Saving Our Global Heritage

Sustainable Preservation

GHF’s Model for Community Development-based Conservation

GHF White Paper
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Sustainable Preservation
GHF’s Model for Community Development-based Conservation

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I. Introduction

In the jungle of Northern Guatemala, just south of the Mexican border, lies a vast metropolis covering 100 square miles and once home to nearly 1 million people. Those fortunate enough to walk its streets today would find themselves beneath a thick canopy of ancient trees, surrounded by tall shapeless mounds and a cacophony of hoots and whistles from the cities’ newest inhabitants. This is Mirador, more than 2000 years old and the largest Preclassic Maya state known. And it is in peril. Nearby lies another great Maya city-state, Tikal, one of the most famous UNESCO World Heritage Sites in the Western Hemisphere and a shining example of Maya architecture, modern day conservation and sustainable economic development. And it is secure.

Like Mirador, many cultural heritage sites are threatened by a host of factors. Chief among these threats are the lack of economic opportunities for the local population. The realities of everyday life and the daily struggle for existence lead to looting, poaching, logging and slash and burn agriculture which threaten the integrity of these unique and irreplaceable cultural resources. Tikal is protected from these threats thanks to an integrated process of cultural preservation and sustainable development. The programs at Tikal have been so successful that the site generates thousands of jobs and more than $200 million of revenue for the country per year. It is to enable developments such as these that the Global Heritage Fund (GHF) was founded in 2002.

The mission of Global Heritage Fund is to save the earth’s most significant and endangered cultural heritage sites in developing countries and regions through scientific excellence and community involvement. For once a site or monument is gone; it is lost to humanity forever.

GHF has developed a sustainable methodology called Preservation by Design™, which protects historic and cultural resources by assisting in the preservation of these sites, providing financial and technical resources and creating new economic opportunities for local communities. Preservation by Design takes each selected heritage site through an integrated process of evaluation and monitoring, planning and design, community development and engagement, partnership development and conservation to provide enduring protection, management and financial support. Preservation by Design provides a methodology and model for early-stage asset development, a process that engages the various stakeholders in this methodology, local capacity and initial seed and venture capital to bring these under-valued and nascent assets to a level that warrants larger-scale social and economic development investment. This process allows GHF to avoid or mitigate many of the challenges inherent in cultural preservation, including poverty, unchecked development, mass tourism and conflict.

While the nature of and depth of involvement in each of GHF’s projects differs, one theme runs throughout: that the monuments, art and architecture of our ancestors can, if respected, bring lasting cultural, social, and economic benefits to a society. This paper discusses the major challenges to sustainable cultural heritage preservation and also identifies solutions that make preservation financially viable to local communities. Finally, this paper discusses Preservation by Design and how it provides GHF with the organizational tools and methodology to protect the past while creating new opportunities for present and future generations.
II. Threats to Sustainable Preservation

Cultural preservation and development are not without risk. Social disparities, political instabilities, weak economic conditions and natural disasters can threaten and destroy cultural heritage sites. Since the UNESCO World Heritage Convention was adopted in 1972, hundreds of significant archaeological and historic sites have been lost to mass tourism, unplanned development, looting, neglect, conflict and disaster. These threats are aggravated by institutional weaknesses that can impede any coordinated or collective action by stakeholders interested in establishing sustainable preservation programs, and can irreparably destroy a cultural resource for present and future generations.

Mass Tourism & Unplanned Development

Tourism directly and indirectly employs more than 215 million people worldwide, and generates approximately 10.4% of the world’s total economic activity. Tourism is the principal source of foreign currency revenue for 83% of developing countries and the primary source of foreign exchange in the 49 least developed countries. In fact, Asian countries, which are home to two-thirds of the world’s poor, have seen tourism receipts increase from $32.4 billion U.S. dollars in 1990 to roughly $140.8 billion U.S. dollars in 2002. While this increase in the number of tourists has been an overall positive trend for the developing world, there are also unintended negative consequences that threaten cultural and natural sites. The greatest challenge is to ensure that tourism does not destroy the very attractions that draw visitors in the first place.

Potential costs and problems associated with cultural heritage tourism can include damage to the environment, destruction and deterioration of cultural sites and monuments, escalating public administration costs, strains on infrastructure and significant declines in the quality of life for residents. Necessary expenditures to support tourism include road construction and maintenance, security, sanitation, water, electric and associated infrastructure costs and increased services to maintain cultural and environmental assets, but in many developing countries, rapid growth of tourism, unplanned development, population growth and expansion of agriculture quickly and irreparably overwhelm existing social and economic systems. Furthermore, many countries lack the institutional capacity necessary to insure protection of heritage assets over the long-term. There exists a need to overcome weaknesses in institutional and organizational capacities, both on the national and local levels, and to create strong and enforceable policies and laws to insure adequate protections for core archeological sites and their buffer zones.

Examples of negative impacts can be seen at the World Heritage Sites of Machu Picchu, Peru and Angkor, Cambodia. At Machu Picchu, where yearly visits by tourists have nearly doubled in the past ten years, conservationists have advised UNESCO’s World Heritage Committee that landslides, fires and haphazard development are threatening the site and that unregulated growth, including a boom in hotel and restaurant construction in the nearby town of Aguas Calientes, is putting pressure on erosion-prone riverbanks resulting in slope instability and water quality issues. According to heritage experts carrying out restoration work at the temples of Angkor, one of the largest religious cultural heritage sites in the world, an increasing number of new hotels and other urban development are drawing so much groundwater from beneath the site that experts

2 Harris R., Vogel D. (2002): E-Commerce for Community Based Tourism in Developing Countries.
believe that the foundations of the site are in danger of collapse. In addition, the nearby town of Siem Reap is feeling the effects of increased pollution and the loss of historical structures as new, modern amenities are built to attract and serve tourists.

Looting & Neglect

While preservation initiatives can deliver the necessary financial and technical management capacity to conserve cultural heritage assets, successful long-term sustainability is ultimately dependant on local community engagement and stewardship. In many communities around the world, the daily struggle for survival means using any and all resources at one’s disposal. Often, this means looting or otherwise degrading nearby cultural heritage sites.

Looting can take on more than one form. In most cases, local residents, in an effort to supplement their incomes, will exploit cultural sites for artifacts and other marketable items to sell or will work as labor for professional looters who sell plundered artifacts on the world market. In other cases, looters use materials from sites to construct their homes and businesses, a practice that can be just as destructive as looting for profit. Many of those looters know exactly where to dig and use crude tools and excavation methods without regard to the damage done to the site and its treasures.

In the ancient border city of Kars, Turkey, the Kaleici district is the historic heart of the city, Ottoman, Armenian and Russian structures, some dating from as far back as the 10th century, lay in ruins, sharing the broken landscape with contemporary squatter houses and shacks. Closer inspection of the dilapidated historic structures in the Kaleici District revealed that local squatters had literally pillaged the historic monuments to provide the basic materials for their shelters. The occupants of these squatter homes are the uneducated and elderly members of society with no access to electricity, gas, sewage or other modern amenities. This very stark economic reality clearly demonstrates that sustained preservation is directly tied to local stewardship and economic conditions. GHF’s successful revitalization program for this historic district included socio-economic components designed to address these issues and encourage a preservation ethic among the local community.

Conflict and Natural Disasters

Conflict can threaten cultural sites in numerous ways. At best, normal services such as security, maintenance and management can be disrupted for long periods of time. At worst, conflict can inflict physical damage to monuments, buildings and artifacts. This is the case with the ancient ziggurat at Samarra, in Iraq, where invading forces, concerned that the monument was being used as a military lookout post, destroyed its top in an air strike.

Then there is the damage caused by cultural and religious conflicts, as in the case of the 1500 year old Bamiyan Buddha statues that were destroyed by the Taliban in 2001. Intangible cultural heritage can also be damaged; festivals, religious events and other traditional activities are often severely disrupted and often even terminated during times of war.

Even though conflicts have closed borders between nations, frequently the combatants share cultural roots. This common cultural link between neighboring states has the potential to transcend disputes and even outright war. A case in point is the famous Mostar Bridge in Bosnia, which was destroyed in the conflict between the region’s Croat and Muslim populations. The
restoration of this bridge after the war was an important element in the process of peace building. Neighbors such as Turkey and Armenia, Thailand and Cambodia, India and Pakistan, and Israel and Lebanon have a shared cultural and historical heritage that offers the potential for cross-border cooperation in conservation and restoration projects and could potentially build a political bridge to further dialogue.

Natural disasters are another major threat to the survival of cultural sites and monuments, but by their very nature are difficult to predict and to protect against. The ancient Iranian city of Bam, famous for its mud brick old city and magnificent fortress, was leveled during the catastrophic 2003 earthquake. Earthquakes, fire and flood are the most common and unpredictable of these threats, and there are precautions that can be taken to minimize damage. Common safety measures include: clearing defensible space to prevent fire damage, reinforcing delicate structures at risk of collapse in earthquakes and building dikes and drainage systems to defend against flood. Nonetheless, the very nature of natural disasters means that risks to cultural heritage sites cannot entirely be mitigated.
III. Opportunities for Sustainable Preservation

The majority of inhabitants in developing nations, particularly in rural areas, are often directly dependant on natural or cultural resources for their livelihood. The realities of everyday life and the daily struggle for existence preclude long-term and sustainable investments in the future, including the preservation of cultural or natural assets. Growing global concern over poverty has increased pressure on preservationists to find ‘win-win’ solutions for preserving cultural assets without ignoring the plight of nearby communities. For preservation projects to succeed, it is imperative to address the root social and economic factors that frame human relationships with cultural heritage sites.

Effective and sustainable preservation of cultural assets requires a strategy that makes preservation economically beneficial to local stakeholders and empowers them to become stewards of these assets over the long term. To ensure sustainability of cultural heritage assets, it is necessary to define a strategy involves all stakeholders, from the local, national, regional and international communities in a manner that is participatory and transparent.

The massive expansion of cultural tourism in the past decade has been fueled by the desire to experience firsthand the varied cultural and natural characteristics of different countries, their history and their people. This trend has provided many benefits directly to stakeholders and has proven to be an important revenue source for conservation. The continued interest in this type of tourism offers a tremendous opportunity to not only provide economically for local communities, but also to foster local stewardship and empowerment.

Cultural Assets

Cultural heritage sites are precious reminders of some of the world’s most socially, politically, and technologically advanced ancient civilizations. GHF believes that a number of strategic sites around the world have the potential to be sustainable assets, providing economic and social benefits to under-developed regions with few existing economic assets available for development. The existence of cultural heritage sites in resource poor countries with high levels of poverty provides a unique investment opportunity. Sustainable heritage preservation improves the economic security and income opportunities for impoverished people by investment into pre-existing assets and communities and by empowering these same communities with a sense of purpose.

Small initial investments in world heritage assets can leverage significant economic benefits on a local, regional and sometimes even on national level, leading to self-sustaining economic growth. Examples of world heritage sites that have generated a substantial income for their host countries include Angkor in Cambodia, the historic Sanctuary of Machu Picchu in Peru, and Tikal National Park in Guatemala.

It is clear that the success of preserving our global cultural heritage is not merely a function of financial or economic investment, but requires implementation of a methodology encompassing several essential and interrelated actions to lay the foundation for long-term sustainability. Global Heritage Fund calls this *Preservation by Design*. 
Global Heritage Fund (GHF) was established in 2002 with the mission to save endangered world heritage sites in developing countries. The *Preservation by Design* methodology was developed to provide the analysis, planning, expertise, training, education, conservation, enforcement and stewardship required to foster sustainability of a particular cultural site, and this methodology can be adapted to fit the unique needs of a community.

Often times the largest capacity constraint is the lack of an organization to manage this process from the beginning, to lay the foundation for sustainable success and to act as a process facilitator and negotiator and also a catalyst for increased participation by other organizations. While GHF’s financial resources for conservation and development can seem small in relative terms to larger government and development institution funding, early stage investment can lead to significant impact multipliers as GHF investments per dollar tend to generate cascading cultural, economic and social benefits all with a direct bearing on sustainable heritage conservation.

Underlying GHF’s methodology and model for sustainable world heritage preservation are some important assumptions:

- Developing countries are home to many UNESCO World Heritage Sites
- Cultural heritage sites are non-renewable economic assets
- Underdeveloped regions have very few economic alternatives to subsistence agriculture, nature and culture
- Community participation is imperative to long-term sustainable preservation
Partnerships are required for scale, sustainability and critical mass

Preservation by Design is a dynamic process to guide sustainable heritage preservation from untapped cultural assets to thriving and protected cultural resources. The core principles of Preservation by Design include a synthesis of:

- Evaluation and Monitoring
- Community Engagement and Development
- Planning and Design
- Scientific Conservation.
- Partnership Development

While GHF engagement on a site must start and end with evaluation, the other core principles of Preservation by Design do not follow a linear process; rather these components are interdependent and occur simultaneously throughout the project.

The steps taken in the Preservation by Design process are as follows:

**Evaluation and Monitoring**

Prior to GHF’s involvement in any project, a comprehensive evaluation must be undertaken of the site, the local communities, development conditions and constraints, infrastructure and any potential risks. The factors that can impact the sustainability of a project include the site’s cultural and historical significance, levels of financial and technical capacity available for preservation and the potential engagement of the local community. In selecting potential new projects, GHF believes the following criteria to be essential to long-term preservation:

- Involve an endangered World Heritage Site (Inscribed, Tentative List or Potential);
- Located in a developing country or region;
- Strong existing or potential project team leader in place;
- Existing plan or the potential for the development of an effective conservation plan;
- Potential for sustained preservation from the participation and support of the surrounding community.

In addition, GHF also looks for the following factors to be present during project selection:

- Site needs to be “at risk” or “in danger”, but have the potential for adequate protection and management systems to ensure its security;
- Potential for co-operation with relevant public and private sector organizations and institutions;
- Eligible for financial support from national and international sources or possess an existing fund raising plan in place; and
- Located in a country with enough political and social stability to allow the site to be developed and preserved.

GHF’s evaluative visits to prospective sites present an important opportunity to meet with local, regional and national stakeholders and to identify opportunities and risks. These missions help
to identify appropriate in-country partners, weaknesses in national regulations and means of enforcement regimes and the overall suitability and receptiveness of the host country to the project. Finally, these missions allow GHF to determine the willingness of local communities to participate in and become the long-term stewards of these cultural heritage sites.

During project implementation and following project completion, GHF monitors the direct and indirect impacts attributable to its involvement. This process aids in evaluating the project plan and helps guide changes during the work cycle which assure that the project is implemented effectively and efficiently in line with its objectives and that changes in design, necessitated by evolving conditions on the ground, are vetted and approved in a timely manner. GHF measures the success of the project plan and its long-term impacts on the site and uses these lessons to improve community participation, improve site security, protect against overuse, and other threats. At the same time the process increases GHF’s knowledge of best management practices for future projects.

GHF measures the impact from its conservation, planning and community development investments. The measurement of impacts from conservation and planning are highlighted in the GHF White Paper titled Sustainable Preservation: Scientific Conservation and Master Planning for Sustainable World Heritage Preservation in Developing Economies. GHF measures the ‘hard’ development impacts discussed in the section below on Community Engagement and Development. These can include new levels of partner funding, increases in community employment, numbers of people trained in site or artifact conservation, and new business development as seen from the tables below on the GHF Kars and Mirador projects.

**Americas**

<table>
<thead>
<tr>
<th>MIRADOR, Guatemala</th>
<th>2004</th>
<th>2009</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GHF Funding (total)</td>
<td>$0</td>
<td>$5,000,000</td>
<td>Planning, conservation &amp; community</td>
</tr>
<tr>
<td>Partner Funding (total)</td>
<td>$500,000</td>
<td>$6,000,000</td>
<td>FARES, PACUNAM, US DOI, FUNDESA, APANAC, IDB MIF, Counterpart International</td>
</tr>
<tr>
<td>Employment</td>
<td>35</td>
<td>350</td>
<td>Guards, labor, conservation workers</td>
</tr>
<tr>
<td>Training</td>
<td>15</td>
<td>85</td>
<td>Guides, guards, conservation workers, business</td>
</tr>
<tr>
<td>New businesses</td>
<td>1</td>
<td>12</td>
<td>Guide associations, transport, services</td>
</tr>
<tr>
<td>Tourism</td>
<td>500</td>
<td>3000</td>
<td>Tourists per year to Mirador</td>
</tr>
<tr>
<td>Government Investment</td>
<td>$0</td>
<td>$10,000,000</td>
<td>New road, airport, site guards, infrastructure</td>
</tr>
</tbody>
</table>

Table 1: GHF impact in Mirador, Guatemala.

**EMEA**

<table>
<thead>
<tr>
<th>KARS, Turkey</th>
<th>2003</th>
<th>2006</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GHF Funding (total)</td>
<td>$0</td>
<td>$450,000</td>
<td>Planning, conservation &amp; community</td>
</tr>
<tr>
<td>Partner Funding (total)</td>
<td>$20,000</td>
<td>$500,000</td>
<td>Kars municipality</td>
</tr>
<tr>
<td>Employment</td>
<td>10</td>
<td>40</td>
<td>Guards, new business, conservation workers</td>
</tr>
</tbody>
</table>
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Training 0 30 Planning and conservation
New businesses 0 10 Hotels, restaurants, transport, services
Visitation 40,000 70,000 Tourists per year through Kars city
Tourism 0 300,000 New community center
Government Investment $500,000 $2,000,000 New streets, historic restoration, new airport

Table 2: GHF impact in Kars, Turkey.

Asia & Pacific

<table>
<thead>
<tr>
<th>LIJIANG, China</th>
<th>2002</th>
<th>2006</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GHF Funding (total)</td>
<td>$0</td>
<td>$275,000</td>
<td>Planning, conservation &amp; community</td>
</tr>
<tr>
<td>Partner Funding (total)</td>
<td>$10,000</td>
<td>$300,000</td>
<td>Lijiang Ancient Town Management Committee (LATMC), home owners</td>
</tr>
<tr>
<td>Employment</td>
<td>2</td>
<td>300</td>
<td>LATMC, labor, conservation workers</td>
</tr>
<tr>
<td>Training</td>
<td>0</td>
<td>300</td>
<td>Restoration and management</td>
</tr>
<tr>
<td>New businesses</td>
<td>n/a</td>
<td>n/a</td>
<td>Significant increase due to increasing tourism</td>
</tr>
<tr>
<td>Tourism</td>
<td>500,000</td>
<td>2,000,000</td>
<td>Tourists per year to Lijiang</td>
</tr>
<tr>
<td>Government Investment</td>
<td>$0</td>
<td>$15,000,000</td>
<td>Demolitions and authentic new construction</td>
</tr>
</tbody>
</table>

Table 3: GHF impact in Lijiang, China.

Community Engagement and Development

To be successful, sustainable preservation must be grounded in community-based conservation. Community development seeks to empower both individuals and groups by providing them with the resources they need to effect change in their own communities by instilling local stakeholders with a vested interest in the long-term preservation of a site. Therefore GHF’s community development work aims to utilize community engagement and development to support project sustainability and thus utilize the economic value of cultural heritage sites to contribute to the development potential of local communities.

Dialogue and discussions with local government, civic leaders and community organizations throughout project evaluation are necessary to determine the receptiveness of the community to a cultural preservation project. Assessing the local community’s stewardship potential over time is also important since GHF involves key local community stakeholders in project planning and design to ensure that the project’s objectives and plan are attuned to local sensitivities and meet the needs of the target community.

GHF has adopted a quasi-venture method for our projects by investing in planning, community engagement, emergency conservation and building local conservation capacity. These small but early-stage investments help GHF to build understanding on the local environment and to gain the trust of local people. GHF’s tolerance for risk gives many communities an opportunity they otherwise would not have and allows GHF to work in riskier environments than many other donors would. If GHF’s initial involvement is successful, we work through various stages of investment that eventually lead to co-investment by other stakeholders and institutions. GHF’s method for community development investments can be seen below in Table 4.
During project implementation, financial and technical investments by GHF and its partners can then be oriented to meet the requirements of the community and help foster necessary the stewardship of cultural assets. Development benefits include increased employment levels, new local businesses, enhanced revenue capture and income diffusion to local communities and new investments in physical and social infrastructure. Additionally, GHF attempts to measure and understand the less tangible indirect benefits of cultural heritage preservation such as national pride, social cohesion and involvement of community stakeholders.

Table 4: GHF model for community development investments

<table>
<thead>
<tr>
<th>PHASE I SEED</th>
<th>PHASE II ANGEL</th>
<th>PHASE III VENTURE</th>
<th>PHASE IV PUBLIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHF Investment</td>
<td>$10K-$20K</td>
<td>$25K-$75K</td>
<td>$100K-$500K</td>
</tr>
<tr>
<td>Partners</td>
<td>Local NGOs</td>
<td>Local NGO, Local Govt, National Corporations</td>
<td>Foundations, National Corporations &amp; Bilateral institutions</td>
</tr>
<tr>
<td>Assessment</td>
<td>Community socio-economic assessment</td>
<td>Regional and national assessment</td>
<td>Regional and national assessment</td>
</tr>
<tr>
<td>Community Capacity</td>
<td>Hire community development manager, participatory platform</td>
<td>Build CBO capacity and leadership.</td>
<td>Established CBO with active participation</td>
</tr>
<tr>
<td>Community Impacts</td>
<td>Training &amp; capacity building, marketing &amp; promotion</td>
<td>Guide associations, visitor/community center; small business development</td>
<td>Increased SME development, social infrastructure development, site management plan</td>
</tr>
<tr>
<td>Exit Strategy</td>
<td>Short-term and long-term funding analysis</td>
<td>Larger strategy, partner integration and prospectus</td>
<td>Financial &amp; partner buy-in for Phase IV</td>
</tr>
</tbody>
</table>

GHF’s targeted project development opportunities can be classified as “Hard” and “Soft.” “Hard” community development are those projects that are designed to create jobs and build infrastructure, while “soft” community development are programs that offer educational prospects, vocational training, marketing and business capacity development. GHF and its partner organizations have tackled numerous development opportunities in both areas. Among “hard” opportunities, projects have included: the hiring of project employees such as conservators, laborers, guides and guards, enterprise development for activities related to tourism (such as boutique hotels or restaurants), development of handicraft and other cultural industries (such as traditional woodcarving or tribal rugs), and the construction of infrastructure and tourism facilities (such as a new airport, road, museum or visitor center). “Soft” opportunity projects have included activities such as: language instruction; business and job training; broadening access to capital for small business; promotion and marketing of sustainable tourism; expansion of general educational opportunities; and building capacity for larger pools of economic and social development funding.

These “hard” and “soft” development opportunities are most often undertaken on a regional scale and thus lay a strong foundation to support the improvement of local communities and serve to catalyze larger partnerships with other organizations that help to increase the project’s scale and build critical mass for further conservation and development around cultural assets.
Planning & Design

Planning provides a dynamic framework to guide conservation of archaeological and cultural heritage sites in relation to their urban and natural surroundings and helps identify potential opportunities for community engagement and development, site protection, control and development for long-term preservation. In creating a master plan for each project, GHF establishes the identity, history, authenticity and value of the site and defines the goals and objectives of the project. The process also seeks to identify and attract both technical assistance and financial partners and to raise local capacity for effective planning and management of cultural assets.

One of the major functions of a site master plan is to identify site monuments and structures at most risk and in critical need of conservation and restoration. Based on priorities established in the plan, GHF undertakes conservation of the most high priority monuments as models for ethical and sustainable conservation. The plan also outlines the methodologies and inputs required for the rehabilitation of each structure. It forms the basis for designation of a site as a protected national park, monument or preserve, and also provides guidance in all archaeological research and conservation work.

A project master plan cannot cover all aspects of a GHF site prior to the start of a conservation program. New elements may be added to the project as the master plan is adapted to changing conditions, new information, changes in stakeholders or their views or the addition of new goals. This flexibility must be incorporated into the design of a project plan. Community development will also evolve as the capacity of local communities increases following the implementation of individual components of the project.

GHF also undertakes extensive work on the development of site management plans. The aim of a management plan is to establish guidelines that will ensure the sustainable development of the site within the framework of internationally accepted conventions and detail specific requirements such as, physical and statutory protection, buffer and protective zoning, access and visitor control and site definition. These management plans integrate archaeology with the social, natural and man-made environment; identify sustainable management practices for the site that are appropriate and relevant to the region.

Scientific Conservation

GHF project teams employ the latest scientific conservation principles and restoration techniques including the use of native materials, reversibility, avoidance of inappropriate reconstruction, careful use of anastylosis and authentic preservation practices in accordance with ethics and authenticity as set forth in the Venice Charter for the Conservation and Restoration of Monuments and Sites and their subsequent charters and guidelines.

Site planning and conservation is supported through our Global Heritage Network (GHN), an international group of leading experts in the fields of archaeology, urban and regional planning, economics, conservation, architecture and museum sciences selected by the GHF Senior Advisory Board (SAB). GHN makes available cross-functional teams supported by technology to assist each project with world-class planning, surveying, documentation, preservation, project management, to share the best practices in the field.

On-site conservation leaders and project directors can leverage the experience and expertise of
the SAB as well as GHN’s shared knowledgebase of best practices in planning, conservation, training and tourism management. GHF is developing a common toolset of technologies to aid in archaeological research is available to all GHF Project teams and GHN experts throughout the conservation process.

However, in conjunction with GHF’s network, local and national experts are utilized as much as possible to develop local capacity and local organizations and businesses and often contracted to perform much of the work. This serves the double purpose of building local engagement and stewardship while promoting industries related to heritage conservation.

Partnership Development

GHF’s *Preservation by Design* stresses the importance of partnership development to ensure the success of each project. During project implementation, there are numerous opportunities for organizations, governments and private industry to invest in projects that are related to their areas of expertise or interest. Such partners include civil society organizations, local and federal government agencies, foreign government agencies, multinational corporations, local businesses, international financial institutions and local and international non-profit organizations. As a non-governmental organization (NGO), GHF has the ability to attract partnerships from both the public and private sectors. Partnerships with governments, the private sector, NGO’s, and development institutions such as the World Bank, United Nations Development Programme (UNDP), or Asian Development Bank (ADB) can provide capital funds for capacity building, training, business loans to entrepreneurs and microcredit. Additionally, larger investments can be made in physical infrastructure such as roads, power, water and sewage and social infrastructure projects such as educational and health.

Because many early stage risks have been reduced through GHF’s process of assessment, planning, funding and expertise, many organizations with specific organizational and financial capacities are attracted to working with GHF on heritage projects. GHF’s early-stage intervention and methodology provide significant levels of comfort to potential partners because the projects have been vetted and planned with community engagement and participation firmly in place. Such is the case in Pingyao, China and Mirador, Guatemala where larger institutional players such as the Asian Development Bank and the Inter-American Development Bank, have invested substantial financial and technical resources into economic development opportunities and around GHF’s cultural preservation projects.

In *Preservation by Design*, it is imperative that preservation efforts ultimately be led by citizens of the nation in which the site is located and that it is equally important that stakeholders in these countries be inspired to provide matching funds. GHF’s goal is to work with a community and a site for a limited period of time, to demonstrate opportunities for further investment and to lay the foundations for long term sustainability and success among local stakeholders.
V. Conclusion

The world’s rich and diverse cultural assets are under threat from neglect, encroaching development and natural causes. There is clearly a global need to care for the heritage of the past, and to do so in a responsible manner that provides for present and future generations. For many people living in poor and remote areas of the world, cultural and natural assets provide one of the few paths to development. From tourism to conservation, investments in cultural heritage and related industries have the capacity to generate a wide range of local and regional economic activities that create prosperity, generate pride and improve quality of life.

National governments, international corporations and multi-lateral development institutions have significant capital resources to invest in the development of cultural assets to bring large-scale socio-economic benefits to regions. The real challenge lies in crafting a model and methodology for the provision of early stage financial and technical assistance investment which will provide the basis, and will provide a level of comfort for such capital resources to be mobilized.

GHF has pioneered and refined a methodology that promotes sustainable heritage preservation and economic development by fostering cooperation between stakeholders and key partners. This approach seeks to empower local communities, and to provide the economic justification for long-term site preservation. GHF recognizes that local conditions are an integral part of the developmental process and that conservation and development must in essence be “homegrown.” Without the support and knowledge of local communities, the successful long-term preservation of a cultural heritage site is doubtful. GHF’s involvement adds unique value to a site’s development as it creates a platform for a partnership to conservation experts, local stakeholders and investors.

GHF’s Preservation by Design is critical to organizational and global development with reference to cultural heritage sites and conservation. With a sustainable and scalable model, proper funding, and governance, many threatened cultural sites throughout the developing world can be saved in a manner that inspires, educates, empowers, and provides for some of the world’s poorest communities. While there are a host of organizations that can help support and develop cultural sites, GHF fills a unique role with its focus on site selection, preparation, and early stage investment. With increased funding and partnerships, Global Heritage Fund can play a vital role in developing and protecting cultural sites in developing countries to the benefit of all mankind.

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Appendix 1:
Case Study: Pingyao Ancient City, China

“This is not the China of the headlines: the China of six-lane ring roads, Trump-like shopping plazas and Olympian architectural aspirations executed by international gold-medal architects. But in a country that is reinventing itself more rapidly than any other in modern history, whisking away thousands of historic buildings in the process, the precarious survival of Pingyao, a rare repository of Ming and Qing vernacular architecture and urban aesthetics—sadly in poor repair—may be the most novel development of all.”

Patricia Leigh Brown, Architectural Digest, December 2007

Pingyao is one of the last remaining examples of ancient walled cities in China. Located in Shanxi Province, the city was first built during the Western Zhou Dynasty prior to 782 B.C., developed into a Chinese mercantile center during the Qing and Ming Dynasties and by 1823, had become the banking capital of China. Today, Pingyao is the most well preserved of China’s two remaining walled cities and in 1997 was named a UNESCO World Heritage site. Within the ancient city’s 1.3 square mile (2.25 square kilometer) footprint are 1000’s of residential courtyards, temples and businesses that impart the sensation of stepping into a bygone era.

Despite the city’s long and storied past, today’s 35,000 contemporary residents of Pingyao’s Ancient City live far from the prosperous coast and thus suffer significantly from underemployment, out-migration of youth and a lack of modern amenities. In 2009, Pingyao is expected to receive 1 million visitors, but most of these will only spend a couple of hours in the city and thus spend very little. Overall, the revenue captured by local businesses, residents and the municipal government is limited, thus leaving Pingyao without the necessary funds for the upkeep of its major temples and the development of other areas in and around the ancient city.

In an effort to protect Pingyao’s treasures from the negative impact of unplanned development and destructive economic activities, GHF is working with the city government and Shanghai’s Tongji University’s College of Architecture and Urban Planning to develop an integrated conservation and development plan incorporating numerous stakeholders to ensure the preservation of Pingyao’s Ancient City. GHF provided the expertise and co-funding necessary to complete the city’s first Master Conservation Plan which focuses on defining cultural assets and setting appropriate buffer zones, enabling consensus building, establishing engagement with key stakeholders, highlighting community and economic development opportunities and defining the appropriate balance between conservation and tourism-related business opportunities.

In 2006 and 2008, GHF organized visits by delegations of Chinese stakeholders to model preservation projects such as Washington DC, Colonial Williamsburg, Quebec’s walled city, The Presidio and Alcatraz Island. GHF has also facilitated relationships between government officials, planners and conservators so that they may better understand the administrative and site management decisions that they will have to make and is developing a new Pingyao Cultural Heritage program to revitalize traditional arts, crafts and architectural preservation with each of the city’s major community wards. In addition, GHF is funding a $1.2 million conservation and development program to restore core heritage assets, broaden opportunities for visitors and...
involve segments of the local population who have traditionally been focused on agriculture.

GHF’s involvement in Pingyao is building a foundation for sustainable heritage preservation through community engagement and the provision of financial and technical capacity. Perhaps more importantly, GHF serves as a facilitator and catalyst for development organizations to become involved under a master conservation plan.
Appendix 2:
GHF Case Study: Banteay Chhmar, Cambodia

“At Banteay Chhmar the whole wall disappears. It's as if you have Notre-Dame de Paris and somebody comes and starts to cut off all the pediments. You could say it is unfortunately one of the worst damages in the history of the looting of Cambodian temples.”

Sébastien Cavalier, UNESCO Cambodia, New York Times, April, 1999

Banteay Chhmar (The Citadel of the Cats) is one of the great architectural masterpieces of Southeast Asia and the Khmer Kingdom’s epic Angkorian Period. Located on the royal road to Pimai, it is one of Cambodia’s top listed sites for UNESCO World Heritage nomination. Banteay Chhmar was built at the end of the 12th Century with temple designs similar to Angkor. A one-kilometre enclosure wall surrounds a magnificent temple carved with detailed bas-reliefs that tell the story of the Ancient Khmer Empire depicting royal processions and battle scenes with the Kingdom of Champa.

The ruins of Banteay Chhmar are located in a remote area in northwest Cambodia that was seldom visited until the Khmer Rouge period, when the site became a battleground and was subject to heavy looting. The looting became so prolific that in 1999, Thai police intercepted trucks near the Cambodian border carrying 117 heavy stone pieces that were boldly removed from the bas relief wall of Banteay Chhmar - one of the boldest heists in Cambodia's long history of looting. The fast-growing jungle that has enveloped its temples, palaces and carvings over the past 800 years has caused further damage to the site. Because of the dual threats of rampant looting and nature’s destructive power, Banteay Chhmar is in critical need of conservation and protection, and local communities must be an integral part of these efforts to ensure long-term success through proper management, master planning and increased protection.

Currently, 10% of Cambodia’s annual GDP comes from tourism, with over 2 million arrivals generating approximately $1.4 billion in revenue. But unrestricted development is threatening the cultural and natural environment that draws tourists to places such as Banteay Chhmar. Currently, the focus of tourism is on the protected area of the renowned Angkor Temple complex and Cambodia’s lesser-known, yet equally exquisite, temple complexes are relatively unknown. The result is that very little of the revenue generated by tourism gets spent outside the capital and the Angkor area. Furthermore, there is a lack of community engagement in the vicinity of Angkor so that the surrounding province of Siem Reap hardly benefits financially.

GHF’s project at Banteay Chhmar is designed to address these problems by using solutions which will engage the local community while preserving the site of Banteay Chhmar in its most natural state as a magnificent ruin. In partnership with the Royal Cambodian Government’s Ministry of Culture and Fine Arts, GHF is undertaking conservation of Banteay Chhmar’s exceptional bas reliefs, opening the site for tourists, and developing sustainable tourism for the benefit of the local people. GHF’s early stage investments in community-driven projects at Banteay Chhmar are building capacity both for conservation and tourism, also in the surrounding areas, as well as tightening enforcement.
Appendix 3:
Case Study: Kars, Turkey

“With average annual incomes of only $823, Kars is amongst Turkey’s poorest and most neglected provinces. Yet before the cold war Kars was among the young republic’s most progressive places. It is vividly evoked in “Snow’ a novel by Turkey’s most famous writer, Orhan Pamuk”

The Economist - June 17th, 2006

The lands surrounding the Black Sea have some of the greatest diversity and density of cultural heritage assets of any region in the world. The border areas are particularly blessed in this regard, as they have been key crossroads in the ebb and flow of civilizations and peoples for millennia. But another, more recent legacy - that of ethnic conflicts, the Cold War and political divisions – has left much of this rich heritage forgotten in often remote and underdeveloped border areas. There is a pressing need to preserve the unique cultural and historical legacy of this region in a coherent and coordinated way that will bring direct economic and social benefits to both present and future generations.

From 2003 to 2007, the Municipality of Kars, the Global Heritage Fund, the NGO Anadolu Kultur and the Turkish Ministry of Culture and Tourism collaborated to restore and revitalize the historic core of Kars – a city that retains much of its historic architecture and street patterns from the Ottoman Period (1580-1879). This district was gradually abandoned following the construction of the Russian portion of the city in the late nineteenth century, and has remained economically depressed, with sub-standard housing, deteriorating infrastructure and a lack of basic services. In 2004, in partnership with the Kars Municipality, GHF co-funded the creation of a Master Conservation Plan for the Kars historic district. Developed by a team of Turkish architects and city planners from Middle East Technical University (METU), this plan focuses on community and economic development, expansion of tourism, and the restoration of historic structures.

Foremost among these activities is the restoration of the city center. Hamam baths, Ottoman period homes, Balerbeye palace, the Kars citadel and the childhood home of Namik Kemal – a renowned Turkish poet and author- have been or are currently being restored. Namik Kemal’s former home has become a modern community center for the people of Kars and the surrounding region, is equipped with a lecture theatre, offices, exhibition space and a catering facility, and has created a venue for educational outreach, community events and social gatherings. Additional private investment in Kars’ historic Ottoman district is fostering the growth of boutique hotels, cafes, restaurants and shops specializing in local crafts and specialties. These restorations have boosted the tourist capacity of the city and have made the city center more attractive to visitors drawn to the nearby historical sites of Ani, Erzurum, Ardahan, Artvin, Dogubeyazit, Sarikamis and Van.

The efforts to revitalize Kars also included a range of initiatives focused on strengthening planning and promotion of tourism, encouraging the development of new small and medium-size businesses and introducing training conferences for regional businesses and community-based organizations. GHF’s efforts have aided in establishing Kars as a ‘hub’ for tourism and as a spark for regional development, and raised the region’s profile for both Turkish and international tour operators.
Appendix 4: 
Case Study: Mirador, Guatemala

“I came to the conclusion years ago that science that doesn’t bless the lives of people is sterile. It is a matter of converting science to blessing the lives of people.”

Dr. Richard Hansen, GHF Mirador Project Director

Since 2004, GHF has led the endeavor to protect and expand Mirador Rio-Azul National Park in Guatemala’s Petén region. The ancient city-state of Mirador is one of Central America’s greatest cultural and natural treasures and is located in the heart of the Maya Biosphere Reserve. The proposed national park will protect more than 800,000 acres of pristine tropical forests filled with Mayan ruins in one of the richest wildlife habitats in Central America. The Mirador Basin contains four of the largest and oldest Maya cities, all of which are larger than the nearby world renowned city of Tikal, and is surrounded by intact lowland rainforest containing massive pyramids, ornate temples, and other vestiges of the highly evolved and complex Mayan civilization. Archeological discoveries made in the Mirador Basin have led experts to identify the region as the Cradle of Maya Civilization. Today these cities lie abandoned, buried beneath 2000 years of jungle growth.

The Mirador Basin is under major threat from deforestation related to agriculture, artifact looting, wildlife poaching and illegal logging. Like nearby Tikal National Park, Mirador’s survival will depend on sustainable tourism to offset economic pressures from both local agricultural communities and the international market for antiquities and tropical hardwoods. Tikal National Park’s success is a model for Mirador, as it is well preserved and generates more than $240 million in annual revenues for Guatemala. Due to this success, it is the only major national park in Guatemala that has not experienced loss of forest and wildlife, nor has it suffered from agricultural invasion. In addition, Tikal has given the local communities near the park well-paid, long term employment opportunities that have reduced the threats of looting, slash and burn agriculture and logging that plague sites such as Mirador.

Dr. Richard Hansen, GHF Project Director for Mirador, has been working at the site for more than 25 years with an annual budget of around $300,000 per year, but in the past 5 years, with GHF’s help, he has raised over $6 million in international and in-country funding for conservation and community development, helped to establish the PACUNAM Association comprised of eight leading Guatemala companies, and is a founding partner of the Multi-Sectorial Roundtable of stakeholders of the Mirador Archaeological and Wilderness Area. Dr. Hansen and GHF are also working with the Guatemalan government, community leaders, the Foundation for Anthropological Research and Environmental Studies 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.

Establishing sustainable tourism in Mirador by engaging local stakeholders is providing economic opportunities for more than a thousand people in surrounding communities, and growth in tourism in 2007 injected nearly $1 million into the local economy. GHF is working towards promoting tourism by partnering with the Guatemalan Development Foundation to secure an Inter-American Development Bank loan of $1.2 million in matched funding for community-based tourism development and training and has worked to develop a community center and a water system in
the gateway community of Carmelita. A critical development in securing community engagement and building a participatory process for the Mirador Project has been the establishment of monthly Multi-Sector Roundtable (Mesa Multisectoriales) meetings. These discussions, initiated in late 2006 by President Berger of Guatemala, offer local, national, and international leaders a forum in which they can address the conservation and development need of the Mirador Basin and the surrounding area.

Initiatives such as these increase communication and collaboration, enable a common vision, and provide the economic, social, and cultural incentives to save the Mirador Basin. While the challenges ahead are many, GHF has established a strong foundation for Mirador’s long-term protection and responsible development through our methodology.

Juan Carlos: A Dedication

Juan Carlos Calderon grew up in the village of Carmelita, a small and remote community of 200 people bordering Mirador Rio Azul National Park in the Petén region of Guatemala. Uneducated, unemployed and faced with the basic human need to shelter and feed his family, Juan Carlos subsisted on a life of wildlife poaching and looting in the numerous ruins of the Maya civilization that surround his home. Faced with the need to support his family, how could Juan Carlos be aware of the cultural and natural resources that provided him with these necessities and what could be done to both provide for his needs and protect the cultural heritage and environment of the region? The Global Heritage Fund has found a way.

Since 2002, the Global Heritage Fund has led an integrated program of planning, scientific conservation, community development and funding at Mirador. For the last five years Juan Carlos has worked as a guard in the park. With a job that provides him with a steady income, access to basic health care, and education opportunities – he completed basic reading and writing literacy programs run in the Mirador Project camp- Juan Carlos now defends the very assets that he had plundered for most of his life. Most importantly, because of Juan Carlos’ steady income for the past five years, his eldest son Enrique completed high school and is now studying law at university in Guatemala City.