploding, funding for heritage preservation remains anemic.**

Major archaeological and heritage sites exist thousands of miles away from our daily concerns. Though we may visit, most of us are unaware of the scale, scope, and pace of damage and loss. Few people realize that they can support critical conservation work at these sites with relatively little money.

Empowering local communities to be the stewards of their global heritage sites is critical. Many global heritage sites are located in natural protected areas and are inhabited by the descendants of those who built them. Local communities will always be the best stewards of their natural and cultural heritage, and the cultural heritage sites provide the economic engine that enables larger-scale nature conservation.

Like endangered species, many archaeological and cultural heritage sites are on the verge of extinction. They are an irreplaceable and finite resource. Without action to protect them now, accelerating economic pressures will end this long history.

**Once they are gone—they are gone forever.**

Right: Uncontrolled tourism allows millions of visitors to climb on the fragile ruins at Angkor Wat, Cambodia. Photo: Vincent Wu





Top: A modern bank constructed in the heart of the Old Famagusta historic district is just one of many encroachments impacting the authenticity and universal value of this priceless ancient city. Famagusta, North Cyprus. Photo: GHF;  
Bottom left: Chersonesos, Ukraine. Photo: Chris Cleere;  
Bottom right: Palace of Sans Souci, Haiti. Photo: Le Korrigan

## Global Heritage in Peril: Sites on the Verge

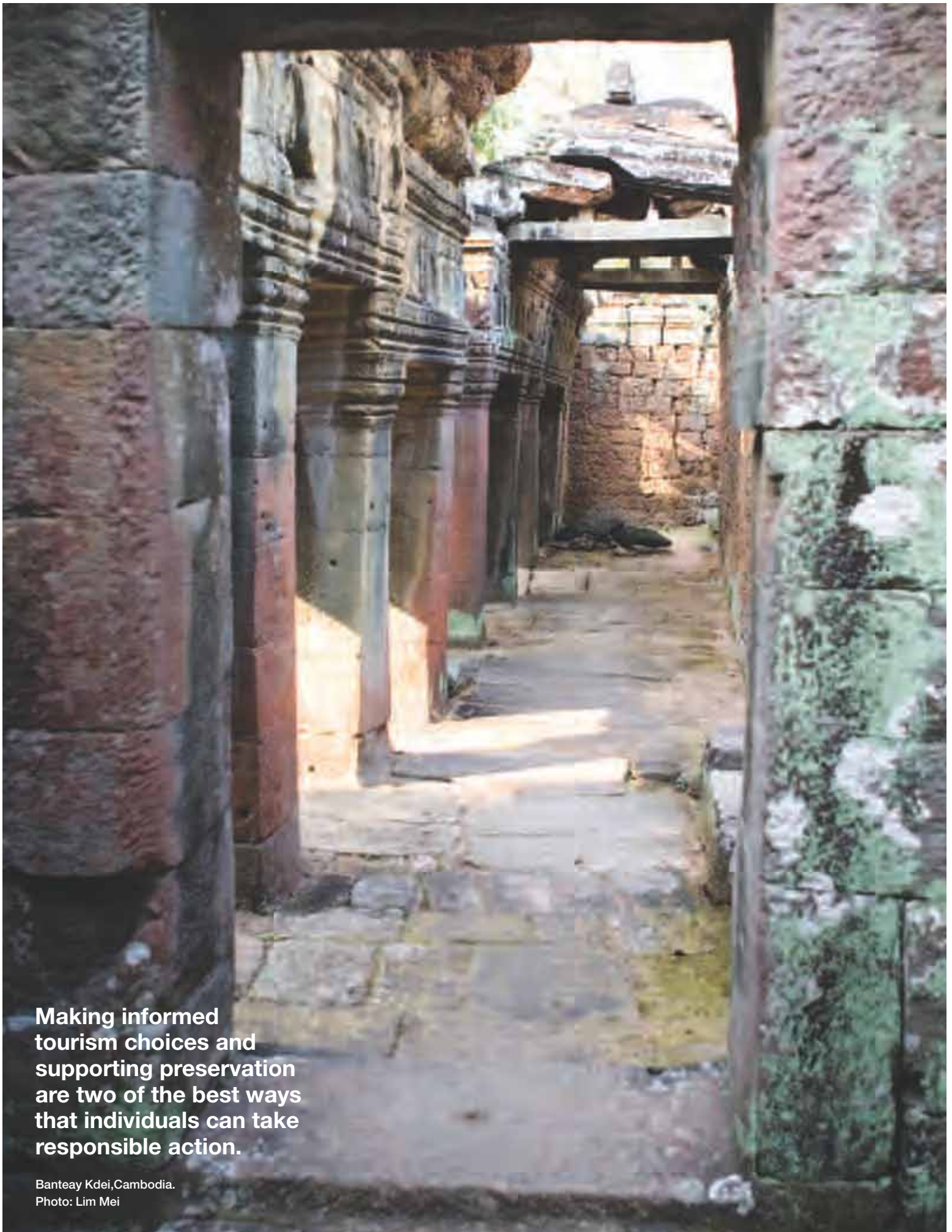
The 12 *Sites on the Verge* listed below are a just a few vivid examples of the nearly 200 sites facing irreversible loss and destruction today. All of the *Sites on the Verge* sites are endangered by multiple simultaneous *man-made* threats from development pressures, unsustainable tourism, insufficient management, looting, and war and conflict.

If the trends continue, we will see Europe preserved while much of the rest of our collective patrimony is lost forever.

| Global Heritage Site  | Significance  | Threats   |
|---|---|---|
| AMERICAS  |   |   |
| <b>Mirador, Guatemala</b><br><i>UNESCO Tentative List</i>                         | Cradle of Mayan Civilization                                    | Insufficient Management<br>Looting  |
| <b>Palace of Sans Souci, Haiti</b><br><i>UNESCO World Heritage Site</i>           | Versailles of the Caribbean:<br>Royal Residence of King Henri I | Insufficient Management   |
| ASIA  |   |   |
| <b>Fort Santiago and Intramuros, Philippines</b><br><i>National Heritage Site</i> | Historic City of the Philippines                                | Insufficient Management<br>Development Pressures                                |
| <b>Mahansrhangarh, Bangladesh</b><br><i>National Heritage Site</i>                | Earliest Urban Archaeological Site                              | Insufficient Management<br>Looting  |
| <b>Maluti Temples, India</b><br><i>National Heritage Site</i>                     | Edifices to the Kings of Pala Dynasty                           | Insufficient Management   |
| <b>Taxila, Pakistan</b><br><i>UNESCO World Heritage</i>                           | Crossroads of Civilization of<br>the Ancient Indus              | Insufficient Management<br>Development Pressures<br>Looting<br>War and Conflict |
| EASTERN EUROPE, MIDDLE EAST AND AFRICA  |   |   |
| <b>Ani, Turkey</b><br><i>National Heritage Site</i>                               | Crossroads of Anatolian Civilization                            | Insufficient Management<br>Looting  |
| <b>Chersonesos, Ukraine</b><br><i>National Heritage Site</i>                      | Largest Classical Archaeological<br>Site On the Black Sea       | Insufficient Management<br>Development Pressures                                |
| <b>Famagusta, North Cyprus</b><br><i>National Heritage Site</i>                   | Maritime Ancient City of<br>Crusader Kings                      | Insufficient Management<br>Development Pressures                                |
| <b>Hisham's Palace, Palestine</b><br><i>National Heritage Site</i>                | Sophisticated Palace Complex<br>of the Ummayyad Kingdoms        | Insufficient Management<br>Development Pressures                                |
| <b>Lamu, Kenya</b><br><i>UNESCO World Heritage Site</i>                           | Oldest Swahili Historic Town<br>in East Africa                  | Insufficient Management<br>Development Pressures                                |
| <b>Nineveh, Iraq</b><br><i>UNESCO Tentative List</i>                              | Cultural Center of the Ancient World                            | Insufficient Management<br>Development Pressures<br>Looting                     |

For further information on our Global Heritage in Peril, see: [www.globalheritagefund.org/vanishing](http://www.globalheritagefund.org/vanishing)





**Making informed  
tourism choices and  
supporting preservation  
are two of the best ways  
that individuals can take  
responsible action.**

Banteay Kdei, Cambodia.  
Photo: Lim Mei



# Why Heritage Matters

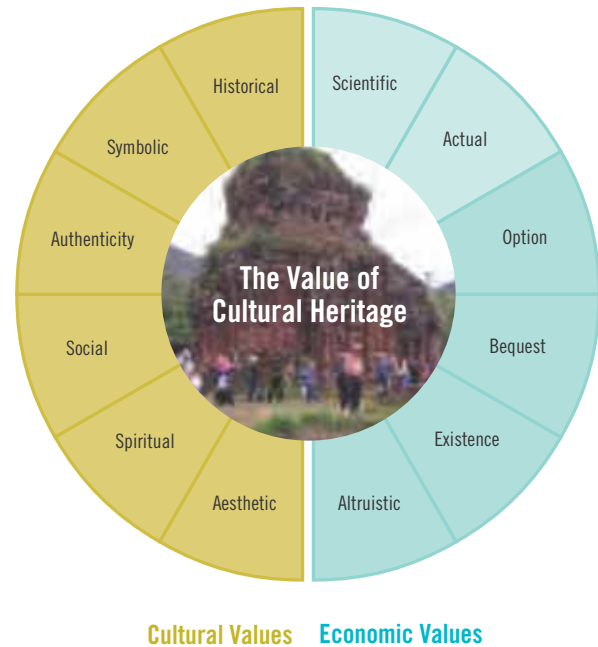
Major archaeological and cultural heritage sites represent the foundations of human society and provide the best examples of the historical and cultural development of humanity. They are also engines for economic development that can alleviate poverty and improve living conditions at the local and national levels.

*Picture a historic temple deep in the jungle of Cambodia.*

Our desire to visit remote cultural sites such as this one ultimately drives the negative impacts of mass tourism and unsustainable development in and around heritage locations. Yet we rarely associate our single visit with the larger need for global preservation.

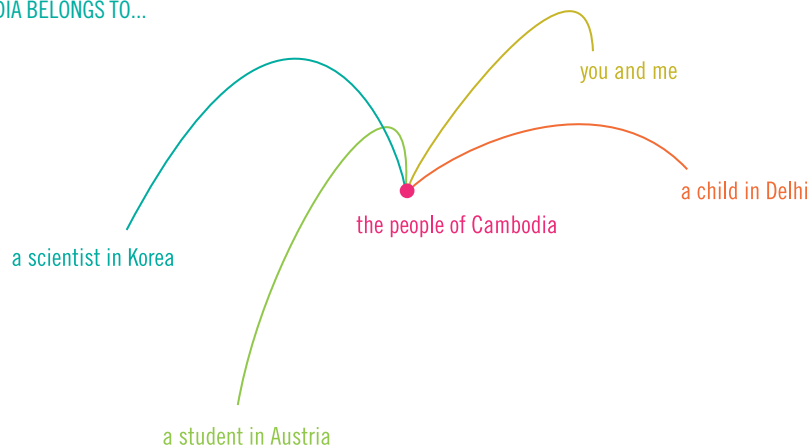
Each year, tens of millions of tourists visit fragile global heritage sites in developing countries. Making informed tourism choices is one of the most important ways that an individual can take responsible action.

## The Values of Heritage—Cultural and Economic



Adapted from Zhang, Yan, "Rethinking Cultural Heritage," (2009).

A SITE IN CAMBODIA BELONGS TO...



...GLOBAL HERITAGE IS FOR ALL OF HUMANKIND.



**Even national-level heritage protection does not guarantee that a major cultural asset will survive.**

Ur, Iraq, is considered by many experts to be the birthplace of Abraham. It is now surrounded by a U.S. Air Force base that encroaches the site on all sides. There has been no site conservation there for over a decade. Photo: Nathan M.

# The State of Global Heritage

*Vanishing* identifies five primary man-made threats to global heritage in the developing world:

1. Development Pressures
2. Unsustainable Tourism
3. Insufficient Management
4. Looting
5. War and Conflict

## Principal Threats to Heritage

### Threat 1. Development Pressures

A driving force of heritage loss in many developing countries is economic transformation; with it comes related changes in land use, population distribution, and income levels. Here, the appeal of modernization often wins out over that of cultural heritage preservation, and even national-level heritage protection does not guarantee that a major cultural asset will survive.

The long-term worldwide benefits of cultural heritage are often discounted against opportunities for short-term domestic economic development. In the face of rapid globalization, there can be a lack of awareness within local communities of the significance of sites for their own cultural identity.

Instead of being conserved for future generations, ancient cities and buildings are torn down to make way for modern infrastructure. Major archaeological sites are neglected and strangled by poorly planned commercial development, destroying precious heritage and viewsapes critical to their integrity and authenticity.

In preparation for the 2008 Beijing Olympics, many square kilometers of historic neighborhoods surrounding the Forbidden City were razed for skyscrapers and hotels, altering forever the architectural fabric of the nation's capital.

In Cuzco, Peru, the oldest continuously inhabited city in the Americas, the construction of hotels and other urban developments continues to threaten the city's distinctive blend of Incan and colonial architecture.

In Saudi Arabia, a ring of new skyscrapers now surrounds the religious pilgrimage site of Mecca, with some buildings more than 100 stories high. Inside the Masjid al-Haram mosque is the Kaaba, toward which the Muslim faithful worldwide face when in prayer. The Qishla of Mecca, an 18th century Ottoman castle formerly facing the Grand Mosque, was demolished recently to make space for new modern hotels.

In Iraq, during the 7th century BC, the ancient site of Nineveh was the wealthy capital of an empire stretching from the Nile Valley to the Caucasus Mountains. More recently, Nineveh has lost nearly half of its core archaeological area to illegal development. "There is very little left of Nineveh now because of the encroachment," said Muzahim Hussein, Director of Antiquities in Nineveh Province, in a 2009 interview with *The Christian Science Monitor*. The modern city that has sprung up within the ancient walls dooms the layers of civilizations underneath.

In many cases, illegal encroachment can irrevocably damage a sacred site's integrity and authenticity—key heritage values—in just a few years.

**Instead of making new development compatible with ancient cities and historic districts, governments are razing old sites to make way for modern infrastructure.**





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#### MECCA, SAUDI ARABIA

### The Importance of Saving Viewscapes

Around the world we are rapidly engulfing our most precious heritage sites with concrete and steel masses of modern construction. While progress and redevelopment are inevitable, we must balance it with the value of heritage. Locating new development at a safe distance from major archaeological and heritage sites to protect their cultural and economic value needs to be a core to all urban and heritage planning in the 21st century if we want to save our last remaining intact historic districts.

Left: Historic Mecca, Saudi Arabia. Inside the Masjid al-Haram mosque is the Kaaba, the place which hundreds of millions of Muslim faithful worldwide face when in prayer. Today, the area surrounding the religious pilgrimage site is hemmed in by skyscrapers, some more than 100 stories high, and 95 percent of millennium-old buildings have been demolished in the past two decades. Photo: skyscrapers.com



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#### OLD BEIJING, CHINA

### Beyond Monuments, Historic Cities Important for Heritage and Tourism are Being Lost at an Accelerating Pace

Many of the last remaining Beijing *hutongs*, or historic districts, were razed in a frantic push to prepare for the 2008 Beijing Olympics. Many city leaders saw the economic value of the land surrounding the Forbidden City but gave little value to the intact historic fabric and unique architecture. Like historic Paris, Old Beijing could bring millions of tourists every year to experience the uniqueness of its historic districts if structures were properly protected. The large-scale razing has left just a few scattered remnants of the ancient *hutongs* reducing the city's historical, scientific, cultural, and artistic value. Unauthentic and often gaudy reconstruction of monuments has left Old Beijing with many false historical sites. Over the last 10 years, 200,000 families have been relocated from historic *hutongs* and over 600 *hutong* lanes per year were replaced with modern glass, cement, and steel high-rise construction by developers.

Left: A Chinese woman rests beside her half-demolished home in a narrow *hutong* lane of old-fashioned courtyard houses in Beijing. The demolished homes are among thousands leveled for the Beijing 2008 Olympics. Photo: Goh Chai Hin/AFP/Getty Images



## Threat 2. Unsustainable Tourism

In the past 10 years, rapid growth in international and domestic tourism has engulfed our most significant and fragile global heritage sites. Despite attracting hundreds of thousands of visitors, these sites have received little financial support from tour operators, hotels, and other users of these assets for heritage conservation.

**Many heritage sites are being “cash-cowed” without reinvestment of tourism proceeds in the heritage asset’s long-term protection and sustainability.**

The official UNESCO World Heritage seal can greatly increase the number of visitors within a few years, far ahead of the planning and training of conservation leaders needed to control the invasion. As UNESCO official Alonso Addison writes in his book *Disappearing World*, “The temptation to capitalize on the visitors all too often proves irresistible to developers resulting in hotel resorts, golf courses...and noisy and overcrowded car parks.”

Travel writers from *Lonely Planet* to *National Geographic* are now urging readers to visit some of the earth’s great gems before they are inscribed on the UNESCO World Heritage list. The reason: inclusion in the list is known to degrade the visitor

experience. *Newsweek*’s July 2009 article “To List or Not to List? Choosing Development over World Heritage” notes that while plenty of countries still strive to earn World Heritage status and reap the benefits of the resulting tourism boom, some are beginning to question the honor’s long-term value.

**The impacts of mass tourism can be dramatic, and in some cases irreversible.**

In Egypt, tourism generates over \$10.8 billion a year and accounts for over ten percent of the country’s annual GDP; by 2014, the government wishes to attract 16 million tourists per year. Yet even now the country’s cultural assets are deteriorating. Inside the tombs in the Valley of the Kings at Luxor, evaporated sweat and moisture from tourists eats away at burial chamber walls. During peak hours at the Pyramids, thousands of visitors cram fragile areas and climb on ancient structures, with some tourists even engraving their names in the ancient stones.

The challenge is to manage tourist visits so that they bring maximum economic benefit without degrading the asset base—the heritage site itself—or otherwise negatively impacting the surrounding environment and communities.



Giza, Egypt. Photo: Christine K.

### Threat 3. Insufficient Management

A poorly conserved site can often be attributed to the lack of a management plan and inadequate resources for maintenance, monitoring, or enforcement. Lack of resources is a primary reason for poor conservation outcomes. In many developing countries, budgets for cultural heritage conservation are understandably limited. Restricted funding often results in inadequate staffing levels, training, and equipment. Even if a management plan exists for a site, there may be little hope that it can be implemented properly, if at all.

Corruption can also skew management's willingness to perform duties, especially in areas where the rewards—financial and otherwise—for ignoring or countering conservation objectives are far greater than the rewards for supporting them. Low morale due to inadequate funding, limited education about the importance of maintaining heritage assets, and cultural preferences that favor other objectives over site management can also adversely affect the condition of a site. For example, a site may become neglected because it is associated with a religion that is no longer present or dominant.

Insufficient expertise can often lead to unscientific restoration, one of the most debilitating threats to heritage. Here there may be a management plan and available funds, but the restoration is not conceived,

supervised, or implemented by skilled professionals, and the actual result is the loss of some or all of the cultural integrity that defined the site's original character and value.

A common practice in many global heritage sites is the artificial large-scale reconstruction of an archaeological ruin for tourism using cement and metal bars. Few sites restored for tourism use appropriate archaeological practices to reflect the scientific record. In many heritage sites, what you see today is a fictional representation of an archaeological site, not an authentically preserved ruin. Despite the Venice and Burra Charters and decades of work by ICOMOS, UNESCO, and others, aggressive restorations such as the recent over-reconstruction of Akapana Pyramid in Ecuador and that of Tiwanaku in Bolivia continue. While discreet use of modern materials can prolong the life of heritage sites without jeopardizing their authenticity, unscientific reconstructions are often the norm in countries that want to rapidly promote tourism.

**Insufficient expertise can often lead to unscientific restoration, one of the most debilitating threats to heritage.**



In Cyrene, Libya, a UNESCO World Heritage Site, Portland cement and rebar is used to patch together ancient monuments even today. Inappropriate reconstructions and unauthentic restorations for tourism are one of the most severe causes of loss and destruction to global heritage sites. Photo: GHF

## Threat 4. Looting

Looting involves the illegal removal of relics from a cultural heritage site. It is an age-old threat but remains a current and highly destructive 21st century problem in many countries including Cambodia, Egypt, Jordan, Syria, Turkey, Guatemala, and Peru.

In the 2005 report *Heritage@Risk*, the International Council on Monuments and Sites (ICOMOS) notes that “in many countries archaeological sites continue to be plundered by illegal excavations, and the illicit traffic of works of art represents a continuous loss of cultural goods that from a preservation perspective should be preserved on their original site. Not only paintings, sculptures and the artifacts of cult sites are being decimated in many countries through theft, but art monuments are actually being destroyed in order to gain fragments for the market: temple complexes are being looted, sculptures decapitated, frescoes cut up.”

Looting occurs in both developed and developing countries, flourishing where there is corruption and weak law enforcement by police, customs officials, and site management personnel. War and conflict often exacerbate looting because of corresponding rises in uncertainty and lawlessness.

After the invasion of Iraq in 2003, volatile political conditions led to looting and lawlessness that is still unleashing devastation upon hundreds of ancient sites across southern Iraq even today.

**Looting occurs in both developed and developing countries, flourishing where there is corruption and weak law enforcement.**

In recent years, the McDonald Institute for Archaeological Research at Cambridge University has found alarming evidence of widespread vandalism on archaeological sites worldwide. In a single year, Turkey arrested 560 looters for possessing more than 10,000 stolen objects. Over a period of four years, Chinese authorities intercepted 110,000 illicit cultural objects, estimating that at least 4,000 tombs were vandalized. In Belize, 73 percent of major Mayan archaeological sites have been pillaged; in Peru, an estimated 100,000 tombs—over half the country’s known sites—have been systematically looted.

According to the McDonald Institute, the looting of antiquities destroys not only a country’s history but also its future; this is particularly true for poor countries that are the worst affected. Though worldwide trade in looted antiquities has been estimated to be worth billions of dollars, stolen objects usually end up in collections in Europe, North America, and Japan, while looters from local communities receive less than one percent of the final sale price. Countries least able to protect themselves are those most often robbed of their valuable history. An archaeological site preserves the material traces of history for hundreds, even thousands, of years. But when a site is looted, details of provenance and context are irretrievably destroyed. Traces of history are lost forever, and everyone who is interested in our collective past—from schoolchildren to scholars—is poorer for it.

Right: Looting at Umma, Iraq, destroys the archaeological site for scientific research and tourism.  
Photo: Italian Forces courtesy of Joanne Farchakh-Bajjalay







#### STEALING HISTORY

### Looting: an Age-Old Threat

Large-scale looting operations are in process today in many countries including Bulgaria, Jordan, Turkey, Syria, and Egypt. In northern Guatemala, thousands of people are actively looting Maya archeological sites in the Peten. Today's northern Peru looks like a lunar landscape from hundreds of thousands of looter trenches across hundreds of miles.

Above: Ayutthaya, Thailand. Source: Brian Beggarly.  
Left: Nimrud, Iraq. Source: Joanne Farchakh-Bajjal





Ctesiphon, Iraq. Source: U.S. Army

### Threat 5. War and Conflict

Warfare can devastate cultural heritage. While aerial bombing or battles in a civilian center may not specifically be aimed at decimating cultural heritage, there is often damage or destruction nonetheless. Cultural heritage sites are often damaged if they are used for cover or as bases for operations during war or conflict.

On a larger scale, one or more complete heritage sites may be inside a military zone, the impact of which can range from mild to devastating. In some instances, however, this can actually protect a site because military activity prohibits other forms of human endeavor—such as agriculture, urbanization, and tourism—that could otherwise jeopardize a site.

The aftermath of war and conflict can be a power vacuum where lawlessness and looting erupt, making cultural heritage increasingly vulnerable.

By contrast, iconoclasm (“image-breaking”) deliberately targets an enemy’s images, icons, or monuments to demoralize that cultural group and establish political or religious superiority over it. It is a significant source of cultural heritage loss, from the Bamiyan Buddhas in Afghanistan to the frescoes of eastern European churches.

Terrorism’s trademark is to intentionally engender fear by erratically targeting civilians, and can also contribute to cultural heritage loss by increasing overall uncertainty and lawlessness and by justifying the illicit trade in antiquities as a source of funding.



The Kosovo conflict resulted in the deliberate destruction of many religious buildings. Photo: Andreas Welch

## Destruction and Loss of Global Heritage in the 21st Century

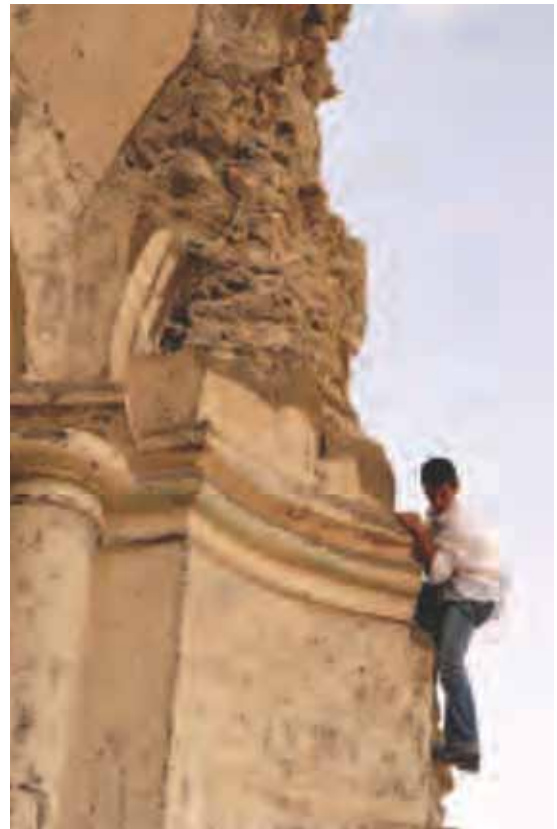
The most vulnerable global heritage sites are found in countries where there is war and crisis, political instability, or rapid economic transformation. Often losses can go undetected for many years, with sites getting little attention from the local or international community.

Much of this loss can be controlled through better planning, community involvement, and management, but these are often missing in countries where the need is greatest.

In a world that is becoming increasingly homogenized, these treasures are unique and priceless cultural assets, providing a basis for national identity, scientific and historical research, sustainable tourism, and other economic development opportunities for future generations.

A 2007 UNESCO study of over 2,000 World Heritage Site status reports found that nearly one third reported damage that might qualify the site as endangered or threatened. Human action caused the problem in 83 percent of these cases, while only 17 percent involved damage due to natural causes.

As of 2009, 31 World Heritage sites were listed by UNESCO as “in danger.” The fact that even designated UNESCO World Heritage sites are suffering neglect, damage, and loss suggests the large scale of the global crisis.



Tourist climbing the ruins of Ani, Turkey, to chip off fresco fragments as souvenirs.  
Photo: GHF

### UNESCO World Heritage: Challenges for the Millennium (2007)

Source: Report Highlights—Threats to Our World Heritage.

#### Number of Cultural Sites Reporting Loss (1986–2004)

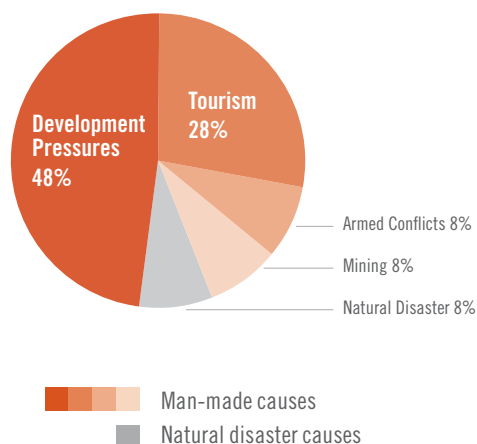
##### MAN-MADE CAUSES

|                       |          |
|-----------------------|----------|
| Development Pressures | 54 Sites |
| Tourism               | 31 Sites |
| Armed conflicts       | 9 Sites  |
| Mining                | 9 Sites  |

##### NATURAL DISASTER CAUSES

|             |          |
|-------------|----------|
| Floods      | 9 Sites  |
| Earthquakes | 12 Sites |

**TOTAL: 124 World Heritage Cultural Sites Affected**



Today, simultaneous man-made threats to the world's cultural heritage far exceed the combined threats of floods, earthquakes, and climate change.

Sites worldwide are being cleared for modern development, while others are suffering from mismanagement and overuse for mass tourism. Over the past decade, cultural sites have been damaged in armed conflict and civil strife, and others, due to lack of prevention funding, have been destroyed by natural disasters. Much of this loss can be controlled through better planning, community involvement, and management, but these are often missing in developing countries where the need is greatest.

- **In China**, 70 percent of the Class 1 or 2 nationally registered Historic Cities have vanished over the last 20 years. Only four ancient walled cities are intact today versus over 20 in 1960. Kashgar, one of China's last intact ancient cities, will lose over 85 percent of its historic district by 2012 under current demolition plans.
- **In India**, hundreds of major cultural heritage sites—including monuments, temples, mosques, forts, and historic ruins—remain unprotected while the Archaeological Survey of India, the national government management agency, finds itself overwhelmed by conservation challenges.

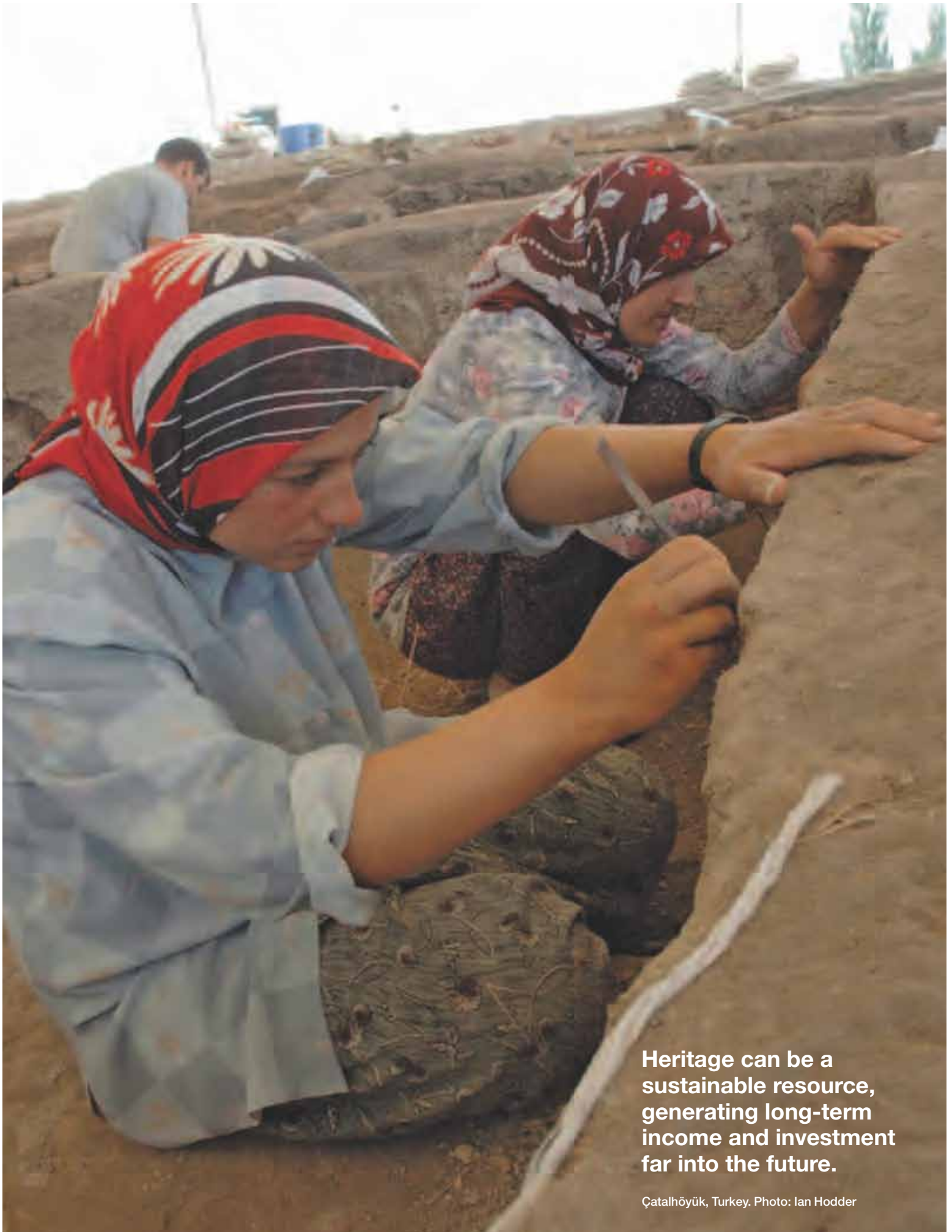
Major archaeological and cultural heritage sites are being used as “cash cows,” without corresponding reinvestment of tourism proceeds in the heritage asset's long-term protection and preservation.

- **In Iraq**, over 1,200 square miles of major ancient Sumerian archaeological sites have been systematically looted since 2003, including the major sites of Larsa and Umma, which originate from the earliest periods of human settlement. Massive looting has not been restricted to conflict zones.
- **In Cambodia**, hundreds of thousands of visitors climb over the ruins of Angkor every year causing heavy deterioration of original Khmer stonework. The nearby sprawl of hotels and restaurants is sapping the region's local aquifer, which has caused the Bayon Temple's 54 towers to sink into the ground.
- **In Guatemala**, the entire Peten region has been sacked in the past 20 years and every year hundreds of archaeological sites are being destroyed by organized looting crews seeking Maya antiquities for sale on the international market.
- **In Peru**, over 2 million people now crowd Machu Picchu every year, up from 300,000 in the year 2000; UNESCO has put the Incan Citadel on a watch list of 10 world sites of “grave concern (and) urgent problems.” Northern Peru appears to be a lunar landscape, with thousands of looter trenches spread across hundreds of miles.



Tourism is uncontrolled allowing millions of visitors to climb on the fragile ruins at Angkor Wat, Cambodia. Photo: Paul Stevenson





**Heritage can be a sustainable resource, generating long-term income and investment far into the future.**

Çatalhöyük, Turkey. Photo: Ian Hodder

# The Global Heritage Opportunity

## A \$100 Billion a Year Opportunity for the Developing World by 2025

A GHF-sponsored analysis of 500 global heritage sites by a team of Stanford University economics graduates estimates that global heritage sites in the developing world are expected to generate over \$100 billion a year by 2025, up from \$24.6 billion today. See *Appendix A* for a summary of this analysis.

**Today, 42 of the 500 global heritage sites surveyed for *Vanishing* each have revenues of more than \$100 million a year.**

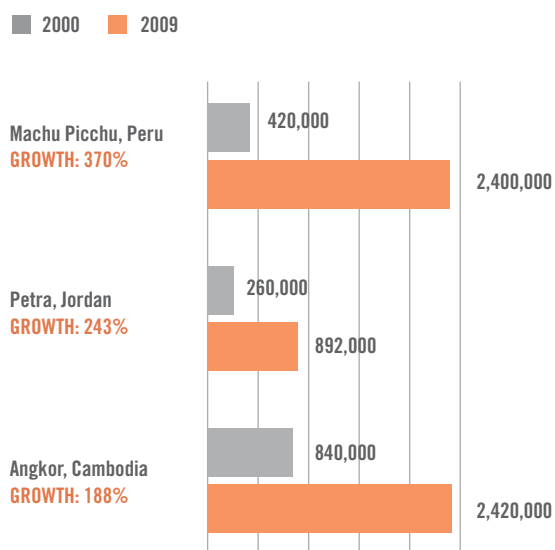
In many developing countries, domestic and international tourism to global heritage sites—when combined with related crafts and community-based services around those areas—now generate more

foreign exchange revenue than any other industry, including mining, logging, and agricultural exports.

Heritage assets can be core economic engines—transforming developing economies through sustainable heritage preservation and responsible development. But due to inaction and lack of resources targeted towards our most endangered sites, we risk losing much of this \$100 billion opportunity.

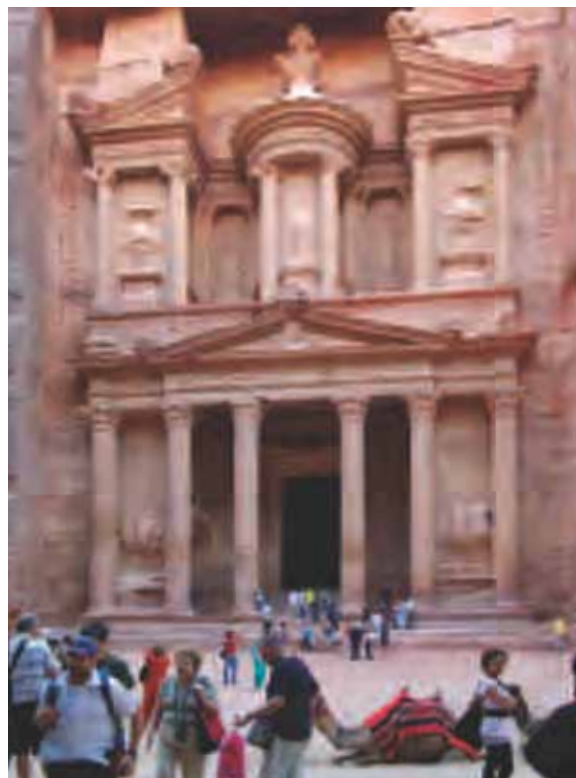
Unlike extraction industries like mining and logging, heritage can be a sustainable resource, generating long-term income and investment far into the future. Few other industries offer our lowest-income countries such an untapped opportunity for global development. By saving our global heritage sites now, we can bring prosperity and hope to millions of people in the most poverty-stricken regions of the world.

### Growth of Tourism Arrivals (2000–2009)



Source: Ministries of Tourism, GHF Estimates

Right: The Treasury at Petra, Jordan, which today has nearly 1 million visitors a year massing through the site with no visitor management or controls. Photo: Berthold Werner



## The Economic Value of Global Heritage

Studies over the last decade have identified the five areas where heritage conservation has the most economic impact:

1. Jobs and household income
2. City center revitalization
3. Heritage tourism property values
4. Small business incubation
5. Multiplier effects in all supply chains

Heritage conservation is particularly good for local job creation and income since labor often makes up 60 to 70 percent of the cost of conservation. Some success stories:

In Palestine's West Bank, the Swedish International Development Agency has found that every \$100,000 project it funds typically provides 3,000 to 3,500 workdays, with labor constituting around 70 percent of total expenditure. Maintenance of heritage sites also continues to provide skilled employment and well-paying jobs that cannot be shipped overseas.

In the historic city center of Quito, Ecuador, the Inter-American Development Bank staged a major initiative that included new businesses, restaurants, and cultural activities; reinvestment by existing and new residents; increased property values; and net economic benefits well above expenditures. According

to *IDB America Magazine* in September 2010, property values in the targeted heritage area of Quito appreciated by 44 percent, as compared to nearby areas which saw less than 10 percent increases over a period of 15 years.

Similar ongoing efforts in the old medina in Tunis, Tunisia, have resulted in the middle class returning both as residents and as business and property owners. The rates of return on private investment have been high, and the leverage of public funds to private funds has been three to one.

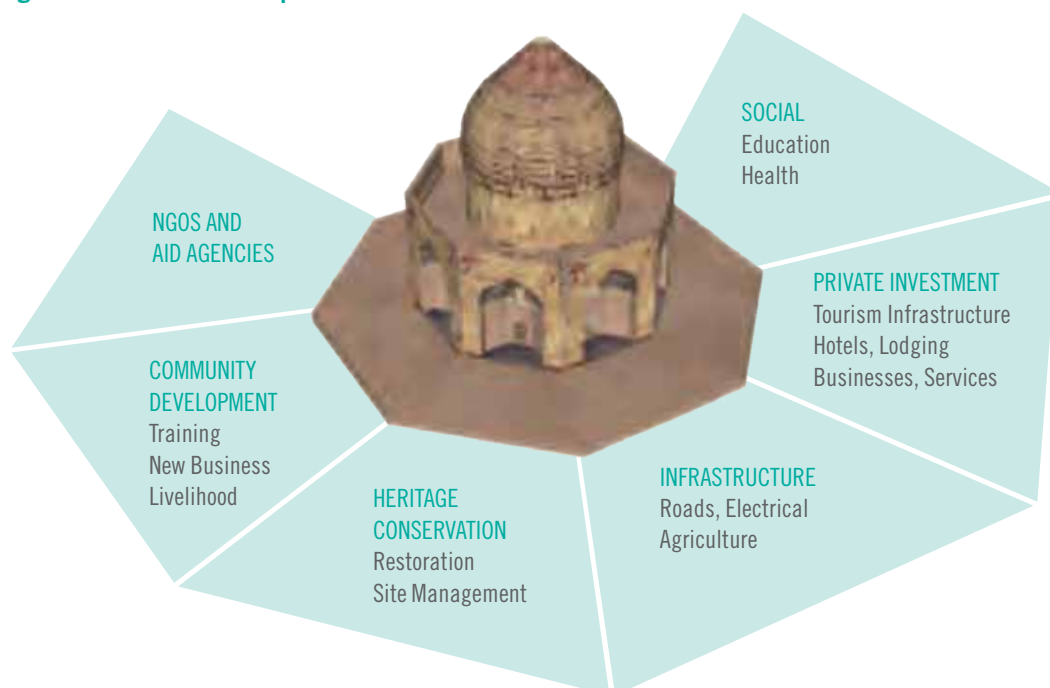
Over the last decade in Ningbo, China, a series of dilapidated, overcrowded, and unsanitary buildings have been converted into the Fan Center, which is filled with small businesses selling antiques, books, and art.

The restoration of the Souq al Saghir in Damascus has stimulated new businesses and more activity from existing businesses that sell both to tourists and local residents.

The local clustering of development activities around heritage sites leads to a broad diffusion of benefits into surrounding communities. Local residents often experience a renewed appreciation for, and pride in, their local city and its history.

**Global heritage should become a core platform for international development strategies.**

### Global Heritage Sites are Magnets for 'Clustering' for Sustainable Development





The UNWTO forecasts that international tourist arrivals will surpass 1.6 billion persons by the year 2020. Tourist arrivals to East Asia and the Pacific, the Middle East, and Africa are expected to grow the fastest, at more than five percent per year, while the world average is expected to hold at 4.1 percent.

For developing countries, global heritage sites are critical assets for new jobs, income, and diversifying economies. Tourism is now considered a cornerstone of a strategic development program by many governments, particularly for more impoverished regions with few other options; according to the UNWTO, at least one third of developing countries (including 24 Least Developed Countries, or LDCs) count tourism receipts as their main source of export revenue.

In Latin America, for example, cultural heritage tourism has already become crucial to country tourism strategies. Peru classifies nearly 93 percent of all incoming tourists as cultural tourists. Well-planned and managed community-based tourism contributes to the revitalization of cultural traditions and crafts, open markets for local farm products, and self-esteem.

Developing countries with a large number or concentration of major archaeological and heritage sites experience greater economic growth than countries without such sites. In these countries, investment, protection, and conservation of heritage sites can be



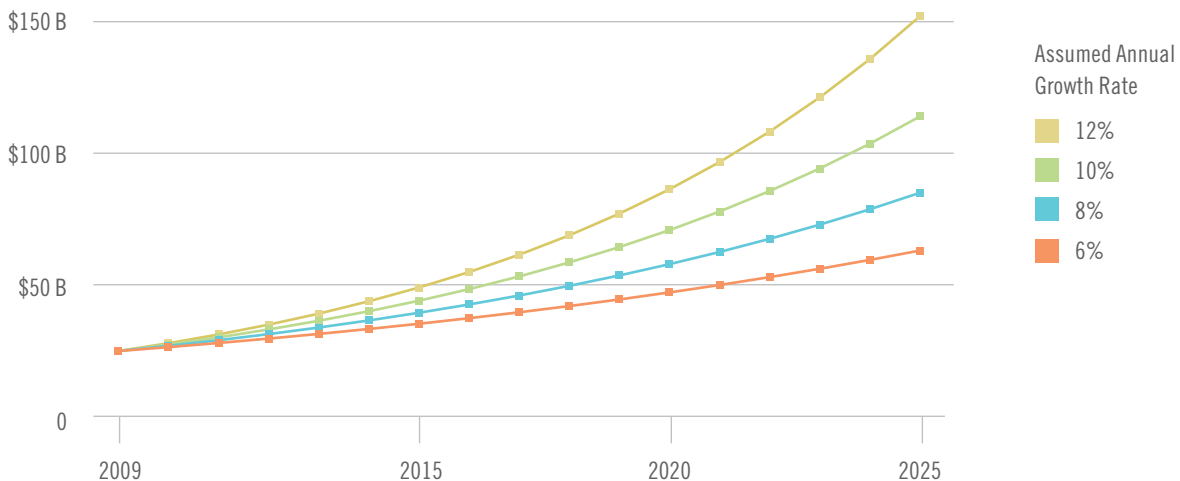
Tourists to Machu Picchu now exceed carrying capacity of the site on most days, reaching over 2.4 million a year in 2009. Photo: Stuart Starks

highly correlated with economic growth, improved standards of living, and foreign exchange revenues. Success in tourism has also proven to contribute to stability and peace in conflict-prone regions. Two good examples are Cambodia, which endured a long civil war led by the Khmer Rouge, and Peru, which has faced the Shining Path insurgency.

Many Latin American countries have developed cultural travel routes linking cultural heritage sites

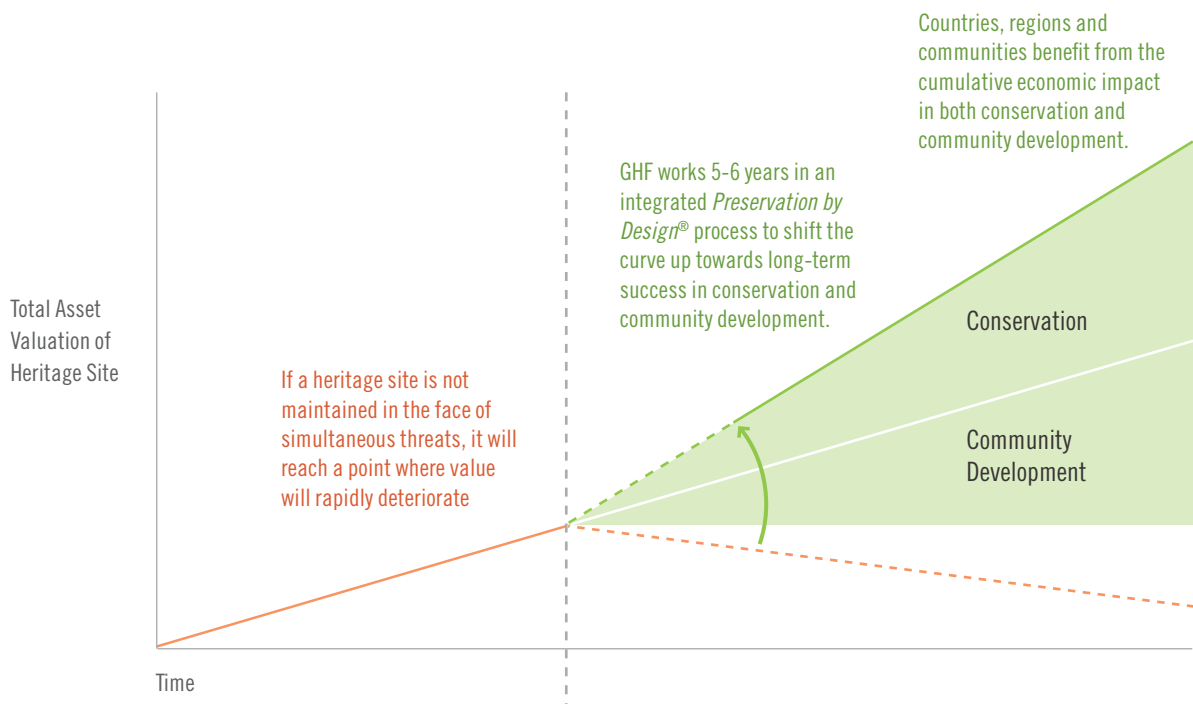
## \$100 Billion Dollar a Year Opportunity for the Developing World by 2025

### Global Heritage Sites: Total Revenue Potential



Revenues shown in billions of US dollars. Source: Based on Stanford University Economics graduate team analysis by Shwetha Shankar et al, 2010. For details and database of 500 global heritage sites with citations, see [www.globalheritagefund.org/vanishing](http://www.globalheritagefund.org/vanishing)  
 Note: As we can see from many popular sites even with maturing growth rates, visitation is continuing to double or triple over the last 10 years. Global heritage sites that are just coming onto the international and domestic tourism scene are often growing much faster rates than those that are already well-known (20 to 30 percent a year). For example, Chavin de Huantar in Peru, grew from 12,000 to over 100,000 visitors in 10 years from 2000-2009.

## Heritage as an Asset: Conservation and Development



with regional development and large-scale nature and wildlife conservation efforts; these include the Inca Trail in Bolivia and Peru, the Mirador-Calakmul Biosphere Reserve in Guatemala and Mexico, and the Ruta Maya (Mayan Route) linking Mexico, Guatemala, Belize, and Honduras.

Cultural heritage tourism is propelled by three driving forces:

- **High value.** Cultural heritage tourists tend to be higher-value customers and tend to spend more, stay longer, and purchase more.
- **Cost effectiveness.** Cultural heritage's unique touristic appeal offers a competitive advantage to many countries, one that can be leveraged from pre-existing domestic resources.
- **Increasing demand.** Demand for tourism to global heritage sites is skyrocketing and is one of the industry's fastest-growing sectors.

**Heritage conservation is particularly good for local job creation and income since labor often makes up 60 to 70 percent of the cost of conservation.**

### Beyond Economic Value

The long-term benefits of heritage preservation—historical, educational, environmental, cultural, aesthetic, and social—often dwarf the economic cost of preserving the sites.

For example, as the cradle of civilization Iraq has the potential to be the next Egypt, which has a \$3 billion tourism industry. Heritage tourism to global heritage sites like Babylon, Ur, Hatra, Nineveh, and Ctesiphon has the potential to eventually become the second most important industry for the country after oil.

Already Najaf in Iraq is drawing tens of thousands of overseas pilgrims, up from just a few thousand a decade ago. Many surrounding communities can broadly share the benefits of religious tourism at Najaf. By supporting tourism to Iraq's many cultural heritage sites, we can also make a key contribution to stability and peace in the region.

Peru's Ministry of Foreign Trade and Tourism expects that recent investments in Peruvian tourism infrastructure will see a boost in tourist arrivals to 3.7 million in 2013, up from 1 million in 2007.

Peru's tourist revenue is highly concentrated in Machu Picchu. The site accounts for 90 percent of total revenues, despite the fact that Peru has a significant number of other undeveloped heritage

In Guatemala, what is known as the “Tikal Effect” has resulted in the employment of over 40,000 people in and around the archaeological park. Hundreds of other sites have the potential to become economic engines on the community or regional level.

Right: Over 140,000 visitors a year come to Tikal National Park, generating over \$380 million in revenues in 2009 for poverty-stricken Guatemala. In the last few decades, Tikal has not suffered from looting or wildlife habitat loss. Photo: Chensi Yuan



sites in impoverished areas. Torrential rains in Peru forced the closing of Machu Picchu in 2010; the two-month closure resulted in a loss of nearly \$200 million in tourism revenues. It was a clear lesson that Peru needs to develop other important heritage regions in order to diversify their heritage economy.

### The Importance of Heritage for International Development

The global community is only beginning to comprehend the economic value of heritage’s long-term benefits to local communities in developing countries.

Investments in cultural heritage can trigger a process of investment in private property, reversing the downward spiral of devaluation of building stocks. Rehabilitation of historic city centers can support the creation of new enterprise and investment in tourism, one of the fastest growing sectors of the world economy.

UNWTO reports that tourism contributes substantially to reducing poverty and empowering women, youth, and migrant workers with new employment opportunities. It also helps to revive declining urban areas, open up and develop remote rural areas, and promote the conservation of environmental endowments and cultural heritage.

### Major Imbalance in Heritage Preservation Funding vs. Use

While many heritage assets are bringing great prosperity and growth to developing countries, just a small percentage of what is needed is being invested for their survival and sustainable preservation, especially in the face of accelerating and simultaneous threats occurring today.

GHF estimates that the cumulative economic value—contribution to GDP, job creation, regional growth, foreign exchange earnings—of the top 500 global heritage sites is today \$20 billion to \$30 billion annually, while total funding for preservation of these same global heritage assets by governments and international agencies is less than \$400 million to \$500 million (approximately two to three percent of annual revenue).

### Major archaeological and cultural heritage sites are being used as “cash cows”

Governments and tourism-related businesses benefit greatly from tax revenues and business profits from global heritage sites, but few reinvest in long-term preservation. The current status quo of meager reinvestment in the preservation of our most valuable heritage assets could lead to loss and deterioration, potentially reducing their economic potential by up 25 to 30 percent, according to UNWTO.



Only by recognizing heritage's fragile state and irreplaceable value can it be appropriately managed through long-term, responsible development, contrary to the current mentality of national governments to cash in on heritage.

Global heritage sites are used (and overused) by numerous parties for tourism, real estate development, and land speculation. Yet few private-sector operators reinvest in preservation of the sites they use or feel responsible for their day-to-day care. This situation results in a progressively decaying heritage resource and surrounding environment.

Government ministries responsible for conservation tend to be ill-equipped and poorly financed. In developing countries, cultural departments are often last in line for funding and staff appointments, whereas heritage assets should demand more attention due to their important role in development and socio-economic regeneration.

A major trend towards decentralization is also leaving our global heritage sites in the hands of local governments who are easily influenced by land developers and commercial interests in matters of heritage preservation. While national governments are placing great importance on these sites by signing off on World Heritage nominations and national registration, municipalities are given few corresponding resources and are more focused on urban development to support economic growth and job creation, according to a 2009 UNESCO presentation titled *Sleeping With The Enemy? Private Sector Involvement in World Heritage Preservation*.

**Through sustainable preservation and responsible development of global heritage sites, we can tackle one of the most pressing issues of our time: poverty.**

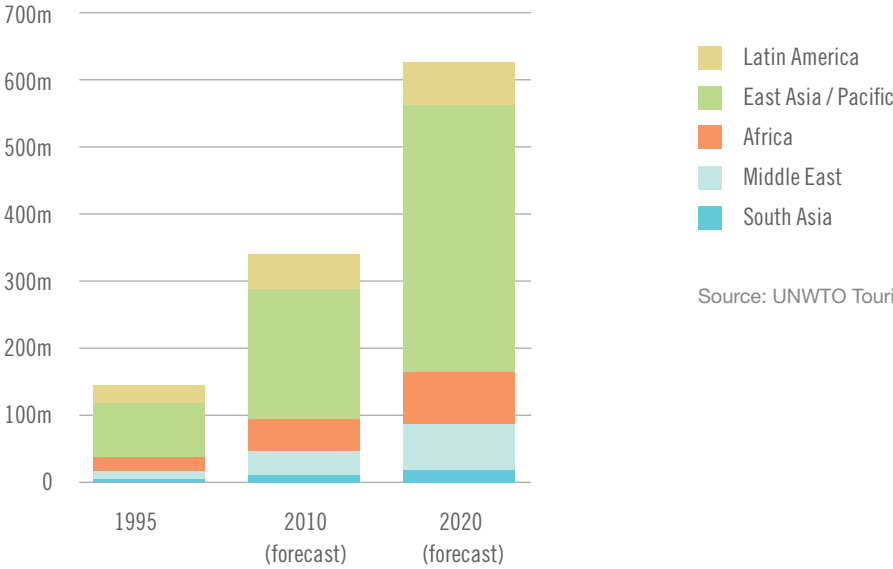
In the past decade, many heritage sites have generated hundreds of millions of dollars in critical foreign exchange and income for poor communities. Jobs in the heritage economy grow organically and are available to diverse groups in each population, diffusing income throughout the economy and the supply chain. In Guatemala, what is known as the "Tikal Effect" has resulted in the employment of over 40,000 people in and around the archaeological park. Hundreds of other sites have the potential to be powerful economic engines on the community or regional level.

**GHF estimates that more than half of the world's most significant archaeological and heritage sites are located in 100 of the lowest-income countries.**

For many developing countries, cultural heritage sites provide one of the only major opportunities for sustainable economic growth. By protecting these assets, we are bringing long-term economic growth on a scale that can lift millions of people out of poverty.

Heritage provides one of the most important and equitable forms of economic development available for poor countries, as global heritage sites are often widely distributed geographically. Because it is possible to work in heritage tourism without a large capital investment or advanced education, many people can participate in heritage-related businesses and jobs, enabling broad diffusion of economic benefits throughout the economy.

### Explosion in International Tourism to the Developing World



Source: UNWTO Tourism Market Trends, 2008.

GHF expects that cultural tourism to global heritage sites in Mesopotamia (like Samarra, Ur, Hatra, Ninevah, and Ctesiphon) will eventually become the second most important industry for Iraq after oil. With major sites in almost every corner of the country, tourism will spread economic benefits far more broadly, and global heritage sites will be a prime contributor to stability, prosperity, and peace in the region.



Local visitors traveling from Baghdad to Ctesiphon, Iraq, can exceed 2,000 people a day on weekend days. Photo: Magnus Manske



**“In every country I have visited, I have seen the importance of a sense of history and a link to the past. For real development to occur, it should be grounded in the culture of the people—drawing strength from their history.”**

James D. Wolfensohn

Pingyao, China. Photo: GHF



# Balancing Preservation and Development

Investment in the protection and preservation of heritage sites has proven to be one of the most scalable, effective, and targeted means to help developing nations.

With just \$10 million to \$20 million in the 1990s and the leadership of UNDP and UNESCO, Angkor in Cambodia was preserved and now generates over a billion dollars a year in tourism revenues. Tikal and Antigua in Guatemala, Machu Picchu in Peru, Luang Prabang in Laos, and Petra in Jordan are all examples of early, targeted preservation investments that have had exponential impact in new jobs and income for host countries.

Due to the global challenges facing developing countries, hundreds of global heritage sites of equal or even greater significance to human civilization languish due to neglect, poor management, and deliberate destruction. With better coordination, greater private-sector involvement, and use of innovative technology and new solutions, we can reverse the destruction and create sustainable preservation success stories in hundreds of these endangered global heritage sites.

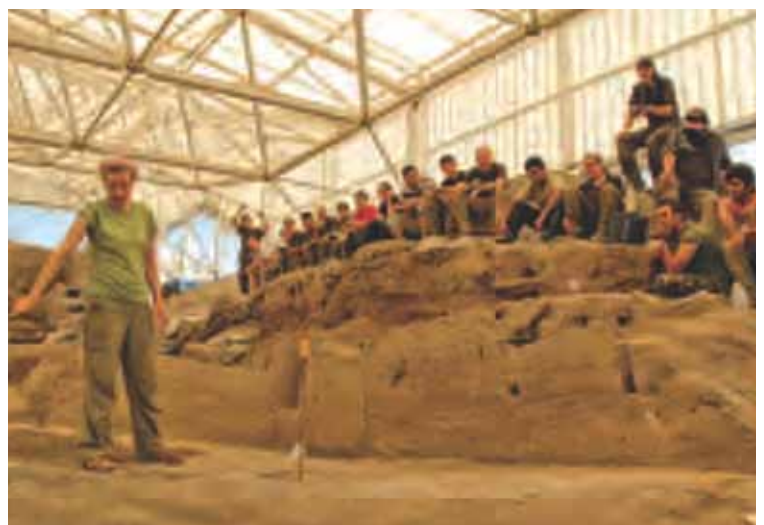
“We neglect the importance of culture in a globalized world. We hear or read about the fear of cultural homogenization almost daily. These fears are real. We must not lose sight of the importance of culture and cultural heritage in a rapidly shrinking world.”

James D. Wolfensohn, former president of The World Bank

## Benefits of Heritage Investment

Heritage is one of the most beneficial investments a country can make. Primary benefits can include:

- Highest foreign exchange revenues of any non-extraction industry
- Highest diffusion of revenues across the regional populations
- Long-term sustainable income generation if the resource is protected
- Limited negative impacts to the environment and health of the population
- Highest growth rates—in cultural heritage tourism—of many industry segments
- Increased investments in infrastructure and social services: health, water, community development
- Greatest opportunities for the involvement of women in such businesses as guiding, crafts, lodging, restaurants, small businesses, and agriculture, including organic farming
- Increased self esteem and reaffirmation of cultural identity



Çatalhöyük, Turkey is being planned and responsibly developed in partnership with the local community. Photo: Ian Hodder



Top: Mijia Xiang Courtyard after GHF restoration; Middle: During restoration; Bottom: Before restoration. Photos: GHF

## PINGYAO ANCIENT CITY, CHINA

### Preserving China's Only UNESCO World Heritage Historic Walled City

#### China's First Banking Capital

Pingyao Ancient City was inscribed to the UNESCO World Heritage list in 1997 for its exceptional preservation of a classic Han Chinese city from the Ming and Qing dynasties (1368-1911). There are close to 4,000 extant Ming- and Qing-era courtyard buildings, out of which close to 400 remain intact. Such quantity and concentration of historic vernacular architecture is unparalleled elsewhere in China. Pingyao Ancient City provides a remarkably complete picture of cultural, social, economic, and religious development during one of the most seminal periods of Chinese history.

The Pingyao County government and the Global Heritage Fund have undertaken a major new collaborative effort to better preserve the cultural heritage of Pingyao Ancient City. The Pingyao Cultural Heritage Development Program aims to preserve the vernacular architecture, revitalize and stimulate the traditional arts, and establish special historic areas.

#### Threats

- Poverty
- Neglect
- Lack of resources
- Mass tourism
- Development pressures



Clockwise from above left: John Sanday, GHF Director of Asia, with local residents of Fujian Tulous; a block print designer in Pingyao helps resurrect this ancient art.; John Hurd and Kuang Han Li of GHF provide training for local preservation leaders in Pingyao. Photos: GHF

### Planning

Beginning in 2007, Pingyao and GHF developed the ancient city's first Master Conservation Plan. It was prepared by Shanghai Tongji University and approved by the 17-member expert panel review in January 2009, and is now in the process of final approvals and implementation.

### Conservation Science

By working with the Pingyao County government and local academic and research institutions, GHF is supporting a comprehensive survey of the tangible and intangible cultural resources in Pingyao. This thorough survey will inform and enrich the Heritage Development Program and identify appropriate adaptive reuse of historic buildings. The data collected will contribute to the development of a comprehensive and informed interpretation plan. Upon completion of this survey, a pilot courtyard restoration project will be conducted. The completed pilot courtyard will be used as the GHF field office and community center, where classes on local history, traditional building crafts, and conservation techniques will be held. During the restoration, traditional materials and techniques will be employed and carefully documented, and the results from this pilot project will serve to inform the rehabilitation of other courtyards.

GHF and Pingyao recently celebrated the opening of the first historic courtyard to be preserved under this private-public partnership. Architectural and social survey documentation has been completed for another 31 courtyards in the project area, with a searchable digital database. Conservation training has been ongoing for staff from the Pingyao planning, cultural heritage, and tourism bureaus.

### Community Development

The Heritage Development Program will support apprenticeships so that the remaining skilled craftspeople and artisans can pass on Pingyao's unique living heritage of arts, crafts, cuisines, and performing arts to the next generation. A series of restored courtyards will serve as a venue where the creation of traditional arts and specialty products will take place with the participation and observation by visitors; community classes will also be conducted at the restored courtyards. This integrated, sustainable program addresses the economic imbalance of the current tourism landscape by preserving the last remaining historic courtyards and supporting the living arts and cultural heritage therein.



## Downsides of Heritage Tourism

Cultural tourism can encourage the revival of traditions and the restoration of sites and monuments. But unbridled tourism can have the opposite effect.

Global heritage sites sometimes suffer from being a “common good,” belonging to everyone and no one. Tourism can threaten the very asset it relies upon. In what is known as the “tragedy of the commons,” tourism operators and developers use heritage assets and resources for which they do not have to pay, causing environmental changes and deterioration. They do not always consider overuse in business decisions. Open access to heritage resources often leads to overharvest and overuse.

A single owner of a resource might implement policies (e.g., numerical limits) to avoid overuse. However, these owners tend to be governments in the case of cultural or natural heritage, and governments generally permit open access as a service to the public.

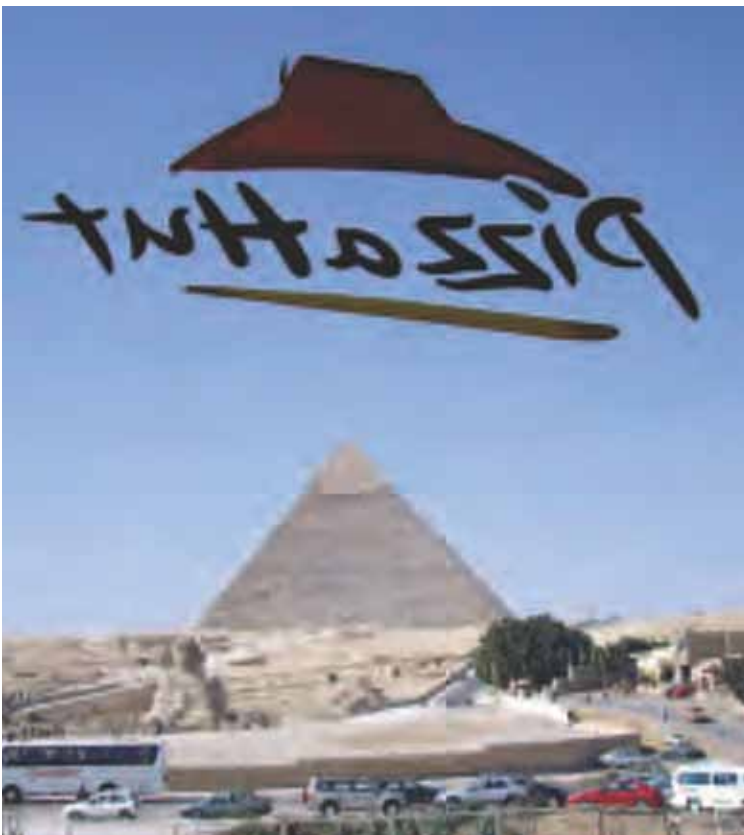
According to Elinor Ostrom, a Nobel Prize-winning economist, governments are best equipped to use planning controls and other measures to ensure that development in general is consistent with societal

goals, especially in cases of market failure and negative externalities like those experienced in overuse of heritage sites without offsetting support for their preservation.

The International Council for Local Environmental Initiatives (ICLEI) stresses that “the primary barrier to sustainable development through tourism is an over reliance on market mechanisms to guide tourism development and consumption decisions... Sustainable tourism development requires a partnership among the stakeholders of the local tourist destination.”

Cooperation amongst users in such situations can lead to an efficient result, but such cooperation is often difficult to achieve when there are multiple businesses competing with each other, particularly when many of the actors do not live in the area and may have limited motivation to cooperate.

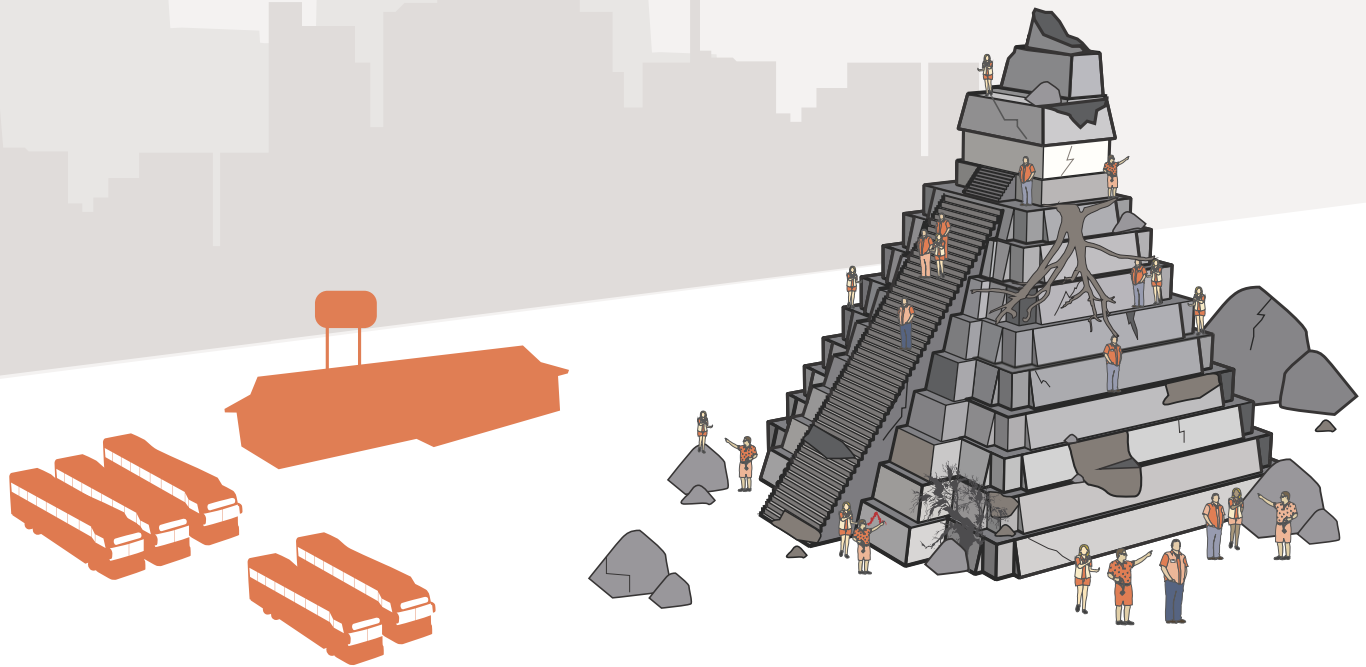
While global heritage sites are major economic assets, investments by governments, international agencies, and the global financial system are not at the same levels as investments in other private-sector industries that achieve similar economic benefits.



Giza, Egypt. Photo: Sebr

## Typical Life Cycle of a Heritage Site

The six principal threats to heritage take their toll on a typical unprotected and unsupported cultural heritage site. The losses affect local people who rely on this site as a source of heritage and income, and also impact our common history.



### Stages of the Typical Development Lifecycle of a Heritage Site



Adapted from Zhang, Yan, "Rethinking Cultural Heritage," (2009).





**“We envision a planet where preservation and sustainable use of our global heritage become a core theme of private sector giving and all global development and international assistance.”**

Jeff Morgan, Executive Director, GHF

Banteay Chhmar, Cambodia. Photo: GHF



# The Way Forward

At a time when globalization yields increasingly homogenized architecture and culture, now is the moment to ensure that the rich and varied expressions of humanity are preserved.

The pace of change and growth of tourism to global heritage sites in developing countries is rapid and accelerating. What was once a three-day trip to sites like Angkor Wat in Cambodia or Machu Picchu in Peru now takes less than a day. Millions of tourists fly to the poorest countries to see magnificent archaeological and heritage sites, and the demand on fragile heritage assets is outstripping the ability to protect them.

Museums can house important artifacts, but they cannot capture the sacredness and splendor of a global heritage site in its entirety. Only in situ protection can truly preserve humanity's cultural record for future generations.

Why do these problems exist mainly in developing countries? It would be easy to conclude that it is simply because there is not enough money to pay for cultural conservation, but the answer is more complex.

The factors that affect economic development also affect conservation performance. Both economic prosperity and good conservation outcomes require the rule of law, impartial third-party enforcement, well-defined and enforceable property rights, and supportive societal preferences for preservation of historic places.

Perhaps the most important way to improve outcomes is to alter social attitudes to actively favor cultural heritage preservation. Education and awareness campaigns can change people's perceptions of the associated costs and benefits of saving cultural assets, but knowledge alone is often insufficient. Conservation must also bring economic benefits to a country and its people.

By empowering communities and integrating them in the vision and planning and development process, local people will be more likely to benefit and become the long-term stewards of their global heritage sites.

It is imperative that there be adequate funding for conservation management and protection so that a site is maintained while the more incremental shift in cultural preferences take place. Greater and immediate investment in cultural heritage conservation in the developing world is needed.

Eventually, these efforts will pay for themselves as people begin to comply with the rules because of their newly acquired understanding and positive financial incentives, thereby greatly reducing the need for, and costs of, formal law enforcement. The best strategy appears to be one of development concurrent with protection of the best examples of invaluable cultural heritage sites.

## We must act now

Now is the time to commit the critical international monies and expertise needed to save our heritage.

**If the trends spotlighted in *Vanishing* continue, we will see European heritage largely preserved while much of the rest of our collective patrimony is lost forever.**

We have an obligation to the people of the past, present, and future to ensure this does not happen, and there is a role for every country, institution, and individual to play. It is our shared heritage at risk and our shared responsibility to save it.

Unless a concerted global effort is undertaken to save these unique and monumental sites representing humanity's major civilizations, many will be lost and hundreds damaged in the next two decades.



#### BANTEAY CHHMAR, CAMBODIA

### Empowering the Local Community to Become Stewards of an Ancient Khmer Civilization

The temple complex of Banteay Chhmar was commissioned by the 12th Century Khmer King Jayavarman VII (AD 1181-1219) in honor of four army generals and his son, the Crown Prince Indravarman. It is most notable for the extensive bas-reliefs documenting the period's contemporary history. The carved temple outer wall is over one kilometer long. In the 1990s, the site became a favored target of looters, resulting in the theft of 25 square meters of bas-reliefs and countless pieces of statuary.

In 2007, GHF began to implement the primary conservation and development goals at Banteay Chhmar. Led by the South Asian Conservation and Restoration Agency (SACRA) Conservation Team under GHF's supervision, the preliminary training is being done in the Khmer language by Khmers for Khmers—a landmark in the sustainable conservation process.

GHF's vision is to conserve the site largely as a ruin with low-impact, safe visitor access via suspended cable platforms over the fallen structures, along with selective interventions for high-risk structures, bas-reliefs, and towers. This unique vision of conserving Banteay Chhmar as a partial ruin will be a radical change from the standard concept of restoration favored in Angkor. Visitors will experience a newly uncovered site amidst natural features.

Long-term sustainability ultimately depends on community engagement and stewardship. To that end, GHF is supporting the local community to organize and manage quality sustainable tourism activities such as guide associations, home-stays, local food, and rural area discovery activities in advance of the expected increase in visitation. Close collaboration is also maintained with the village commune council on issues affecting the village such as access to water, the alignment of roads, and ways that the project can aid in addressing human needs in an impoverished part of Cambodia that was the center of the Khmer Rouge for decades.

#### Threats

- Climate
- Vegetation
- Vandalism and looting
- Development pressures





“I’d like to work at Banteay Chhmar for many years so that when I’m an old man I can retire and watch people coming to visit the temple and admire it.”

Neiv Bunteat, age 20



Facing page, top: In Banteay Chhmar, GHF is working with an all-Khmer conservation team to stabilize and scientifically restore the Citadel of the Cats. Photos: GHF

This page, top: John Sanday, GHF Director of Asia, and James Hooper, Manager of GHF Europe, escort HRH Duke of Gloucester to tour the GHF Project at Banteay Chhmar; Bottom: Local Khmer conservators are trained to survey and consolidate the massive ruins. Photos: GHF



# Recommendations

Earlier this year, our Editorial Committee of 24 respected professors, scientists, and conservation and development experts from the international community began work on *Saving Our Vanishing Heritage*.

Starting with a shared understanding of the threats to global heritage sites, the Committee worked to present a strong case for the protection and development potential of these sites, and to form key recommendations as a framework for action.

Six specific recommendations were formulated to increase the viability and potential for the long-term survival of our global heritage sites in developing countries.

1. Multiply International Private-Sector and Government Funding
2. Reinforce Our Global Institutions
3. Increase Global Awareness of the Crisis
4. Promote New Models for Sustainable Preservation and International Development
5. Advance Innovative Solutions and Technologies
6. Increase Private-Public Partnerships

## Recommendation 1: Multiply International Private-Sector and Government Funding

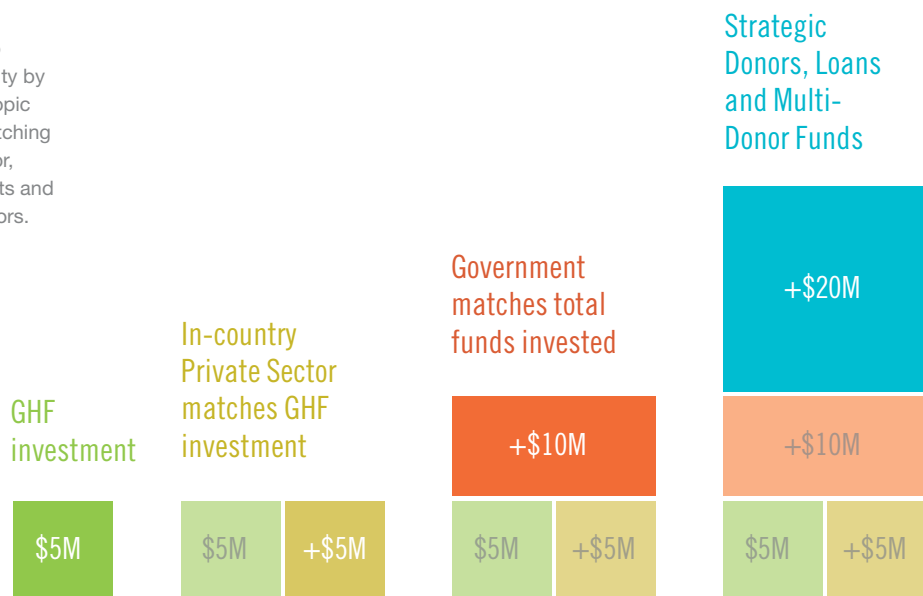
Targeted philanthropic, government, and business investments can save our global heritage. A multi-billion dollar **Global Fund for Heritage** is needed to assist the poorest, most vulnerable countries with the most endangered and significant sites. Modeled after the Global Fund for AIDS, the Global Fund for Heritage would be managed by a joint executive board of government and private-sector leaders and donors, including archaeologists and heritage law and policy experts. It would support international experts, provide emergency assistance and technical and financial resources, and secure matching in-country funding.

International philanthropy for cultural heritage preservation is barely recognizable on the global giving map. Billions of dollars are available for global nature and wildlife conservation, yet our endangered global heritage is left without institutional support.

**GHF estimates that total support from all international heritage conservation groups for global heritage sites in the developing world was less than \$100 million in 2009.**

### Leveraging GHF Investments

GHF works in every project to achieve long-term sustainability by leveraging precious philanthropic donations with in-country matching funding from the private sector, local and national governments and international multi-lateral donors.



## Funding for Nature and Wildlife Conservation Exceeds Cultural Heritage Preservation by 12:1

| Cultural Heritage Preservation  | Developing World | Worldwide Total | Nature and Wildlife Conservation   | Developing World | Worldwide Total  |
|---------------------------------|------------------|-----------------|------------------------------------|------------------|------------------|
| 1. UNESCO Funds in Trust        | \$16 M           | \$18 M          | 1. World Wildlife Fund             | \$180 M          | \$220 M          |
| 2. Aga Khan Trust for Culture   | \$8 M            | \$8 M           | 2. Conservation International      | \$116 M          | \$116 M          |
| 3. World Monuments Fund         | \$6.8 M          | \$15 M          | 3. World Conservation Union (IUCN) | \$80 M           | \$131 M          |
| 4. Global Heritage Fund         | \$3.3 M          | \$3.3 M         | 4. Wildlife Conservation Society   | \$62 M           | \$235 M          |
| 5. UNESCO World Heritage Fund   | \$4 M            | \$4 M           | 5. The Nature Conservancy          | \$48 M           | \$856 M          |
| 6. Getty Conservation Institute | \$2.8 M          | \$8 M           | 6. Greenpeace                      | \$26 M           | \$26 M           |
| 7. ICOMOS                       | \$2.4 M          | \$6.8 M         | 7. Flora Fauna International       | \$12 M           | \$12 M           |
| <b>TOTAL</b>                    | <b>\$43.3 M</b>  | <b>\$63.1 M</b> | <b>TOTAL</b>                       | <b>\$524 M</b>   | <b>\$1,596 M</b> |

Funding is shown in millions of US dollars for developing and emerging countries only, 2009. Sources: Annual Reports and GHF estimates.

**Current funding for heritage conservation from international agencies, major foundations, and corporations is a fraction of what is needed to solve the crisis facing the developing world.**

The United Nation's Millennium Development Goals, the World Bank, the UN Development Program (UNDP), the U.S. Agency for International Development (USAID), the Clinton Global Initiative, and other international development programs have not tapped the potential for global heritage sites to enable poverty alleviation or sustainable regional development.

For most global development agencies, private foundations, and corporate responsibility programs, global heritage preservation is seen as a luxury rather than a necessity or core asset in poverty alleviation and development strategies.

While international giving is on the rise, it remains less than two percent of total U.S. philanthropic giving, or \$5.2 billion in 2008 versus a total of \$308 billion in philanthropic dollars, according to The Foundation Center. Less than one percent of total U.S. philanthropic funding today is available for domestic cultural heritage preservation, with philanthropic dollars for all arts, culture and humanities combined representing only 5.2 percent of overall giving, according to Giving USA. The largest international grant foundations, such as the Gates Foundation, have no available programs and funding for global heritage preservation or its development.

### Correcting the Imbalance of Funding for Cultural vs. Natural Heritage

When the UN Foundation made its \$1 billion pledge to support the United Nations in 1997, it specifically excluded support for cultural heritage conservation, while focusing hundreds of millions on nature conservation. Even though cultural heritage sites are the main economic engine for tourism and development for poor countries, most funding is devoted to nature and wildlife conservation.

The top seven nature conservation NGOs—including Conservation International (CI), Fauna and Flora International (FFI), the Nature Conservancy (TNC), the Wildlife Conservation Society (WCS), and the World Wildlife Fund (WWF)—fund over \$500 million a year for the developing world. Meanwhile, the top seven NGO funders of cultural heritage—the UNESCO World Heritage Fund, the World Monuments Fund (WMF), the Aga Khan Trust for Culture, the Getty Conservation Institute (GCI), and the Global Heritage Fund (GHF)—fund less than \$40 million annually, a 12:1 ratio.

The successful strategies designed and implemented by nature conservation organizations should be assessed and explored by international heritage conservation groups.

## Establishing a New Global Fund for Heritage

Greater technical and financial resources must be channeled to the national and local governments of developing countries for conserving their endangered cultural heritage assets. The global community should consider establishing a multi-billion-dollar Global Fund for Heritage specifically for assisting the most vulnerable countries with the most endangered and significant global heritage sites, especially those in emergency or high-risk situations facing irreversible loss.

## The International Diaspora Opportunity

The World Bank estimates that private remittances of \$350 billion to \$650 billion were sent back home by 150 million international migrants in 2008. Overseas diasporas have deep connections to culture and often are major supporters of heritage conservation efforts in their home countries.

**Targeted philanthropic, government, community and business investments can save our global heritage.**

Private philanthropy and remittances from the developed to the developing world were \$233 billion compared to government aid of \$121 billion in 2008, according to the Center for Global Prosperity.

The low recognition by major foundations, international donors, corporations, and development agencies of the importance of archaeological and heritage sites in developing countries must be addressed.

A Global Fund for Heritage focused on helping developing countries with the expertise, training, and critical seed funding can complement and support local community investment in ways that make all the difference for whether we can safeguard global heritage for the benefit of future generations.

The Global Fund for Heritage should support international experts to assist in planning, training, scientific conservation, and site policing and enforcement, while requiring integral community development and equal or better in-country matching funding from the national government and private sector.

One idea is to use the power of the antiquities market to generate funds to prevent antiquities looting. The legal market for antiquities is difficult to quantify, but the sale of a single Mesopotamian artifact for \$57 million gives some idea of how much money is involved. The demand for antiquities creates massive perverse incentives for looting of archaeological sites by signaling that a single artifact could be worth tens of millions of dollars. A piece worth thousands in New York or Tokyo may bring only \$50 to an impoverished digger in Thailand or Peru, but that is enough to lead thousands to decimate sites around the world.

Shutting down legal markets is neither feasible nor desirable, but those who buy and sell antiquities should recognize and assist in mitigating the indirect harm that their activity causes. Major market players, including auction houses, dealers, collectors, and museums, must work to create more transparency in the business of antiquities.



Baalbek, Lebanon. Photo: Troels Myrup

**The World Bank's Cultural Heritage and Urban Development Project in Lebanon is a \$50 million program focused on five UNESCO World Heritage archaeological sites and historic cities. This multi-year program seeks to increase local economic development and enhance the quality of life around these historic centers by improving their conservation and management as core goals which is rare in most development projects.**



## Recommendation 2: Reinforce Our Global Institutions

Global institutions for heritage preservation in developing countries are grossly underfunded. Supplemental funding from other governments is meager, relative to the enormous potential return on investment.

The total operating budget for the UNESCO World Heritage Center is under \$6 million annually to implement the World Heritage Convention for 911 inscribed cultural and natural heritage sites. The U.S. government made voluntary contributions of just \$694,100 in 2009 to the UNESCO World Heritage Fund towards the total budget of \$3,142,570 available, according to UNESCO reporting. This voluntary support was used to support critical planning and emergency activities at over 60 World Heritage-inscribed and Tentative List sites in 2009.

While the U.S. government is the largest overseas funder for international assistance, support for global heritage preservation is a negligible fraction of the total assistance. Over a decade, the U.S. Ambassadors Fund for Cultural Preservation, the U.S. government's primary vehicle for cultural heritage preservation overseas, has provided \$26 million to more than 640 cultural preservation projects in more than 100 countries—an average of just \$2.6 million a year.

Supplemental funding to the UNESCO World Heritage Center from Funds-in-Trust donations from Japan, France, Netherlands, Finland, and Spain is

sporadic and generally in decline as fiscal austerity measures reduce government support.

In total, the UNESCO World Heritage Center has less than \$20 million to \$30 million a year for planning, training, and emergency intervention in over 100 developing countries. UNESCO World Heritage has made incredible progress to protect our world heritage and increase the visibility of the crisis, despite being hampered by meager resources. Even fewer resources are available for the hundreds of global heritage sites without international recognition.

ICOMOS, a volunteer network of 9,000 professionals with a worldwide budget of less than \$2 million, is a primary technical advisor to UNESCO on World Heritage sites. ICOMOS was founded in 1965 as a result of the Venice Charter of 1964 and, with rare exception, each member must be a qualified practitioner in the field of heritage conservation. ICOMOS' Heritage@Risk report is an important contribution consisting of expert host country testimonials.

Both these organizations—UNESCO World Heritage Center and ICOMOS—should be reinforced now with critical new funding and a mandate to build the global heritage monitoring and emergency response systems, international expert networks, and local and regional training capabilities needed to carry out their critical work. Most importantly, both international and national institutions must have the will and ability to uphold and enforce the existing laws that are in place protecting heritage.



Nemrut Dagı, Turkey, a UNESCO World Heritage site, is at risk from severe climate and lack of scientific preservation.  
Photo: Klearchos Kapoutsis



Turkish people rally for “Keep Hands Off Hasankeyf” at Hasankeyf, Turkey. Photo: Doga Dernegi

### Recommendation 3: Increase Global Awareness of the Crisis

Most people think that heritage preservation is the responsibility of governments or the United Nations. In fact, it is often under-resourced local communities and a handful of site managers who assume this role. Many have extraordinary capabilities and potential. They just need our support.

The upcoming 40th Anniversary of the UNESCO World Heritage Convention in 2012 is a major opportunity to raise awareness and encourage hundreds of millions of travelers to give back to the developing countries and the archaeological wonders they visit each year.

**We need travelers and the tourism industry to get involved in the support of global heritage conservation across the developing world.**

### Recommendation 4: Promote New Models for Sustainable Preservation and Global Development

New models are needed to better define the economic and cultural value of heritage sites, and to guide effective and efficient conservation investments and practices; promising models are discussed here.

#### Heritage Economics

Heritage economics is an emerging field that has developed new tools to deepen understanding of the critical factors inhibiting or supporting sustainable preservation and responsible development.

Conservation outcomes in many cases can be greatly improved with better planning, scientific expertise, better governance, and the leadership of a few key individuals or communities, all of which cost relatively little in financial terms.

#### Institutional Modeling

There is a critical need for new models that can be used to better value heritage in economic and cultural terms. This better enables decision-making

for complex programs—like large historic cities and major archaeological sites—and makes investments on the ground more effective.

One of the more interesting developments in heritage conservation theory revolves around the use of institutional modeling as a framework to better understand those complex conditions—often unique to each country and culture—that can directly affect conservation outcomes. The work of Nobel Prize-winning economist Douglass North and that of economist Elinor Ostrom on Institutional Economics and Common-Pool Resources (CPR) provide promising methodologies.

### Recommendation 5: Advance Innovative Solutions and Technologies

One of the greatest challenges facing heritage conservation is the lack of critical baseline assessments, monitoring, and measurement of conservation progress. Even in developed countries in Europe or North America, there is no standard monitoring system in place to evaluate the current state of conservation of our heritage sites.

There is much we can do for the field of heritage conservation, which has traditionally been bureaucratic and underserved. Some of the more forward-looking solutions include:

- Building Early Warning and Threat Monitoring Systems
- Creating Internet-Based Expert Collaboration and Training Platforms
- Establishing Archaeological Protected Areas
- Funding Subsidies for Preservation and Responsible Development
- Promoting Sustainable Management Practices
- Integrating Communities and Heritage Preservation

### Early Warning and Threat Monitoring Systems

If we don't measure and benchmark the state of conservation of global heritage sites, we can't protect them.

The 2007 UNESCO World Heritage Center report *Challenges for the Millennium* reviewed over 2,000 State of Conservation reports. It concluded:

“One of the results of this effort has been the identification of the enormous gaps in knowledge of the World Heritage Convention, and the lack of a system of indicators to effectively monitor the changes affecting World Heritage sites.”

Today, there are no effective early warning and threat monitoring systems for endangered global heritage sites in developing countries, and only five countries today have heritage assessment systems in place.

Effective early warning and threat monitoring can be possible with the use of tools such as advanced satellite technology, imagery analysis, and change detection, combined with *on-the-ground* monitoring and Internet-based databases and knowledge-sharing.



Nineveh, Iraq. A whole swath of the central portion of this ancient walled city has been encroached upon by development. Photo: GHN and Digital Globe





#### GLOBAL HERITAGE NETWORK (GHN)

### An Early Warning and Collaborative Solutions Platform

Major archaeological and cultural heritage sites are being damaged and destroyed at an alarming rate around the globe, perhaps nowhere as quickly as in developing countries and regions with limited financial resources or expertise available.

To address this crisis, GHF has established the Global Heritage Network (GHN) to:

- Act as an early warning and threat monitoring system for endangered archaeological and cultural heritage sites in developing countries.
- Enable the collaboration of experts and conservation leaders to mitigate the threats.
- Facilitate a holistic, *Preservation by Design*<sup>®</sup> process of planning, science, community, and partnerships.

To achieve this, GHN brings together leading experts in the fields of heritage preservation, archaeological conservation, and sustainable development to help save endangered global heritage sites in the developing world.

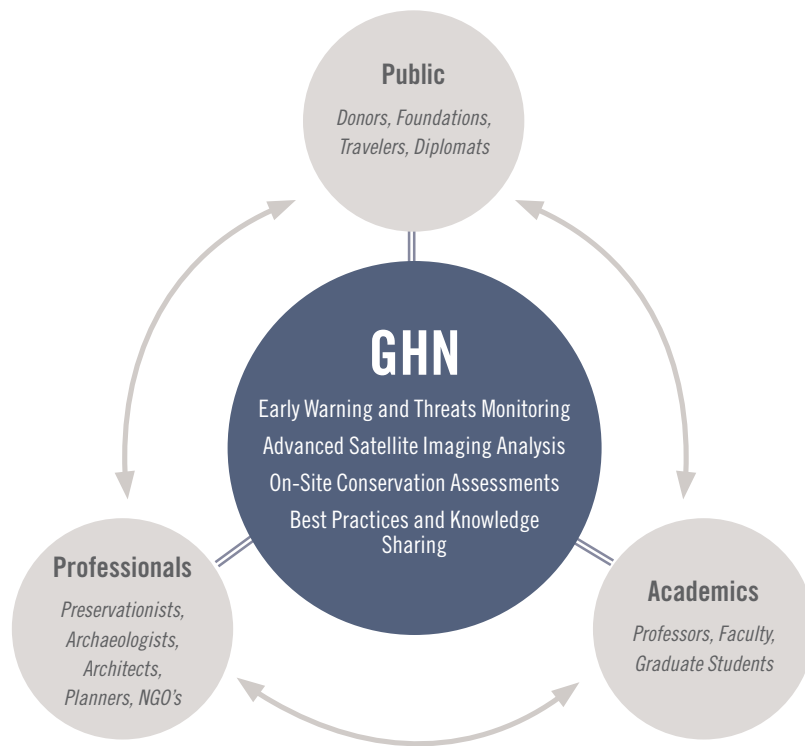
GHN enables collaboration between site teams, international experts, archaeologists, community and business leaders, and government authorities in order to save global heritage sites through the *Preservation by Design*<sup>®</sup> model of Integrated Planning, Science, Community, and Partnerships.

GHF and GHN also provide critical funding for site monitoring, site conservation assessment, planning, and investigation through the Global Heritage Preservation Fellowship Program and Site Monitoring Grants, as well as assistance with technical documentation, mapping, and conservation planning for GHF Projects.

The GHN Site Database focuses on an initial collection of approximately 500 globally significant sites in the developing world with either documented threats or that provide exemplary case studies of site preservation. Sites in the GHN database are ranked on the following threats scale: Destroyed, Rescue Needed, At Risk, Stable, and Unknown.

To join Global Heritage Network, see:  
**[ghn.globalheritagefund.org](http://ghn.globalheritagefund.org)**

Top: Mapping and surveying of Ani in Turkey by GHF's team begins a process of threat analysis and conservation planning; Middle: Indus Heritage Conference brings together experts and leaders in conservation to develop a strategy for bringing the Indus sites and Harappan civilization to the world; Bottom: GHF training and master planning enable local leaders to have professional capabilities for managing Pingyao Ancient City. Photos: GHF



### Global Heritage Network (GHN)

Leaders in conservation of global heritage sites including site directors and their teams can work directly through GHN with professionals, academics, and the public on a daily basis over many years to further their conservation and responsible development goals. GHN provides advanced collaboration and satellite imaging technology combined with the latest site planning, scientific, and management tools.

- **Internet-Based Expert Collaboration and Training Platforms**

While the best collaboration and training often happens in person and on site or in structured field training workshops, online training in heritage conservation and responsible development is an important component, as is the continuous involvement of international experts in site conservation through online collaboration, knowledge sharing, and project management systems.

- **Archaeological Protected Areas**

Archaeological Protected Areas can be a valuable tool for conserving critical archaeological and heritage resources as part of a regional-based approach to management. Like wilderness areas or national parks, Archaeological Protected Areas can be used to protect and manage archaeologically rich areas, such as cultural landscapes.

To conserve key ocean habitats, for example, the World Conservation Union suggests that Marine Protected Areas (MPAs), a new concept for most countries, should cover at least 20 to 30 percent of key ocean habitats in order to effectively conserve fish stocks and marine biodiversity. There is no similar universally accepted model for archaeological and heritage resource conservation today.

- **Subsidies for Preservation and Responsible Development**

A key underlying cause of unsustainable heritage development and poor preservation is the fact that businesses and communities often lack strong incentives to consider the long-term sustainability of heritage resources or the collateral impacts to the surrounding environment.

Government and multilateral agency subsidies to the tourism industry and rapid unplanned development on UNESCO World Heritage sites is one of the biggest destroyers of heritage authenticity and site integrity. At a very minimum, low-cost loans and subsidies should be made equally available for the preservation of those heritage resources.

- **Sustainable Management Practices**

Using a combination of approaches, some regions around the world have protected major archaeological sites, providing a clear map for the future. Strong, science-based tourism and development limits, combined with better management and economic incentives, can prevent loss and destruction of fragile heritage resources and renew previously endangered sites.

For example, in Egypt, encroachment into the Giza Pyramids has effectively been stopped, and tourists are now prohibited from climbing on the fragile monuments. To end the current trend toward overuse, heritage management leaders must embrace the use of Total Allowable Visitation (TAV) limits for global

heritage sites based on defined capacity. A wide range of disciplines—including archaeology, anthropology, conservation sciences, political science, urban planning, law, architecture, sociology, protected area management, and economics—intersect to conserve cultural heritage. As a result, conservation outcomes are affected by myriad factors, such as political will, property rights management, concentration of power, and a site's current position in its lifecycle.

Lack of appropriate legal and management systems for heritage is currently one of the main reasons many countries are not represented on the UNESCO World Heritage list. Boundaries and buffer zones should be clear and well defined. Buffer zones need to be registered on official maps and plans. There is a need for general planning frameworks including management plans and strategies for tourism/visitor management, scientific research, education, and monitoring.

- **Communities and Heritage Preservation**

A comprehensive approach considers the global heritage site as part of a much larger regional strategy with living populations and natural and cultural assets. A management plan should address the cumulative effects of tourism, development, and other activities on global heritage with all stakeholders in the broader region. Ultimately, management should ensure that the entire ecosystem around a site thrives along with the core resource itself.

## Recommendation 6: Increase Public-Private Partnerships

In the past, most private-sector leaders have shied away from heritage conservation due to its complexity and the heavy involvement of government as the primary party responsible for preservation of global heritage sites and national treasures. Governments in many developing countries have a reputation of being bureaucratic, less effective, and less stable than the private sector.

But a new breed of private-sector associations between family foundations, business leaders, and corporations has emerged to work in partnership with the public sector to save heritage. Recently, the International National Trusts Organization (INTO) was established to support heritage conservation by supporting the emergence of private-sector associations in every country through training and knowledge sharing. Backed by long-range planning and close cooperation with the government and international partners, its mission includes education, conservation, maintenance, protection, and promotion of natural and cultural heritage, and a focus on responsible, sustainable, and profitable tourism.

Creating sister site programs between developed and developing countries should also be expanded on an organized global level. The success of Chinon, France's cooperative effort to preserve and responsibly develop Luang Prabang, Laos, utilized French

architects, planners, and heritage preservation experts to help a developing country become self-sufficient in sustainable preservation.

**PACUNAM:**

### A New Model for Private-Public Partnerships

Today, 12 Guatemalan companies and foundations are working together to preserve Mirador through the Foundation of Cultural and Natural Maya Patrimony (PACUNAM). PACUNAM looks to become Guatemala's leading foundation in the preservation of Mayan natural and cultural heritage by combining the efforts of companies, businessmen, and individuals. It has committed \$3 million in in-country matching funding.

Founding members since 2006 include Progreso, WalMart Central America, Pantaleón Foundation, Cervecería Centroamericana, Banco Industrial, Claro, and Citibank. This is the first time that major industrial groups have combined forces in Guatemala to realize a major new national park and conservation program for cultural and natural heritage of the country.

From 2008 to 2012, over \$6 million in conservation funding will be committed by GHF and PACUNAM for Mirador conservation and community-led development. Due to the work of PACUNAM, the Guatemalan government is now committing major new investments in park infrastructure, social services, security, and park management. President Colom estimates the project will generate thousands of new jobs and will be a critical initiative to stop the destruction of the Maya Biosphere through deforestation, wildlife poaching, and looting.



GHF Indus Heritage Trustees and experts come together to tour the site of Dholavira in Kutch, one of India's jewels of the Harappan civilization. Photo: GHF





Top: My Son Sanctuary, one of Vietnam's two archaeological UNESCO World Heritage sites. Photo: GHF; Bottom: Local villager from Quang Nam Province. Photo: Richard Vignola

## HOI AN, MY SON, AND THE CHAM ISLANDS, VIETNAM

### Integrated Management of Multiple Heritage Sites in Quang Nam Province

The Province of Quang Nam in Central Vietnam is home to three heritage sites with UNESCO designations: the two World Heritage sites of Hoi An and My Son and the Biosphere Reserve of the Cham Islands. The provincial government has partnered with UNESCO to manage the three heritage sites and the entire province more holistically, with tourism development based on the twin pillars of sustainability and culture.

#### Planning

Increased visitor volume threatens all three sites featured in this project. In Hoi An, additional threats include flooding in the ancient town and beach erosion. The archaeological site of My Son faces degradation from increased visitation; it must be better preserved while allowing for controlled economic development. The Cham Islands have a fragile environment that cannot be developed for mass tourism; an understanding of sustainable development practices is necessary.

Another general objective is to boost Quang Nam as a stand-alone destination for international visitors and to target a higher yielding market that will bring increased economic benefit.

#### Community

The provincial authorities and local planners seem well intentioned, but sustainable tourism concepts are new to them. The influence that UNESCO and its team of consultants—led by UNESCO Hanoi's Cultural Program Coordinator—has on the local planners is significant, but will require ongoing interaction to ensure proper balancing of the needs and desires for economic development through tourism with the needs for preservation of cultural heritage and conservation of natural heritage.

#### Threats

- Flooding
- Mass tourism
- Development pressures



#### MIRADOR, GUATEMALA

### Saving Nature and Wildlife with Cultural Heritage Preservation

The Mirador Cultural and Natural System is located in the heart of the Maya Biosphere in northern Guatemala. It is home to the earliest and largest Preclassic Mayan archaeological sites in Mesoamerica and includes La Danta, the largest pyramid in the world; the basin is known as the Cradle of Mayan Civilization. According to the World Wildlife Fund, the Maya Biosphere has lost 70 percent of its forests in the last 10 years.

Establishing sustainable tourism in this area with active local community participation will provide economic alternatives to current destructive activities that include illegal logging, archaeological looting, and human, wildlife, and drug trafficking. GHF is working with the Guatemalan government, community leaders, the Foundation for Anthropological Research and Environmental Studies (FARES), and the U.S. Department of the Interior (which includes the U.S. National Park Service) to create an economically sustainable cultural and natural sanctuary.

#### Threats

- Looting
- Deforestation
- Fires
- Major logging
- Poaching
- Narcotics trafficking





Facing page, top: The summit of La Danta pyramid at El Mirador, one of the largest pyramids in the world; Middle: Fires have destroyed over 75 percent of the Maya Biosphere in Guatemala since 2000; Bottom: Looting is destroying major ancient Mayan cities such as Tintal, where more than 3,200 trenches were dug between 1998 and 2003.

This page: Mirador is one of the last refuges in Guatemala for the endangered orange breasted falcon, howler monkey, and jaguar.

See page 47 for a breakdown of nature funding compared to culture funding.



GHF's primary conservation goals for Mirador are to aid the Guatemalan government in securing UNESCO World Heritage designation, establish permanent protection for Mirador Basin, and create a sustainable protected area within 10 years.

#### **Planning**

A major goal of this project is to work with all stakeholders to prepare a site conservation and management plan that provides guidelines for a holistic and integrated approach to site preservation with the support of the government—crucial to ensuring long-term sustainability.

#### **Conservation Science**

Conservation efforts are aimed at stabilizing and preserving some of the most significant monuments within the archaeological site of El Mirador, with the complex of La Danta, the pyramid of El Tigre, and the building known as Structure 34 ("Jaguar Paw Temple") receiving particular attention with oversight and guidance provided by leaders in the field of conservation science.

#### **Community**

GHF is dedicated to ensuring that local communities benefit directly from tourism to Mirador. As part of this initiative, the Guatemalan government has agreed to improve the road to the villages surrounding Mirador, provide increased security measures for tourists, and supply electricity for rural villages surrounding the basin. The gateway village of Carmelita will serve as a model community, while a newly opened visitor center will serve as the hub for park management, education,

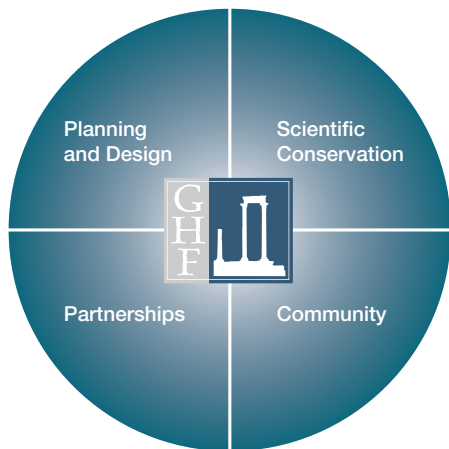
and guide services in the Mirador Basin. GHF-sponsored conservation and training employs over 300 Guatemalans each year, providing meaningful employment and an alternative to logging, poaching, looting, and other illegal activities.

#### **Quality Assessment**

GHF is measuring the success of the project plan and its long-term impacts on the site in order to improve community participation, boost site security, and protect against overuse. Specific measurements will monitor new levels of partner funding, increases in community employment, numbers of people trained in site or artifact conservation, and new business development.







MIRADOR, GUATEMALA

**Preservation by Design®**  
**Creating a Cycle of Success**

*Preservation by Design®* is GHF's 360-degree methodology to assist site conservation leaders in a multi-year organized process of community-based master planning, scientific conservation, community development, and the establishment of in-country partnerships for long-term sustainability. Using this model, interventions to protect and preserve endangered heritage sites can be more effective, targeted, and sustainable, creating a cycle of success to benefit local communities and developing countries and regions.

Facing page, clockwise from top left: Planning Map of Tintal. Photo: FARES; Dr. Richard Hansen shows latest discovery of Popul Vuh stucco friezes at El Mirador. Photo: FARES; Community and Partnerships. Photo: GHF

Using an integrated 360-degree approach, *Preservation by Design®* helps to increase the chances of success and long-term sustainability in global heritage conservation projects.

### Planning and Design

- Community Engagement
- Visioning
- Master Conservation Plan
- Site Management Plan
- Training



### Scientific Conservation

- Technical Expertise
- Scientific Planning
- Model Conservation
- Training



## A Cycle of Success at Mirador

### Partnerships

- Government
- Private Sector
- In-Country
- International
- Community
- Associations



### Community

- Stakeholder Process
- Conservation Training
- Business Training
- Guide Associations
- Community-Based Tourism



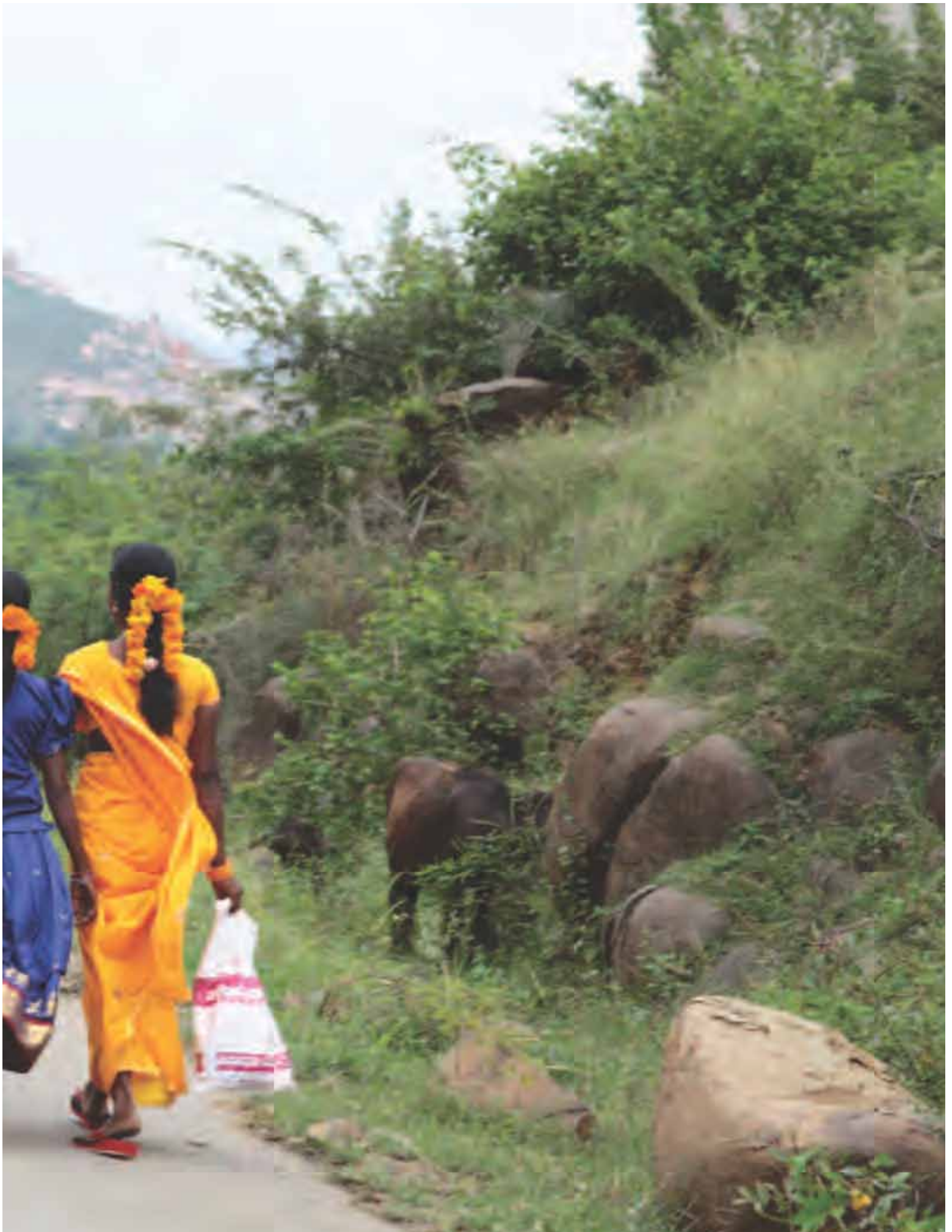
### Measuring Impact: Mirador Investment Results (2004–2009)

| Activity                         | 2004   | 2009   | Impact   |
|----------------------------------|--------|--------|--|
| GHF Funding (total)              | \$0    | \$5.0M | Provided planning, conservation and community development        |
| Partner Funding (total)          | \$0.5M | \$6.0M | Involved <i>FARES, PACUNAM, US DOI, FUNDESA, APANAC, IDB MIF</i> |
| Employment (No. of people)       | 35     | 350    | Staffed site with guards, labor, and conservation workers        |
| Training (No. of people)         | 15     | 85     | Improved guides, guards, conservation workers, and business      |
| New Businesses                   | 1      | 12     | Funded guide associations, transport, services                   |
| Tourism (No. of annual visitors) | 500    | 3000   | Tourists arriving per year to Mirador                            |
| Government Investment            | \$0    | \$10M  | Funding new road, airport, site guards, infrastructure           |

A photograph capturing a scene in a rural Indian village. In the foreground, a woman wearing a vibrant green sari and a large, bright yellow flower garland is running towards the left. Her hair is pulled back, and she appears to be in motion. To her right, the arm and shoulder of another person in a blue sari are visible. In the middle ground, a black water buffalo stands on a paved road, facing left. The background features a lush green landscape with a prominent, rocky hillside covered in dense vegetation. The sky is overcast and grey. The overall scene conveys a sense of daily life and movement in a traditional setting.

At a time when  
globalization yields  
increasingly homogenized  
architecture and culture,  
now is the moment to  
ensure that the rich and  
varied expressions of  
humanity are preserved.





## Appendix A:

### Economic Impact of Global Heritage Sites in Developing and Emerging Countries and Regions

| Top 50 Sites                                    | Country  | Domestic Visitors | International Visitors | Total Site Visitors<br>(2009 est.) | Total Revenues<br>(in \$1,000s) |
|---|----------|-------------------|------------------------|------------------------------------|---------------------------------|
| The Great Wall                                  | China    | 16,000,000        | 8,200,000              | 24,200,000                         | \$2,888,000,000                 |
| Mausoleum of the First Qin Emperor              | China    | 10,000,000        | 8,000,000              | 18,000,000                         | \$1,920,000,000                 |
| Memphis and its Necropolis                      | Egypt    | 400,000           | 2,600,000              | 3,000,000                          | \$936,000,000                   |
| Imperial Palaces of the Ming and Qing Dynasties | China    | 5,200,000         | 1,800,000              | 7,000,000                          | \$904,000,000                   |
| Historic Cairo                                  | Egypt    | 1,400,000         | 2,600,000              | 4,000,000                          | \$576,000,000                   |
| Ephesus   | Turkey   | 800,000           | 2,700,000              | 3,500,000                          | \$572,000,000                   |
| Dahshur   | Egypt    | 400,000           | 2,600,000              | 3,000,000                          | \$536,000,000                   |
| Amritsar  | India    | 4,000,000         | 1,500,000              | 5,500,000                          | \$460,000,000                   |
| Angkor  | Cambodia | 400,000           | 2,100,000              | 2,500,000                          | \$436,000,000                   |
| Pre-Hispanic City of Teotihuacan                | Mexico   | 2,200,000         | 2,000,000              | 4,200,000                          | \$432,000,000                   |
| Machu Picchu                                    | Peru     | 600,000           | 1,800,000              | 2,400,000                          | \$384,000,000                   |
| Monte Alban                                     | Mexico   | 1,300,000         | 1,500,000              | 2,800,000                          | \$352,000,000                   |
| Historic Oaxaca                                 | Mexico   | 1,300,000         | 1,500,000              | 2,800,000                          | \$352,000,000                   |
| Mitla   | Mexico   | 1,300,000         | 1,500,000              | 2,800,000                          | \$352,000,000                   |
| Abu Simbel                                      | Egypt    | 500,000           | 1,500,000              | 2,000,000                          | \$320,000,000                   |
| Ancient Thebes                                  | Egypt    | 500,000           | 1,500,000              | 2,000,000                          | \$320,000,000                   |
| Taj Mahal                                       | India    | 1,200,000         | 1,200,000              | 2,400,000                          | \$288,000,000                   |
| Petra   | Jordan   | 320,000           | 1,280,000              | 1,600,000                          | \$268,800,000                   |
| Old Havana and its Fortifications               | Cuba     | 573,986           | 1,200,000              | 1,773,986                          | \$262,959,440                   |
| Abu Mena  | Egypt    | 300,000           | 1,200,000              | 1,500,000                          | \$252,000,000                   |
| Pre-Hispanic City of Chichen-Itza               | Mexico   | 1,200,000         | 1,400,000              | 2,600,000                          | \$248,000,000                   |
| Querétaro                                       | Mexico   | 1,200,000         | 800,000                | 2,000,000                          | \$224,000,000                   |
| Medina of Fez                                   | Morocco  | 500,000           | 1,000,000              | 1,500,000                          | \$220,000,000                   |
| Mount Wutai                                     | China    | 2,800,000         | 502,000                | 3,302,000                          | \$212,400,000                   |
| Red Fort Complex                                | India    | 1,200,000         | 800,000                | 2,000,000                          | \$208,000,000                   |
| Medina of Marrakesh                             | Morocco  | 200,000           | 900,000                | 1,100,000                          | \$188,000,000                   |
| City of Cuzco                                   | Peru     | 200,000           | 800,000                | 1,000,000                          | \$168,000,000                   |
| Nemrut Dag                                      | Turkey   | 200,000           | 800,000                | 1,000,000                          | \$168,000,000                   |
| Ancient City of Damascus                        | Syria    | 200,000           | 800,000                | 1,000,000                          | \$168,000,000                   |
| Pharaonic Temples in Upper Egypt                | Egypt    | 200,000           | 800,000                | 1,000,000                          | \$168,000,000                   |
| Divriği   | Turkey   | 1,500,000         | 500,000                | 2,000,000                          | \$160,000,000                   |
| Ciudad de Zaruma                                | Ecuador  | 500,000           | 700,000                | 1,200,000                          | \$160,000,000                   |
| Old Town of Lijiang                             | China    | 2,750,000         | 250,000                | 3,000,000                          | \$160,000,000                   |

(continued from adjacent page)

Appendix A: Economic Impact of Global Heritage Sites in Developing and Emerging Countries and Regions

|  |           |                    |                   |                    |                         |
|--|-----------|--------------------|-------------------|--------------------|-------------------------|
| Kasbah of Algiers                                      | Algeria   | 500,000            | 630,000           | 1,130,000          | \$146,000,000           |
| City of Safranbolu                                     | Turkey    | 1,600,000          | 400,000           | 2,000,000          | \$144,000,000           |
| Ban Chiang   | Thailand  | 500,000            | 600,000           | 1,100,000          | \$140,000,000           |
| Amber Fort and Town                                    | India     | 500,000            | 595,000           | 1,095,000          | \$139,000,000           |
| Agra Fort  | India     | 500,000            | 590,722           | 1,090,722          | \$138,144,400           |
| Hasankeyf  | Turkey    | 400,000            | 600,000           | 1,000,000          | \$136,000,000           |
| Antiphellos  | Turkey    | 400,000            | 600,000           | 1,000,000          | \$136,000,000           |
| Medina of Tétouan                                      | Morocco   | 400,000            | 600,000           | 1,000,000          | \$136,000,000           |
| Zhouzhuang Ancient Walled City                         | China     | 1,700,000          | 300,000           | 2,000,000          | \$128,000,000           |
| Dubrovnik  | Croatia   | 100,000            | 620,000           | 720,000            | \$128,000,000           |
| My Son Sanctuary                                       | Vietnam   | 166,500            | 600,000           | 766,500            | \$126,660,000           |
| Lahore Fort and Shalamar Gardens                       | Pakistan  | 1,990,000          | 210,000           | 2,200,000          | \$121,600,000           |
| Borobudur  | Indonesia | 2,468,864          | 111,136           | 2,580,000          | \$120,981,760           |
| Champaner-Pavagadh                                     | India     | 2,000,000          | 200,000           | 2,200,000          | \$120,000,000           |
| Kiev Historic Centre                                   | Ukraine   | 500,000            | 500,000           | 1,000,000          | \$120,000,000           |
| Historic Sukhothai                                     | Thailand  | 500,000            | 500,000           | 1,000,000          | \$120,000,000           |
| Fujian Tulous  | China     | 2,000,000          | 164,200           | 2,164,200          | \$112,840,000           |
| Total - Top 50 Global Heritage Sites                   |           | 77,569,350         | 68,153,058        | 142,722,408        | \$17,477,385,600        |
| Total - Other Global Heritage Sites (approx. 450)      |           | 44,670,964         | 27,612,010        | 72,403,107         | \$7,268,988,899         |
| <b>Total - All Global Heritage Sites (approx. 500)</b> |           | <b>122,240,314</b> | <b>95,765,068</b> | <b>215,125,515</b> | <b>\$24,746,374,499</b> |

Assumes an average of 1.4 days stay per visitor and spending by domestic visitors of \$40 and international visitors of \$200.

Source: Based on Stanford University Economics Graduate Analysis by Shwetha Shankar et al, 2010.

See [www.globalheritagefund.org/vanishing](http://www.globalheritagefund.org/vanishing) to see the entire site tourism database (500 global heritage sites) with citations.



## Appendix B:

### Focusing on Developing and Emerging Countries Most at Risk with Great Heritage Potential

| Country     | 2008 International Tourist Arrivals | Global Heritage Potential | Level of Threats |
|-------------|-------------------------------------|---------------------------|------------------|
| Turkey      | 25.0 million                        | Exceptional               | Critical         |
| China       | 24.1 million                        | Exceptional               | Critical         |
| Malaysia    | 21.0 million                        | Medium                    | High             |
| Russia      | 20.5 million                        | High                      | High             |
| Mexico      | 19.3 million                        | Exceptional               | High             |
| Ukraine     | 18.4 million                        | High                      | Critical         |
| Thailand    | 14.5 million                        | Exceptional               | High             |
| Egypt       | 10.6 million                        | Exceptional               | Critical         |
| Hungary     | 8.6 million                         | High                      | High             |
| Morocco     | 7.4 million                         | Exceptional               | High             |
| Romania     | 7.2 million                         | High                      | High             |
| Tunisia     | 6.8 million                         | High                      | Medium           |
| Bulgaria    | 5.2 million                         | Medium                    | High             |
| India       | 5.0 million                         | Exceptional               | Critical         |
| Jordan      | 3.5 million                         | High                      | High             |
| Philippines | 3.1 million                         | Medium                    | High             |
| Iran        | 2.5 million                         | Exceptional               | High             |
| Cyprus      | 2.4 million                         | High                      | Critical         |
| Cuba        | 2.1 million                         | High                      | High             |
| Cambodia    | 2.1 million                         | Exceptional               | Critical         |
| Lebanon     | 1.8 million                         | Exceptional               | Critical         |
| Peru        | 1.6 million                         | Exceptional               | Critical         |
| Georgia     | 1.5 million                         | High                      | Critical         |
| Guatemala   | 890,000                             | Exceptional               | Critical         |
| Kenya       | 840,000                             | High                      | Critical         |
| Myanmar     | 780,000                             | Exceptional               | Critical         |
| Armenia     | 580,000                             | Exceptional               | Critical         |
| Laos        | 540,000                             | Exceptional               | High             |
| Nepal       | 480,000                             | Exceptional               | Critical         |
| Yemen       | 432,000                             | Exceptional               | Critical         |
| Ethiopia    | 350,000                             | Exceptional               | Critical         |
| Pakistan    | 320,000                             | Exceptional               | Critical         |
| Algeria     | 182,000                             | Exceptional               | Critical         |
| Libya       | 146,000                             | Exceptional               | Critical         |
| Tanzania    | 98,700                              | High                      | Critical         |
| Mali        | 86,000                              | High                      | Critical         |
| Bhutan      | 28,000                              | Exceptional               | Medium           |
| Iraq        | 1,800                               | Exceptional               | Critical         |

Source: UNWTO, 2009, United Nations World Statistics Pocketbook and Statistical Yearbook, GHF.

Note: While China, Russia, Turkey, and Mexico are not considered developing countries, each has regions where global heritage sites are located with high levels of poverty.

## Appendix C: Benefits and Costs of Tourism to Global Heritage Sites

| Benefits  | Costs   |
|---|---|
| <p>Financial</p> <ul style="list-style-type: none"> <li>• Foreign Exchange Earnings</li> <li>• Contribution to Gross National Product (GNP)</li> <li>• Tax Income (Bed/Lodging, Tourism, VAT)</li> <li>• Use Fees (Gate Entrance, Museum/Store, etc.)</li> <li>• Income - Business and Individuals</li> <li>• Contribution to Balance-of-Payments</li> </ul>  | <p>Financial</p> <ul style="list-style-type: none"> <li>• Site Conservation Investments</li> <li>• Infrastructure Investments</li> <li>• Training and Education Investments</li> <li>• Planning and Promotion Investments</li> </ul>  |
| <p>Employment</p> <ul style="list-style-type: none"> <li>• Jobs and Household Income</li> <li>• Opportunities for Training</li> <li>• Women Independence from Traditional or Restrictive Roles</li> <li>• Community Empowerment</li> </ul>  | <p>Employment</p> <ul style="list-style-type: none"> <li>• Often Part-time, Seasonal Jobs with Lower Pay</li> <li>• Low skilled (expatriate non-locals often occupy more skilled positions)</li> <li>• Higher workloads and Responsibilities for Woman</li> <li>• May Take Employees from other Sectors or Livelihood Activities</li> </ul>   |
| <p>Regional Development</p> <ul style="list-style-type: none"> <li>• Broader Economic Base (i.e., Diversification)</li> <li>• Inter-Sector Linkages; Multiplier Effects</li> <li>• Entrepreneurial Activity</li> <li>• Improvement of Social Services, Increased Skills and Education</li> <li>• Regional Development in Underdeveloped Areas</li> <li>• New Infrastructure, Utilities, Services Supply</li> <li>• Opportunities for Informal Sector and Small Businesses</li> <li>• Local Sourcing (e.g., buying supplies from the poor for tourism operations)</li> <li>• Funds for the Community and Charitable Giving</li> </ul>  | <p>Regional Development</p> <ul style="list-style-type: none"> <li>• Leakages and/or Negative Balance-of-Payments Effects - Greater Imports, Repatriation of Profits Out of Country</li> <li>• Opportunity Costs (e.g., livelihood conflicts, investment costs, infrastructure maintenance costs)</li> <li>• Inflation and Higher Land Prices</li> <li>• High Fluctuations in Revenue due to seasonality or economic recessions</li> <li>• Utility and Infrastructure Supply Imbalances</li> </ul>  |
| <p>Culture and Environment</p> <ul style="list-style-type: none"> <li>• Restoration of Monuments</li> <li>• Improvement of Urban and Site Environment</li> <li>• Renaissance and/or Retention of Art, Handicrafts, Dance, Music, Literature, Ceremonies, Dress, Food</li> <li>• Increased Community Empowerment</li> <li>• Reduction in Landfill Disposal from Historic Building Demolitions (up to 25 percent of many landfills)</li> <li>• Increased Community Pride</li> <li>• Enhanced Sense of Identity (National, Regional, Local)</li> <li>• Promotes Intercultural/International Understanding</li> <li>• Enhances Local and External Appreciation and Support for Cultural Heritage</li> </ul> | <p>Culture and Environment</p> <ul style="list-style-type: none"> <li>• Over-use of Heritage Resources</li> <li>• Disappearance, degradation or commoditization leading to a loss of authenticity of Art, Handicrafts, Dance, Music, Literature, Ceremonies, Dress, Food</li> <li>• Local Resentment resulting from the 'Demonstration Effect'</li> <li>• Moral Problems: Crime, Prostitution, Gambling</li> <li>• Decline of Traditional Beliefs and Religion</li> <li>• Health Problems, e.g. AIDS</li> <li>• Adverse Effects on Family and Community Life</li> <li>• Neo-colonialism, Erosion of Local Control</li> <li>• Displacement of Local Peoples</li> </ul> |

Adapted from France (1997), Brohman (1996), Weaver (1998), and Ashley (2000).

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The Editorial Committee is an international group of experts external to GHF. Its primary function was to review *Saving Our Vanishing Heritage* and comment on the validity of the general thesis, structure, and supporting evidence. Members also contributed additional facts, references, and case studies to strengthen the paper and research database. Their input will allow for a consensus on the scope, degree, and pace of damage and loss to cultural heritage sites over the last decade as well as a commentary on promising solutions.

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This report is only the beginning. With the help of concerned citizens around the world, we will raise awareness, increase targeted funding, and build the coalition of private and public sectors needed to make global heritage a priority for international development and assistance.

## Online Resources

*Saving Our Vanishing Heritage* Report and Appendices  
See [www.globalheritagefund.org/vanishing](http://www.globalheritagefund.org/vanishing)

Global Heritage in Peril— Site Backgrounds  
See [www.globalheritagefund.org/vanishing](http://www.globalheritagefund.org/vanishing)

*Vanishing* Case Studies  
See [www.globalheritagefund.org/vanishing](http://www.globalheritagefund.org/vanishing)

*Vanishing* Database— Reports and Articles  
See [www.globalheritagefund.org/vanishing](http://www.globalheritagefund.org/vanishing)

Value of Global Heritage— Database  
See [www.globalheritagefund.org/vanishing](http://www.globalheritagefund.org/vanishing)

Heritage on the Wire— GHF Blog  
See [www.globalheritagefund.org/onthewire](http://www.globalheritagefund.org/onthewire)

Global Heritage Fund (GHF)  
See [www.globalheritagefund.org](http://www.globalheritagefund.org)

Global Heritage Network (GHN)  
See [ghn.globalheritagefund.org](http://ghn.globalheritagefund.org)

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