World Heritage Leadership Programme

Heritage Place Lab

A Model for Research–Practice Collaboration in the Context of World Heritage

Report of the Pilot Phase 2021–2022

Editors: Maya Ishizawa and Eugene Jo

ICCROM

NORWEGIAN MINISTRY OF CLIMATE AND ENVIRONMENT

IUCN

Heritage Place Lab

A Model for Research-Practice Collaboration in the Context of World Heritage

Report of the Pilot Phase 2021-2022

Editors

Maya ISHIZAWA ESCUDERO
Eugene JO

Contributors

Dafné Adriana ACEVEDO QUINTANILLA
Graciela Edith AGUILAR
Ompabaletse Vasco BAITSISENG
Inger BIRKELAND
Chandni CHOWDHARY
Alfredo Luis CONTI
Josué Roberto GARCÍA VALDEZ
Raquel Elisabet GARCÍA
Kodzo GAVUA
William Narteh GBLERKPOR
Clapperton GUTU
Maya ISHIZAWA ESCUDERO
Abdul-Rauf ISSAHAQUE
María Magdalena IXQUIACTAP TUC
Shikha JAIN
Eugene JO
Steffen Fagernes JOHANNESSEN
Susan Osireditse KEITUMETSE
Audhild Lindheim KENNEDY
Nitya KHENDRY
Francis KWARAYIRE
Lesley Hatipone MACHIRIDZA
Nyaradzayi MADURO
Mahmoud MALIK SAAKO
Josefina MALLO
Jobe MANGA
Vicky MIKALSEN
María Valentina MILLÓN REY CAMPERO
Stephen MOGOTSI
María Elena MOLINA SOTO
Andrea Fabiana MORELLO
Tawanda MUKWENDE
Tendai Treddah MUSINDO
Katlego Pleasure MWALE
Onalethuso Petruss Buyile Mambo NTEMA
Sebastián Matías PASIN
Mario Raúl RAMÍREZ DE LEÓN
Anuranjan ROY
Olga Edith RUIZ
Gakemotho SATAU
Juliana STROGAN
Genius TEVERA
Thomas Panganayi THONDHLANA
Kgosietsile VELEMPINI
Benjamin WARINSIE KANKPEYENG
Christopher WETCHER
Claudia Blanca Verónica WOLLEY SCHWARZ
Madhura YADAV

Publication design

Anja VAN DER WATT

ISBN

978-92-9077-345-0

ICCROM

NORWEGIAN MINISTRY OF CLIMATE AND ENVIRONMENT

IUCN

Contents

Serranía de Hornocal, near Humahuaca, Argentina.
Image by Havardtl (2017) via Wikimedia Commons. Creative Commons Attribution-Share Alike 4.0.
Original image cropped for design purposes.

Foreword
ICCROM

ICCROM is an Intergovernmental Organization currently serving 137 Member States by promoting the conservation of their cultural heritage in all its forms and worldwide. Capacity building and research are at the core of our mandate. For ICCROM to be able to fulfill this mandate of serving the conservation and protection of heritage sites in our Member States, our research needs to remain relevant to the realities on the ground and to be useful and applicable in addressing both the immediate and long-term issues facing heritage management.

Mid-career heritage professionals, who are juggling an immense amount of work out in the field, often face having to make quick and difficult decisions about management without the necessary time or space to search for supporting research and studies, nor do they have the capacity to commission or conduct them directly.

I know that research on heritage cannot be robust if it does not reflect the input of actual site management, and that site management needs better research and scientific data to back up better management decisions. Therefore, the Heritage Place Lab has been a long project journey availing a sustained platform to talk not only about the management of heritage places but also to contribute to formulating the larger ideas of research at the international level. Through this pilot initiative, we have tried to formulate a step-by-step process that could be replicated in different heritage places to contribute towards better research.

I particularly praise the commitment and efforts made to ensure a scientifically robust and sound research project, of which the results could be framed to directly benefit a heritage site management reality and connect between silos of research and day-to-day management. I am confident that this experience of the Heritage Place Lab has provided a possible methodology for bridging these gaps and paving the way for us to accumulate more results in the most important themes that constitute the heritage discourse these days, such as climate change, governance, and incorporating Indigenous and Local Knowledge Systems into management.

In conclusion, I would like to convey my deep sense of gratitude to all the Research-Practice Teams for your commitment to work alongside us on this unknown journey. I am confident that this process has been useful for all, and that it can influence how we work at both the site level and within academia from now into the long-term future. I am glad that ICCROM is publishing the results of this journey in this volume, and we will continue to provide technical and procedural assistance to many more sites for better research in the future.

Aruna Francesca Maria Gujral
Director General
ICCROM

Foreword
IUCN

After the World Heritage Leadership Programme started in 2016, it was recognised that more needed to be done to ensure that research endeavours would directly contribute to improving heritage management, so as to bridge the gap between theory and practice. We knew we had to construct viable ways to achieve this goal, whilst recognising our roles and positions as Advisory Bodies to the World Heritage Convention.

The Heritage Place Lab is a promising product of such a thought process. As we continuously build upon the first iteration of the lab, it is our hope that this has provided a chance for us to reflect on heritage management holistically and concretely – both from the perspectives of nature and culture, and from the perspectives of research and practice. The outcomes can be seen within the second section of this publication ("The Heritage Place Lab Results: Practice–led Research Agendas for World Heritage Properties").

Through this cycle of Heritage Place Labs, Research-Practice Teams have found viable partnerships that can provide consistent support and ideas to work collaboratively and remove silo walls. The processes piloted through the Heritage Place Labs can also be used as a framework to engage with other researchers and institutions in the future.

IUCN is committed to a place-based and people-centred approach to heritage management and, by extension, to the encouragement of relevant research. It is encouraging to see and learn from the management practices of the pilot phase through their inclusion as solutions in the PANORAMA Nature-Culture platform. We are often asked for tangible examples of management practice, and having these practices documented on PANORAMA ensures that they are accessible to all relevant stakeholders. It is valuable to document what works, and to be able to share that success.

With appreciation for all the site managers and researchers who have contributed their time and efforts to this process, we hope that the connections made through this initiative can be strengthened further, so as to inspire further collaboration between different disciplines, regions and sectors in the name of heritage conservation.

Dr Grethel Aguilar
Director General
IUCN

7

View from the Hill Complex, Great Zimbabwe.
Image by Maya Ishizawa (2024), with permission.

Preface

Within the ICCROM-IUCN World Heritage Leadership programme (WHL), the modules Learning sites and Leadership networks promote activities oriented to connect people and heritage places through peer-learning, advancing people-centred and place-based approaches. Activities of these modules include the World Heritage Site Managers Forum (SMF) initiated in 2017 and the PANORAMA Nature-Culture Community launched in 2020. A Research network started to be conceptualised in 2019, that would link researchers, practitioners, institutions, communities and World Heritage places, both in the fields of natural and cultural heritage, to strengthen the interlinkages between research, practice and policy in the context of World Heritage processes. Building on existing research networks, such as UNESCO Chairs, Universities Fora, ICOMOS International Scientific Committees and IUCN Commissions and Specialists Groups, and initiatives, like the ICOMOS-IUCN Connecting Practice Project, the WHL proposed facilitating these linkages between natural and cultural heritage, science and practice, to support site management and policy- making by testing the concept of a Heritage Place Lab in a pilot phase.

When we first posted the call for application of the Heritage Place Lab in May 2021, we were very worried that we would not have anybody be interested or committed to such a process. In our desire to make this a concrete and creative process, we had already many requirements and criteria that we outlined in the call, that in the back of our minds, we were already accepting our possible fate that we might not get a single team interested. But to our surprise we received up to 20 applications, that we had to actually go through the 'unforeseen' difficult process of selecting the most eligible teams. That was the point when we realised that although we may not have the right recipe for solving the problem, we had at least articulated the issue correctly, which resonated with our Research-Practice Teams. That was proof enough for us to pursue this project and make sure that we could bring out tangible outcomes.

Over the pilot phase, we have learned so much about all the different management practices and challenges, as well as ongoing research from Peru, Ghana, Norway, India, Guatemala, Argentina, Zimbabwe, and Botswana. We had the chance of confirming that although we live and work in very different places, the issues regarding heritage management are strikingly similar, and there is so much to learn from each other. This spirit of peer learning, across regions, across heritage typology and across the nature of challenges, is what the World Heritage Leadership is truly dedicated to. The mission of the World Heritage Leadership as a global capacity-building programme is to make sure that there is a safe learning space for heritage people to gather around, and be able to contribute in advancing the field in our own roles and capacities. In this regard, having the opportunity to hear and learn about so many diverse heritage management practice has provided us with the most valuable resource. We truly hope that we can continue to create these learning environments with more diverse partners and sites.

After closing the string of online workshops held between 2021 and 2022, we continued working together to produce tangible outcomes: PANORAMA Nature-Culture solutions, a Special Issue of the Journal of Cultural Heritage Management and Sustainable Development from Emerald, and this volume where we have collected the results of the pilot phase: a model for research-practice collaboration that can be replicated at other heritage places, and the practice-led research agendas worked collaboratively among Research-Practice Teams.

Maya Ishizawa Escudero and Eugene Jo

Amber Fort in Jaipur, India.
Image by Kuldeepsingh Mahawar (2017) via Wikimedia Commons. Creative Commons Attribution-Share Alike 4.0.
Original image cropped for design purposes.

Acknowledgements

Many people contributed to the implementation of the Heritage Place Lab. The World Heritage Leadership would like to express its deep gratitude to the following World Heritage places and institutions: The World Heritage site of Antigua Guatemala, with the University of San Carlos of Guatemala and the Consejo para la Protección de la Antigua Guatemala; the World Heritage site of Asante Traditional Buildings, with the University of Ghana and the Ghana Museums and Monuments Board; the World Heritage site of Great Zimbabwe, with the Great Zimbabwe University and National Museums and Monuments of Zimbabwe; the World Heritage site of Historic Sanctuary of Machu Picchu, with the National Intercultural University of Quillabamba, University of Genoa, Servicio Nacional de Areas Naturales Protegidas and Archaeological Park of Machu Picchu; the World Heritage site of Jaipur City, Rajasthan, with the Manipal University Jaipur, Wildlife Institute of India, and the Jaipur Municipal Corporation and Town Planning Department of Rajasthan; the World Heritage site of Okavango Delta with the University of Botswana and the Botswana National Museum; the World Heritage site of Quebrada de Humahuaca, with the Universidad Nacional de la Plata, Universidad de Buenos Aires, and the World Heritage Coordination, Quebrada de Humahuaca Provincial Management Unit; and, the World Heritage site of Rjukan-Notodden Industrial Heritage site, with the University of South-Eastern Norway, and the Vestfold and Telemark County and Notodden municipalities.

The World Heritage Leadership would also like to acknowledge the generous contributions of the guest speakers joining the online sessions of the Heritage Place Lab: Bernard Baerends, Tim Badman, Matthew Emslie-Smith, Xavier Forde, Carlo Francini, Francesca Giliberto, Nobuko Inaba, Soledad Luna, Valérie Magar, John Merson, Alessia Montacchini, Gamini Wijesuriya, Peter Bates, Nigel Thomas Crawhall, Joseph Karanja, Yolanda López-Maldonado, Susan Osireditse Okeitumetse, Loes Veldpaus, Silke Bertram, Shadreck Chirikure, Barbara Engels, Stephanie Grant, José Francisco Roman Gutiérrez, Albino Jopela, Sophia Labadi, Michael Turner, Scott Allan Orr, Kristal Buckley, Ona Vileikis, Mechtild Rössler, and Webber Ndoro, which experience sparked valuable insights in the Research-Practice Teams and supported the process of building up these research agendas.

The Heritage Place Lab organising team was composed of Maya Ishizawa Escudero as the project lead, Eugene Jo, Nicole, Franceschini and Supitcha Sutthanonkul as the World Heritage Leadership programme, and Leticia Leitao, Pascall Taruvinga, Steve Brown as the facilitators. Kristal Buckley, Ona Vileikis Tamayo and Bas Verschuuren supported the team as observers.

List of figures and tables

Figures

Tables

List of annexes

Research-Practice Teams of the Heritage Place Lab

A Asante Traditional Buildings, Ghana
- University of Ghana
- Ghana Museums and Monumnets Board (GMMB)

B La Antigua Guatemala, Guatemala
- University of San Carlos of Guatamala
- Consejo Nacional para la Proteccion de La Antigua Guatemala (CNPAG)

C Great Zimbabwe, Zimbabwe
- UNESCO Chair on African Heritage, Great Zimbabwe University (GZU)
- National Museums and Monuments of Zimbabwe (NMMZ)

D Jaipur City, Rajasthan, India
- Manipal University Jaipur
- UNESCO Category 2 Centre for World Heritage Management and Training, Wildlife Institute of India
- Jaipur Municipal Corporation and Town Planning Department, Rajasthan

E Okavango Delta, Botswana
- UNESCO Chair on African Heritage Studies and Sustainable Development, University of Botswana
- Botswana National Museum

F Quebrada de Humahuaca, Argentina
- Universidad Nacional de la Plata
- Universidad de Buenos Aires
- Ministry of Culture and Tourism of the Province of Jujuy

G Rjukan-Notodden Industrial Heritage site, Norway
- University of South-Eastern Norway
- Vestfold and Telemark County and Notodden, Tinn and Vinje Municipalities

H Historic Sanctuary of Machu Picchu, Peru
- National Intercultural University of Quillabamba
- UNESCO Chair in Anthropology of Health, Biosphere and Healing Systems, University of Genoa, Italy
- Servicio Nacional de Areas Naturales Protegidas (SERNANP)
- Archaeological Park of Machu Picchu

Part I:
The Heritage Place Lab Initiative

Chapter 1
Introduction

The World Heritage Leadership (WHL) programme is a collaboration between ICCROM (the International Centre for the Study of the Preservation and Restoration of Cultural Property) and IUCN (the International Union for Conservation of Nature), implemented in partnership with ICOMOS (the International Council of Monument and Sites) and the UNESCO World Heritage Centre, with the financial support of the Ministry of Environment and Climate of Norway and other partners. The WHL focuses on capacity building to support the implementation of the World Heritage Convention in order to improve conservation and management practices for cultural and natural heritage, including its unique role to link nature and culture, and the contribution of World Heritage sites to sustainable development.

In May 2021, the WHL launched a new activity focused on strengthening networks across research and site management in the context of the implementation of the World Heritage Convention. In order to develop practice-led research agendas for World Heritage properties, the WHL invited researchers and site managers to team up in Research–Practice Teams and take part in the Heritage Place Lab (HPL) pilot phase, consisting of a series of six incubator online workshops held between September 2021 and April 2022. The expected outcomes of the HPL were that each Research–Practice Team would define a research agenda for one World Heritage property, and that the WHL together with the research institutions and World Heritage properties involved develop an umbrella research proposal and/or thematic research proposals that could be later used to apply for research funds. Applications were open for approximately eight weeks to ensure that adequate teams could be established and proposals written up based on what was outlined by the programme. A mandatory requirement was that each World Heritage property had to be represented by both a research group and a practice group.

The following four priority themes were proposed by the WHL for teams to frame their proposals:

- **Incorporating different knowledge systems to influence World Heritage policy.**
- **Analysing and enhancing governance and management systems.**
- **Exploring local languages and knowledge systems.**
- **Localising climate change.**

Twenty Research–Practice Teams from Africa, Latin America, Europe, and Asia submitted their proposals. Based on five criteria,[1] the following eight teams were selected and invited to participate in the pilot phase: Asante Traditional Buildings,

[1] 1. Research background, academic quality and impact (publications); 2. Basic knowledge on the implementation of the World Heritage Convention; 3. Prospective sustainability of the institutional partnership between research institutions and site management authorities; 4. Adequacy of the research group qualifications to respond to the World Heritage site management needs, including capacity to communicate in the local language; 5. Gender-balanced and intergenerational composition of Research–Practice Teams; 6. Priority theme relevance.

Ghana; La Antigua Guatemala, Guatemala; Great Zimbabwe, Zimbabwe; Jaipur city, Rajasthan, India; Historic Sanctuary of Machu Picchu, Peru; Okavango Delta, Botswana; La Quebrada de Humahuaca, Argentina; and Rjukan-Notodden Industrial Heritage site, Norway. In total, these teams comprised twenty institutions and 61 team members including both researchers and managers.

Aim and Objectives

The HPL aimed to initiate long-term research–practice cooperation while promoting international networking; it intended to test new ideas and started an explorative process together with World Heritage site managers and researchers.

The general objectives of the HPL in its pilot phase were to:

- create and activate World Heritage research–practice networks;
- promote research on integrated and people-centred approaches to the management of natural and cultural heritage;
- promote interdisciplinary and transdisciplinary approaches and environments;
- promote practice-led research; and
- promote long-term and sustainable research–practice partnerships.

The specific objectives of the pilot phase were to:

- explore research–practice collaboration models, strategies and methods;
- create practice-led research agendas for each selected World Heritage property, built through researcher and site manager collaboration;
- devise processes for building (a) common research proposal(s) for the World Heritage properties involved in the HPL pilot phase; and
- disseminate the pilot phase results through publications.

Expected Outcomes

The expected outcomes of the HPL pilot phase were that:

- each Research–Practice Team identifies the research needs for their World Heritage property, outlining a practice-led research agenda co-produced between researchers and managers;
- each Research–Practice Team activates a model of collaboration based on their context and interests at their World Heritage places; and
- networking between different sites and research institutions is advanced and possible ideas and means of cooperation explored.

Based on these outcomes, a model that can be scaled-up for other World Heritage properties to follow was formulated, with the longer-term aim of developing a World Heritage Leadership practice-led research strategy that addresses the benefits of people-centred approaches to, and the integrated management of, cultural and natural heritage. With the scaling-up of this model and the development of a World

Heritage Leadership practice-led research strategy, in the longer term, it is expected that applied research will be activated at World Heritage and other heritage places, and a stronger collaboration between researchers and site managers will advance positive impacts on the conservation and management of World Heritage globally.

Implementation

In September 2021, the incubator online workshops kicked off and continued until April 2022, under the following titles:

I **Workshop I:**
Models of Research–Practice Collaboration.

II **Workshop II:**
Knowledge Systems Dialogues.

III **Workshop III:**
Building Collaborative Practice-led Research Agendas.

IV **Workshop IV:**
Partnering for Collaborative Research.

V **Workshop V:**
Building Common Practice-Led Research Proposals and Projects.

VI **Workshop VI:**
Publications and Heritage Place Lab Follow-up.

More than 30 international experts, heritage researchers and practitioners participated in the six online workshops as guest speakers. A team of four people coordinated the design, implementation and communication of the workshop activities; three facilitators supported their design and implementation; and three observers were invited to follow and provide feedback on the process.

Following the online workshops, the HPL pilot phase continued with the development of the incubated outputs, namely a Special Issue in the Journal of Cultural Heritage Management and Sustainable Development (Emerald),[2] PANORAMA Nature-Culture snapshot solutions showcasing the associations between World Heritage site management authorities and research institutions, and this volume, which outlines the research–practice model tested during the pilot phase and the practice-led research agendas for the World Heritage properties that participated in the process.

[2] Ishizawa, M. and Jo, E. (eds.) (2023). Towards practice-led research agendas for World Heritage properties. Journal of Cultural Heritage Management and Sustainable Development, Vol.13 No.3, available at https://www.emerald.com/insight/publication/issn/2044-1266/vol/13/iss/3

About the rest of this volume

This volume is divided into two parts. In the first part, the editors present the process proposed during the HPL, describing the conceptual framework and methods used during the incubator online workshops. The research–practice model tested during this pilot phase is detailed alongside the lessons learned during the experiment. A model that could be replicated at other World Heritage properties and heritage places is then proposed. In the second part, the results of the HPL experimental process are discussed; seven practice-led research agendas are presented that showcase the collaborative work developed by the Research–Practice Teams involved in the process. The outcomes of the application of the model and methodology in the different regions and national contexts resulted in a diversity of proposals for research priorities at each of the World Heritage properties. These research priorities were identified based on an analysis of existing management issues through a collaborative process undertaken by site managers and researchers. Due to the diversity of heritage places involved in the HPL (including archaeological sites, protected areas, cultural landscapes, industrial sites, vernacular architecture, and historic towns), a diversity of issues were examined and potential research projects outlined under the four priority themes proposed by the WHL.

22

Overview of lake Tinn with the rail ferry D/F Ammonia and related transportation infrastructure.
Copyright: Guri Dahl. File name: NVA_RN-0269_GD.

Chapter 2

The Heritage Place Lab, a Network for Research-Practice Collaboration

Article 5 of the UNESCO Convention concerning the protection of the world's cultural and natural heritage (hereafter, World Heritage Convention) calls on State Parties to develop and encourage research for the protection of their cultural and natural heritage, emphasizing the role of science in its implementation. Even though the World Heritage system provides such space for exchange and collaboration between researchers and practitioners, this has not been sufficiently and systematically explored. The need to strengthen the interlinkages between the conservation of natural and cultural heritage, as well as the interconnections between and among science, practice and policy, has increasingly become evident with Agenda 2030, which promotes inter-sectoral cooperation, partnerships and science-based approaches to achieve the 17 Sustainable Development Goals. To take advantage of existing opportunities, the WHL proposed stimulating these synergies through the development of a research network that would enable science, management and policy interactions within the World Heritage context. The aim of this approach was to clarify and further activate the contributions of the integrated management of cultural and natural heritage and people-centred approaches to sustainable development at World Heritage places.

As a research network, the HPL aimed to function as an incubator of research agendas for specific World Heritage properties, promoting pathways for research to impact site management and for site management to influence research, with the WHL acting as a knowledge broker. In its pilot phase, the HPL consisted of six online workshops consisting of three sessions, each three hours, held between September 2021 and April 2022. This was followed by a subsequent period of approximately one year (April 2022–May 2023) to develop and finalize outputs.

Participation in the HPL was open to any researcher working within or connected to the field of heritage management as well as World Heritage site managers. Managers and researchers had to work together and prepare assignments to present and for discussion during the online workshops. Site management issues were explored collaboratively, enabling researchers to test theories and methodologies with site managers working on the ground. Researchers gained access to World Heritage properties as well as in-depth understanding of local needs. Site managers became familiar with research methods and co-produced research agendas for their World Heritage places. In the following sections, the conceptual framework and implementation of the HPL is outlined and reflected upon, with the aim of proposing a model that can be replicated in other heritage places and other heritage contexts.

2.1 Knowledge brokering: bridging research and practice in the World Heritage context

Disconnections between academic research and practical application are found at World Heritage properties. The impacts of research findings at a site level are often limited, and site managers face barriers in legal and administrative frameworks when applying innovative research results and recommendations. These issues have been identified in several other disciplines and fields of work (Barrett and Oborn, 2018; Han and Stenhouse, 2014; Duxbury et al., 2021). In response to this, interest in the co-production of knowledge – especially between researchers and ground-based actors (Iwama et al, 2021), local communities and Indigenous Peoples – is growing alongside a desire to incorporate Indigenous and local knowledge in scientific assessments and policy development (Nakashima et al, 2012). In this context, the WHL, which is focused on developing capacity building activities for heritage practitioners, in particular World Heritage site managers, has sought to address this research–practice gap, so that managers can have access to scientific evidence to support decision-making processes at World Heritage properties.

The WHL piloted the HPL as a platform for interaction between researchers and managers working on World Heritage, to promote peer-learning while developing the capacities of the different groups. Thus, the HPL platform was designed to enable the co-production of knowledge, specifically through the involvement of managers and non-academic communities in the development of research agendas.

In the field of water policy and science, Hering (2016) notes the need for improving knowledge transfer over producing more research because "research is missing". Specifically, better channels for communicating both research needs and research findings are necessary so that science can address knowledge gaps in policy and practice, and, therefore, impact on-the-ground actions and policymaking. Hering (2016) further highlights some of the barriers to such exchange, including the limited dissemination and uptake of knowledge, and the transfer and usability of research. She points at three key impediments to effective knowledge exchange – accessibility, relevance and timeliness of research. These barriers often apply to the World Heritage context. For example, only a small proportion of relevant academic research and publications is accessible to site managers, both because of journal paywalls and, very often, the complicated scientific jargon used in academic writing. Furthermore, most academic publications are only available in English, which can be of limited use for local heritage practitioners. In this sense, knowledge brokering is required as an "iterative and bidirectional process of translation, tailoring of information for specific contexts, feedback, and integration" (Hering, 2016, p. 364).

Through the HPL initiative, the WHL aimed to function as a knowledge broker (Figure 2.1), bringing management and research closer together by producing a space for knowledge exchange and building on existing partnerships, and creating new ones,

between scientific institutions and management authorities. Although this type of partnerships is well-established at local level in some countries, including Japan (Figure 2.2) and Australia (Figure 2.3), this strategy is missing in the majority of States Parties. In the particular case of archaeological World Heritage sites, in-house research is often established within a site's management institution, such as a site museum. For protected areas, local researchper bases or other types of research institutions are also established to pursue fundamental investigations as well as monitor ecosystems and species. However, more and more of the properties inscribed on the World Heritage List belong to complex categories, such as historical cities or cultural landscapes, for which different types of heritage and layers of significance are intertwined, producing diverse interests and the need for interdisciplinary and applied research.

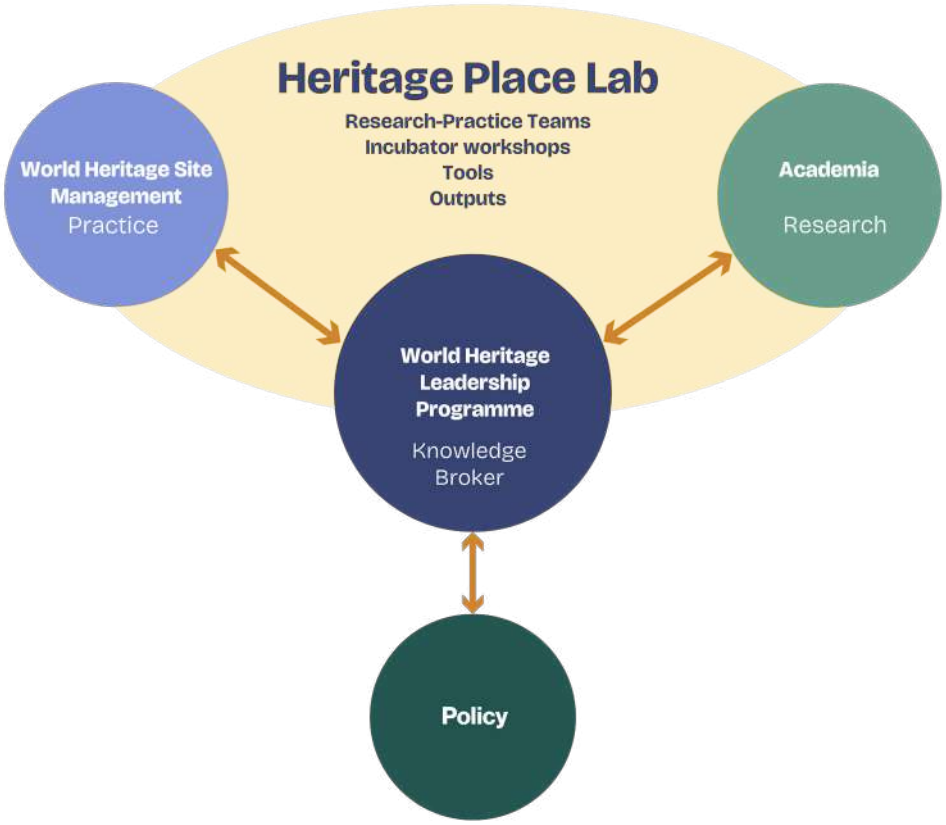


Figure 2.1 The World Heritage Leadership programme (WHL) as knowledge broker (Source: WHL)

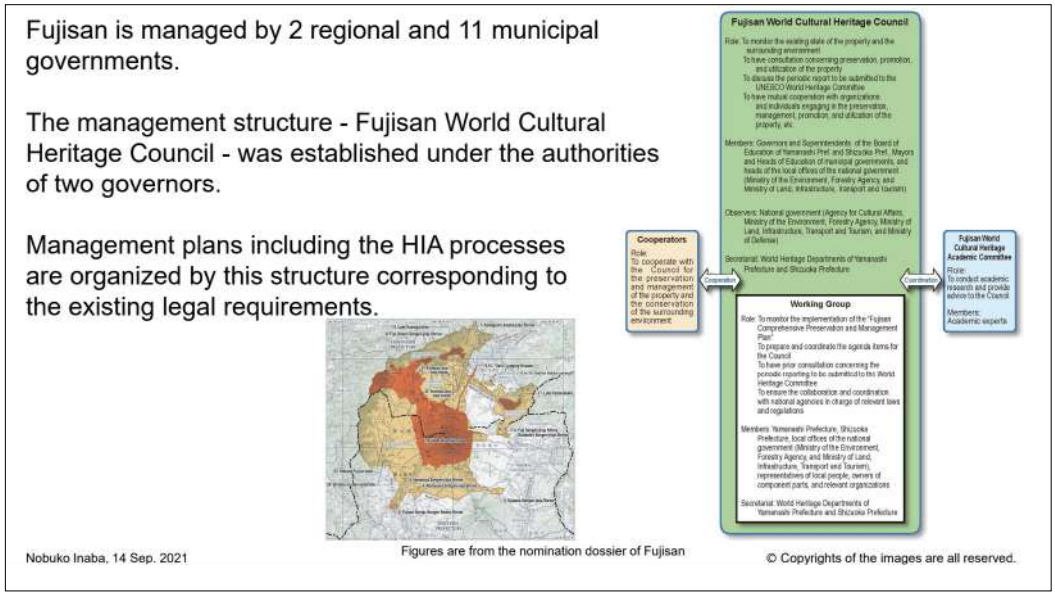


Figure 2.2 University–World Heritage partnership at Fujisan, Japan (Source: Inaba, 2021).

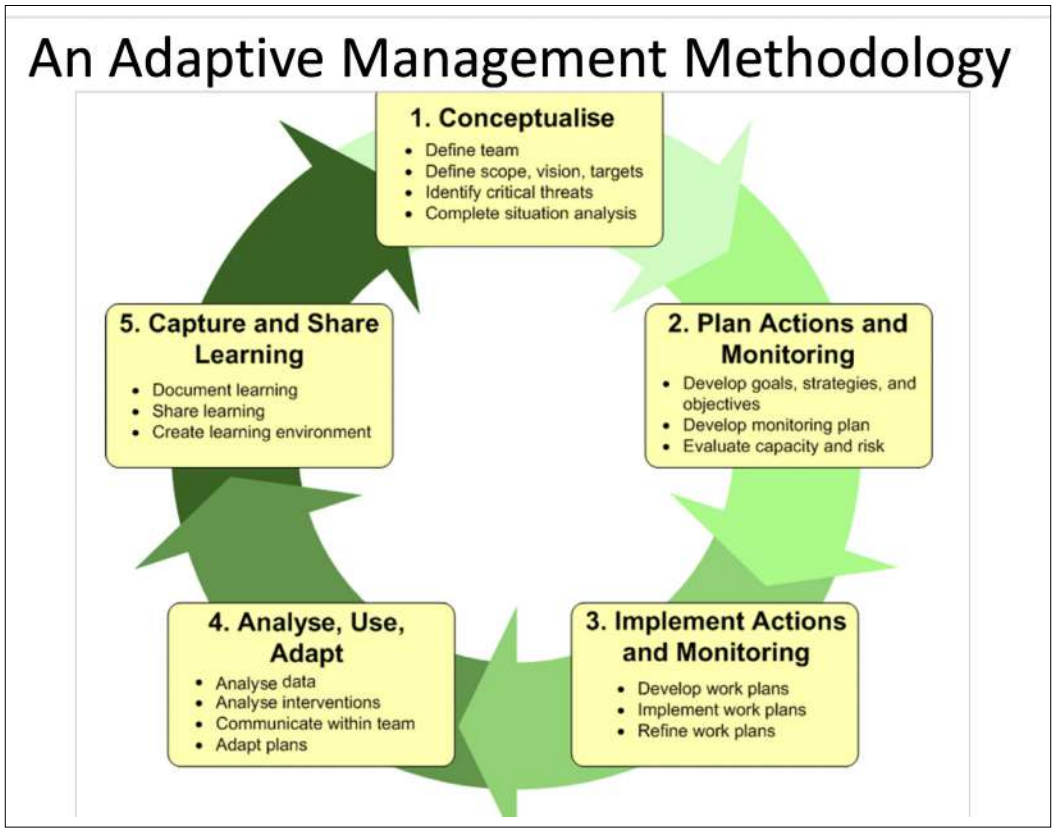


Figure 2.3 Adaptive management proposed by the Blue Mountains World Heritage Institute (BMWHI), Australia, to manage the World Heritage property (Source: Merson, 2021).

In response to such need, the WHL focuses on promoting interdisciplinarity and transdisciplinarity, and the joining of diverse knowledge systems to work together in understanding heritage places and finding what research can do to support better management and conservation. To implement this vision, through an open call, the WHL invited research institutions from existing UNESCO and World Heritage networks, including UNESCO Chairs, UNESCO Category 2 Centres, and universities, to join with World Heritage site management institutions. These institutions could be museums, ministries, specific authorities for heritage site management, associations, or communities, depending on the type of heritage place and legal system of the relevant country. The HPL was, therefore, designed as a virtual space to promote knowledge transfer between academics and managers, placing both roles at the same level, and facilitate a process of co-production of practice-led research agendas for World Heritage properties.

The practice-led research agendas developed through this process state the main research priorities for each site based on a collaborative analysis of management needs and knowledge gaps. A focus on management needs that could be addressed through research – or that required specific research input to gain an evidence-based management response – was key. While management issues can be widely varied and not all require new knowledge or evidence to be addressed, some form of research is typically needed for the development of appropriate legal tools or specific mechanisms to support specific management responses.

The HPL pilot phase was structured in two parts, namely the incubator online workshops (over seven months) and the development and publication of outputs (over 12 months). The six online incubator workshops were specifically intended to enable:

- **Research–Practice Teams' collaborative work, through the preparation and delivery of presentations based on assignments, and the participation and exchange in online sessions;**
- **networking between different Research–Practice Teams;**
- **inputs from guest speakers within the framework of defined priority themes; and**
- **feedback from facilitators and organizers to the Research–Practice Teams.**

The online format of the workshops allowed the inclusion of a greater range of regions, participants and guest speakers that would otherwise not be possible, although this also presented some logistical constraints given time-zone differences.

The HPL process began in September 2021, with **Workshop I** on **models of research–practice collaboration**, in which the WHL and HPL pilot phase were introduced. After the HPL approach, as promoted by the WHL, was presented to participants, the Research–Practice Teams looked at examples of research–practice collaboration at World Heritage sites and other heritage places around the world. Experiences from Australia, Denmark, Germany, Italy, Japan, the Netherlands, New Zealand, and the United Kingdom were used to show the potential for collaboration at different levels (local, national, international and global) and highlight the importance of applied research, working beyond traditional silos, and inter-sectoral collaboration. Sources of data for World Heritage, including the UNESCO World Heritage Centre website, State of Conservation system, Operational Guidelines, Policy Compendium, Periodic Reporting system, and World Heritage Decisions, were explained. Platforms for finding data on protected areas were also presented, focusing on the IUCN World Heritage Outlook, the IUCN Green List, and the "Protected Planet" online resource[3]. The "PANORAMA solutions for a healthy planet" online platform was also introduced as a source of good practice examples in heritage places, via the PANORAMA Nature-Culture portal.

During this first workshop, the Research–Practice Teams shared the management issues and research interests of their World Heritage places based on the Assignment I (see Annex 1 for details of the different assignments). Plenary discussions and interactions were facilitated through the use of interactive online tools. At the end of the workshop, Assignment II (Mapping Values and Attributes) was presented to the attendees.

In October 2021, two workshops were held. **Workshop II**, on **knowledge systems dialogues**, explored how best to integrate Indigenous and local knowledge (ILK) systems into World Heritage processes. Examples were discussed from the UNESCO Local and Indigenous Knowledge Systems (LINKS) programme and the work being done with the Intergovernmental Panel on Biodiversity and Ecosystem Services (IPBES) and the Intergovernmental Panel on Climate Change (IPCC) to develop multiple-evidence models using both scientific evidence and ILK. Synergies between the World Heritage Convention and the 2003 UNESCO Convention on the Safeguarding of Intangible Cultural Heritage (ICH) were also explored using the example of the Okavango Delta and Tsodilo Hills in Botswana. The example of the Budj Bim Cultural Landscape in Australia was also used to explore relevant values, attributes and knowledge systems as well as the importance of archiving, accessibility of information and governance.

During the second workshop, the Research–Practice Teams shared their mapping of values and attributes at each World Heritage place. In the plenary dialogues, the interlinkages between values, attributes and knowledge were discussed, and interactive exercises facilitated debate over knowledge, interdisciplinarity and transdisciplinary. This process enabled that participants began to identify what knowledge is needed at their World Heritage properties. World Heritage actors' mapping was also initiated through an interactive exercise, and discussions on power arrangements were introduced to then present the Assignment III.

[3] https://www.protectedplanet.net/en

Workshop III, on **building collaborative practice-led research agendas**, began structuring the research needs of the World Heritage properties based on practice, using the Budj Bim Cultural Landscape as an example. During this workshop, the Research–Practice Teams shared their mapping of actors and, together, analysed the governance arrangements at their heritage places. With presentations and plenary dialogues on linking values, knowledge, governance and management systems, the Research–Practice Teams started making connections and initiated the development of their own research questions to later feed into their research agendas. The example of a research agenda from heritage planning in Europe (Stegmeijer and Veldpaus, 2021) was shared, and Assignment IV (factors affecting heritage places) was introduced using the Budj Bim Cultural Landscape example and an interactive exercise to identify and understand those factors affecting the range of heritage places participating in the HPL.

Workshop IV, on partnering for collaborative research, was held in November 2021 and focused on understanding the inputs needed to develop research, both in terms of funding and institutional partnerships. Examples of interdisciplinary research, international partnerships and global projects were presented alongside strategies that can be used to identify the inputs needed. Academics, site managers and funding officers presented different perspectives on research funding and the potential of institutional collaboration. Category 2 Centres in Africa and Latin America and the Caribbean presented projects, emphasising the work they undertake to achieve capacity building and research in a World Heritage context. During this workshop, the Research–Practice Teams shared their outputs from Assignment IV, through which they identified the factors affecting their heritage places, and the final assignment, Assignment V, was presented at the end of this workshop.

Two further workshops were help in March 2022. **Workshop V**, on **building common practice-led research proposals and projects**, focused on the discussion of the outline practice-led research agendas of each Research–Practice Team. Climate change was introduced as a fundamental theme for research, and the potential for integrating this into the developing research agendas was explored. A presentation on common challenges and opportunities in the World Heritage context was given, and potential common issues and research questions were identified in smaller breakout rooms and then shared as a group. Finally, the two main outputs of the HPL pilot phase were explained, namely a journal article and practice-led research agenda from each participating Research–Practice Team.

Workshop VI, on **publications and HPL follow-up**, gave further instructions for developing the proposed knowledge products aimed at disseminating the work undertaken during the HPL pilot phase, which included a PANORAMA solution as well as the journal article and practice-led research agenda for each World Heritage property. During this workshop, each Research–Practice Team worked on their respective outputs in breakout rooms. An exercise was also run to pitch potential common projects based on the discussions had at the previous workshop on common issues and research questions. Presentations on the interlinkages between policy, research and practice in the context of World Heritage and the Foresight Horizon Scan undertaken by ICCROM were also used to provoke further thought on potential topics and research paths for the Research–Practice Teams. Some additional online consultation meetings were held with each Research–Practice Team between Workshops IV and V, when they were developing their research agendas.

2.2 Conceptual framework, methods and tools

The HPL is based on the experience gained by heritage professionals and, especially, the Advisory Bodies to the World Heritage Convention in the 50 years of implementation of this ground-breaking international instrument. The Convention proposes a framework for international cooperation and recognition of the most valuable heritage places for humanity, and provides mechanisms for its conservation for future generations. In that way, the Convention has achieved the creation of a network of heritage places globally and continues to enable exchanges between an ever-growing number of heritage practitioners, researchers and institutions working at a site level. Even though the World Heritage framework calls for individuals, institutions and networks to work collectively to safeguard humanity's common heritage, the links and knowledge transfer between researchers and managers have tended to be weak, mostly in relation to management issues. Fundamental research on sites that is carried out by in-house researchers and university collaborations is a typical model of working at most archaeological sites and some protected areas; however, for other types of heritage places, such as cities, cultural landscapes and mosaics of protected areas, different research actors may be working with little coordination and without direct communication with site managers. The primary focus of the HPL is, therefore, to develop applied research questions that build on the existing and ongoing fundamental research to inform adequate management responses for the variety of factors affecting heritage places.

The World Heritage Convention and operational guidelines for its implementation

The HPL is embedded in the framework proposed by the World Heritage Convention (UNESCO, 1972) and its guidance for implementation – the Operational Guidelines (UNESCO, 2023). The HPL is working with World Heritage properties inscribed on the World Heritage List and considers the procedures and statutory processes that these must follow, including State of Conservation monitoring and Periodic Reporting. With an emphasis on the need to understand the Outstanding Universal Value[4] (OUV) of World Heritage properties, the HPL initiative also focuses on the exploration of other values that are important to support OUV and maintain the relationships between people and places.

During the first online workshop, the underpinning principles of the World Heritage system were outlined, so that all participants were up to date with the latest developments as well as the resources that have been developed over the last few decades, including the State of Conservation Information System, the Reactive Monitoring Process, Periodic Reporting, the Policy Compendium, the World Heritage Capacity Building Strategy, and the IUCN Outlook and PANORAMA Nature-Culture Community resources.

During the 50 years of implementation of the Convention, many developments and changes have occurred in its application, including the types of properties that are inscribed and the complex process of nomination. While the focus of the HPL is not nomination nor World Heritage management capacity building, it was useful to review some of the fundamental aspects of the Convention and its implementation, especially as researchers, who are often focused on specific aspects of heritage, may not necessarily be aware of the procedures and rules that site managers must comply with.

The heritage place concept and approach

The WHL adopts the concept of "heritage places", which unite all the elements that people inherit from the past and want to pass on to future generations along with the reasons why they wish to do so (Figure 2.4). This concept is being used in all the resources currently being developed or recently published by the WHL to support World Heritage site management, including the Manual on Managing World Heritage, the Guidance for Impact Assessments in a World Heritage context, and the Enhancing our Heritage Toolkit 2.0. In order to align all these materials, heritage places are understood as areas that can vary in scale from whole landscapes to individual buildings; heritage places can be valued by diverse groups and communities for their natural and/or cultural heritage significance; and World Heritage properties are heritage places – or might be located within a larger heritage place – with defined boundaries and which hold international significance, namely OUV.

The heritage place approach to management highlights the need to maintain not only the OUV of World Heritage properties but all other important values they hold for the groups and communities connected with them. The heritage place approach looks at the interconnections between a property, its buffer zone(s) and its wider setting. In this way, management can recognize the roles and contributions that Indigenous Peoples, local communities and other rights-holders make to the protection of, and the rights that they have to benefit from, these properties. Such an approach emphasizes the dynamic aspects of heritage places and all the different connections and relationships they have, encompassing their multiple values and the tangible and intangible attributes that support those values. Through this approach, there is an emphasis on the relationships between people with place, promoting the recognition of the diversity and distinctiveness of different places including diverse worldviews, spoken languages, and cultural traditions. Ultimately, this enables a broader understanding of heritage, values, the actors involved in management, and the factors that may be affecting World Heritage properties but which occur outside their official boundaries.

[4] "Outstanding Universal Value means cultural and/or natural significance which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity. As such, the permanent protection of this heritage is of the highest importance to the international community as a whole." (UNESCO, 2021, para. 49).

Figure 2.4 The "heritage place" concept (Source: WHL)

The knowledge framework for managing World Heritage

The Knowledge Framework is composed of four modules: (i) the heritage place, its values and its context; (ii) governance; (iii) management processes; and (iv) results (Figure 2.5). This framework is being developed by the WHL to support capacity building in World Heritage management, and outlines the fundamental components of World Heritage management that all properties can refer to when analysing their management systems. Although not all aspects of the Knowledge Framework were explored through the HPL pilot phase, the underpinning concepts of the framework were used and conveyed through lectures and discussions within the workshops. Specific aspects of the Knowledge Framework addressed by the HPL relate to the first and second modules, the purpose of which was to develop a deep understanding of each heritage place, its management system, and governance arrangements.

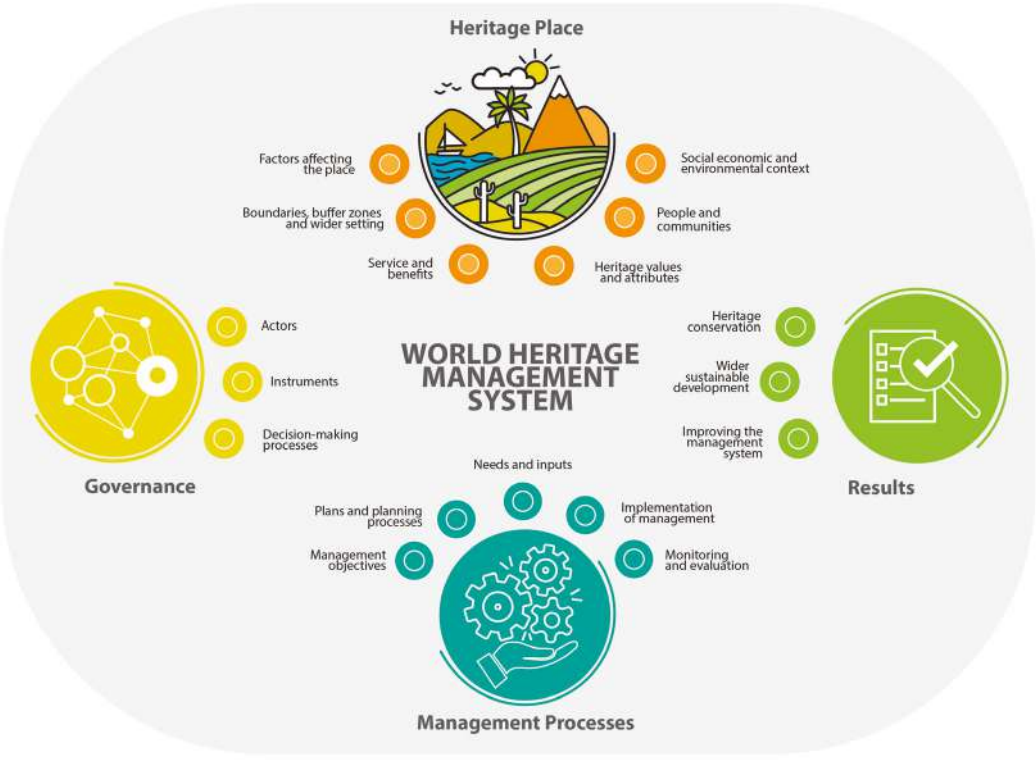


Figure 2.5 A Knowledge Framework for Managing World Heritage (Source: WHL).

Heritage Place Lab priority themes

To guide the development of the Research-Practice Teams' proposals, the WHL proposed four priority themes based on an analysis of relevant research and practice issues for the management of World Heritage properties (i.e. State of Conservation issues and Periodic Reporting). These four priority themes helped frame the HPL, with each being more or less relevant to the work undertaken with participants:

1 Priority theme 1: Incorporating different knowledge systems to influence World Heritage policy

World Heritage places and their local communities, including Indigenous Peoples, receive influence from international and national experts and top-down management systems yet rarely have platforms to influence the research, decision-making and policymaking that underpin the management of their heritage places. Indigenous and local knowledge systems can play a significant role in the protection and sustainable use of heritage, and in sustainability more broadly. In this context, the HPL reflected on how ILK could influence site management beyond customary practices and have an effect on both national and World Heritage policies.

This theme was very relevant for the discussions during the HPL, considering the need to include the ILK present at all of the sites participating in the pilot phase but also the challenges of doing so. The example of the work of UNESCO LINKS programme with the IPBES and IPCC was important to explore how other knowledge systems could be incorporated in World Heritage processes. Even though the structure of the World Heritage system broadly differs from the Convention on Biological Diversity (CBD) and the United Nations Framework Convention on Climate Change (UNFCCC), some of their underpinning ideas were explored in the context of World Heritage, especially the use of multiple-evidence approaches to decision-making.

2 Priority theme 2: Analysing and enhancing governance and management systems

Natural and cultural heritage practitioners and institutions tend to work independently under different mandates and conservation objectives, guided by prevailing governance and management systems. Heritage places are both influenced and shaped by these different inputs as well as by other sectors, such as development, urban planning, agriculture, and tourism to name a few. Furthermore, community based management, traditional management systems, and ancestral as well as autonomously evolving governance systems influence and contribute to understanding

how to better and effectively manage heritage places. However, Indigenous, traditional and local knowledges have particular and specific transmission systems that are not necessarily transferable to contemporary scientific methodologies. Thus, the HPL explored how a dialogue between and among knowledge systems could be better established in the World Heritage context, including inter-sectoral, interdisciplinary and transdisciplinary approaches. Through this process, the HPL analysed different governance and management systems to identify effective governance models and solutions for World Heritage places, providing case studies that can serve as inspiration for other heritage places.

During the HPL pilot phase, one case study that was used as an example under this theme was the Budj Bim Cultural Landscape, inscribed on the World Heritage List in 2019 under criteria (iii) and (v). This site, located in Australia, represents the continuity of the traditional land-use systems of the Gunditjmara people and contains the most extensive and oldest aquaculture system developed over the lava flows of Budj Bim Volcano. This example not only demonstrates the leadership of Indigenous Peoples in nominating their heritage place, but also the dialogue established between science and traditional knowledge to understand the values of the cultural landscape and its international significance. Moreover, Budj Bim represents a governance model led by the customary practices of the Gunditjmara people in cooperation with the Victoria State Government in its management of the Budj Bim National Park. In this case, the approach followed integrates considerations for cultural heritage, natural heritage and Indigenous heritage, without the separation of nature and culture that is common in Western culture. Here, legal and customary systems are working together for the protection of this World Heritage property.

3 Priority theme 3: Exploring local languages and knowledge systems

The World Heritage Convention works in two main languages, English and French, and most of its instruments and guidance have been conceived in these languages and later translated to other languages. As the terms used in World Heritage management usually come from European conservation, very little is known about local uses of language in World Heritage places. These under-researched language dimensions are often unexplored sources of information that can help understand management arrangements and their diverse knowledge systems that are linked to the specific place, cultures and worldviews. One example could be the concept of sustainability, which is not new to Indigenous knowledge systems. Thus, the HPL explores the diversity of Indigenous and local languages in connection with the transmission of ILK about World Heritage places, from multiple angles, to encourage dialogue between local and global understandings geared towards improving heritage management.

All of the properties involved in the HPL pilot phase showcased a component of Indigenous and local communities that were, in general, underrepresented in their existing governance arrangements and management systems. The diversity of languages was stated as an important aspect that, in some cases, could also hinder the dialogue between researchers, managers, and local rights-holders and stakeholders.

4 Priority theme 4: Localising climate change

Climate change, and the more frequent extreme weather events and hazards related to it, are recognized as one of the main threats to World Heritage properties. The potential of heritage management to contribute to climate change mitigation and adaptation using traditional and local systems to guide disaster risk management at World Heritage properties is currently being explored; however, specific baseline datasets at most World Heritage properties are lacking. In this context, local community experiences of climate change and its impacts could be beneficial to localising climate change. Involving local communities in the monitoring of a site's state of conservation and climate change impacts represents one opportunity, by advancing citizen science, for example. The HPL explores the potential of localized indicators for monitoring climate change impacts, which can be co-identified by researchers and World Heritage site managers while also involving Indigenous and traditional knowledge systems.

This priority theme required some extensive exploration as it was clear that climate change is increasingly becoming a factor affecting all World Heritage properties, with both researchers and managers noting the need for greater capacity building in this regard. Knowledge on climate change is still under-developed in many regions, and the need to establish baseline datasets and mitigation and adaptation strategies requires more in-depth study of the impacts of climate change on the values and attributes of World Heritage places. Indeed, all of the properties involved in the HPL pilot phase would benefit from a greater exploration of the opportunities to integrate local knowledge in the monitoring of climate impacts on these heritage places.

One specific topic that emerged from discussions during the workshops was that of services and benefits. The distinction between heritage values that need to be protected and the economic benefits that can be obtained by the conservation of heritage was not always clear (Figure 2.6). Alongside sustainability, ecosystem services and the impacts and benefits of tourism are important themes that need to be more clearly incorporated in further discussion platforms.

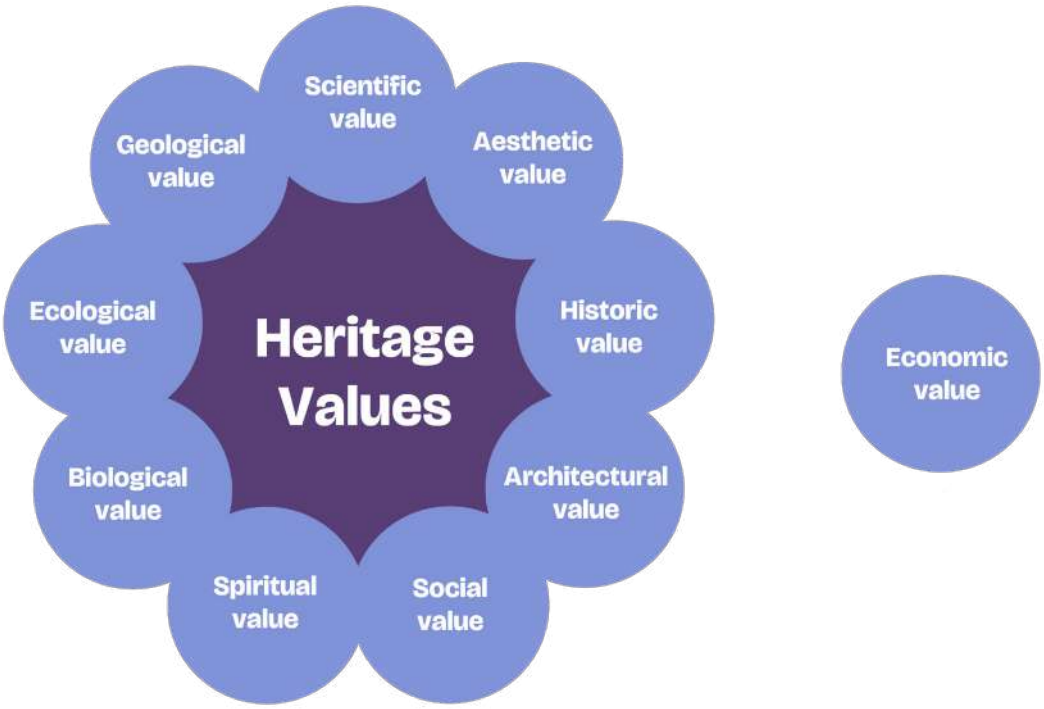


Figure 2.6 Heritage values, and services and benefits (Source: WHL).

The Enhancing our Heritage Toolkit 2.0 (EOH 2.0)

The Enhancing our Heritage Toolkit (EOH 2.0) (UNESCO, IUCN, ICCROM and ICOMOS, 2023) is a self-assessment methodology developed for World Heritage properties based on a previous version published in 2008[5] that was focused solely on natural World Heritage properties. The new version has been developed by the three Advisory Bodies (IUCN, ICCROM and ICOMOS) along with the UNESCO World Heritage Centre, to make it applicable in all types of World Heritage properties. The toolkit helps managers evaluate the effectiveness of their management systems through the use of 12 individual tools (Figure 2.7) and, thereby, supports the identification of management issues to be addressed and opportunities for improving existing management systems. While EOH 2.0 was mainly created for the managers of the World Heritage properties or other heritage places, as part of the HPL pilot phase, the tool was used collectively by researchers and managers.

The EOH 2.0 toolkit was central to the HPL, providing a means for fostering collaborative work, discussion between researchers and managers, and deepening the understanding of management issues at the different World Heritage properties involved in the process. Note that the specific tools used during the HPL process were not the final versions, as EOH 2.0 was still being finalized at the time of the online workshops (see Annex 1 for details of the tools used during the HPL assignments). Nevertheless, use of the EOH 2.0 tools in the HPL pilot phase served as an opportunity to gain user feedback and to test performance and applicability in a context other than that for which the Toolkit was originally created.

[5] Hockings, M., James, R., Stolton, S., Dudley, N, Mathur, V., Makombo, J., Courrau, J. & Parrish, J. 2008. Enhancing our Heritage Toolkit. Assessing management effectiveness of Natural World Heritage sites. UNESCO World Heritage Centre (World Heritage Papers 23), Paris. See https://whc.unesco.org/en/eoh/.

Figure 2.7 Tools within the Enhancing our Heritage Toolkit 2.0 (Source WHL)

The tools used to identify research needs based on the management issues at each of the HPL properties were:

Tool 1: Values, attributes and management objectives

This tool helps clarify the understanding of a World Heritage property by all those involved in the process and formed the basis for the whole assessment. The tool evaluates the understanding of a property's values and attributes, and whether the existing management objectives are appropriate for guiding the management system. With this tool, those involved in the assessment can identify the different values of their heritage place, including the OUV, but also other values at different levels (national, local, and other international designations). It also helps identify the attributes that carry the values, and the sources of this knowledge. In this way, the tool helps recognize the knowledge gaps regarding values, and whether the values and attributes that guide the conservation are clear for the people involved in the self-assessment process, and whether these are commonly shared with other actors playing a role in the management of the heritage place. In the context of the HPL, this tool helped the Research–Practice Teams identify those values that were not part of the OUV of their properties but which seemed to be important for rights-holders or other stakeholders. It also helped identify what is currently known in terms of values and what needs more research to be better understood.

Tool 2: Factors affecting the property

This tool assesses whether the factors that affect or could potentially affect a World Heritage property are known, understood and documented. It also analyses the adequateness of the management responses that deal with these factors. Further, the tool helps articulate which factors are current and

which are potential, as well as realising whether the underlying causes of these factors are clear among those developing the assessment and the documents guiding management, such as the management plans. The tool also helps identify whether the relationships between the different factors and their causes and impacts on the attributes of the property, are identified and documented, and whether there is a shared understanding of these. Moreover, the tool supports the exploration of whether management responses and actions have been suitably developed to address these factors. In this way, the people involved in the assessment can understand where the knowledge gaps lay and whether the responsibilities over who is in charge of the actions to contain or profit from these factors are clear. The challenges of undertaking management responses can be clarified. In the context of the HPL, this tool helped the Research–Practice Teams identify the pressing management issues at their heritage places and, also, whether these could be addressed through research.

Tool 4: Governance arrangements

This tool assesses if the roles and responsibilities of different managers are clearly defined, if there is effective coordination between them, and the level of engagement and participation of rights-holders in the management of a property. Specific objectives are to assess whether there is a good understanding of the actors with recognized responsibilities for managing the property (managers) as well as of actors with rights (rights-holders) and interests or influence (stakeholders) over the property. This tool helps to identify gaps in and challenges for the effective coordination and collaboration between managers, and aids in examining whether rights-holders are adequately recognized as well as the decision-making processes used at the heritage place. The tool supports the identification of actions that can engender respectful, inclusive and participatory governance at the property. In the HPL pilot phase, this tool helped all the Research–Practice Teams realize the complexity of the governance arrangements at their heritage places and identify knowledge gaps that could help improve them. Most of the properties involved in the pilot phase identified a research priority in their agendas related to governance issues, as outlined in the following chapters.

During the HPL, the worksheets that accompany these tools were used to facilitate discussion and exchange between managers and researchers. This helped the researchers identify and structure the information needed while recognising the local knowledge of managers who work daily on the ground. The managers found these tools useful because they provided a focus on the issues that were most urgent or significant, enabling a system of prioritisation. Notably, the OUV of the properties were not as clear as might be expected, the difference between values and attributes was not always clear, and the factors affecting the properties almost always required more investigation. Moreover, the reflection on governance proved to be of primary importance as this helped managers and researchers identify the roles and responsibilities of the different actors, so that power relations could be understood and the gaps that need to be addressed through research identified.

Other relevant tools included within EOH 2.0 but which could not be used during the HPL pilot phase due to time constraints were Tool 3 (boundaries, buffer zones and wider setting) and Tool 11 (outcomes - monitoring the State of Conservation). Therefore, these tools could usefully be adopted in subsequent iterations of the HPL.

Assignments

For the purpose of developing World Heritage properties' practice-led research agendas, the HPL involved each Research–Practice Team worked on five assignments (Table 2.1) during the two-week to four-month period between each of the six workshops. The results/outputs of each assignment were presented at each subsequent workshop.

Assignment I, "Management Issues and Research Needs", involved the managers in each team presenting on the management issues, and the researchers presenting on the research interests and needs, of each World Heritage property. This aimed to establish a baseline of knowledge for HPL process that could be used later to reflect on how the perceptions of management issues and research needs may have changed through collaborative analysis.

The next three assignments **(Assignments II, III and IV)** were based on Tools 1, 2 and 4 of the EoH 2.0 Toolkit, namely "Mapping Values and Attributes", "Mapping Actors" and "Factors Affecting the Property", respectively. The tools were adapted for the purposes of the HPL, and not all worksheets and questions within these tools had

1. A reflective journal article discussing the HPL process, from the baseline stage (management issues and research needs) to the identification of research priorities through the collaborative work between managers and researchers (see Annex 2 for the article template adopted, including prompts).
2. A practice-led research agenda stating the research priorities for each heritage place based on management issues and needs identified through the HPL process (see Annex 3 for the research agenda template adopted, including prompts).
3. A PANORAMA Nature-Culture snapshot solution showcasing the collaboration between the research institutions and management authorities involved in the HPL process.[6]

[6] https://panorama.solutions/en/portal/panorama-nature-culture

to be completed. The sequence of the assignments was designed to feed into the production of the practice-led research agenda for the World Heritage properties. Specific guidelines were provided at the end of each workshop for the assignment that was to be presented in the subsequent workshop. Written feedback was also provided for Assignments II, III and IV.

Assignment IV involved outlining each property's practice-led research agenda based on the results of the previous exercises as well as the process of reflection developed through the online workshops. Each Research–Practice Team had to present these results, and feedback was provided by facilitators and other members of the other teams. Three specific outputs were requested from each Research–Practice Team as part of this final assignment:

These outputs were finalized after the online workshops had been completed, allowing each team to focus on drafting the required documents.

Workshop	Assignment	Deadline	Presentation
I – Research-Practice Collaboration	I – Management Issues and Research Needs	Sep. 10, 2021	Sep. 12-15, 2021
II – Knowledge Systems Dialogues	II - Mapping Values and Attributes (Tool 1, EOH 2.0)	Sep. 30, 2021	Oct. 4-6, 2021
III – Building Collaborative Practice-Led Research Agendas	III. Mapping Actors (Tool 4, EOH 2.0)	Oct. 20, 2021	Oct. 25-26, 2021
IV – Partnering for Collaborative Research	IV - Factors Affecting the Property (Tool 2, EOH 2.0)	Nov. 10, 2021	Nov. 15-17, 2021
V – Building Common Practice-Led Research Proposals and Projects	V - Practice-led Research Agenda Outline	Mar. 10, 2022	Mar. 16-18, 2022
Vi – Publications and HPL Follow-up	VI - Publications • Final Research Agenda • Journal Article • PANORAMA snapshot solution	Apr. 30, May 30, Apr. 30, 2022	Published 2022-2024

Table 2.1 Assignments of the Heritage Place Lab pilot phase, showing deadlines and dates of presentation.

The HPL assignments supported the work within the Research–Practice Teams as they developed collaborative strategies for undertaking the requested tasks. In parallel, the discussions had during the HPL online workshops allowed exchange between the different teams, enabling a process of learning from different experiences. Additional exercises were used to explore common themes as umbrella topics for future research proposals (i.e. local values and intangible cultural heritage, climate change, governance, services and benefits), although this process would have benefited from more time. It was also noted that this process needed more time to explore additional topics. It was anticipated that the initial research agendas developed during the online workshops would be developed further, as a continuation of the HPL, by each of the Research–Practice Teams.

2.3 Testing the Research–Practice Team model

The HPL proposed a model of collaboration, namely the Research–Practice Team (Figure 2.8). Research–Practice Teams were composed of groups of between two and four researchers and managers. The research groups could include faculty members and post-doctoral and graduate students based in one or more research institutions covering cultural and/or natural heritage fields. The groups of site managers (one per World Heritage property) included individuals involved in the management of World Heritage and belonging to one or more institutions (e.g. managing authorities, municipalities, the local community, etc.) within the World Heritage site management system. The research groups proposed to work on a World Heritage property where they were either already active or on one of the properties proposed by the WHL based on those showcased in the PANORAMA Nature-Culture resource (see Annex 5). The teaming-up process was facilitated, if needed, by the WHL. The WHL encouraged Research–Practice Teams to work cross-regionally and in multi- and interdisciplinary groups considering gender and intergenerational balance. The Research–Practice Teams committed to working together for the duration of the HPL pilot phase and its follow-up activities. Terms of Reference were provided to all Research–Practice Teams together with letters of invitation before starting the online workshops (see Annex 4). Each Research–Practice Team had to appoint a research lead and a practice lead to both coordinate within the groups and function as the primary contact with the WHL. A wider aim of this approach was to allow Research–Practice Team members to share their experiences and lessons learned during the HPL with colleagues at their base institutions.

Figure 2.8 Composition of Research–Practice Teams within the Heritage Place Lab pilot phase
Source: WHL.

The call for applications received proposed from twenty Research–Practice Teams including those from Africa, Latin America, Europe and Asia. The following eight teams were ultimately selected and invited to participate in the pilot phase, encompassing twenty institutions and a total of **61 team members:**

1. **Asante Traditional Buildings, Ghana.**
2. **Antigua Guatemala, Guatemala.**
3. **Great Zimbabwe, Zimbabwe.**
4. **Jaipur city, Rajasthan, India.**
5. **Historic Sanctuary of Machu Picchu, Peru.**
6. **Okavango Delta, Botswana.**
7. **La Quebrada de Humahuaca, Argentina.**
8. **Rjukan-Notodden Industrial heritage site, Norway.**

These teams were selected based on a desire to ensure the following:

1. A diversity of institutions

The HPL included UNESCO Chairs, UNESCO Category 2 Centres, universities, research institutions working in different disciplines (architecture, urban planning, tourism, ecology, social sciences, etc.) and a diversity of management authorities including municipalities, archaeological parks, museums, ministries, World Heritage coordination units, provincial and local level management units, etc. Each of these institutions had different levels of responsibility and different mandates towards the heritage places they were working on. Exploring this diversity was an important aspect of the exchange within and between the different Research–Practice Teams, to better understand the research and management contexts connected to the range of World Heritage considered.

2. A diversity of typologies

The HPL pilot included cultural properties consisting of two historical cities/urban areas, one cultural landscape, one industrial site, one ensemble of vernacular architecture, and two archaeological parks; and natural properties consisting of two protected areas, of which one is part of a mixed site. The exploration and exchange between these different types of sites was fundamental in revealing similarities, common challenges, and also differences among regions, countries and specific sites.

3. A diversity of regions

The HPL pilot covered four of the five World Heritage regions – Latin American and the Caribbean (three Research–Practice Teams), Africa (three Research–Practice Teams), Europe (one Research–Practice Team), and Asia and the Pacific (one Research–

Practice Team). This favoured the exchange and peer-learning of different realities, contexts and ways of implementing the World Heritage Convention as well fostering an understanding of a diversity of management systems that depend on diverse political systems and geographies. This underpinned by an inclusive, interdisciplinary and intercultural approach to the HPL pilot phase.

The experiences of the Research–Practice Teams were complemented by guest speakers from a diversity of World Heritage places and countries, including those from Europe and Asia and the Pacific, which were underrepresented in the teams, to further enrich the exchange.

In some cases, the members of the Research–Practice Teams had collaborated previously, but these existing institutional arrangements were not aimed at co-producing knowledge or creating spaces for knowledge exchange and transfer. In this sense, the diverse PANORAMA snapshot solutions (see Annex 5) showcase how these collaborations worked, the results they achieved for the institutions involved, and the paths identified to enable ongoing collaboration.

Some aspects of the Research–Practice Team model could be adapted and refined for replication. For example, the election of leads (both of practice and research) could have been done after the team members start working together rather than as a pre-condition to start the collaborative process. It is also of primary importance to have the relevant management authorities involved in the process, so that the research agendas can, ultimately, be applied on site and incorporated into management plans and official activities. For some Research–Practice Teams where members were located some distance apart, joint working was difficult. It is, therefore, important to teams to include people with availability, interest and the support of their own institutions to engage with the work required during such an exercise.

During the first online workshop on research–practice collaboration, Japan was used as one example of where such team-based working is already practiced, where World Heritage site management is supported by local universities and scientific councils with the purpose of advising on management decision-making. As another example, The Blue Mountain World Heritage Institute (BMWHI) in Australia was specifically established to enable research, monitoring and educational outreach regarding the values and the threats that this natural property is facing. The BMWHI works directly with the site management, providing research and support for monitoring campaigns, climate change, and volunteering activities that contribute to site conservation. In Italy, the University of Florence and the Municipality of Florence have established the Heritage Research Lab (HeRe_Lab) as a collaboration between researchers and management aiming to address the management issues of the World Heritage city, including the development of its management plan (Francini, 2021). In Western Europe, the conservation and management of the Wadden Sea, a transboundary and transnational natural World Heritage property spanning Germany, the Netherlands and Denmark, is supported by a trilateral cooperation for the management and research (Luna, 2022). This includes a regular international scientific symposium that aims to share the best available knowledge about this highly sensitive ecosystem as well as address common management challenges that are increasingly related to climate change.

All of these cases were used to illustrate a diversity of models of cooperation between academics and site management that have proved effective in their specific context. For the HPL, one key innovative was the proposal to create teams of managers and researchers who remain attached to their institutions and, in the longer term, can develop projects together while having the flexibility to invite additional institutions and individuals according to the specific research needs of a site. Indeed, the inherent flexibility of the HPL Research–Practice Team model avoids needing establish rigid structures or new institutions that would require significant additional administrative burden.

Introduction to the HPL World Heritage properties

The HPL invited participation from a range of sites that were inscribed at very different periods, which allowed consideration of how the implementation of the World Heritage Convention has evolved over the last 50 years. **Asante Traditional Buildings (Chapter 3)**, which gives testimony to the Asante Kingdom in Ghana, was inscribed in 1980, and **La Antigua Guatemala (Chapter 4),** valued for its architecture and urban fabric legacy of the Spanish colonisation and exchange between Spanish and Indigenous cultures, was inscribed in 1979. These two examples are some of the first cultural properties inscribed on the World Heritage List. Notably, the former of these two properties was inscribed without clear boundaries, and the latter without a buffer zone, as these were not requirements at the time. Furthermore, both of these properties have no clear management systems since inscription, which still underpins their current management issues. Machu Picchu in Peru, valued for its Inca archaeological remains in a unique natural setting, was inscribed in 1983, and **Great Zimbabwe (Chapter 5)** in southern Africa, which provides the best representation of the dry stone building achievements of the Bantu civilisation of the Shona, was inscribed in 1986. These two properties are notable for their archaeological value. Even though Machu Picchu is one of the 39 mixed sites on the List, the predominance of its cultural values is clear. Furthermore, both of these sites are framed by their unique natural settings, which in the case of Machu Picchu is well recognized and valued just as much as its archaeology, yet is significantly under-recognized in the case Great Zimbabwe. Together, Asante Traditional Buildings, Antigua Guatemala, Machu Picchu, and Great Zimbabwe demonstrate the World Heritage priorities at the end of the last century, when heritage valuation was focused on tangible testimonies of major civilisations, monuments, and impressive infrastructure.

Jaipur City (Chapter 6) in Rajasthan, India, was inscribed in 2019 and is valued for the uniqueness of its 19th-century urban fabric, including important buildings and a syncretism of Western planning influenced by Hindu and Mughal spatial design. With clear boundaries and a buffer zone, Jaipur City requires a management system that involves not only the municipal authorities but also platforms for residents and other stakeholders to be engaged in the conservation efforts.

The Okavango Delta (Chapter 7) in Botswana was inscribed in 2014 as the 1,000th World Heritage site on the List. As a natural property, the delta is valued as a wetland of international importance, combining great beauty and a fundamental habitat for endangered species in the middle of the Kalahari Desert. The inscription of the site

has, however, given rise to a number of management issues related to tourism and local community engagement – a theme that is echoed by the other heritage places included in the HPL.

Quebrada de Humahuaca (Chapter 8), one of the few recognized cultural landscapes in South America, was inscribed in 2003 and is valued for the different layers of significance from prehistory to colonial times, where the ravine (quebrada) represented a pass from the high Bolivian plains to the low Argentinian plains (pampas) through the Andes Mountains. This site shows how the perception of World Heritage began to adopt a landscape approach, valuing not only the tangible remains but also the interactions between human communities and their environment through time.

Finally, the **Rjukan-Notodden Industrial heritage site (Chapter 9)**, in Norway, was inscribed in 2015. This property expands the landscape approach to industrial sites, where 19th-century technology and machinery that, previously, would not have been considered cultural heritage, is valued not only as tangible remains but also for its impact on the environment, use of natural resources and transformation of land uses, and ways of life through the creation of industrial towns. Notably, the narrative histories of these heritage places are often contested, as places like this one are usually inhabited, and residents are affected by the socio-cultural changes that a World Heritage designation signifies.

Notably, all of the sites share some common challenges regarding the recognition of local values and intangible cultural heritage as well as a lack of clear, inclusive, and accountable governance arrangements and decision-making processes. Furthermore, many of the sites are impacted by over-tourism or unsustainable tourism that, even though benefiting some aspects of the communities, can be detrimental to the environment and the heritage itself. Lastly, during the HPL pilot phase, all of the Research–Practice Teams recognized the importance of exploring the issues regarding climate change in more depth as an increasingly important factor affecting all properties but which is not well understood; how can managers and researchers support climate mitigation and adaptation at these heritage places, and how can communities, researchers, managers and other stakeholders get involved in monitoring climate impacts? These questions remain relevant and will be addressed in new iterations of the Heritage Place Lab.

2.4. A scalable research–practice collaboration model

The HPL model has been shared as a PANORAMA solution so that it can be replicated in other heritage places and contexts (World Heritage Leadership Programme, 2022). The HPL initiative has been divided into four building blocks or steps to aid replication by other knowledge brokers or any institution interested in establishing a similar process, whether at another World Heritage property or other heritage place. The only requirement is to adopt a place, people-centred and values-based approach to heritage management.

1 Building Block 1: Establishing partnerships between research institutions and management authorities

The first step is to initiate the collaboration and establish a formal partnership between the research institutions and the management authorities of the World Heritage property or other heritage place. In the case of the HPL, an open call for applications for Research–Practice Teams was released that stipulated a number of conditions for the association including the need for a balanced number of managers and researchers, endorsement from host research and management institutions, and a commitment to work collaboratively for the period of one year both online and offline. Even when research institutions are formally connected with or working at World Heritage properties, they may not always have the opportunity to work with the managers themselves. Thus, this approach a unique aspect of the HPL model in contrast to other types of institutional agreements.

The establishment of Research–Practice Teams allows for compositional flexibility. For example, during the HPL pilot, several teams changed some of their members, and institutional associations can be modified, expanded or reduced according to the development of the different tasks. Importance is placed on creating long-lasting relationships between managers and researchers who can actively participate in different initiatives and projects.

2 Building Block 2: Research–practice incubator online workshops

The second step requires initiating incubator activities, which in the case of the HPL had to be undertaken online due to the COVID-19 pandemic. The online platform also enabled larger teams to be convened, consisting of up to eight members and totalling 61 participants. This could be easily organized with smaller or larger groups if held on site, depending on whether the planned activities are intended to be run internationally (as with the HPL), regionally, nationally or focused on just one heritage place. Organising incubator activities is wholly dependent on the resources available to the knowledge broker and the institutions involved.

In the case of the HPL, each workshop comprised three online sessions of three hours each, with a total of 18 sessions and 56 hours. Each session was structured by an introduction, presentations of Research–Practice Team's assignments followed by questions and discussion, and talks by guest speakers on themes related to the priority themes and topics of the specific workshop. Some sessions included breakout rooms or plenary discussions. Detailed programmes of the online sessions of each workshop can be found in Annex 6, and Annex 7 details the specific exercises and questions that the Research–Practice Teams had to tackle in each session (Figure 2.9).

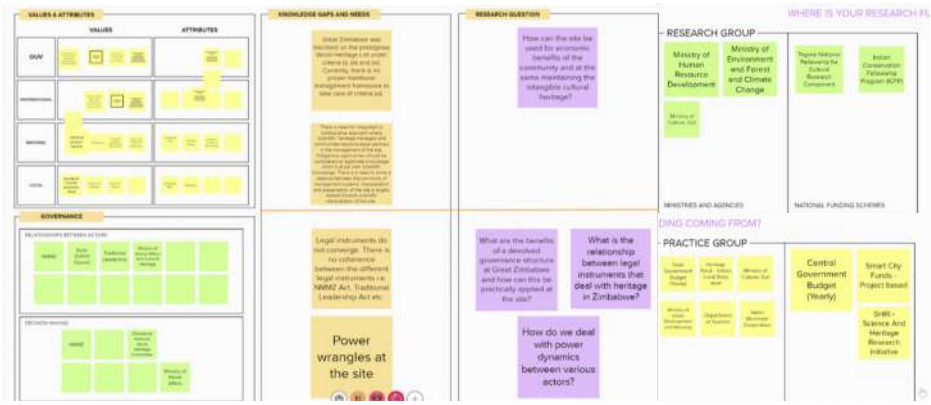


Figure 2.9 "Mural" board during the online workshops (Source: WHL).

One the one hand, the sequence of workshops (Figure 2.10) was designed to deepen understanding of the heritage places, while on the other hand, these sessions fed into the development of the research agendas, with inputs on the priority themes and the exchange of ideas between the different Research–Practice Teams, facilitators and organizers.

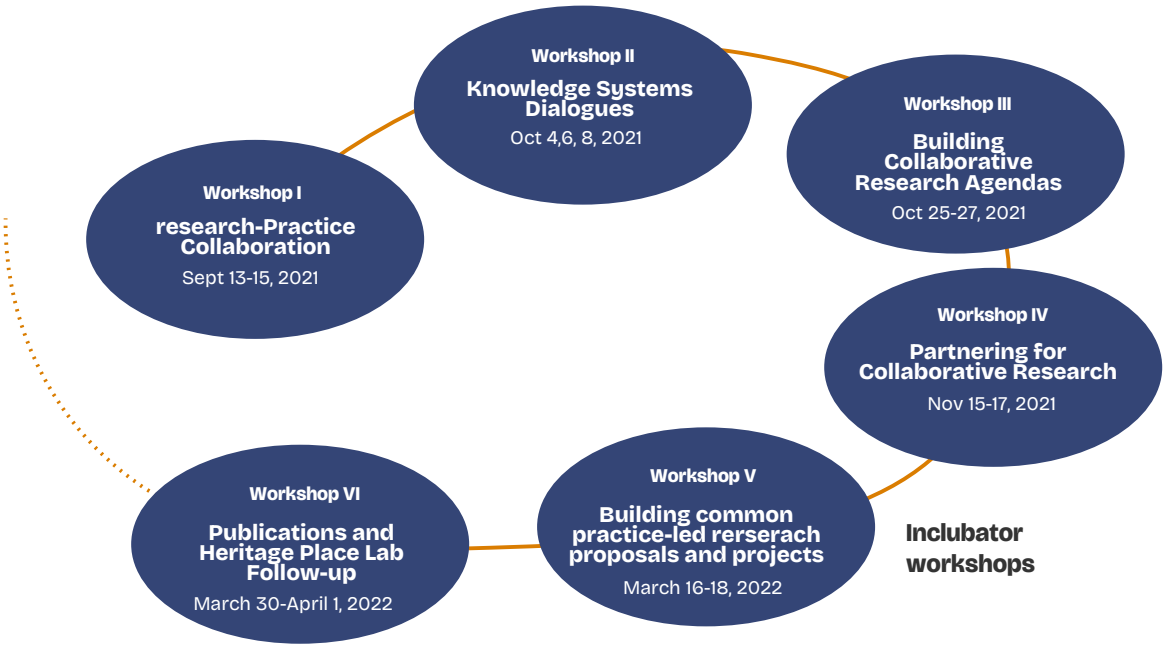


Figure 2.10 Six online workshops held as part of the Heritage Place Lab pilot phase (Source: WHL).

3 Building Block 3: Collaboratively assessing management effectiveness of World Heritage properties (or other heritage places)

For the purpose of developing the practice-led research agendas, the HPL model proposes that Research–Practice Teams work on assignments in the period between workshops, with their work being presented at subsequent workshops. During the pilot, the sequence of the assignments was designed to feed into the production of the research agendas using the Tools 1, 2 and 4 of the EOH Toolkit 2.0, as outlined in Section 2.2. The EOH Toolkit 2.0 was instrumental in the collaborative working

between researchers and managers. Even though the tools are designed for the use of managers, it was important for researchers to learn the relevant management concepts and language to really connect with the management needs. It was also important to structure the knowledge and document the process. Collaborative working between the researchers and site managers when assessing management effectiveness was also fundamental to strengthening the research–practice partnerships and enabled the inception of new potential projects and plans.

4 Building Block 4: Publication, communication and dissemination of outputs

The final step of the exercise is to develop outputs – concrete results that can be communicated within the participating institutions and to wider audiences including the local communities of World Heritage properties (or other heritage places) and, where relevant, the global World Heritage context. In the case of the HPL, dissemination allows replication elsewhere as well as the sharing of experience and individual case studies with other site managers and researchers. Three specific sets of outputs were planned as part of the HPL pilot phase, namely academic journal articles, research agendas, and the PANORAMA snapshot solution. These outputs allowed the Research–Practice Teams to reflect, collectively and individually, on the process, bringing continuity to the partnerships. Furthermore, the process of producing these outputs forms part of the capacity building activity and allows the knowledge broker to collect results that can be used in subsequent iterations of the process. Finally, in order to effectively disseminate the research–practice model for replication, it is necessary to count with a sharable format (online publication, for example).

Concluding remarks

As an experimental process, the HPL pilot phase has been a learning-by-doing exercise, where the WHL tested a new innovative model of collaboration between researchers and managers. Some aspects were successful and others need to be improved. In most cases of collaborative working, some aspects cannot be controlled by the knowledge broker, such as the internal dynamics within the Research–Practice Teams. What is very clear from the pilot phase is that participating teams require time to get into the process, understand the proposal, and get used to working together. The teams themselves also need to have a strong desire and the initiative to drive the process forward. Therefore, it is recommended to consider this time allocation for the future deliveries of similar activities. It is also worth noting that the time available for exchange between the different teams was limited in the online workshops and, therefore, allowing more time for team-to-team interaction would likely prove more effective at generating common research proposals.

In the following chapters, the outputs of each of the Research–Practice Teams involved in the HPL pilot phase are presented. Each chapter is structured according to a template provided by the WHL, with the purpose of showcasing the results of the collaborative process. The management issues identified through the process are also stated, followed by the research agenda with the research priorities identified by each team as being most relevant to their heritage place. While the HPL process allowed each Research–Practice Team to identify priorities for their site, the intention might not necessarily be for these to be addressed or implemented by the teams themselves. Rather, the agendas generated through the HPL process can be adopted by the management authorities when developing and revising in their management plans while also providing a useful reference for other researchers interested in working at these sites. In some cases, the Research–Practice Teams recognized that implementing their agendas would involve convening other research institutions or individuals, while in other cases, teams planned to progress their agendas themselves. The intention is that news and updates about the progress and implementation of the HPL research agendas will be made available via the WHL.

References

Barrett, M. & Oborn, E. 2018. Bridging the research-practice divide: Harnessing expertise collaboration in making a wider set of contributions. Information and Organization, 28(1): 44–51. https://doi.org/10.1016/j.infoandorg.2018.02.006.

Francini, C. 2021. HeRe_Lab: a joint heritage research lab for the management of the World Heritage property of Florence, Italy. In: PANORAMA Solutions for a Healthy Planet (available at: https://panorama.solutions/en/solution/herelab-joint-heritage-research-lab-management-world-heritage-property-florence-italy).

Han, H. & Stenhouse, N. 2014. Bridging the Research-Practice Gap in Climate Communication: Lessons from One Academic-Practitioner Collaboration. Science Communication, 37(3): 396–404. https://doi.org/0.1177/1075547014560828.

Hering, J.G. 2016. Do we need "more research" or better implementation through knowledge brokering? Sustainability Science, 11: 363–369. https://doi.org/10.1007/s11625-015-0314-8.

Luna, S. 2022. Participatory Process of Development of the single integrated management plan (SIMP) for the transnational Wadden Sea World Heritage site. In: PANORAMA Solutions for a Healthy Planet (available at: https://panorama.solutions/en/solution/participatory-development-process-single-integrated-management-plan-transnational-wadden).

Duxbury, N., Bakas, F.E. & Pato de Carvalho, C. 2021. Why is research–practice collaboration so challenging to achieve? A creative tourism experiment. Tourism Geographies, 23(1–2): 318–343, https://doi.org/10.1080/14616688.2019.1630670.

Ishizawa, M. & Jo, E., eds. 2023. Towards practice-led research agendas for World Heritage properties. Journal of Cultural Heritage Management and Sustainable Development, 13 (3). https://doi.org/10.1108/JCHMSD-08-2023-217

Iwama, A.Y., Araos, F., Anbleyth-Evans, J., Marchezini, V., Ruiz-Luna, A., Ther-Ríos, F., Bacigalupe, G. & Perkins, P.E. 2021. Multiple knowledge systems and participatory actions in slow-onset effects of climate change: insights and perspectives in Latin America and the Caribbean. Current Opinion in Environmental Sustainability, 50:31–42.

Nakashima, D.J., Galloway McLean, K., Thulstrup, H.D., Ramos Castillo, A. & Rubis, J.T. 2012. Weathering Uncertainty: Traditional Knowledge for Climate Change Assessment and Adaptation. Knowledges of Nature 5. Paris, UNESCO and Darwin, UNU, 120 pp.

Stegmeijer, E. & Veldpaus, L., eds. 2021. A Research Agenda for Heritage Planning. Perspectives from Europe. Cheltenham, UK, and Northampton, MA, USA: Edward Elgar.

UNESCO 1972. Convention concerning the protection of the world's cultural and natural heritage. World Heritage Convention (available at: https://whc.unesco.org/en/conventiontext/).

UNESCO 2023. Operational Guidelines for the Implementation of the World Heritage Convention. World Heritage Convention (available at: https://whc.unesco.org/en/guidelines/).

UNESCO, IUCN, ICCROM & ICOMOS Forthcoming. Enhancing our Heritage Toolkit 2.0. Assessing management effectiveness of World Heritage properties. Paris, UNESCO.

World Heritage Leadership Programme 2022. Heritage Place Lab, interlinking research and practice for improving World Heritage management. In: PANORAMA Solutions for a Healthy Planet (accessible at: https://panorama.solutions/en/solution/heritage-place-lab-interlinking-research-and-practice-improving-world-heritage-management).

Okavango Delta, Botswana.
Image by Teo Gómez (2016) via Wikimedia Commons. Public domain.

Part II:
The Heritage Place Lab Results

Practice–led Research Agendas for World Heritage properties

Asante Traditional Buildings

Ghana

Chapter 3

Recovering Traditional Management

Asante Traditional Buildings, Ghana

Christopher Wetcher[1], Kodzo Gavua[1], William Nartey Gblerkpor[1], Benjamin Kankpeyeng[1], Francis Kwarayire[2], Malik Saako[2] and Abdul-Raul Issahaque[2]

[1] University of Ghana, Department of Archaeology and Heritage Studies
[2] Ghana Museums and Monuments Board (GMMB)

Image of Asante Courtyard. Copyright Kodzo Gavua (2021).

I. Background

1. Brief description of the World Heritage property

The Asante Traditional Buildings (ATBs) are the material culture manifestations of the Asante people in Ghana. The Asante people belong to the Akan language group and can be found in the central forest region of present Ghana. Through a series of wars and conquests, the Asante people extended their territory. The Asante Kingdom was established in the late 17th century when the Asante were forged into a powerful confederacy under the leadership of the first Asantehene, Osei Tutu, and his chief priest and advisor Okomfo Anokye.

The ATBs are located in the Asante Region of Ghana (Figure 3.1), with ten ATBs found in the communities of Abirim, Adarko, Gyakye, Asawase, Asenemaso, Bodwease, Edwenease, Kentikrono, Patakoro, and Saaman (Figure 3.2). The ATBs date to the late 17th century, when the Asante Kingdom was established and reached its peak in the 18th century.

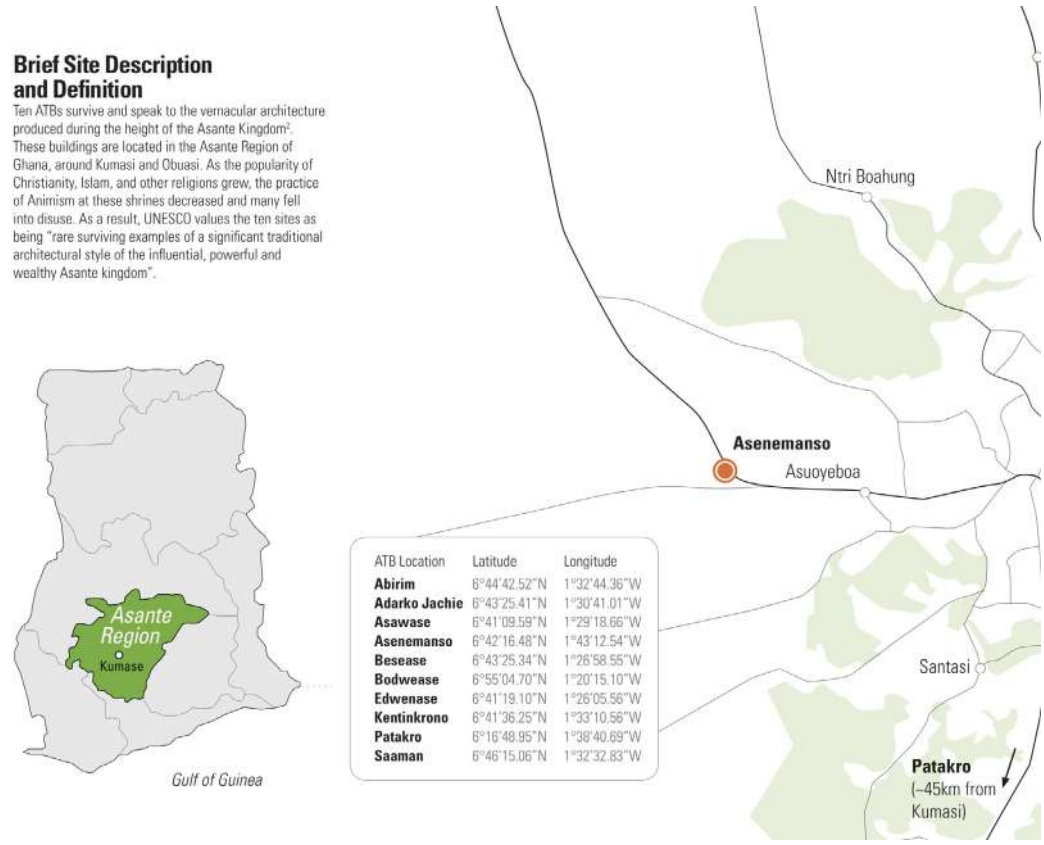


Figure 3.1 Map of the Asante Region (Source: Gina Haney, 2014).

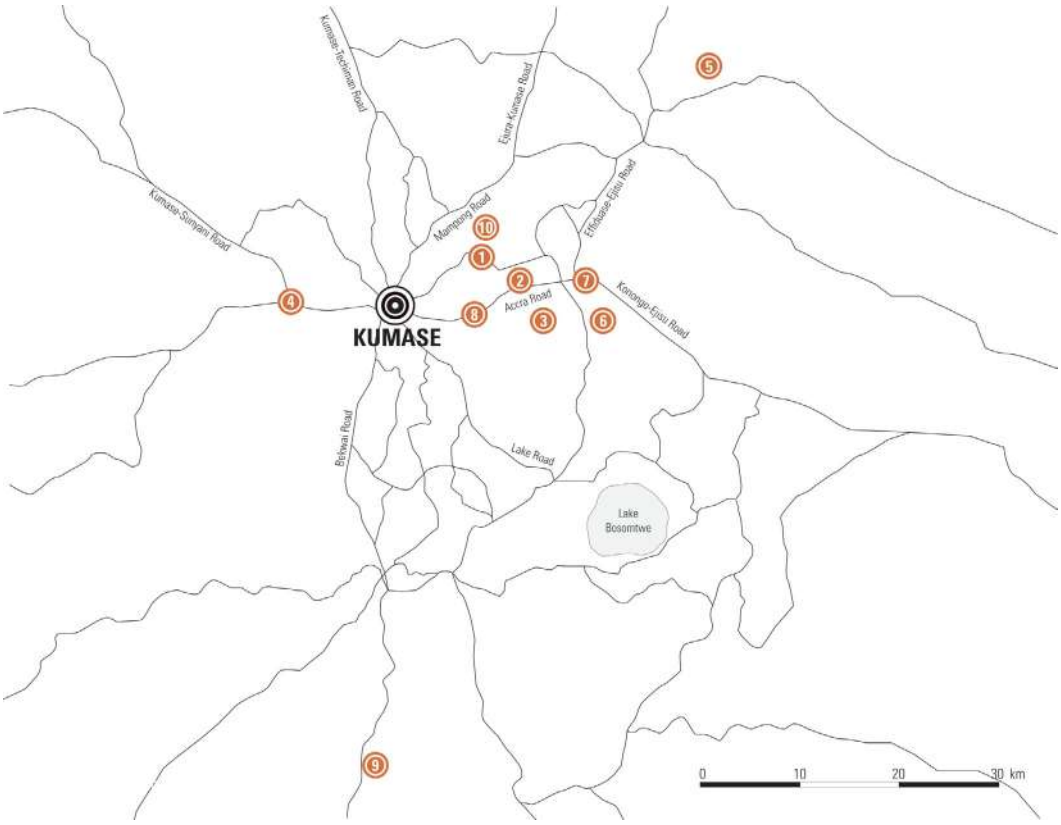


Figure 3.2 Locations of the Asante Traditional Buildings (Source: Gina Haney, 2014).

The ATBs are rectangular in plan view with different courtyards used for various purposes. The buildings were primarily constructed of mud plastered onto a timber framework, with steeply pitched roofs covered with thatch [Figures 3.3(a–b)]. The upper sections of the buildings were painted with white clay, whilst the plinths and the lower sections were painted with red laterite andw polished to a dull shine. These buildings are associated with the institution of chieftaincy and/or the Indigenous animist religion (Prussin, 1980), with the belief that everything created by the creator has a spirit and life. The buildings served as palaces, houses for the powerful deities who protected the Asante Kingdom, and homes for the affluent.

The ATBs are mostly made up of four buildings enclosing a central courtyard. Three of the buildings are open to the courtyard with raised floors called dampons. One of these was reserved for drummers during religious ceremonies, with its three plain walls giving effective sound resonance. Another room, usually the one opposite, was used by singers who accompanied the drumming. The third open room was used as a cooking area, where ceremonial meals were regularly prepared to be partaken by the Gods. The fourth building housed the shrine and is enclosed by decorated walls or intricate open-work screen walls that allow ventilation and lighting, creating an unusual and mysterious atmosphere. The shrine itself was placed on a raised and often ornamented platform, or dais, and this room could only be accessed by the priest and his attendants, known as nsumankwaafo.

Figures 3.3 Beasease Asante Traditional Building (Source: Chris Wetcher, 2019)

An important feature in the courtyard is the Nyame dua or altar for the Sky God (Figure 3.4). This takes the form of a tree or forked post, between the branches of which is wedged a calabash, pot, or brass basin into which sacrificial offerings were deposited. This is placed to the right of the shrine room entrance. Such altars were formerly found in every Asante compound, and the oldest member of the home would not eat before placing some food into it for Onyame (God) (Prussin, 1980).

Figure 3.4 An image of Nyame dua (Source: Chris Wetcher, 2019).

In addition to the fact that these buildings are the custodians of traditional religion in a form of consultation with the deities for direction on specific issues or prior to important initiatives in the Kingdom (Prussin, 1980), other local values associated with the buildings relate to their mural decorations. Common forms of designs on the ATBs include spiral and arabesque details with representations of animals, birds and plants linked to traditional Adinkra symbols (Prussin, 1980; Joffroy et al., 1998; Figure 3.5). As with other traditional art forms of the Asante Kingdom, these designs are not merely ornamental but also have symbolic meaning, are associated with the ideas and beliefs of the Asante people, and have been handed down from generation to generation. Thus, the ATBs reflect and reinforce a complex and intricate technical, religious, and spiritual heritage (Prussin, 1980; Joffroy et al., 1998). The mural decorations on the ATBs have socio-cultural, socio-religious, and socio-political relevance to the Asante Kingdom; they reveal the power embodied in them as the abode of the traditional authorities, and show the power of the various actors (chiefs, priests, and elders) within the Asante Kingdom.

In 1960, after Ghana had gained independence from British rule in 1957, the ATBs were declared national monuments and were handed over to the Ghana Museums and Monuments Board (GMMB). Subsequently, the ATBs were serially listed as World Heritage at the 4th Session of the World Heritage Committee Meeting held in Paris, 1–5 September 1980. The property was listed under criterion (v) based on the ATBs being the last remaining testimony of what is considered the unique architectural style of the great Asante Kingdom. Beyond this internationally recognized value, the local communities value the buildings highly as places where they connect with their maker and the spirits of their ancestors.

Figure 3.5 Examples of mural decorations on the Asante Traditional Buildings (Source: Chris Wetcher, 2019).

2. Main management issues

The ATBs are currently in a poor condition and risk being placed on the List of World Heritage in Danger List if urgent interventions are not undertaken to rehabilitate and restore them. The GMMB – the implementing agency of the World Heritage Convention mandated by law to manage all monuments and heritage sites including the Asante Traditional Buildings World Heritage Site – have been severely under-resourced to effectively manage the ATBs. The absence of a management plan and adequate heritage laws has further exacerbated their deterioration. In addition, each of the ATBs does not have a site manager who can undertake regular condition assessments to ascertain and monitor their state of conservation.

Since the GMMB operates by legal instruments (with laws deriving from the Colonial period), the management of the ATBs is state based. A State-Based Management System (SBMS) is a management system premised on modern concepts of conservation and colonial laws (Mumma, 2003). However, SBMSs are mostly devoid of Indigenous Knowledge Systems (IKS) and are implemented by State institutions. The few conservation interventions that have been undertaken by the GMMB since the inscription of the ATBs on the World Heritage List have not adequately addressed the factors affecting the buildings. These factors, stated in the State of Conservation reports submitted to the World Heritage Committee, include inadequate and ineffective conservation mechanisms; weak research; development and land-use change; tropical climatic conditions; a governance and conservation structure informed by SBMSs; insufficient resources available for the conservation of the

fragile ATBs; the proliferation of insects; and an intensification of agriculture (SOC Reports 1996, 1997, and 1999). The persistence of these factors has led to the loss of some parts of the ATBs, including some of their important attributes, such as mural decorations, shrines and paintings that convey the values of the buildings. Some of the ATBs have also been restored by the communities using modern concrete rather than traditional materials. This was done in the absence of proactive measures by the GMMB; the local communities resorted to using concrete when they failed in their attempts to enlist the help of the GMMB and the Government (District Assembly). These non-compliant interventions, though intended to slow the deterioration of the buildings, are compromising their Outstanding Universal Value (OUV).

Most concerning, some of the ATBs have been abandoned in the past two years following the removal of caretaker salaries by the GMMB. The emerging problem is that the site is not effectively managed and is increasingly becoming vulnerable to both human and natural threats. Furthermore, local community wisdom and traditional approaches have not been harnessed to address the situation, which compromises the standing of the site as a World Heritage site. In particular, issues of authenticity and integrity have been compromised due to the weak protection and lack of a management system for the ATBs.

It is worth noting that the heritage laws in Ghana are inadequate for the effective management of the nation's heritage sites. These laws were inherited from the colonial regime and have no regard for IKS. Thus, there is urgent need to review and revise these colonial laws that, for a long time, have relegated traditional management systems to the background. In order to develop an integrated approach to the management of heritage places and World Heritage sites in Ghana, particularly the ATBs, it is necessary to have a legislative instrument that effectively interweaves the wisdom and knowledge practices of the local communities.

Outside of Kentikrono Shrine.
Image by Noahalorwu (2016) via Wikimedia Commons. Creative Commons Attribution-Share Alike 4.0.
Original image cropped for design purposes.

II. Research Agenda

1. Introduction

Research in Ghana has, for a long time, been conducted in silos. Thus, several institutions undertake similar research leading to duplication in effort that could be avoided if institutions worked together to achieve a common goal. Thus, this research agenda, developed by the Research–Practice Team under the World Heritage Leadership's Heritage Place Lab initiative, seeks to address this gap by bringing both researchers and practitioners together with the view of promoting innovative research and making the most of limited resources by minimising duplication.

2. Research priorities

1

Research priority 1
Indigenous knowledge (IK) and intangible cultural heritage (ICH) of the ATBs

Understanding the values of the ATBs is critical to their management. The lack of understanding of the values and attributes underpinning the values of these buildings negatively affects their overall management. While the local communities need to understand the international value and OUV, it is also imperative that local values – those values associated with the ATBs by the local communities – are ascertained to help inform the management processes. Without a proper understanding of the local values of the ATBs, any management system, devoid of IK, is a clear betrayal of the pioneering spirit of the buildings themselves.

Arguably, when the value of something is not known, mishandling becomes inevitable. In this regard, understanding the local values of the ATBs is critical to their effective conservation and management.

Embedded in the values that the local communities attribute to the ATBs is the IKS that serves as the foundation principles for their conservation. As shrine houses, the ATBs possess several ICH values that, when harnessed, can advance their management. As a World Heritage site, the management processes for the ATBs have relied on the World Heritage Convention and their OUV as captured under the Convention. Unfortunately, their OUV does not fully capture the ICH and IKS components of these buildings.

To successfully integrate IKS with the SBMS, detailed research is needed on the IKS of the local communities. While the ATBs have survived from

the pre-World Heritage status through the resiliency of the IKS of the local communities, these systems have not been documented. Their survival is an indication that some effort has been made by the local communities to preserve them; proper and detailed documentation of the IKS associated with the ATBs will help inform the site managers (and the GMMB more broadly) with the right/pioneering methods and approaches needed to help enhance the conservation of the ATBs. In this regard, questions that need to be considered are: What IKS underpinned the management of the ATBs before they were listed as a World Heritage site? Are there any of these management practices continuing?What values do the local communities attach to the buildings? How can these values be incorporated into the overall management of the ATBs?

2 Research priority 2
Towards participatory and inclusive governance arrangements for the management of the ATBs

In addition to documenting the IKS of the local communities and integrating this into the management of the ATBs, these local communities should be empowered to assist in their protection. Thus, for the effective and efficient management, relevant stakeholders should be involved in the decision-making and management processes of the ATBs. This will help avoid the top-down management approach characterized by the SBMS and, further, ensure the co-control, co-ownership and co-production of knowledge/ideas and management policies. To achieve this, the key questions that need to be addressed are: How can the local communities be involved in the decision-making process and management of the ATBs? What role can the local communities play in the management of the ATBs?

3 Research priority 3
Addressing climate change impacts on the ATBs

As well as affecting the socio-economic lives of people in many countries, many heritage sites, including World Heritage sites, are being gravely affected by climate change. For example, the two World Heritage sites in Ghana, namely the Forts and Castles, Volta, Greater Accra, Central and Western Regions; and the ATBs, are increasingly threatened. The walls, pillars and mural decorations of some of the ATBs have been destroyed by climatic factors (Figure 3.6). This has greatly impacted the materiality of the buildings. As no research has been done in Ghana on the impact of climate change on heritage sites, the ATBs offer significant opportunity as a case study. It is anticipated that empirical evidence derived from such research would help develop a more resilient and adaptable management system in the face of climate change. Key questions to explore here are:

To what extent has climate change impacted the materiality of the ATBs? How can the impacts of climate change on the ATBs be mitigated through Indigenous and contemporary methods?

Figure 3.6 Impacts of climate change on the Asante Traditional Buildings (Source: Chris Wetcher, 2019).

III. Inputs Needed and Expected Outputs

To address the research priorities outlined in Section II, the Research–Practice Team intends to undertake stakeholder engagement, ethnographic research, condition assessments, interviews, archival research, a needs assessment of the GMMB, and rehabilitation works. These activities will be done in partnership/collaboration with the local communities, UNESCO, the District Assembly, the GMMB, and the Ghana Ministry of Tourism, Arts and Culture.

Expertise in earthen architecture and stakeholder engagement will be essential given that the nature of the ATBs requires knowledge-holders and professionals with expertise in mud construction and those with an understanding of the materiality of these buildings. In addition, specialist knowledge of World Heritage and its management processes will also be needed when carrying out this research agenda along with other technical and financial resources. Overall, it is expected that this research agenda will provide empirical evidence for the development of an integrated management system that will help manage the ATBs effectively and efficiently.

IV. Desired Outcomes

A period of 48 months will be required to effectively address the outlined research priorities. Successful implementation of this research agenda will ensure that the IKS associated with the ATBs is fully documented and prioritized in the ATB management system. In addition, site managers will be equipped with traditional management systems that, when incorporated into the SBMS, should offer a more effective ATB management system. Furthermore, if there are changes in the personnel associated with the ATBs, the documented IKS and its application can guide the new staff to ensure that the ATBs remain properly managed.

The implementation of the research agenda will also empower local communities as legal stewards of the ATBs. In this regard, through consultation and engagement, local communities can better understand the local, national, regional and international importance of the ATBs as well as the role that they can play in their ongoing conservation. This will go a long way to ensuring that the ATBs are co-owned and co-managed by the local communities alongside State institutions. The empirical evidence gathered from the implementation of the research agenda will also help inform national-level policy and legislative reviews. More broadly, it is intended that this research will advocate for a review of the outdated heritage laws in Ghana and the domestication of the World Heritage Convention.

Overall, the research agenda developed by the ATB Research–Practice Team supports an integrated management system to ensure that the ATBs are managed effectively and efficiently. Most importantly, this must involve and engage the local communities who are indispensable in the management process of the ATBs. Actively involving communities in the existing decision-making framework of the government institutions mandated to manage the ATBs (the GMMB) will inspire these communities to contribute to the management and conservation process. This help to remove the top-down approach imposed by the SBMS that has disempowered those communities who are the primary owners and custodians of the ATBs.

References

Abungu, O.K. 2016. Introduction. In: O.K. Abungu, N. Ndukuyakhe, E.F.I. Thiombiano, J. Zulu & S. Varrissou, eds. Traditional Management Systems at Heritage Sites in Africa, pp. 8–10. Midrand, South Africa.

Eloundou, L. 2005. The traditional conservation of the Mousgoum hutshells. In: T. Joffroy, ed. Traditional Conservation Practices in Africa, pp. 82–89. ICCROM Conservation Studies 2, Rome, ICCROM.

Gavua, K. & Nutor, K. 2014. Bringing Archaeology to the People: Towards a Viable Public Archaeology in Ghana. In: J. Anquandah, B. Kankpeyeng, & W. Apoh, eds. Current Perspectives in the Archaeology of Ghana, pp. 264–275. Social Sciences Series 6, University of Ghana Readers. Accra: Sub-Saharan Publishers.

Gblerkpor, W.N. 2005. An Archaeological Investigation of the Krobo Mountain dry-stone terraces. Unpublished M. Phil. thesis, University Ghana, Legon.

Gethitho, N.A. 2005. The sacred Mijikenda Kaya forests of coastal Kenya: traditional conservation and management practices. In: T. Joffroy, ed. Traditional Conservation Practices in Africa, pp. 62–69. ICCROM Conservation Studies 2. Rome, ICCROM.

Joffroy, T. 2005. Introduction. In: T. Joffroy, ed. Traditional Conservation Practices in Africa, pp. 1–5. ICCROM Conservation Studies 2. Rome, ICCROM.

Joffroy, T. Moriset, S. & Misse, A. 1998. Asante Traditional Buildings - Asante traditional buildings. Accra, Ghana, UNESCO, ICCROM & CRATerre-EAG.

Kankpeyeng, W.B. 2005. The cultural landscape of Tongo-Tengzuk: traditional conservation practices. In: T. Joffroy, ed. Traditional Conservation Practices in Africa, pp. 16–23. ICCROM Conservation Studies 2. Rome, ICCROM.

Mumma, A. 2003. Community-based legal systems and the management of World Heritage sites. In: E. de Merode, R. Smeets, & W. Westrik, eds. 2004. Linking Universal and Local Values: Managing a sustainable future for World Heritage. World Heritage Papers, 13: 43–44. Paris: UNESCO World Heritage Centre.

Ndoro, W. 2001. Your Monument Our Shrine. Unpublished PhD thesis, Uppsala University.

Prussin, L. 1980. Traditional Asante Architecture. The MIT Press Journal, 13(2): 57–87.

Prussin, L. 1968. The Architecture of Islam in West Africa. African Arts, 1(2): 32–74. https://doi.org/10.2307/3334324.

Taruvinga, P. 2019. Stakeholders, Conservation and Socio-economic Development: the case of Mapungubwe Cultural Landscape World Heritage Site, South Africa. Unpublished PhD thesis, Department of Archaeology, Faculty of Science, University of Cape Town, South Africa.

Tony, Y. (2017). The Development of Architecture in Kumase, 1874-1960. Unpublished thesis submitted to the Department of History, of the College of Humanities and Legal Studies, University of Cape Coast in partial fulfilment of the requirements for the award of Master of Philosophy degree in History. (L. Digitized by UCC, Compiler) University of Cape Coast.

Atuo Kosua Shrine.
Image by Shahadusadik (2016) via Wikimedia Commons. Creative Commons Attribution-Share Alike 4.0.
Original image cropped for design purposes.

La Antigua Guatemala

Guatemala

Chapter 4

Building Consensus for a Buffer Zone La Antigua Guatemala

Mario Raúl Ramírez de León[1], María Elena Molina Soto[1], Claudia Blanca Verónica Wolley Schwarz[2], Olga Edith Ruiz[1], María Magdalena Ixquiactap Tuc[2], Josué Roberto García Valdez[2] and Dafné Adriana Acevedo Quintanilla de López[1]

[1] Universidad San Carlos de Guatemala (USAC)
[2] Consejo Nacional para la Protección de la Antigua Guatemala (CNPAG)

Image of Town Hall of Antigua Guatemala by Claudia Wolley Schwarz, with permission.

I. Background

1. Brief description of the World Heritage property

La Antigua Guatemala is in Guatemala, Central America, in the department of Sacatepéquez in the middle of the Panchoy Valley (Gall, 1976), with its foundation recorded on March 10th, 1543 (Pardo, 1984). Prior to Spanish colonisation, this territory was occupied by 22 Mayan cities (Perrot-Minnot, 2002).

During the colonial era, the city of Santiago (the former name of La Antigua) was the political-administrative seat of the region of Central America and southern Mexico (Carlos I, 1543, Chapter XI), having an important role in the historical formation of the territoriality of the American continent (López, 2005). The colonisation left, within the city, the remains of at least 45 groups of religious buildings. One university and various governmental buildings are also found in La Antigua area, for example. The city had its heyday during the 18th century despite being subject to constant and destructive earthquakes, which led to its eventual destruction in 1773. Left in ruins, the Spanish Crown ordered residents to abandon the city, moving them 42 km to the valley of the Hermitage, where today Guatemala City is located as the modern capital of the country (Pardo, 1984). As a result, the city was reduced to a village, inhabited only by workers dedicated to crop agriculture and animal grazing. In 1799, the Audiencia appointed a City Council for the city in ruins, giving it the official name of La Antigua Guatemala.

During the 19th and early 20th centuries, the city was slowly populated while being visited by foreign chroniclers who recorded their amazement and admiration for the characteristics of the city, its population and its landscape (Stephens, 1971), describing it as a "romantic and picturesque city", initiating it as a tourist destination. From 1930 to 1950, the first academic studies on the city's architecture and urban planning were carried out and, later, two key books were published. The first of these books was published by Sidney David Markman (1966) of the American Philosophical Society, and the second by the American architect Verle L. Annis (1968), published by the University of San Carlos of Guatemala. Both Markman and Annis are known for their descriptions of the historical value of the urban layout and scenery of the city, forming the basis for the Legislative Decree 60-69, of the Congress of the Republic of Guatemala (the Law for the Protection of the City of La Antigua Guatemala) (UNESCO, 2006).

With this previous research and an increasing interest in the city from academics and tourists (Markman, 1966; Annis, 1968; Pardo et al., 1968; Stephens, 1971), awareness of the historical, monumental and aesthetic values of the city increased, especially due to its state-of-the-art buildings (Ramírez, 2014). Annis also contributed to the declaration of La Antigua as a National Monument in 1944 by President Jorge Ubico (Moyssen, 1969). In 1965, the city was declared a "Monument City of America" by the Pan-American Institute of Geography and History (Figure 4.1). In 1969, the Decree 60-69 was issued by Congress, creating the National Council for the Protection of La Antigua Guatemala (CNPAG) as the institution responsible for its protection and conservation, initiating its first activities in 1972. Seven years later, in 1979, La Antigua was inscribed on the UNESCO World Heritage List as a cultural property of Outstanding Universal Value (OUV) (Ubico Calderón, 2019).

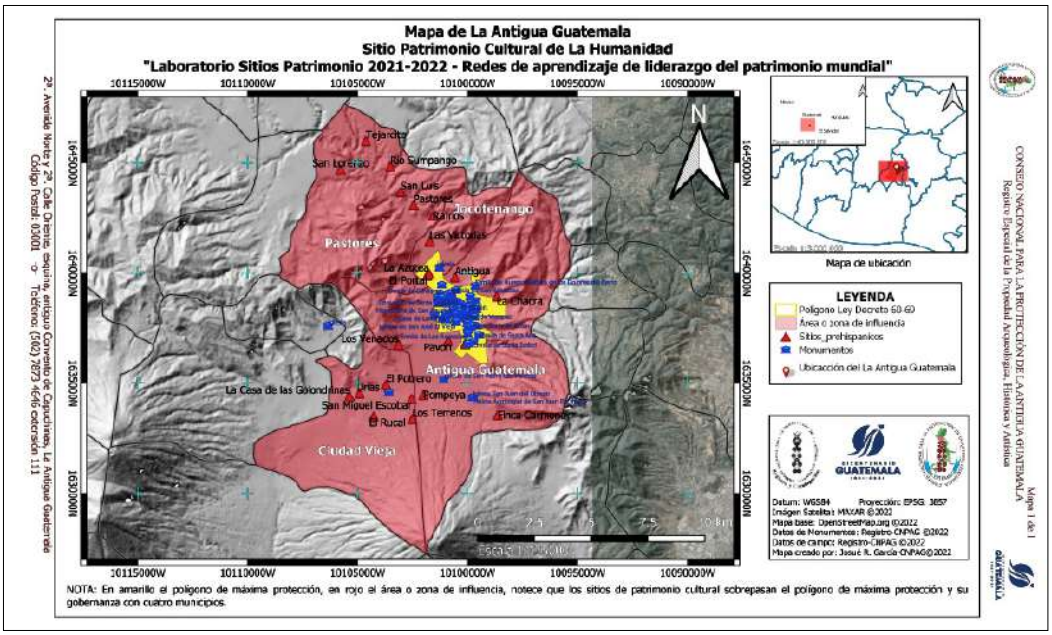


Figure 4.1 Map of La Antigua Guatemala and surrounding areas. The conservation polygon established in the Decree 60-69 of the Congress of Guatemala is shown in yellow; thee surrounding areas are shown in red (Source: Courtesy CNPAG, 2022).

La Antigua Guatemala's Outstanding Universal Value

The city of La Antigua was inscribed as a World Heritage city (ICOMOS, 1979) because it contains living vestiges from 16th to 18th-century Spanish culture in America. It was also an international trade centre of religious images and statues during the 17th and 18th centuries. Its religious, private and government buildings are outstanding evidence of Spanish colonial architecture in America, with a Renaissance-type urban layout. Antigua's Baroque developed in this area as a regional adaptation of the Baroque style, designed to be resilient to the frequent earthquakes in this region (Figure 4.2).

Figure 4.2 Aftermath of the 1976 earthquake in La Antigua Guatemala showing people walking over the debris of a house (Source: Courtesy CNPAG [ref. envelope 1, 15A], 1976).

Other important values and designations

In La Antigua, religious, architectural and artistic syncretism are found in sculptures and paintings, harmoniously combining the Spanish colonial and Indigenous cultures. Furthermore, the diverse socio-cultural heritage and intangible cultural heritage, which is found in La Antigua Guatemala's neighbourhoods and its surrounding towns, represent important local values. Traditions and festivities as well as the gastronomy, food systems, oral tradition and handicrafts (including masks-making, basketry, jewellery, sculpture, saddlery, weaving, carpentry, and blacksmithing) are important aspects of local communities' livelihoods (López, 2006). In particular, the celebration of the Holy Week and Easter stands out internationally. The Ministry of Culture and Sports of Guatemala (MICUDE) recognizes this festival as being Cultural Heritage of the Nation under Ministerial Agreement number 560-2008, and on the 30th November 2022, the festival was inscribed in the Representative List of Intangible Cultural Heritage of Humanity in Rabbat, Morocco, during the 17th meeting of the 2003 UNESCO Convention Intergovernmental Committee. Such designations reflect the growing interest in intangible cultural heritage values and the importance of considering heritage as an integral whole, both in its material and immaterial aspects; La Antigua provides a clear example of the conjunction of architecture and natural environment, with the traditions and customs of its inhabitants evident in the Holy Week (MICUDE, 2022).

At the same time, the landscape and natural environment of La Antigua Guatemala has always been an integral part of the city. The scenic landscape (Figure 4.3), composed of hills to the North, East, West and the colossal volcanoes to the South demarcate the Panchoy Valley, with its historic towns, and coffee-grevillea farms of the 18th and 19th century form an agro-industrial landscape. The importance of the landscape is partially protected in some designated areas by the National Council of Protected Areas (CONAP) of Guatemala (2021). Furthermore, archaeological remains of human occupation have been found in the Panchoy Valley from c.1300 ± 500 BC (Robinson, et al., 1998, 2000).

In 1996, the University of San Carlos of Guatemala (USAC) undertook a study to define a "green belt" around La Antigua Guatemala (Búcaro and Mc Mannis, 1996). The green belt originated after the 1874 and 1918 earthquakes, which caused depopulation but also resulted in the consolidation of green areas around the city, largely composed of coffee plantations (Kraker and Pérez, 2011) alongside avocado and grevillea trees, forming a landscape unit (Herrera & Lesslie, 2013) and hydrographic basin (García, 2009). However, issues related to natural heritage have not been sufficiently studied in La Antigua, including its flora and fauna, water resources, cultural landscape, biodiversity, and biological corridors.

Figure 4.3 "Calle del Arco" in La Antigua Guatemala, with Agua volcano in the background (Source: Courtesy CNPAG [ref. envelope 165, 31A], 1980).

2. Main management issues

Based on the multiple challenges in a living city like La Antigua Guatemala, the pressures of population growth, urban sprawl, unplanned tourism, and development projects incompatible with conservation, the following were identified as the key management issues to be addressed by research:

→ Update of the regulatory plan

As stated in Article 5 of Decree Law 60-69, the National Council for the Protection of La Antigua Guatemala (CNPAG) must formulate, may modify, and should submit a Regulatory Plan for the approval of the MAG with the objective of protecting and conserving the heritage assets in the city and its surrounding areas. The first plan that was developed for La Antigua Guatemala and its surrounding areas was duly approved in 1973 and is still used today. However, the concept of a "Regulatory Plan" has varied over time and has currently been replaced by "Municipal Land Use Plans". In 2008, the MAG approved the Regulation of the Territorial Ordering Plan (MAG, 2008).

In 2017 and 2018, proposals for Municipal Regulatory Plans were prepared for the four municipalities covered by Decree Law 60-69 (La Antigua, Jocotenango, Pastores and Ciudad Vieja); however, to date, none of these plans has been approved.

Similarly, the Operational Guidelines for the implementation of the UNESCO World Heritage Convention (UNESCO, 2021) recommend that nominated sites prepare Management Plans as the main instrument to guide and guarantee the adequate management of World Heritage properties. Since 1992, many valuable efforts have been made to elaborate a Management Plan that guides medium- and long-term conservation objectives for La Antigua. Unfortunately, none of these attempts has been approved or implemented. The most recent assessment was made in 2017 and 2018 by the National Competitiveness Program (PRONACOM), titled the "World Heritage Site Management Tool" (PRONACOM, 2018), which has not yet been approved by the CNPAG and municipalities around La Antigua.

Thus, La Antigua Guatemala lacks adequate planning in two key areas:

1. Land-use regulation in the city and surrounding areas, including the municipalities of Pastores, Ciudad Vieja, Jocotenango and La Antigua Guatemala. Such a regulatory plan should follow a comprehensive approach in which future development is harmonized with the conservation of the heritage values recognized by civil society, the municipalities, the CNPAG, the USAC, national and international private universities, and MICUDE alongside other local, national and international actors; and

2 A long-term World Heritage Management Plan for La Antigua Guatemala that guarantees the conservation (integrity and authenticity) of its material and immaterial attributes. Such a plan is of vital importance as it should go beyond the Institutional Strategic Plan (PEI) of the CNPAG and address aspects that cannot be covered by a single institution.

This Management Plan should be comprehensive, promoting inter-institutional partnerships (Government, Universities, NGOs, Civil Society, etc.) at a national and international level.

→ Establishment of a buffer zone

It is of the utmost importance to define a buffer zone for La Antigua Guatemala to protect the community's cultural diversity and the landscape values of the heritage place while recognising local and Indigenous knowledge. This should include attempts to address inappropriate land-use change, such as an inadequate consideration of the environmental dynamics that generate flood risk alongside the high vulnerability of the population. Indeed, the floods that affect La Antigua Guatemala have shifted from being considered positive for the water recharge of the Panchoy Valley basin to representing a significant risk for a society with an inappropriate development model.

An initial governance analysis undertaken during the Heritage Place Lab (HPL) pilot phase exposed a structural problem between site management authorities. Thus, a more in-depth study is required to form the foundation for the modification of Decree Law 60-69 of the City of La Antigua Guatemala. Specifically, alliances with other institutions are needed to determine, in a participatory manner, the delimitation of a buffer zone.

→ Research gaps in archaeology and intangible heritage

Archaeology in Guatemala has made considerable progress in recent years, with archaeological research carried out within the framework of building restoration under the Protective Law of the City of La Antigua Guatemala (Decree 60-69) and the Law for the Protection of the Cultural Heritage of the Nation (Decree 26-97 and its reforms) and as World Heritage. However, the archaeology of the pre-Hispanic and Republican periods in La Antigua Guatemala has been neglected, with few and outdated archaeological surveys (Shook, 1957; Shook & Marquis, 1996; Robinson, 1990, 1991, 1993; Robinson et al., 1998, 2000; Perrot-Minot, 2002).

Some pioneering studies have focused on the architecture of Antigua Guatemala, such as the work of Jorge Luján Muñoz (1983, 1994), Luis Luján Muñoz (1968) and Manuel Rubio Sánchez (1989). Other studies have focused on more specific aspects of the property, such as the study on Joseph de Porres (Ramírez, 2014). Archaeological and biological investigations have also been initiated based on the pioneering studies of Borhegyi (1950, 1965) and Hatch (1998), who focused on archaeological evidence from the classic period of the Guatemalan Highlands.

The state of pre-Hispanic sites and historical monuments associated with the upper basin of the Guacalate River, which is part of the Panchoy Valley water system, has also been studied (Morales, 1999). Regarding the heritage of the pre-classic period, Robinson et al. (2000) examined adaptation to the environment and culture in the Panchoy Valley, which have not had continuity nor a long-term plan that responds to the management needs of the city of La Antigua Guatemala.

Most recent research has been carried out as part of Bachelor's, Master's and Doctoral theses, with a focus on heritage cataloguing (López, 2005; Alvarado, 2009), architectural analysis (Morales and López, 2005; Gálvez, 2014; Obando, 2017), adaptive reuse heritage projects (Chew, 2005; Monterroso, 2007; Valenzuela, 2013), restoration and conservation projects (Ubico Calderón, 2008; Cruz and Ramírez, 2009), architecture and mechanics (Ramírez, 2014), archaeology (Cruz, 2006; Ramírez, 2006), human and fauna bone remains (Wojcik, 2017; Delsol, 2021), and a range of other topics related to cultural heritage.

Archival investigations are fundamentally historical (Pardo, et al., 1968; Lutz, 1982, Lovell and Lutz, 2000) and limited generally to art history (Aguilar, 1965). Research on restoration, construction sequences, and use over time are needed to better understand and conserve urban heritage and the socio-economic dynamics in the historical city and its wider setting. Research on the historical industrial structures located within La Antigua Guatemala and the surrounding areas is also necessary to determine their potential for cultural, educational and tourist uses. Additionally, programmes for the rescue, valorisation, restoration and conservation of industrial remnants could be developed alongside educational programmes, with the aim of learning more about the colonial and republican economy (Aparicio, 1992).

Notably, there have been no studies on intangible cultural heritage and landscape values at La Antigua Guatemala, and research on the risks posed by climate change remains limited (Figure 4.4). More broadly, Decree 60-69 and its relationship with other national laws needs to be reviewed and updated. Such research and up-to-date evidence is needed to support the development of management strategies and responses for conserving this heritage place.

Figure 4.4 Church of San José el Viejo damaged from flooding, black and white photograph (Source: Courtesy CNPAG [ref. envelope 43, F.18], 1986).

Panoramic view of Antigua Guatemala with the Agua volcano in the background.
Image by Image by Dr. Mario Raúl Ramírez, with permission.

II. Research Agenda

1. Introduction

This research agenda, for La Antigua Guatemala, was developed during the ICCROM-IUCN World Heritage Leadership HPL during 2021 and 2022, where a multidisciplinary Research–Practice Team composed of researchers from the USAC and managers from the CNPAG discussed, analysed, compared and revised the main issues that La Antigua faces today in a participative way. This collaborative work allowed the identification of knowledge gaps and research needs to address the main management issues of the site, namely the design of a buffer zone and the definition of a strategic agenda for La Antigua Guatemala. Key opportunities for research were identified based on the following specific management issues:

· The need to update regulatory plan

a) The need of land use regulation
b) The need for a strategic agenda to improve the management of the World Heritage place.

· The need of establishing a buffer zone.

· The need to include research gaps.

a) The need for further archaeological studies.
b) The need to study the intangible cultural heritage of La Antigua Guatemala and its surrounding areas.

· The need to study the natural environment of La Antigua Guatemala and surrounding areas.

a) The need to research of biodiversity, climate change and risk management.

· The need for a new model of governance.

a) The need to update de legal and regulatory framework due for the overlapping functions among different institutions responsible, for heritage and urban management in La Antigua Guatemala and surrounding areas.
b) The need to include the participation of the population of La Antigua Guatemala and surrounding areas.

Prior studies have addressed the need for a buffer zone (López, 2008; López and Martín, 2014; Chan et al., 2015). Since the inscription of La Antigua as a World Heritage Site, conservation concepts have evolved, such as the understanding of heritage, the

inclusion of intangible cultural heritage as a main concern, the diversity of values and attributes of heritage places, and a landscape approach to management (Figure 4.5). These new approaches demand the revision of the existing management strategies at La Antigua as part of the process to define, first, a buffer zone and then, a strategic agenda that can bring together those institutions that share responsibility for the protection of La Antigua Guatemala. This research agenda proposes adopting these new approaches to comprehensively address the management issues facing La Antigua.

Figure 4.5 Street of La Antigua Guatemala, with the Agua volcano in the background, photograph (Source: Mario Ramírez, 2017).

2. Research priorities

1 Research Priority 1
Governance and management system analysis of La Antigua Guatemala as a World Heritage property

Governance in public management processes, at a general level, and in the management of cultural heritage, is a concept that has gained relevance since the 1990s (Treviño, 2011), with the State and its institutions no longer the only actors that watch over the conservation and protection of heritage but, instead, share this task with civil society and other actors. This system of relationships between institutions or rights-holders and interested groups or stakeholders implies overlapping and duplicity in the power relations between said actors, as indicated by Francesca Booker and Phil Franks, that "Governance is distinct from management. It is about power, relationships and accountability; about who makes decisions, how they make them, how they allocate resources and how actors have their say and hold people in power to account" (Booker and Franks, 2019, p. 11).

In the case of La Antigua Guatemala, during the HPL team's collaborative work, an overlapping of functions was identified at the level of institutional regulations. In some cases, the text of the institution's official mandates is ambiguous, which further strengthens the degree of overlap in the functions of the CNPAG, MICUDE, National Institute of Tourism (INGUAT), Ministry of Economy (MINECO), PRONACOM, Ministry of Agriculture (MAGA), and the municipalities of La Antigua Guatemala, Jocotenango, Pastores, and Ciudad Vieja. This is reflected in the Land Management Plan of the Heritage Conservation and Economic Development Department of Sacatepéquez (PRONACOM, 2018). Other institutions responsible for the implementation of regulations and sanctions are the Public Ministry and the Judicial Body (Figure 4.6).

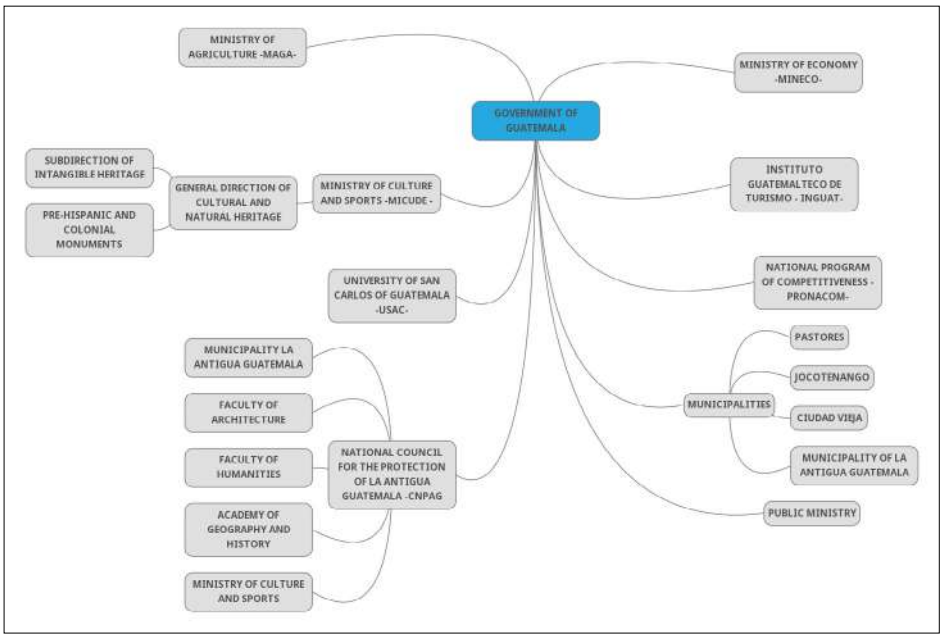


Figure 4.6 Different institutions involved in heritage management in Guatemala (Source: Authors, 2022).

This overlap in the governance of La Antigua leads to the following research questions:

· What is each institution already doing for the preservation of the cultural heritage in La Antigua Guatemala, and what should they be doing to contribute to the management of the cultural heritage of La Antigua Guatemala?

· How can the identity and empowerment of communities be ensured and their level of participation in the governance of La Antigua's heritage be increased?

· What mechanisms or strategies do communities use for heritage conservation in the absence of institutional support?

· What factors affect the participation of the population in decision-making regarding the management of their cultural heritage?

· What heritage management mechanisms and strategies should be used to implement a governance model in a strategic agenda?

2 Research Priority 2
Study of the wider setting, land use, landscape and natural heritage

The 1773 earthquake was a historical moment that impacted on the geopolitics of Guatemala, causing the relative abandonment of the city and Santiago de Los Caballeros (La Antigua Guatemala; Lutz, 1982). Five main periods of land-use change can be distinguished historically: (i) the rise of the grana trade in 1820 caused vacant lands to be massively planted with nopale cacti for cochineal farming (Taracena, 2000); (ii) due to the liberal reforms carried after 1871, the cultivation of cochineal was supplanted by coffee (Lutz, 1982); in 1874 and 1918, earthquakes continued to cause depopulation and a green belt around the city was consolidated (mainly as areas for planting trees and growing coffee); (iii) between 1920 and 1970, the boom in the coffee economy allowed several owners to rebuild their houses, making these renovations in the "Antique Style" ; (iv) between 1970 and 1996, the improvement of the world economy caused foreign and national capital investment in the city of La Antigua for the purposes of secondary housing, hotels and commerce linked to the rise of tourism, which facilitated further the fragmentation of land uses (Taracena, 2000); (v) in 1996, the end of a 36-year long internal armed conflict gave stability to the country and caused local tourism to increase. Many homes became businesses, and this motivated real estate speculation, which caused cropland and green areas to become residential areas. Those unable to afford the high costs are now becoming displaced in some cases to mountain slopes or riverbanks that are susceptible to flooding (Chan, et al., 2015).

These dynamics and changes in land use in La Antigua Guatemala and surrounding areas are reflected in three main aspects of:

(i) land use,
(ii) landscape and
(iii) natural heritage.

In the case of land-use change and regulations, in Decree Law 60-69, the conservation area (or polygon) of La Antigua Guatemala was established as well as the "conservation islands" around neighbouring places and municipalities. At that time, a buffer zone to define uses and levels of protection outside the conservation polygon was not considered by UNESCO WHS Convention.. This is important to be reflected upon, not only because of heritage administration but also because La Antigua Guatemala is located downstream of the Pensativo River sub-basin, meaning that actions that are carried out in the middle or upstream of the sub-basin directly affect La Antigua.

The current regulatory framework incorporates the overlapping functions of the heritage management institutions, giving rise to a lack of accountability

for the environmental, social, economic, political and cultural problems in La Antigua. For instance, land-use change and housing dynamics promoted by real estate agencies in the historical area need to be urgently addressed because these trends directly affect the population of La Antigua. Indeed, the lack of a regulatory framework and zoning prevent residents from accessing a good quality of life in their own heritage place.

To address the problem of land management while considering a sustainable approach to heritage management, the development of participatory research is proposed, in which governance involves and includes all the relevant actors in the process. From this perspective, the following research questions were proposed:

· What are the existing heritage values in the surrounding areas of La Antigua?

· What are the impacts of the absence of a buffer zone on La Antigua heritage values and its wider setting?

· What is the current model of management and administration of cultural heritage in La Antigua Guatemala and surrounding areas?

· Who should be involved in the management and administration of cultural heritage in La Antigua Guatemala and its surrounding areas?

· What are the power relations and conflicts between the actors involved in the management and administration of cultural heritage in La Antigua Guatemala and its surrounding areas?

· What is the correlation of forces? What interests and aspects of cultural heritage does the current management cover?

· How might changes in land use have positive impacts in the sense of belonging of the population of La Antigua Guatemala?

· What medium- and long-term instruments are required to regulate land use to define the buffer zone in La Antigua Guatemala and its surrounding areas? Who should formulate such instruments?

· How can community networks in La Antigua Guatemala and its surrounding areas be strengthened?

Regarding landscape and the natural environment, study of the landscape, its ecosystems and their interconnections with the conservation of tangible and intangible heritage is of primary importance. However, issues related natural heritage have been few studied, including flora and fauna, water resources, the cultural landscape, biodiversity, and biological corridors.

Thus, important research questions include:

· On which basis could an educational programme be created for the conservation and protection of the cultural and natural heritage of La Antigua Guatemala?

· What are the values that must exist to empower citizens in the conservation and protection of cultural and natural heritage?

Regarding natural heritage, research must focus on the integral values and management of La Antigua Guatemala as a living heritage site . The recognition of other values that are not part of the official inscription of La Antigua as a World Heritage site highlights the need for comprehensive planning and management of the heritage place that considers its OUV as well as other values connected to the intangible cultural, natural and industrial heritage, which are at risk of being lost.

Managing the cultural and natural heritage of La Antigua Guatemala as a whole in a changing territory, requires a strategic and comprehensive planning process that includes the construction of scenarios using evidence-based research. This must be addressed through a strategic agenda, prepared based on a bottom-up, participatory and inclusive manner with the support of existing institutions, such as the CNPAG, USAC, municipalities, native communities, and international entities in the field of heritage, including the monitoring and evaluation of actions for the conservation of cultural heritage.

From this perspective, the following research questions were identified by the Research–Practice Team:

· How can awareness of the actors involved be increased to influence political will and benefit the cultural heritage of La Antigua Guatemala?

· What are the best ways to influence the active participation of the native population of La Antigua Guatemala in carrying out a strategic agenda?

· What is the best way to implement a strategic agenda for the conservation of cultural heritage and the development of the population of La Antigua Guatemala?

· What impact will be achieved through a strategic agenda for the conservation of the cultural heritage of La Antigua Guatemala?

· How can a strategic agenda and its implementation be equitable, ensuring the participation of women, younger generations, and alternative narratives, and addressing the compromises between different actors?

3 Research priority 3
Other values of the World Heritage site: Archaeological, industrial, and intangible heritage

The heritage values and attributes of La Antigua Guatemala as recognized in the enactment of Law 60-69 and the Statement of OUV, refer to the architectural, aesthetic and historical values of the city's urban fabric, focusing on the material aspects of heritage. However, since the enactment of Law 60-69, the perception of heritage at the international level has expanded; notions of heritage now include intangible aspects, landscapes, and their uses. Based on these wider conceptions, other heritage values have been identified, and it has become necessary to incorporate broader professional expertise into the management carried out by the CNPAG. Specifically, archaeologists, anthropologists, sociologists, urban and landscape planners, geographers, landscape architects, biologists, foresters, and educators are needed alongside experts in risk management, climate change, cultural heritage, cultural tourism, and sustainability.

During the HPL process, a lack of knowledge about intangible cultural heritage was identified, especially on symbolic values within the heritage place, which should be investigated in La Antigua conservation area and in the towns and villages in the surrounding and wider setting. Pioneering studies have been carried out on aspects such as the socio demographics of Santiago de los Caballeros de Guatemala (Lutz, 1982); religiosity, arts and crafts (Aguilar, 1953, 1961, 1965, 1973; Luján, 1983; MICUDE, 2008); and literary expressions encompassing the genres of legend, historical novels and oral literature (Gaitán, 1981; Milla, 1999; Lara, 2020). However, other manifestations of community interaction in art, religion, education, socio-cultural syncretism, brotherhoods, and the symbolism and worldview of Indigenous Peoples are noticeably lacking.

Interest in the industrial archaeology of Guatemala emerged in the late 1980s at the School of History of the USAC parallel to pre-Hispanic archaeological research (Robinson et al., 1998) and alongside interest from other disciplines including history (Ubico, 2010), anthropology (Wagner, 2001) and economics (Poitevin, 1977). At this time, Colonial Archaeology was established as a field of research (Cruz, 2006; Ramírez, 2006; Rodríguez et al., 2012; Wolley, 2020) along with, later, Industrial Archaeology (Mendoza, 2006; Larios and Mendoza, 2010; Wolley and Gómez, 2016), and yet the academic community has failed to integrate these perspectives with efforts to build an archaeological record of industrial remains. Thus, archaeological studies of industrial heritage are scarce (Mendoza, 2006; Larios and Mendoza, 2010). To address this, it is essential to carry out cataloguing, registration and archaeological research projects of the pre-Hispanic, colonial, republican and agro-industrial sites

located in the surrounding areas of La Antigua Guatemala, integrating the owners of these sites and the communities associated with them in the research, as well as in their protection and conservation.

Considering these needs, the following research questions were identified by the Research–Practice Team:

- **What is the role of the surrounding communities in the safeguarding, protection, and conservation of the archaeological, industrial, and intangible heritage?**

- **What are the factors that contribute to the protection and conservation of the archaeological and industrial heritage?**

- **What is the vision of the landowners and surrounding communities of the archaeological and industrial cultural heritage located on their properties?**

- **What is the current use and function of the archaeological and industrial cultural heritage that is located on private property and within communities?**

- **What impact will intangible cultural heritage values have on the areas surrounding La Antigua Guatemala?**

- **How will cultural heritage be protected as a guarantee to empower the community?**

III. Inputs Needed and Expected Outputs

The research agenda outlined in Section II, outlined three research priorities followed by potential questions that can guide the elaboration of future research projects. These research priorities necessarily guide the multidisciplinary teams required to address them, encompassing the following three areas of multidisciplinary knowledge (Figure 4.7):

- **Social-Humanistic:** Anthropology, Sociology, Pedagogy, History, Archaeology, Geography, Legal and Social Sciences, Economy, Cultural Tourism, Ecotourism, Sworn interpreters/translators, Political Science, and Social Work.

- **Health Sciences:** Psychology, Biology, and Chemistry.

- **Scientific-Technological:** Agronomy, Structural Engineering, Environmental Engineering, Sanitary Engineering, Architecture, Urban Planning, Territorial Planning, Landscaping, and Geology.

To tackle Research Priority 1 (Governance and management system analysis of La Antigua Guatemala as a World Heritage property), there is currently no governance model for the site nor studies of its characterization. For this reason, it is necessary to develop a governance model for La Antigua Guatemala and surrounding areas with input from a multidisciplinary team that includes Sociology, Political Science, Social Work, History, Pedagogy, and Anthropology among others, who are tasked with building a new governance model using methods and techniques including ethnomethodology, diagnoses, actor mapping, conflict resolution, "SWOT" analysis, consensus circles, case studies, construction of future scenarios, and prospective studies.

Regarding Research Priority 2 (Study of the wider setting, land use, landscape, and natural heritage), The interconnectivity of the surroundings and wider setting of La Antigua Guatemala should be considered for the effective management of heritage. Notably, there is currently no buffer zone for the site, with only a few studies on this topic that have not been approved and do not adequately address those aspects needed to ensure the protection and conservation of the site.

A buffer zone for La Antigua Guatemala and surrounding areas needs to be defined with input from a multidisciplinary team that includes Geography, Territorial Planning, Sociology, Political Science, Social Work, Urbanism, and Architecture among others (Bahía, 2017). Relevant methods and techniques for delivering this include case studies, participatory research, action research, conflict resolution, construction of future scenarios, and prospective studies.

Although Decree Law 60-69 for the Protection of La Antigua Guatemala notes that the property must be conserved as a single landscape unit, considering its surrounding hills with their forests and rivers, the conservation efforts of the CNPAG have mainly focused on architectural and urban conservation. With a greater awareness of the importance of integrating management and protection of the wider natural environment, this needs to be addressed at La Antigua Guatemala.

Some previous efforts have been made in this area, such as the "green belt" proposal carried out by the Faculty of Architecture in the 1990s (Búcaro and Mc Mannis, 1996) as well as the establishment of private nature reserves and municipal regional parks and their associated management plans carried out by the National Council of Protected Areas and the Guatemalan System of Protected Areas (CONAP-SIGAP), the Association of Private Natural Reserves of Guatemala (ARNPAG), the TCN and the Sotzil Association. The environmental values and services provided by forests are also increasingly recognized. For these reason, it is necessary to identify, promote and disseminate the values linked to the conservation of the natural heritage of La Antigua Guatemala and its surrounding areas with a multidisciplinary team from fields that include Biology, Botany, Geology, History, Archaeology, Anthropology, Sociology, Work Social, Urbanism, and Architecture among others (Figure 4.7). Relevant methods and techniques here include performance analysis, actor mapping, "SWOT" analysis, case studies, ethnomethodology, risk mapping, soil studies, slope classification, and Leopold matrix analysis among others. Such an endeavour should aim to develop a map of opportunities for sustainable development whilst accounting for the conservation and protection of the natural heritage of La Antigua Guatemala as a priority.

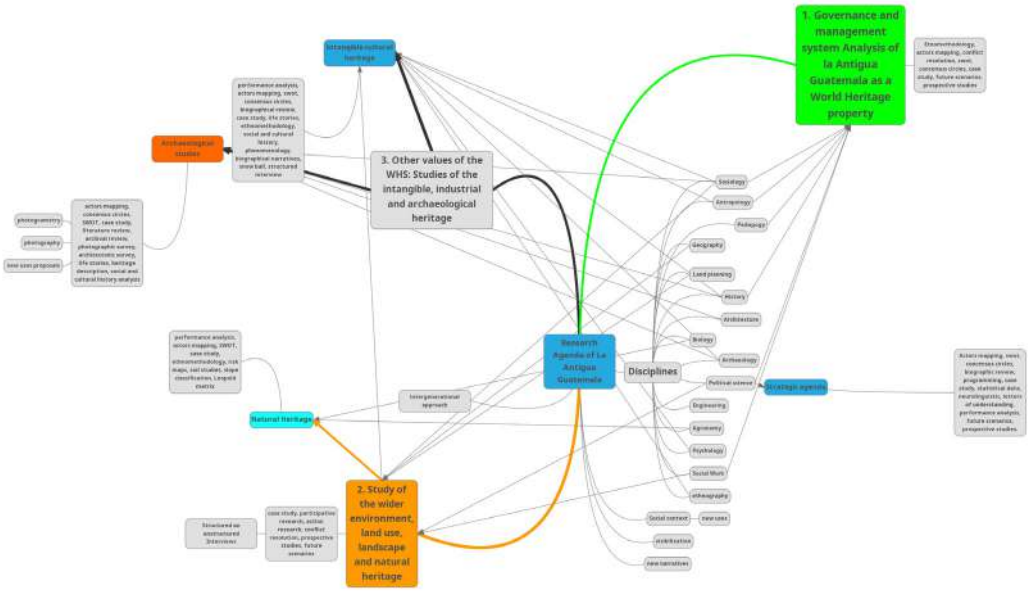


Figure 4.7 Relationship between research priorities, disciplines and methods. Counter-clockwise: Research Priorities 1, 2 and 3 (Source: Authors, 2022).

To develop a research agenda for La Antigua Guatemala, it is necessary to:

- develop a plan, coordinated by a special committee, with the participation of technicians from the CNPAG and municipalities, universities, specialists, civil society, and the communities of La Antigua Guatemala. Funds are needed for the preparation of the Master Plan for La Antigua and hiring a specialized technical team to coordinate and facilitate the process as well as for its publication in Diario de Centroamérica (Daily of Central America) after approval by the relevant authorities;

- establish alliances with universities, both public and private, with the CNPAG and municipalities for the implementation of the projects outlined in the Master Plan; and

- establish the necessary multidisciplinary team to execute the heritage management and promotion of the Master Plan.

Regarding Research Priority 3 (Other values of the World Heritage site: Studies of the archaeological, industrial, and intangible heritage), it is essential to carry out inventory, cataloguing, and the registration of cultural, tangible and intangible heritage. The information gathered from these activities can form the basis of archaeological research projects on the pre-Hispanic, colonial and industrial sites located in the surrounding areas of La Antigua Guatemala. Such research must integrate the landowners of the sites and the communities associated with them; the empowerment of communities and landowners where archaeological and industrial heritage is located can contribute to its protection and conservation.

The main aspects that research under this priority must consider, beyond the property's recognized values and including its OUV, are

(i) archaeological heritage,
(ii) Intangible values and
(iii) integrated value management and promotion of living heritage.

Pioneering research has also been done on the pre-Hispanic, colonial, republican and agro-industrial archaeological heritage of the property, although little attention has been given to the industrial remnants in La Antigua Guatemala and its surrounding areas, although the values linked to the pre-Hispanic, colonial, republican and agro-industrial heritage of La Antigua Guatemala and its surrounding areas still need to be identified, catalogued, and registered. This required a multidisciplinary team of individuals from fields including Archaeology, Anthropology, Architecture, History, Sociology, and Urban Planning among others. Relevant methods and techniques could include actor mapping, consensus circles, "SWOT" analysis, case studies, literature review, archival review, photographic surveys, architectonic surveys, life-story recording, heritage description, and social and cultural history analysis among others. These activities can usefully feed into the development of a greater understanding and valuation of the cultural landscape around La Antigua Guatemala.

Intangible cultural heritage encompasses the values of daily life through the worldview of the Indigenous Peoples. There are pioneering studies on this topic developed by the USAC School of History, although it is still necessary to identify, promote and enhance the values linked to the worldview and daily life in La Antigua Guatemala and its surrounding areas. This requires input from a multidisciplinary team of individuals from disciplines such as History, Anthropology, Sociology, Urbanism, and Architecture among others. Relevant methods here include actor mapping, "SWOT" analysis, biographical review, case studies, life-story recording, ethnomethodology, social and cultural history, phenomenology, biographical narratives, snow-balling research, and structured interviews. These activities could underpin an educational project that aims to rescue the intangible values of La Antigua Guatemala's cultural heritage.

Integrated value management and the promotion in living heritage should focus on the preservation of the cultural and natural values of La Antigua Guatemala and its surrounding areas, for which there is currently no strategic agenda despite partial initiatives and regulations that, unfortunately, do not address the site in an integral and sustainable manner (IDOM, 2018; MAG, 2018). To tackle this, comprehensive management is necessary through the development of a strategic agenda for La Antigua Guatemala and its surrounding areas, with multidisciplinary input from fields that include Geography, Territorial Planning, Sociology, Political Science, Social Work, Urbanism, Architecture, Psychology, Cultural Tourism and Ecotourism among others. Such an agenda must take the perceptions and participation of local communities into account (Darabi et al., 2019). This could be achieved via performance analysis, actor mapping, "SWOT" analysis, consensus circles, biographical review, case studies, statistical data, neuro-linguistic analyses, letters of understanding, construction of future scenarios, and prospective studies.

IV. Desired Outcomes

Due to the fragility of the protection and conservation of La Antigua and the cultural and natural heritage of the surrounding areas, the Research–Practice Team decided it was important to establish a research agenda with a realistic work schedule that identifies the most urgent needs.

Key outputs from the identified research priorities include (i) a new management plan, (ii) a strategic agenda, and (iii) a proposal for a buffer zone. These priorities must consider the other heritage values identified through the investigation in addition to the OUV that is the current basis of the property's World Heritage declaration. Importantly, as an example of living heritage, the populations of La Antigua Guatemala and its surrounding areas continue to shape their heritage, creating new interactions and spatial organisation within the territory. In addition, the relationships between different actors, managers and promoters must be considered for the definition of a buffer zone. Considering these aspects, Table 4.1 presents an approximate four-year timeline for the three research priorities described in Section II as well as the required inputs outlined in Section III. Notably, the implementation of such a timeline strongly depends on the political and administrative context and financial support of La Antigua Guatemala.

Year	1	2	3	4
1. Governance and management system Analysis of La Antigua Guatemala as a World Heritage property.				
2. Study of the wider environment, land use, landscape, and natural heritage.				
3. Research on other values of the World Heritage site: Studies of the archaeological, industrial, and intangible heritage				

Table 4.1 Proposed timeline for the development of a research agenda for La Antigua Guatemala as a World Heritage property.

Having a research agenda will help the CNPAG and the municipal authorities to develop plans, strategies, policies, and projects to strengthen, in favour of the protection and conservation of the cultural and natural heritage of La Antigua Guatemala and its surrounding areas and, hopefully, will contribute to achieving greater harmony and balance between the needs of the conservation and development. This must be addressed through a strategic agenda, prepared based on a bottom-up, participatory with multidisciplinary input from different fields and inclusive manner, with support of existing institutions, such as the CNPAG, USAC, municipalities, native communities, and international entities in the field of heritage, including the monitoring and evaluation of actions for the conservation of cultural and natural heritage, among others.

Temple of San Pedro, Antigua Guatemala.
Image by Dr. Mario Raúl Ramírez, with permission.

Acknowledgments

The authors recognize with great gratitude to the Heritage Place Lab 2021-2022 organizing team and facilitators. Special thanks to all organizations involved in the implementations of the World Heritage Leadership programme- ICCROM, IUCN, ICOMOS and UNESCO, especially to Eugene Jo, Maya Ishizawa, and Nicole Franceschini. Joining the HPL programme expanded our knowledge on the importance of the research as a key tool for improving the World Heritage site management.

Thanks to ICCROM and CNPAG which provided financial assistance and that allowed one member of this research-practice team to attend the round table discussion and presented the results of the research agenda in Santiago de Chile in December 2022. This event was organised by the Association for the Critical Heritage Studies, that was hosted by Centro de Estudios Interculturales e Indígenas at the Pontificia Universidad Católica de Chile.

References

Aguilar, E.C. 1953. La Inquisición en Guatemala. Publicaciones del Instituto de Antropología e Historia de Guatemala. Guatemala, Editorial del Ministerio de Educación Pública, available at: https://books.google.com.gt/books?id=BwwDuAkcrC4C.

Aguilar, E.C. 1961. El Ayuntamiento Colonial de la Ciudad de Guatemala. Colección Editorial Universitaria. Guatemala, Editorial Universitaria, available at: https://books.google.com.gt/books?id=z8grAQAAIAAJ.

Aguilar, E.C. 1965. Historia del Arte en Guatemala: Arquitectura, Pintura y Escultura. Guatemala, Editorial "José de Pineda Ibarra", Ministerio de Educación, available at: https://books.google.com.gt/books?id=Z1dZAAAAMAAJ.

Aguilar, E.C. 1973. Los Hábitos de los Religiosos en el Ocaso de la Vida Colonial: Guatemala, 1787. Guatemala, Unión Tipográfica, available at: https://books.google.com.gt/books?id=jE4KAQAAIAAJ.

Alvarado P., L. F. 2009. Catalogación y registro de la Arquitectura de la calle del Arco de las Catalinas, Antigua Guatemala, Sacatepéquez. Unpublished undergraduate thesis, Faculty of Architecture, Guatemala, Universidad de San Carlos de Guatemala, available at: http://biblioteca.usac.edu.gt/tesis/02/02_2511.pdf

Annis, V.L. 1968. La Arquitectura de la Antigua Guatemala 1543–1773. Guatemala, Editorial Universitaria.

Aparicio, R. 1992. Arqueología histórica de la arquitectura industrial y utilitaria de y alrededor de Santiago, capital del Reino de Guatemala. In: J.P. Laporte, H. Escobedo & S. Brady, eds. V Simposio de Investigaciones Arqueológicas en Guatemala, 1991, pp. 333–337. Guatemala, Museo Nacional de Arqueología y Etnología.

Bahía, M. 2017. The role of buffer zones in Rio de Janeiro urban landscape protection. Journal of Cultural Heritage Management and Sustainable Development, 7(4): 381–406.

Booker, F. & Franks, P. 2019. Governance Assessment for Protected and Conserved Areas (GAPA) Methodology manual for GAPA facilitators. London, UK, IIED.

Borhegyi, S. 1950. Estudio Arqueológico en la Falda del Volcán de Agua. Antropología e Historia de Guatemala. Guatemala, 2 (1):3–22.

Borhegyi, S. 1965. Archaeological Synthesis of the Guatemala Highlands. In: G.R. Willey, ed. Handbook of the Middle American Indian, 2(1): 3–58. Austin, USA, University of Texas Press.

Búcaro Méndez, H. & Mc Mannis, L. 1996. Creación del cinturón verde de la Antigua Guatemala. Guatemala, Universidad de San Carlos de Guatemala, DIGI-PUIRNA-CIFA.

Carlos, I. 1543. Leyes y ordenanças nueuame[n]te hechas por su Magestad pa la gouernacion de las Indias y buen tratamiento y conseruacion de los Indios ...: que se han de guardar en el consejo y audie[n]cias reales q[ue] en ellas residen y por todos los otros gouernadores juezes y personas particulares dellas. Alcalá de Henares, Spain.

Chan, R. Monterroso, R. Medina, R. and Mora, O. 2015. Primera fase Plan Maestro / Plan Regulador de La Antigua Guatemala. Guatemala. UNESCO-CNPAG-MICUDE.

Chew G., K. L. 2005 Arquitectura para la fabricacion, venta y almacenaje de polvora, Capitanía
General de Guatemala Siglos XVII, XVIII y XIX. Unpublished Phd. Thesis. Faculty of Architecture, UNAM.

Consejo Nacional de Áreas Protegidas -CONAP- 2021. Rendición de Cuentas 2021, primer cuatrimestre, Gobierno de Guatemala, Guatemala, available at: https://conap.gob.gt/wp-content/uploads/2021/05/Informe-de-Rendicio%CC%81n-de-cuentas.pdf.

Cruz, A.B. 2006. Estudio histórico-arqueológico del antiguo templo parroquial “Nuestra Señora de los Remedios”, La Antigua Guatemala. Unpublished undergraduate thesis, School of History, Guatemala, Universidad de San Carlos de Guatemala.

Cruz, A.B. & Ramírez, J. 2009. Proyecto de Restauración y Habilitación del Conjunto Arquitectónico San Jerónimo, La Antigua Guatemala. Unpublished Master’s thesis in Restoration of Monuments, Architecture Faculty, Guatemala, Universidad de San Carlos de Guatemala.

Delsol, N. 2021. Itinerary of Cattle and Humans in the Post-Columbian Circum-Caribbean: A Zooarchaeological and Historical Inquiry. Unpublished PhD thesis, Anthropology Department, Florida, University of Florida.

Darabi, H., Irani Behbahani, H., Shokoohi, S. & Shokoohi, S. 2019. Perceptual buffer zone: a potential of going beyond the definition of broader preservation areas. Journal of Cultural Heritage Management and Sustainable Development, 10(3): 271–291.

Gaitán, H. 1981. La Calle donde tu Vives. vol. 3. Guatemala, Artemis Edinter, available at: https://books.google.com.gt/books?id=HOEX2UqDzLsC&printsec=copyright&hl=es.

Gall, F. 1976. Diccionario Geográfico de Guatemala. Guatemala, Instituto Geográfico Nacional.

Gálvez, R. 2014. Análisis del Estado Actual y Propuesta de Conservación de la Ermita de Nuestra Señora de los Dolores del Cerro, La Antigua Guatemala. Unpublished undergraduate thesis |, Architecture Faculty, Guatemala, Universidad de San Carlos de Guatemala.

García, E. 2009. Proyecto de Investigación en Recursos Hídricos. Guatemala, Universidad de San Carlos de Guatemala, Dirección General de Investigación, available at: https://digi.usac.edu.gt/bvirtual/informes/rapidos2009/INF-2009-046.pdf.

Guatemala (Republic of). 1969. Legislative Decree 60-69, Law for the Protection of the City of La Antigua Guatemala (Ley Protectora de la Ciudad de La Antigua Guatemala).

Hatch, M. 1998. Los Kíche´s-Kaqchikeles en el Altiplano Central de Guatemala: Evidencia Arqueológica del Período Clásico. Mesoamérica, Guatemala, 35: 93–115.

Herrera Q. & Lesslie A. 2013. Paisaje cultural entorno a la Antigua Guatemala. América Patrimonio, 5: 84–97, available at: http://openarchive.icomos.org/1429/1/Am%C3%A9rica_Patrimonio_5-article6.pdf.

ICOMOS 1979. Nominations for the world Heritage List, review sheet, André Chastel, Henry Millon, Jean Taralon.

IDOM 2018. Planificación de Ordenamiento Territorial, Conservación Patrimonial y Desarrollo Económico para el Departamento de Sacatepéquez. Guatemala, PRONACOM, available at: https://www.pronacom.org/wp-content/uploads/library/Plan%20de%20Desarrollo%20Municipal%20y%20Ordenamiento%20Territorial%20-%20Antigua%20Guatemala.pdf.

Kraker, C. & Pérez, S. 2011. Contribución de los cafetales bajo sombra en la conservación de murciélagos en la Antigua Guatemala, Guatemala. Acta Zoológica Mexicana, 27 (2): 291–303, available at: http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S0065-17372011000200006&lng=es.

Lara, C. 2020. Leyendas de Guatemala. Guatemala, Editorial Planeta, available at: https://issuu.com/dilutello/docs/proyecto_final_-diana_tello.

Larios, R. & Mendoza, E. 2010. Máquinas del Tiempo: Arqueología Industrial en Guatemala. In: Revista Estudios. Instituto de Investigaciones Históricas, Antropológicas y Arqueológicas, School of History, Universidad San Carlos de Guatemala, Guatemala, Litografía Mercurio.

López G., J.S. 2006. Catálogo de Bienes Culturales de Las Aldeas Circundantes de la Ciudad de La Antigua Guatemala. INTERREG IIIB AÇORES - MADEIRA - CANARIASAÇORES - MADEIRA - CANARIAS, Viceconsejería de Emigración del Gobierno de Canarias, Universidad de Las Palmas de Gran Canarias, Centro de Formación de la Cooperación Española en La Antigua Guatemala, Municipalidad de La Antigua Guatemala, Universidad de San Carlos de Guatemala, Consejo Nacional para La Protección de La Antigua Guatemala, Vicaría Episcopal de Sacatepéquez. Canarias, España.

López G., J. & Martín, M. 2014. Plan maestro de la Antigua Guatemala, ciudad patrimonio de la Humanidad. Universidad de Las Palmas de Gran Canaria, España.

López G., R. 2005. Ciudades administrativas o de españoles en México Siglo XVI. In: Atrio, Revista de Historia del Arte, 10/11: 87–92, Universidad Pablo de Olavide, Sevilla, Spain, available at: https://www.upo.es/revistas/index.php/atrio/article/download/300/291/609.

Lovell, W.G. & Lutz, C. 2000. Demografía e imperio: guía para la historia de la población de la América Central Española, 1500-1821. Guatemala, Editorial Universitaria, Universidad de San Carlos de Guatemala.

Luján Muñoz, J. 1983. El Artesano Tradicional y su Papel en la Sociedad Contemporánea. Sub-Centro Regional de Artesanías y Artes Populares, available at: https://books.google.com.gt/books?id=u0WxAAAAIAAJ.

Luján Muñoz, J. 1994. Historia General de Guatemala: desde la Conquista hasta 1700. Guatemala, Asociación de Amigos del País, Fundación para la Cultura y el Desarrollo, available at: http://fundaciónhcg.org/index.php/conocer-a-guatemala-para-amarla/2-uncategorised/44-historia-general-de-guatemala-tomo-ii.

Luján Muñoz, L. 1968. Diego de Porres, Arquitecto de Capuchinas en la Antigua Guatemala. Guatemala, Instituto de Antropología e Historia.

Lutz, C. 1982. Historia sociodemográfica de Santiago de Guatemala 1541-1773. Guatemala, Centro de Investigaciones Regionales de Mesoamérica, Serviprensa Centroamericana.

Markman, S.D. 1966. Colonial Architecture of Antigua Guatemala. Philadelphia, USA, American Philosophical Society, First Edition.

Mendoza, E. 2006. Arqueología industrial en Guatemala: Chocolá 1891-1942. In: J.P. Laporte, B. Arroyo & H. Mejía, eds. XIX Simposio de Investigaciones Arqueológicas en Guatemala, 2005, pp. 267–281. Guatemala, Museo Nacional de Arqueología y Etnología.

MICUDE 2022. Cuéntale a la Humanidad en Tik Tok sobre la #SemanaSantaGTOPatrimonio Humanidad, available at: https://mcd.gob.gt/patrimonio-semana-santa-2021/.

MICUDE 2008. Síntesis histórica de las cerámicas populares de Guatemala, Colección Antropología Guatemala. Guatemala, Dirección General de Antropología e Historia.
Milla, J. 1999. La Hija del Adelantado. Guatemala, Editorial Piedra Santa, Guatemala.

Monterroso, K. 2007. Propuesta de Restauración y Readecuación del edificio de La Antigua Universidad de San Carlos en el Valle de Panchoy. Unpublished Master's thesis in restoration, Architecture Faculty, Universidad de San Carlos de Guatemala, Guatemala.

Morales, P. 1999. Sitios prehispánicos y monumentos históricos asociados a la Ruta Nacional 14 Cuenca del río Guacalate". In: J.P. Laporte, H.L. Escobedo & A.C. de Suasnávar, eds. XII Simposio de Investigaciones Arqueológicas en Guatemala, 1998. pp. 53–562. Guatemala, Ministerio de Cultura y Deportes, Instituto de Antropología e Historia y Asociación Tikal.

Morales, Y. & W. López. 2005. Análisis Arquitectónico de las Obras del Arquitecto Mayor Diego de Porres. Unpublished undergraduate thesis, Facultad de Arquitectura, Universidad de San Carlos de Guatemala, Guatemala.

Moyssén, X. 1969. The Architecture of Antigua Guatemala 1543-1773, de Verle Annis Lincoln. Anales Del Instituto De Investigaciones Estéticas, 10(38): 141–142. https://doi.org/10.22201/iie.18703062e.1969.38.890.

Municipalidad de la Antigua Guatemala (MAG) 2018. Reglamento del Plan de Ordenamiento Territorial, Guatemala.

Obando Bardales, M. Z. 2017. Análisis de la arquitectura del asentamiento Prehispánico El Rucal en el Valle de Panchoy. Unpublished undergraduate thesis, Faculty of Architecture, Guatemala, Universidad de San Carlos de Guatemala, available at: http://biblioteca.usac.edu.gt/tesis/02/02_4650.pdf

Pan-American Institute of Geography and History. 1965. Antigua Guatemala, monument of América declaration. VIII General Assembly of the Pan-American Institute of Geography and History. Guatemala, Instituto Geográfico Nacional de Guatemala, available at: https://books.google.com.gt/books/about/VIII_Asamblea_General_del_Instituto_Pana.html?id=trxnAAAAMAAJ&redir_esc=y.

Pardo, L., Zamora Castellanos, J.J., Luján Muñoz, P. 1968. Guía de Antigua Guatemala. Guatemala, Guatemala. Sociedad de Geografía e Historia de Guatemala, Editorial José de Pineda Ibarra. Ministerio de Educación.

Pardo, J.J. 1984. Efemérides de Antigua Guatemala, 1541-1779. Guatemala, Consejo Nacional para La Protección de La Antigua Guatemala, Archivo General de Centroamérica, Instituto de Antropología e Historia, Biblioteca Nacional.

Perrot-Minnot, S. 2002. Encuestas y visitas arqueológicas en el área de La Antigua Guatemala, Sacatepéquez. A Report presented to the Instituto de Antropología e Historia de Guatemala and Consejo Nacional para La Protección de La Antigua Guatemala. Guatemala, Centro Francés de Estudios Mexicanos y Centroamericanos CEMCA.

Poitevin, R. 1977. El proceso de industrialización en Guatemala. Costa Rica, Editorial Universitaria Centroamericana EDUCA.

PRONACOM 2018. Memoria de labores 2018. Guatemala, PRONACOM, available at: https://www.pronacom.org/wp-content/uploads/library/memoria-2018-web.pdf.

Ramírez Ramírez, J.C. 2006. El abastecimiento de agua en Santiago, capital del reino de Guatemala: un estudio histórico-arqueológico. Unpublished undergraduate thesis, School of History, Universidad de San Carlos de Guatemala, Guatemala.
Ramirez, M. 2014. La arquitectura de la Antigua Guatemala: Joseph de Porres 1635-1703. Unpublished PhD thesis. Universidad Nacional Autónoma de México, Mexico.

Robinson, E. 1990. Reconocimiento de los municipios de Alotenango y Sumpango, Sacatepéquez. Informe Final del Proyecto Encuesta Arqueológica Kaqchikel. Guatemala, Instituto de Antropología e Historia de Guatemala.

Robinson, E. 1991. El reconocimiento arqueológico de Alotenango. In: J.P. Laporte, H. Escobedo & S.V. de Brady, eds. II Simposio de Investigaciones Arqueológicos en Guatemala, 1988, pp. 81–94. Guatemala, Ministerio de Cultura y Deportes, Instituto de Antropología e Historia y Asociación Tikal.

Robinson, E. 1993. Santa Rosa: un sitio defensivo del altiplano de Guatemala. In: J.P. Laporte, H. Escobedo & S.V. de Brady, eds. VI Simposio de Investigaciones Arqueológicas en Guatemala, 1992, pp. 409–428. Guatemala, Ministerio de Cultura y Deportes, Instituto de Antropología e Historia y Asociación Tikal.

Robinson, Eugenia J., Marlen Garnica, Dorothy Freidel and Patrice Farrell. 1998. La cultura y el ambiente preclásico de Urías en el Valle de Panchoy, Guatemala. In: J. P. Laporte & H. L. Escobedo, eds. XII Simposio de Investigaciones Arqueológicas en Guatemala, 1997, pp. 537–552. Guatemala, Ministerio de Cultura y Deportes, Instituto de Antropología e Historia y Asociación Tikal. (digital version)

Robinson, Eugenia J., Marlen Garnica, Patricia Farrell, Dorothy Freidel, Kitty Emery, Marilyn Beaudry-Corbett and David Lentz. 2000. El Preclásico en Urías: una Adaptación Ambiental y Cultural en el Valle de Antigua. In: J. P. Laporte, H. L. Escobedo & A. C. de Suasnávar, eds. XIII Simposio de Investigaciones Arqueológicas en Guatemala, 1999, pp. 841–847. Guatemala, Ministerio de Cultura y Deportes, Instituto de Antropología e Historia y Asociación Tikal. (digital versión)

Rodríguez Girón, Zoila, Marlen Garnica, Jorge E. Cáceres and Juan P. Herrera. 2012. Veinticinco años de investigaciones arqueológicas en la Antigua Guatemala, 1985-2010: un análisis preliminar del espacio, evolución y conservación. In: B. Arroyo, L. Paiz & H. Mejía, eds. XXV Simposio de Investigaciones Arqueológicas en Guatemala, 2011, pp. 678–868. Guatemala, Ministerio de Cultura y Deportes, Instituto de Antropología e Historia y Asociación Tikal. (digital versión)
Rubio Sánchez, M. 1989, Monografía de la Ciudad de Antigua, Guatemala, Volumen 1. Guatemala, Tipografía Nacional.

Shook, E. 1957. Lugares arqueológicos del altiplano meridional central de Guatemala. En Arqueología Guatemalteca. Guatemala, Publicaciones del IDAEH, Vol. 20, Editorial del Ministerio de Educación Pública.

Shook, E. & E. Marquis. 1996. Secrets in Stone: Yokes, Hachas and Palmas from Southern Mesoamérica. Philadelphia, American Philosophical Society.

Stephens, J.L. 1971. Incidentes de viaje en Centroamérica, Chiapas y Yucatán. Vol. 1, 2d. ed. San José, Costa Rica. Editorial Universitaria Centroamericana EDUCA, Impreso por Trejo Hnos.

Taracena A., J. A. 2000. Invención criolla, sueño ladino, pesadilla indígena. Los Altos de Guatemala: de región a Estado, 1750-1871. Guatemala. CIRMA.

Treviño C., J.A. 2011. Gobernanza en la administración pública. Revisión teórica y propuesta conceptual. Contaduría y administración, 233: 127–153, available at: http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S0186-10422011000100008&lng=es&tlng=es.

Ubico Calderón, M. 2008. Antiguo Templo de N. S. de Los Remedios de La Antigua Guatemala: Restauración y Habilitación de su Atrio, Unpublished Master's thesis in Restoration of Monuments, Faculty of Architecture, Universidad de San Carlos de Guatemala, Guatemala.

Ubico Calderón, M. 2010. La Antigua Guatemala 1799-1950: Aspectos Urbanísticos y Arquitectónicos. Unidad de Investigaciones Históricas, Arqueológicas y Estudios de Apoyo, Guatemala, Consejo Nacional para la Protección de La Antigua Guatemala, La Copia Fiel Editorial.

Ubico Calderón, M. 2019. Efemérides Consejo Nacional para Protección de La Antigua Guatemala en su Cincuentenario 1969-2019. Consejo Nacional para la Protección de La Antigua Guatemala, Guatemala.

UNESCO. 2003. Convention for the Safeguarding of the Intangible Cultural Heritage. Paris, France, UNESCO.

UNESCO. 2006. Compendio de leyes sobre la protección del patrimonio cultural guatemalteco. K. Grigsby, B. Niño Norton & O. Mora, Paris, France, UNESCO, available at: https://oibc.oei.es/uploads/attachments/482/compendio_leyes_guatemala.pdf.

UNESCO. 2021. Operational Guidelines for the Implementation of the World Heritage Convention. Paris, France, UNESCO.

Valenzuela, D. 2013. Templo del Beaterio de Santa Rosa de Lima Proyecto de Restauración y Nuevo Uso. Unpublished Master's thesis in Restoration of Monuments, Faculty of Architecture, Universidad de San Carlos de Guatemala, Guatemala.

Wagner, R. 2001. La historia del café de Guatemala. Guatemala, Villegas Editores-Asociación Nacional del Café ANACAFE.

Wolley, C. 2020. Perspectivas de la arqueología colonial. In: B. Arroyo, L. Méndez & G. Ajú Álvarez, eds. XXXIII Simposio de Investigaciones Arqueológicas en Guatemala, 2019, pp. 677–742. Guatemala, Ministerio de Cultura y Deportes, Instituto de Antropología e Historia y Asociación Tikal.

Wolley, C. & Gómez, E. 2016. Evidencia arqueológica de la producción de bebidas alcohólicas de finales del siglo XIX y principios del siglo XX en el antiguo Convento de San José de las Carmelitas Descalzas de Santiago de los Caballeros de Guatemala. In: B. Arroyo, L. Méndez

Salinas & G. Ajú Álvarez, eds. XXIX Simposio de Investigaciones Arqueológicas en Guatemala, 2015, pp. 975–990. Guatemala, Ministerio de Cultura y Deportes, Instituto de Antropología e Historia y Asociación Tikal.

Wojcik, P.V. 2017. Diet, Health, and Migration in Antigua, Guatemala, 1541-1773. Unpublished PhD thesis, Anthropology Department, Indiana University Bloomington, Indiana, USA.

Town Hall of Antigua Guatemala.
Image by Dr. Mario Raúl Ramírez, with permission.


Great Zimbabwe
Zimbabwe

Chapter 5

Integrating Universal and Local Values: Towards a people-centred research agenda Great Zimbabwe

Tawanda Mukwende[1], Tendai Musindo[2], Genius Tevera[2], Nyaradzayi Maduro[1], Lesley Machiridza[2] and Thomas Panganayi Thondhlana[2]

[1] National Museums and Monuments of Zimbabwe
[2] Great Zimbabwe University

I. Background

1. Brief description of the Great Zimbabwe World Heritage Site

The pre-colonial past of southern Africa is associated with the development of the Zimbabwe Culture, a state system that developed and dominated the region from the 12th to 18th centuries CE. Zimbabwe Culture is an archaeological term for the dry-stone walled ancient settlements that are found across the modern-day countries of Zimbabwe, Mozambique, Botswana and South Africa. There are over five hundred Zimbabwe Culture settlements, constructed using unique dry-stone masonry techniques, around southern Africa. Great Zimbabwe, the largest of these sites, was a major centre for political, religious and economic progress in the region between the 12th and 18th centuries (Ndoro, 2001; Chirikure, 2021a). The significance of the Zimbabwe Culture sites is noted in the fact that three of them (Great Zimbabwe, Khami and Mapungubwe) have been placed on the UNESCO World Heritage List under the 1972 World Heritage Convention.

Great Zimbabwe is protected as a national monument under the National Museums and Monuments Act (GoZ, 2001). The boundaries of the property were influenced by colonial developments that saw local communities being stripped of their right to access the site after it was nationalized and monumentalized (Ndoro, 2001). The designated national monument and World Heritage property covers 729 hectares, although archaeological and ethnographic research has shown that the site covered a much larger landscape area (Musindo, 2019; Sinamai, 2020; Chirikure, 2021a).

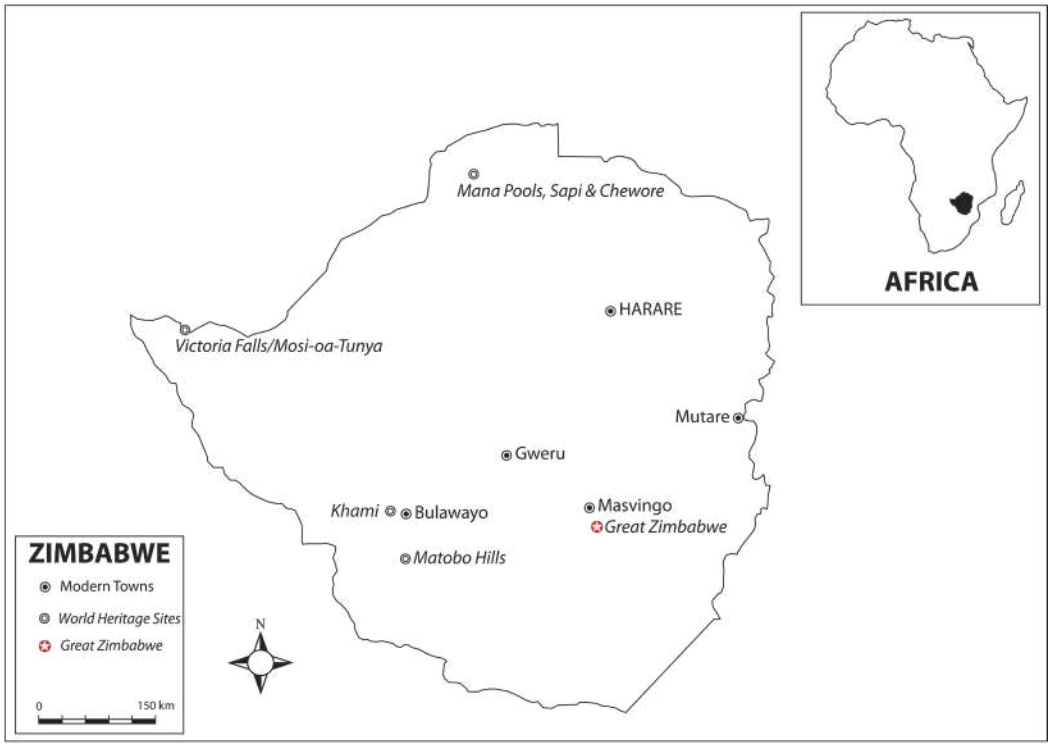


Figure 5.1 Map of Zimbabwe showing the location of Great Zimbabwe with an insert map of Africa (Source: Authors, 2022).

The different components of the Great Zimbabwe site have been conveniently divided into four zones, namely the Hill Complex, the Great Enclosure, the Valley Enclosures, and the Peripheral settlements (Figure 5.2). The ubiquitous maware (exposed granite hills and rock outcrops) around the site are the source of the granite rocks that were used to construct the dry-stone walls. Earliest construction is thought to have begun on one of the steep-sided rocky granite hills, now designated the Hill Complex, before spreading into the adjacent valley. The dry-stone masonry at the site demonstrates impressive architectural engineering informed by local realities and resources. As such, Great Zimbabwe is among one of the most sophisticated architectural ensembles in the world. In addition to granite, earth was one of the building materials used in the construction of the houses at Great Zimbabwe. However, what remains of these features are collapsed dhaka structures in the form of earthen floors or foundations. Although dhaka structures are an integral part of Great Zimbabwe, they have been largely neglected in most conservation and preservation efforts; archaeologists and heritage managers have paid less attention to the dhaka structures relative to the dry-stone walls. Indeed, few dhaka structures have been excavated and exposed to enhance the presentation and interpretation of the site (Figure 5.3).

Figure 5.2 Aerial view of the Great Zimbabwe World Heritage Site (Source: NMMZ, 2018).

Figure 5.3 Dhaka feature remains in the Western Enclosure of the Hill Complex at Great Zimbabwe (Source: NMMZ, 2020).

Movable material culture also constitutes an important part of material recovered at Great Zimbabwe. Usually buried under the soil, the archaeological evidence at the site includes potsherds, faunal remains, and metal artefacts (copper bangles, gold beads and foil, iron hoes, spears, axes and arrowheads). The majority of these artefacts were locally manufactured. The most exceptional and intriguing of these are the eight Zimbabwe birds (carved soapstone sculptures) that are largely viewed as religious symbols (Matenga, 1998; Matenga, 2011). The birds have been adopted as the national symbol of modern-day Zimbabwe. These birds have become Zimbabwe's treasured symbols, as depicted on the country's currency, stamps, insignia and flags (Mahachi and Ndoro, 1997; Thondhlana et al., 2021).

Given this background, it is not surprising that when the country gained independence in 1980 it was named after Great Zimbabwe. The Great Enclosure and Conical Tower have also been powerful symbols that have inspired state iconography. Zimbabwean citizens and Africans in general continue to draw inspiration from the site because it embodies pre-colonial African intellectual, cultural, political and economic achievements. Due to these attributes, people from all walks of life and different parts of the world visit Great Zimbabwe for a diverse range of reasons including spiritual reawakening, education and cultural tourism.

Left: Figure 5.4 One of the eight Zimbabwe birds recovered from Great Zimbabwe (Source: Authors, 2022).

2. Main management issues

Great Zimbabwe has largely functioned, ahead of other purposes, as one of the most popular cultural tourism destinations in southern Africa. Because of its domestic and international appeal, it remains the second most popular tourist destination after Mosi-oa-Tunya/Victoria Falls in Zimbabwe. The site is managed by the National Museums and Monuments of Zimbabwe (NMMZ), a government agency responsible for the overall management of the country's cultural heritage in line with the National Museums and Monuments Act (see also Chipunza, 2005). The NMMZ implements key conservation and management activities as well as the interpretation of the site. Conservation initiatives are carried out through the Research and Conservation Centre, while the Heritage Education Department interprets the site to the visiting public. Over the years, these initiatives have also received support from both local and external partners that include universities, research institutions, heritage funding bodies, and intergovernmental institutions as well as foreign governments. Periodic reports, State of Conservation reports and management plans give a glimpse of the plethora of challenges that continue to hamper the effective management of the heritage site (National Museums and Monuments of Zimbabwe, 2012). The recurrent main challenges are linked to site presentation and interpretation, sustainable use, access, governance and site conservation. The main management issues at the site emanate from a colonial philosophy and heritage practice that alienated Africans from their cultural heritage (Ndoro, 2001); tried and tested traditional management systems were replaced with a Western-oriented heritage management philosophy that has largely persisted to the present. The result is that the dominant narratives and the management system at Great Zimbabwe lack contributions from local voices, realities and experiences.

Boyd and Timothy (2001) have lamented the lack of adequate interpretation at World Heritage properties, arguing that most have inadequate interpretation programmes. Several factors impact the quality of the interpretation but the most critical one is financial resources. In addition, in instances where interpretive facilities are available, there is a constant challenge of keeping up with new interpretation trends and new information about the site. Similar concerns have been noted for Great Zimbabwe, whose interpretation has largely been the preserve of academics, mostly archaeologists. Interpretation at Great Zimbabwe is still largely informed by old dominant frameworks that are object based rather than people based. Despite new revisionist attempts at an understanding of Great Zimbabwe, there has been little effort to integrate the new knowledge into the site-interpretation framework. Reinterpretation of the site is particularly important at this juncture, especially if one takes into account the increasingly vociferous calls to accommodate the voices of local communities (Fontein, 2006; Schmidt and Pikirayi, 2016). As such, there is a need for a proactive approach that takes into consideration inputs from the multiple stakeholders for a holistic interpretation of the site. In particular, it is important to include local narratives and traditional values, and increase local community participation, by incorporating traditional management frameworks in the conservation of both tangible and intangible aspects of the property.

Community participation and the continuation of the religious functions of a site are important aspects of its sustainability (Ndoro, 2001; Schmidt and Pikirayi, 2016). Heritage protection without community involvement and commitment has been identified as an invitation to failure. The World Heritage Convention Article 5(a) explicitly states that "cultural and natural heritage should have a function in the life of community". At its 26th session in Budapest, the World Heritage Committee adopted four strategic objectives (known as the four "Cs") to promote the implementation of the World Heritage Convention (World Heritage Committee, 2002). These are Credibility, Conservation, Capacity-building and Communication. A fifth strategic objective, Communities, was added at the 31st session, held in Christchurch in 2007 (World Heritage Committee, 2007). By adding the fifth "C", the World Heritage Committee sought to enhance the role of communities in the implementation of the 1972 Convention. Munjeri (2010) asserts that World Heritage sites that do not prioritize local communities' participation in defining values and participation, nor sharing the benefits, have a high failure rate. The research agenda at Great Zimbabwe should, therefore, go beyond the current "material-oriented" conservation practice by incorporating people-centred approaches that were championed during the ICCROM-IUCN World Heritage Leadership Heritage Place Lab (HPL).

Great Zimbabwe is associated with some deep-seated spirituality and sacredness, and site managers at Great Zimbabwe often deal with people of different religious persuasions. Stovel (2005) noted that it is unavoidable to encounter polarized relations between and among religious groups at religious heritage sites. Indeed, dealing with the competing requirements of diverse faiths and belief systems is a very serious management issue at Great Zimbabwe (Mawere et al., 2012). If not properly managed, religious differences can become flashpoints for conflict and can affect the values of the heritage place. It is, therefore, a challenge for site managers to maintain the sacred and religious values of Great Zimbabwe.

Previously, the conservation of this property largely focused on its tangible aspects at the expense of the intangible (Ndoro, 2001). While there have been initiatives at the site to broaden the understanding and promotion of its intangible values, more needs to be done (Matenga, 2011; NMMZ, 2012). The Government of Zimbabwe recently constructed a spiritual centre that is aimed at ensuring that the spiritual dimension at the site receives the same attention as its other values. This is important to build synergies and rapport between the site management team and local communities who are involved in the safeguarding of intangible heritage elements associated with the site. All of these issues have been identified as central in the previous site management plan as well as during the second and third cycles of the World Heritage periodic reporting exercises (National Museums and Monuments of Zimbabwe, 2012).

The Great Enclosure.
Image by Maya Ishizawa (2024), with permission.

II. Research Agenda

1. Introduction

This new research agenda was developed from the experience of our Research–Practice Team during the HPL process. This experience highlighted the mismatch between previous and ongoing research agendas and the site management needs. Coming together as the Research–Practice Team required us to reorient our research towards finding solutions to the management needs and conservation challenges outlined in Section II. While the site has received considerable academic enquiry, dating as far back as the 1870s, it is unfortunate that some of these research activities are the source of some of the current management challenges. Previous site managers noted that the history of research at Great Zimbabwe has left a legacy of vandalism and looting (Ndoro, 2001, Matenga, 2011). Ndoro (1997) laments that some of the current conservation problems emanate from the early attempts at researching and interpreting the site. Furthermore, misguided clearance of vegetation and earth around the site resulted in some of the current conservation challenges. The establishment of requisite visitor amenities following its promotion as a tourist destination also brought in its fair share of conservation challenges. As such, since independence in 1980, the thrust of the post-colonial state has been to promote management and conservation initiatives at the site (Matenga, 1996; Ndoro, 2001; NMMZ, 2012), with the long-term conservation objectives at Great Zimbabwe focusing on the physical fabric of the site and visitor management (Ndoro, 1997; NMMZ, 2012).

2. Research Priorities

Research Priority 1
Local values and intangible cultural heritage

1

Traditionally, the management of cultural heritage was closely tied to the land, which was controlled by religious leaders representing royal ancestors who ensured societal well-being and harsh punishment for "all" when the spirits were offended. Thus, the religious significance of heritage places was either premised on "secret ancestral blessings" or the "tragedy of the commons". A community's sense of place was closely tied to these religious and spiritual beliefs (Ndoro, 2005). Owing to such beliefs, ordinary people could not simply visit sacred places without an official priest/priestess or their appointee (Ranger, 1998). Thus, intangible cultural values were regulated, transmitted and inculcated into society through a series of taboos, rituals, secrets and myths by societal elders, spirit mediums and even ordinary members (Katsamudanga, 2003; Manyanga 2003). The management of intangible cultural heritage was, therefore, a responsibility for all before the advent of colonialism and the Western heritage management system. However, the tragedy of intangible cultural heritage started with the onset of colonialism. As Ndoro (2005) notes, the

annexation of Great Zimbabwe by the British South Africa Company (BSAC) significantly changed the way people interacted with the site. Access to the heritage site by local communities was curtailed once the site was designated a national monument. Traditional rituals and ceremonies that had been central to the well-being of the communities that used to take place at the site were prohibited.

In particular, there was a shift from an open model of heritage management to a closed one, from indirect economic benefits to direct ones, and from a collective system of ownership to a monopolized one. While locals had traditionally linked the land to ancestral spirits, under colonialism, alien heritage management evolved with a strict bias towards scientific conservation approaches, foreign tourism and the academically trained public. Spiritual values were disparaged and alienated together with their local spiritual guardians. For instance, the 1972 World Heritage Convention modelled a restrictive concept of cultural heritage with a materialist bias and limited spatial dimension that ignored intangible aspects (Ndoro, 2005). Adherence to international heritage conventions and other protocols and guidelines from ICOMOS and the IUCN for financial incentives or grants became the obsession for most heritage managers in southern Africa (Ndoro, 2005). This is despite the fact that economic benefits only come into being based on other inherent heritage values, and an over-emphasis on economic benefits can create problems for heritage sites. Be that as it may, modern societies continue to perceive heritage in terms of its economic worth and aesthetics (Katsamudanga, 2003).

While heritage sites bear important spiritual values shared by locals in complex ways, most heritage managers simply assume that local communities are irrelevant to their "scientific" conservation approaches (Ndoro, 2005). Spiritual values are the least understood aspects by heritage managers, hence the constant mistrust, tension and animosity between experts and indigenous communities. As each generation uses the past differently, diverse religious groups are now emerging in the post-independence era to make "new" and contrasting claims around heritage places. Such shifts have escalated conflicts between heritage managers, traditional chiefs, African Traditional Religion (ATR) and Independent African Churches (Mawere et al., 2012). Schmidt (1983) succinctly sums this up by stating that symbolic systems in African cultures have often been the ideological cause for primary changes in political and economic relationships, as rival groups struggle to control access to wealth and power through the control of symbolic systems.

Most Indigenous communities hold spiritual heritage in high regard, yet it is the least emphasized. The landscape in Africa is alive, spiritual and visual, but its relationship with communities is complex and embedded in Indigenous Knowledge Systems (IKS) (Dei, 2012; Mawere, 2015; Sinamai, 2015, 2017). Hence, an appreciation of IKS recaptures community interest and

support for archaeological and heritage management practices (Sinamai, 2017). This also promotes multi-vocality, which is good for enhanced heritage-meaning making. Intangible heritage and IKS also deserve special attention because they enhance the protection of heritage sites and landscapes through traditional management systems. Therefore, before any intervention, heritage managers should first understand what counts as reality, knowledge and values to local communities. Any research conducted under such a premise aids decolonisation, which promotes space for recovery, recognition, healing, self-determination, development and power (Held, 2019).

This will also be tied to ongoing efforts to safeguard intangible cultural heritage (ICH) values attached to Great Zimbabwe. Since the colonial era, the ICH of Africa has been under attack due to many factors. At Great Zimbabwe, there are ongoing efforts to promote the religious and spiritual values of the site. These include the Shona Village as well as the appointment of a resident spirit medium responsible for attending to spiritual matters at the site. Intangible cultural heritage is tied to the land, numerous landscape features, soundscapes, ancestral spirits, religious leaders, and ordinary community members (Sinamai, 2015, 2017). From an ICH perspective, Great Zimbabwe is an extensive landscape connected to numerous other shrines and communities situated far beyond the current protected World Heritage property. The manifestations of this are being witnessed at the site today in the form of conflicting religious groups clamouring for space within the core zone of the site (Figure 5.5). Unfortunately, finding common ground among these diverse religious interests has proved complicated due to a myriad of issues that include political interference in site management issues. Worse still, reconciling the differences among the various religious stakeholders has proved to be a herculean task as various groups claim exclusive rights to use the site for religious purposes. Owing to this, the current web of ICH around the Great Zimbabwe World Heritage Site is so complex that this warrants further research.

The key questions identified under this research priority are:

1. What is the nature of the intangible cultural heritage values around Great Zimbabwe and how can these values be promoted at the site together with the tangible attributes?

2. In what ways are derived economic values escalating conflict at Great Zimbabwe and can these be reconciled with ICH?

3. What are the short and long-term impacts of these conflicts at the site?

Figure 5.5 Photograph of a cave on the Hill Complex at Great Zimbabwe, where some individuals visit to conduct rituals (Source: Authors, 2022).

2 Research Priority 2
Heritage governance at Great Zimbabwe

Globally, the issue of heritage governance is gaining traction as most formal heritage management systems are now viewed as discriminatory and undemocratic in contexts where they lead to the exclusion of particular groups from exercising their rights and responsibilities over their heritage places (Ndoro and Wijesuriya, 2015; Schmidt and Pikirayi, 2016). This is a common problem in the Global South, which witnessed land alienation and nationalisation of heritage places during the colonial era. The net effect of such policies was that a new management regime was instituted for the administration and management of immovable and movable heritage. In the case of Zimbabwe, this is in the form of the National Museums and Monuments Act of 1972 and other preceding heritage legislation (Chipunza, 2005). Crucially, this legislation does not provide space for community participation in the management of their heritage places, which are classified as national heritage resources.

While this complex scenario depicts what has prevailed at Great Zimbabwe, it is interesting to note that over the past two decades, the heritage authorities have been trying to reach out to local communities. The challenge, however, is that there has been no guiding policy on how the local communities should be engaged and included in the management of the property. As such, current community consultation practices are rather ad hoc. This has not escaped the eyes of the community leaders, who feel that heritage authorities only incorporate them to "tick boxes" and show that they adhere to international best practices in heritage management (Fontein, 2006).

With this context, it will be important to carry out research to guide heritage authorities in developing a framework for heritage governance that takes into account the principles of good governance. The Constitution

of Zimbabwe has provisions for the active participation of traditional leaders in the governance of their heritage (GoZ, 2013). It also provides for the restoration of ancestral rights that were stripped from descendent communities. This is also important in the context of the country's new thrust on the devolution of governance and responsibilities to ensure that communities have more say in issues affecting their day-to-day livelihoods. It is understandable that, in many scenarios, this is not an easy task, requiring a guiding framework for policy makers to ensure wider participation of local and descendent communities in the management and governance of their heritage places.

This proposal does have precedents on the continent and in other places. This includes South Africa, where the process of developing and enacting the National Heritage Resources Act of 1999 ushered in democratized heritage practices and restored heritage places to descendent communities (Hall, 2005). In Australia, the government also restituted property rights of Budj Bim World Heritage Cultural Landscape to the Gunditjmara Traditional Owners. The property is protected and managed through an adaptive and participatory management framework of overlapping and integrated customary, governance, legislative and policy approaches (Smith et al., 2019). The Gunditjmara Traditional Owners apply customary knowledge and scientific approaches through two management regimes – a cooperative arrangement with the Victorian Government for Budj Bim National Park and Indigenous ownership of the Budj Bim and Tyrendarra Indigenous Protected Areas.

The key questions identified under this research priority are:

1. How can traditional leaders, local communities and civil society actively participate in the management of Great Zimbabwe?

2. What systematic frameworks can be instituted to ensure a harmonious heritage governance framework at Great Zimbabwe (between heritage authorities and resident local communities as well as among the resident local communities themselves)?

3 Research Priority 3
Climate change, environmental sustainability and the Great Zimbabwe cultural landscape

Climate change and environmental sustainability are issues of major concern at most cultural heritage sites (McIntyre-Tamwoy, 2008; Sesana et al., 2018). The natural environments around Great Zimbabwe continue to be destroyed by aggressive or invasive floral species (e.g. Lantana camara, eucalyptus and jacaranda) that were introduced in the early 20th century (Ndoro, 2001). While efforts have been made to implement previous recommendations to reclaim and restore Great Zimbabwe's endemic

vegetation, these have been hampered by invasive floral species such as L. camara (Matenga, 2003), an invasive species that originated from Tropical America. This alien species is toxic and also negatively alters soil properties (Ruwanza and Shackelton, 2016; Kato-Noguchi and Kurniadie, 2021). The species develops into dense thickets, making it impossible for other plant species to develop, and its roots pose a risk to the physical fabric of the monument. Several projects have been implemented to control L. camara but with minimal results (Chiseva, 2019).

Furthermore, some zvitubu (sacred springs), nzizi (rivers), madziva anoera (sacred pools), masango anoera (sacred groves/forests), miti inoera (sacred trees), and nzvimbo dzinoera (sacred places) in and around Great Zimbabwe are being impacted by the effects of climate change. The region has witnessed erratic and unpredictable weather patterns over the past few decades, characterized by prolonged dry and wet spells as well as intense summer heat. Summer seasons in southern Africa are now characterized by flash floods in the form of cyclones and, sometimes, prolonged dry spells. This has affected the natural ecosystem within the wider Great Zimbabwe landscape.

In addition, increased human populations have also led to increased competition for natural resources, thus putting a strain on an already fragile ecosystem. For example, indigenous trees including muhacha/muchakata (Parinari curatellifolia), muchechete (Mimusops zeyheri) and muonde (Ficus sycomorus) are considered sacred around Great Zimbabwe (Matenga, 2003; Mushangwe, 2019). In Zimbabwe, traditional religious ceremonies and communications with the ancestors are often conducted within sacred forests or under specific sacred trees (Byers et al., 2001). Some of these trees produce fruits of nutritional and medicinal value. These attributes, not often perceived to be part of the monumental nature of the site, are largely ignored in the conservation and presentation of the site. Conversely, Ndoro (1997) argues that the natural setting of the site is crucial and, therefore, any serious conservation plan should consider this broader environmental setting.

The impacts of climate change are also noticeable in the physical fabric of Great Zimbabwe. For instance, dhaka remains are vulnerable to rapid climate variations. The deterioration of exposed dhaka structures has been an issue of concern over the years and some measures have been put in place, such as the construction of protective sheds or coverings with layers of sand to arrest further erosion (Ndoro, 2005). However, it is important to review the success of these measures. By and large, the conservation of dhaka structures has suffered due to a lack of proper research on the nature of these features and how they can best be conserved. Initial efforts towards research on the conservation of these structures, which was done in the 1990s, culminated in conservation efforts of selected dhaka features. Several reports have been generated to highlight these challenges (Pwiti, 2011; NMMZ, 2012). In the face of climate change, how best can these dhaka structures be conserved?

Another concern identified by the Research–Practice Team is encroachment, whereby the area surrounding the site has had immense vegetation clearance by communities for agriculture and settlement. This has left the designated area as an "island" in terms of vegetation density. This has created a situation where animals, both domestic and wild, find sanctuary in the World Heritage property. The non-availability of a legally defined buffer zone for the World Heritage property only complicates matters as heritage authorities only have jurisdiction in the core area and otherwise depend on the goodwill of communities near the property (Sagiya, 2015). Domestic animals that come to the site for pasture and sanctuary are a major threat to the structural stability of the walled structures. How communities living around the site are affected by the adversities of climate change, and how they may best cope with these challenges, remains largely unknown. At the same time, as a heritage site with physical structures and intangible aspects, research is also needed on ways of combating the effects of climate change.

Figure 5.6 Seasonal bushfires that frequently engulf the site of Great Zimbabwe (Source: NMMZ, 2016).

Seasonal bushfires have been a recurrent and major concern at Great Zimbabwe (Figure 5.6). Indigenous trees, which take many years to regenerate, have been severely affected by these veld fires. Dry L. camara is one of the "fire weeds" that exacerbates the intensity and frequency of veld fires, which also promote the infestation of L. camara. Fireguards have been used as one way of limiting the impact of veld fires at Great Zimbabwe, with nine-metre-wide fire guards emplaced around the site for a long time, and these have been successful to some extent. In this context, the Research–Practice Team considered it necessary to conduct further research on fire and vegetation management around Great Zimbabwe.

Based on these outlined needs, four research questions were identified by the Research–Practice Team to address issues related to climate change and environmental sustainability:

1. What are the impacts of extreme climate variations on the physical fabric of the site?

2. What is the level of awareness on climate change issues amongst the local communities and how have they responded to the impacts of climate change?

3. What are the possible ways of controlling invasive species at Great Zimbabwe?

4. What are the most effective ways of controlling fire outbreaks within the monument?

4 Research Priority 4
Local knowledge systems and the conservation and presentation of Great Zimbabwe

The fourth area that the Research–Practice Team identified was the incorporation of local ways of knowing in the management and knowledge production at Great Zimbabwe. This comes from a realisation that local communities have had enduring traditions of caring and involvement with the site. Therefore, the team agreed to explore how local knowledge – as an outcome of centuries of interacting with the heritage place –can enhance the management of the site. Pikirayi (2016) defines local knowledge as a corpus of knowledge, practices, and representations maintained and developed by communities with extended histories of interaction with the landscape. Often this knowledge is embedded in local cosmologies, local languages and oral traditions (Chirikure, 2021b). Elsewhere, it has often been noted that local communities, especially those with direct ancestral links, have rich narratives about heritage located within their spaces. Thus, this research priority seeks to explore strategies that can be used to promote indigenous approaches to conservation, local narratives and oral histories connected to Great Zimbabwe (Figure 5.7). This is imperative because these skills, narratives and histories have long been marginalized in favour of other forms of knowledge production, like archaeology. Sinamai (2020) laments that alien knowledge systems have been privileged over local ones when it comes to heritage management in Africa, and Thondhlana and Garwe (2021) argue that colonialism privileged the Western worldview, institutions, knowledge, languages and value systems at the expense of African epistemologies. Local knowledge is largely regarded as unscientific and an appendage of disciplines that originate from the West; African cultures, which have their epistemologies, are often dismissed as unscientific (Chirikure, 2021a). According to Mahachi and Ndoro (1997), earlier attempts to incorporate local histories, myths and legends at Great

Zimbabwe were trivialized and deemed unconventional and unscientific. It is, therefore, crucial that a new research agenda prioritizes the recovery, revitalisation and restoration of the local knowledge about Great Zimbabwe.

Figure 5.7 Stonemasons employing traditional skills to reconstruct collapsed walls at Great Zimbabwe (Source: NMMZ, 2018).

Archaeological investigations have yielded a large body of evidence that was crucial in reconstructing the way of life of the ancient occupants of Great Zimbabwe. Archaeology has been perceived as the only credible source of information on southern African heritage places, which predate 1500 CE. At Great Zimbabwe, researchers have largely been sceptical about other sources of information and knowledge systems. Throughout the colonial period, research at Great Zimbabwe was designed and carried out by white expatriates who did not pay attention to local narratives, indigenous knowledge and local ways of knowing. Archaeologists/ heritage managers, also mostly white expatriates, were given the sole role of stewardship of heritage places (Sinamai, 2020). Their research activities failed to address questions that were pertinent to local communities. Unfortunately, archaeology remains deeply entrenched in colonial knowledge-production structures and continues to be perceived as a preoccupation of foreigners with resources to burn on unproductive pursuits (Chirikure, 2021b). Sinamai (2020) argues that archaeologists continue to disrespect, subjugate and side-line the voices that come from other worldviews. Indeed, previous research at and around Great Zimbabwe has largely failed accommodate local interests and agendas. Pikirayi (2016) encourages heritage practitioners, especially archaeologists, to incorporate traditional and local wisdom in their work. Inclusivity and multivocality are considered best practices in the management of heritage sites. Notably, while some local narratives and conservation skills have proved quite resilient, others are no longer easy to retrieve.

Resorting to local languages is one way of promoting local ways of knowing. Mignolo (2005) argues that "knowledge is carried in language" and, therefore, it is imperative to use local languages in research, presentation and interpretation at Great Zimbabwe. Previous attempts to incorporate African languages in the displays at the Great Zimbabwe site museum and guidebooks are acknowledged (Ndoro, 1997). Breunlin (2020) notes that epistemologies are embedded in local languages, and their use helps researchers connect with the local landscapes. For example, Mosi-oa-Tunya, the Indigenous name of Victoria Falls, another World Heritage property in Zimbabwe, was initially ignored when the site was nominated on the World Heritage List. Academics often ignore Indigenous toponyms that are crucial in historical reconstructions (Pikirayi, 2016; Figure 5.8). According to Musoni (2016), names and naming practices among African peoples carry spiritual, emotional and physical overtones. Indigenous names often carry collective community memories and, therefore, can be fruitful avenues to understand heritage places like Great Zimbabwe. Unfortunately, due to colonisation, Indigenous languages were removed and erased from the hierarchy of knowledge (Mignolo, 2005).

Alongside language, reclamation of Indigenous knowledge can be achieved through traditional performances (Breunlin, 2020). Ritual performances can aid researchers in understanding the diverse aspects of a heritage place. Clan praise poetry, genealogies of ruling families, traditional songs, dances and stories about migrations can be potent sources of valid historical information about Great Zimbabwe. According to Mataga (2009), oral traditions and folklore were methods by which cultural heritage was preserved. For Great Zimbabwe, exploring local histories, myths and legends as well as engaging with multiple ways of producing local histories is now very crucial.

Research questions that archaeologists continue to pursue remain largely irrelevant to the local communities; archaeological approaches and knowledge-production processes seem not to resonate well with local communities and their historical realities (Pikirayi, 2016). Archaeologists working at Great Zimbabwe have been fixated on chronostratigraphic sequences based on pottery typologies, radiocarbon dates and wall sequences (Mahachi and Ndoro, 1997). However, Pikirayi and Schmidt (2016) claim that local communities remain uninterested in the pasts constructed by archaeologists because they cannot assist them in establishing clan histories. The co-production of knowledge as well as the formulation of research agendas with the descendent communities might help to bridge this gap.

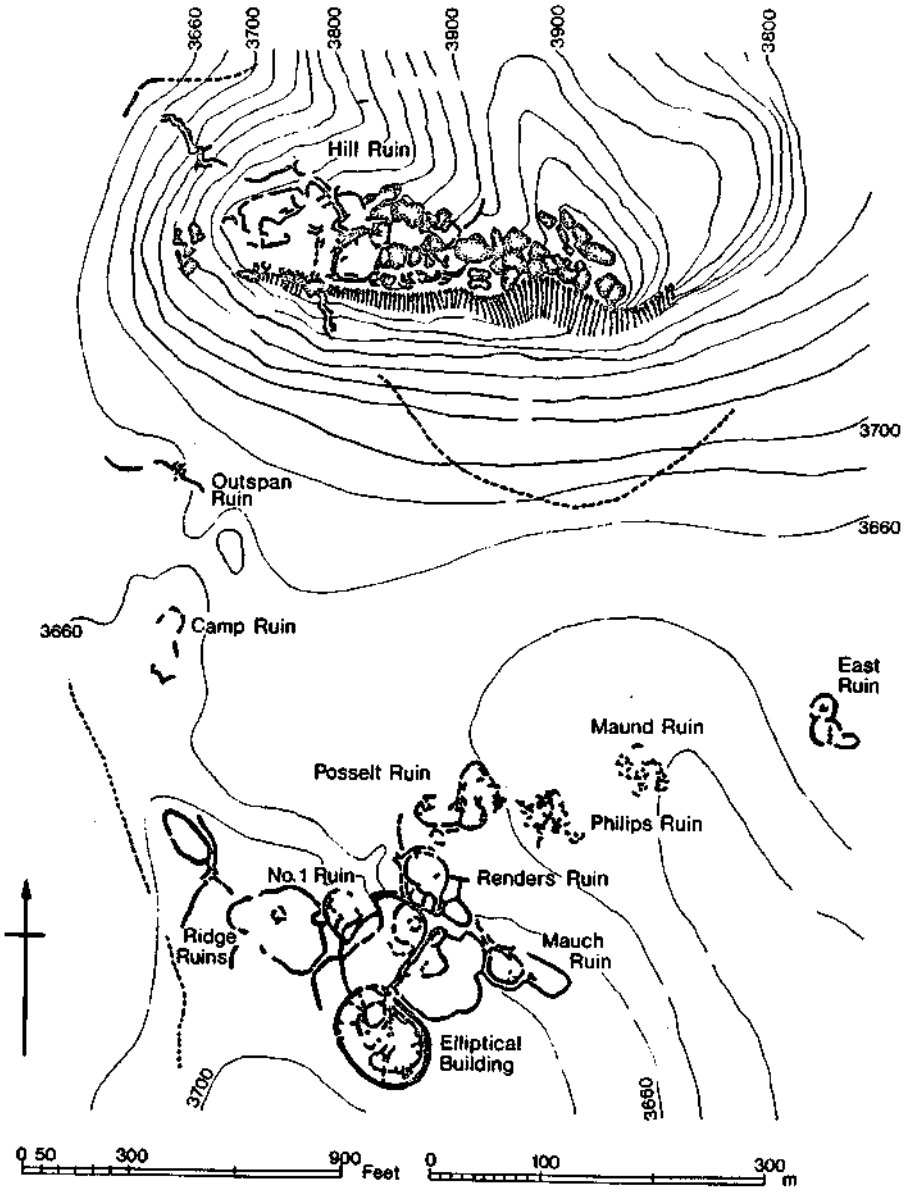


Figure 5.8 Site map of Great Zimbabwe available on the official UNESCO web page. The toponyms shown are the alien names of European explorers who vandalized the site (Garlake, 1973).

The HPL Research–Practice Team noted that research questions should also emanate from the communities themselves and should be based on Indigenous and local knowledge. Based on this need, three broad questions critical for directing the development of this research priority are:

1. Which Indigenous philosophies, ontologies and epistemologies can contribute to the dynamic use and presentation of the site?

2. What is the contribution of local knowledge and skills to the management of Great Zimbabwe?

3. What have been the impacts of imported heritage management approaches on the conservation of Great Zimbabwe?

III. Inputs Needed and Expected Outputs

The success of the outlined new research agenda will be premised on the availability of resources. It is important to fully document the intangible cultural heritage, meanings, interests, positions and challenges from the perspective of heritage managers and local communities living around Great Zimbabwe. Such studies should be carried out by multidisciplinary teams with the active participation of local community members. Relevant disciplines could include archaeology, heritage studies, anthropology, ethnography, history, religious studies, media and filming, political science, tourism, and African languages and culture. The involvement of local communities has often been limited to the participation of traditional leadership, spirit mediums and community elders. This, however, leaves out a potentially useful constituency of the ordinary people who practice their way of life around the site. Politicians, liberation war veterans, and Christians in the form of Pentecostal church leaders and Independent African Churches should also not be left out. Such an approach should also promote graduate student development through their participation in research, and the development of undergraduate and post-graduate dissertations. It is anticipated that numerous publications related to the identified themes at Great Zimbabwe will result from this endeavour.

This research effort will immensely benefit from numerous financial, academic, cultural, Christian and political partnerships. For example, to finance research and conservation activities, partners including UNESCO, ICCROM and the IUCN are critical alongside other international heritage bodies. Furthermore, to administer such funds and coordinate associated activities, the NMMZ, Great Zimbabwe University (GZU) and the Zimbabwe Tourism Authority (ZTA) should not be left out. Such strong partnerships will underpin the collaboration of various experts affiliated with these organisations who will ensure the effective and smooth implementation of the research agenda. More importantly, the research agenda must ultimately be integrated into the management plan of the site to ensure there is stakeholder consensus on the issues raised. This is also important to uphold the obligations of the NMMZ and stakeholders to implement the research agenda.

IV. Desired Outcomes

Great Zimbabwe has largely been managed as a cultural site with little consideration of its natural and intangible values. As such, the research agenda developed by the Research–Practice Team seeks to move towards considering both the cultural and natural values of the site, which are inherently intertwined. As previously noted, the natural elements at the site, such as native trees, springs and caves, have deep spiritual meanings for the local communities. Taken together, the cultural and natural values at Great Zimbabwe imbue the deep religious and spiritual values associated with the site. To this end, the Research–Practice Team anticipate that the collaborative research agenda will develop responses to the management issues

View from the Great Enclosure.
Image by Maya Ishizaw (2024), with permission.

raised with a particular focus on entrenching the centrality of the local community in the management of the site as rights-holders.

The initiatives raised under this research agenda will also be implemented in the context of Great Zimbabwe University's UNESCO Chair on African Heritage, which is hosted in the Centre for Culture and Heritage Studies. The Chair was awarded to the institution to specifically develop research projects on African heritage. Participation in the HPL was thus important in shaping the future direction of the Chair. The research priorities identified here are expected to be actioned over the next three to four years.

The first research priority relates to the mapping of the intangible values associated with Great Zimbabwe. This is an important exercise that has received scant attention over the years (see Fontein, 2006; Matenga, 2011). Anticipated activities include a mapping programme that involves consultations with local communities and other interest groups from different parts of the country. Great Zimbabwe is regarded as a national shrine and, therefore, any mapping exercise of its intangible values has to take a national approach. Mapping and developing a baseline of intangible values is a long process, expected to take approximately two years. However, this process will have to be sustained in future to account for changing values and new values that come into society over time.

The second research priority focuses on governance and requires extensive fieldwork consultation with local traditional leaders and community members, government officials and other stakeholders. To this end, a guiding framework on how the issue of heritage governance at Great Zimbabwe can be approached, which takes into account concepts of multi-vocality in the management approach, is planned. It is expected that such a guiding framework could be replicated at other heritage sites in the country as a way of promoting local community participation. Ultimately, this work should culminate into a vibrant site stakeholder team that is progressive with a unity of purpose. More specifically, through an integrated management approach, the sustained nurturing of trust and collaboration between NMMZ heritage managers and the various religious groups interested in accessing and using Great Zimbabwe is anticipated. This ambition will be realized in the form of a comprehensive integrated management plan that minimizes conflict and safeguards spiritual values and associated attributes. In addition, this work will contribute to the development of vibrant cultural villages and art and craft industries among other benefits. In particular, the current Spiritual Centre, Shona Village and the Chesvingo Villages should be enhanced and adapted to research findings as generated from this work. These cultural facilities will be used to effectively communicate Indigenous cultural heritage through poetry, music, dance and drama performances as well as art and craft products. This has significant potential to deliver numerous exciting cultural tourism products including guided tours, cultural festivals, short films, documentaries, and temporary and mobile exhibitions on intangible cultural heritage.

The third research priority relates to research on the physical fabric of Great Zimbabwe in the face of climate change, as a thematic line of research that also focuses on the physical dimensions of the site. Addressing this priority will involve a long-term research project that will have an initial horizon of three years but with the possibility of future development, especially as the impacts of climate change will be felt for a

long time to come. The results of this line of research will contribute to supporting the site management team when developing management responses to the challenges posed by climate change and the presence of invasive exotic species, such as L. camara, which are impeding the development of the local Indigenous vegetation.

Finally, the fourth research priority, on local knowledge systems, is unique in that it is a cross-cutting theme for the whole research agenda. This recognizes that to address all of the research priorities, working with the know-how of the local communities around Great Zimbabwe is paramount. As such, the delivery of this priority will inherently be linked to the other three research priorities and associated activities.

Concluding Remarks

The research agenda presented here, co-developed by the Great Zimbabwe Research–Practice Team, demonstrates the needs of, and opportunities for, the conservation and management of this World Heritage property. To achieve success, however, there is a need for stakeholder coordination and collaboration to ensure that the priorities set out in this agenda are achieved. More importantly, the management plan of the site will be an important platform to highlight and prioritize the research agenda, thus making it a key deliverable for the heritage authorities. Ultimately, the research priorities identified through the HPL process have the potential to positively impact the management of the site by increasing communication and collaboration among heritage authorities, local communities and other stakeholders at the Great Zimbabwe World Heritage Site.

View of the Great Enclosure.

References

Breunlin, R. 2020. Decolonising ways of knowing heritage, living communities and indigenous understandings of place. Genealogy, 4(3)

Boyd, S.W. & Timothy, J.D. 2001.Developing partnerships: Tools for interpretation and management of World Heritage Sites. Tourism Recreation Research, 26(1): 47-53

Byers, B.A., Cunliffe, R.N. & Hudak, A.T. 2001. Linking the conservation of culture and nature: a case study of sacred forests in Zimbabwe. Human Ecology, 29(2): 187–218.

Chirikure, S. 2021a. Great Zimbabwe: Reclaiming a 'Confiscated' Past. London and New York, Routledge.

Chirikure, S. 2021b. Making archaeology relevant to global challenges: a Global South perspective. Antiquity, 95(382):1073-1077

Chirikure, S., Nyamushosho, R., Bandama, F. & Dandara, C. 2018. Elites and commoners at Great Zimbabwe: archaeological and ethnographic insights on social power. Antiquity, 92(364): 1056–1075.

Chipunza, K.T. 2005. Protection of immovable cultural heritage in Zimbabwe: an evaluation. In Ndoro, W. and Pwiti, G. (eds) Legal frameworks for the protection of immovable cultural heritage in Africa. Rome: ICCROM

Chiseva, B. 2019. Lantana camara elimination commences at Great Zimbabwe- TellZimNews- Climate Change and Environment, available at: https://tellzim.com/lantana-camara-elimination-commences-at/ [Accessed 27 April 2022].

Dei, G.J.S. 2012. Indigenous anti-colonial knowledge as 'heritage knowledge' for promoting Black/African education in diasporic contexts. Decolonization: Indigeneity, Education and Society, 1(1): 102–119.

Fontein, J. 2006. The Silence of Great Zimbabwe: Contested Landscapes and the Power of Heritage. 1st ed. London and New York, Routledge.

GoZ. 2001. National Museums and Monuments Act Cap 25:11. Harare, Government Printers.

GoZ. 2013. Constitution of Zimbabwe. Harare, Government Printer.

Hall, A., 2005. Initiating a review of national heritage legislation in the South African experience. Ndoro, W. and Pwiti, G. (eds) Legal frameworks for the protection of immovable cultural heritage in Africa. Rome: ICCROM

Held, M.B.E. 2019. Decolonizing research paradigms in the context of settler colonialism: An unsettling, mutual and collaborative effort. International Journal of Quantitative Methods, 18(1): 1–16.
Kato-Noguchi, H. & Kurniadie, D. 2021. Allelopathy of Lantana camara as an invasive plant. Plants, 10(1028): 1–10.

Katsamudanga, S. 2003. The dilemma of preserving intangible heritage in Zimbabwe. Paris, ICOMOS Open Archive, pp. 1–6.

Mahachi, G. & Ndoro, W. 1997. The socio-political context of southern African Iron Age studies with special reference to Great Zimbabwe. In: G. Pwiti, ed. Caves, Monuments and Texts: Zimbabwean Archaeology Today, pp. 89–109. Uppsala, Department of Archaeology and Ancient History.

Manyanga, M. 2003. Intangible cultural heritage and the empowerment of local communities: Manyanga (Ntaba Zi Ka Mambo) revisited. In 14th ICOMOS General Assembly and International Symposium: Place, memory meaning : preserving intangible values in monuments and sites, 27-31 October 2003, Victoria Falls, Zimbabwe

Mataga, J. 2009. Religion as heritage: Traditional shrines and African Initiated Churches in Zimbabwe. Missionalia: Southern African Journal of Mission Studies

Matenga, E. 1996. Conservation history of the Great Enclosure, Great Zimbabwe, with reference to the proposed restoration of a lintel entrance. In: G. Pwiti & R. Soper, eds. Aspects of African Archaeology: Papers from the 10th Congress of the PanAfrican Association for Prehistory and Related Studies, pp. 825–828. Harare, University of Zimbabwe Publications.

Matenga, E. 1998. The Soapstone Birds of Great Zimbabwe: Symbols of a Nation. Harare, African Publishing Group.

Matenga, E. 2003. An evaluation of the critical economic resources of Great Zimbabwe, 1200-1500 AD: A preliminary ethno-botanical survey of edible wild fruits. In: F. Chami, G. Pwiti & C. Ramimilahy, eds. Climate Change, Trade and Modes of Production in Sub-Saharan Africa, pp. 118–127. Dar es Salaam, Dar es Salaam University Press.

Matenga, E. 2011. The Soapstone Birds of Great Zimbabwe: Archaeological Heritage, Religion and Politics in Postcolonial Zimbabwe and the Return of Cultural Property. Uppsala Universitet, Department of Archaeology and Ancient History.

Mawere, M., Sagiya, M.E. & Mubaya, T.R. 2012. Convergence of diverse religions at Zimbabwe heritage sites: The case of Great Zimbabwe National Monument. International Research Journal of Arts and Social Sciences, 1(2): 22–31.

Mawere, M. 2015. Indigenous knowledge and public education in sub-Saharan Africa. African Spectrum, 50(2): 57–71.

McIntyre-Tamwoy, S. 2008. Archaeological sites and indigenous values: The Gondwana rainforests of Australia World Heritage Area. Archaeological Heritage 1(1): 42-49

Mignolo, S. 2006. Prophets facing sidewise: The geopolitics of knowledge and the colonial difference. Social Epistemology 19(1): 111-127

Munjeri, D. 2010. An Analytical Approach to International Treaties on Natural and Cultural Heritage in the Context of Sub-Saharan Africa, Unpublished PhD thesis in International Relations and Diplomacy, Académie de Paris, Ecole de Hautes Etudes Internationales, Centre d'études Diplomatiques et Stratégiques, Paris, France.

Mushangwe, C.T. 2019. Human-Plant Interactions in Semi-Arid Regions: An Ethnobotanical Study of the Iron Age Site of Mtanye, Southwestern Zimbabwe, Unpublished MPhil thesis, University of Cape Town, Cape Town, South Africa.

Musindo, T.T. 2019. Modelling Water Use at Great Zimbabwe: An Ethnohistoric, Ethnoarchaeological and GIS Landscape Analysis at an Ancient African City. Oxford, BAR Publishing.

NMMZ 2012. Great Zimbabwe World Heritage Site Management Plan. Harare, Unpublished report submitted to the World Heritage Centre.

Ndoro, W. 1997. Great Zimbabwe. Scientific American, 277(5): 94-99

Ndoro, W. 2001. Your Monument Our Shrine: The Preservation of Great Zimbabwe. Uppsala, Uppsala University.

Ndoro, W. & Wijesuriya, G. 2015. Heritage management and conservation: From colonisation to globalisation. In Meskell, L. Global Heritage: A Reader. London, Wiley Blackwell

Pikirayi, I. 2016. Archaeology, local knowledge and tradition: The quest for relevant approaches to the study and use of the past in southern Africa. In Schmidt, P.R. & Pikirayi, I. Community Archaeology and heritage in Africa: Decolonising practice. London: Routledge

Pikirayi, I., Sulas, F., Musindo, T.T., Chimwanda, A., Chikumbirike, J., Mtetwa, E., Nxumalo, B. & Sagiya, M. 2016. Great Zimbabwe's water. Wiley Interdisciplinary Reviews: Water, 3(2): 195–210.

Pwiti, G. 2011. Great Zimbabwe Site Conservation Assessment v2.0. A Report Prepared for the Global Heritage Fund.

Ranger, T.O. 1999. Voices from the Rocks: Nature, Culture and History in the Matopos Hills of Zimbabwe. Indiana, Indiana University Press.

Ruwanza, S. & Shackleton, C.M. 2016. Effects of the invasive shrub, Lantana camara, on soil properties in the Eastern Cape, South Africa. Weed Biology and Management, 16(2): 67–79.

Sagiya, M. E. 2015. An evaluation of the applicability of the concept of buffer zones in the management of world heritage sites in Zimbabwe, with special reference to Great Zimbabwe. MA Dissertation submitted to the University of Zimbabwe

Schmidt, P.R & Pikirayi, I. 2016. Community archaeology and heritage in Africa: Decolonising practice. London: Routledge

Sesana, E., Gaganon, A.S., Bertolin, C., Hughes, J. 2018. Adapting cultural heritage to climate change risks: Perspectives of cultural heritage experts in Europe. Geosciences 8(8), 305

Sinamai, A. 2015. Understanding metaphors in sustaining cultural landscapes within traditional societies in Australia and Zimbabwe. Archaeological Review from Cambridge, 30(1): 17–28.

Sinamai, A. 2017. Melodies of God: the significance of the soundscape in conserving the Great Zimbabwe landscape. Journal of Community Archaeology and Heritage, 5(1): 17–29.

Sinamai, A. 2020. “We are still here”: African heritage, diversity and the global heritage knowledge templates. Archaeologies: Journal of the World Archaeological Congress, 16: 57–71.

Stovel, H. 2005. Introduction. In: H. Stovel, N. Stanley-Price & R. Killick, eds. Conservation of Living Religious Heritage: Papers from the ICCROM 2003 Forum on Living Religious Heritage, pp. 1–11. Rome, ICCROM.

Smith, A., McNiven, I.J., Rose, D., Brown, S., Johnston, C. & Crocker, S. 2019. Indigenous knowledge and resource management as world heritage values: Budj Bim Cultural Landscape, Australia. Archaeologies, 15: 285–313.

Thondhlana, J. & Garwe, E.C. 2021. Repositioning of Africa in knowledge production: shaking off historical stigmas- introduction. Journal of the British Academy, 9(s1): 1–17.

Thondhlana, T.P., Chitima, S.S. & Chirikure, S. 2021. Nation branding in Zimbabwe: archaeological heritage, national cohesion, and corporate identities. Journal of Social Archaeology, 21(3): 283–305.

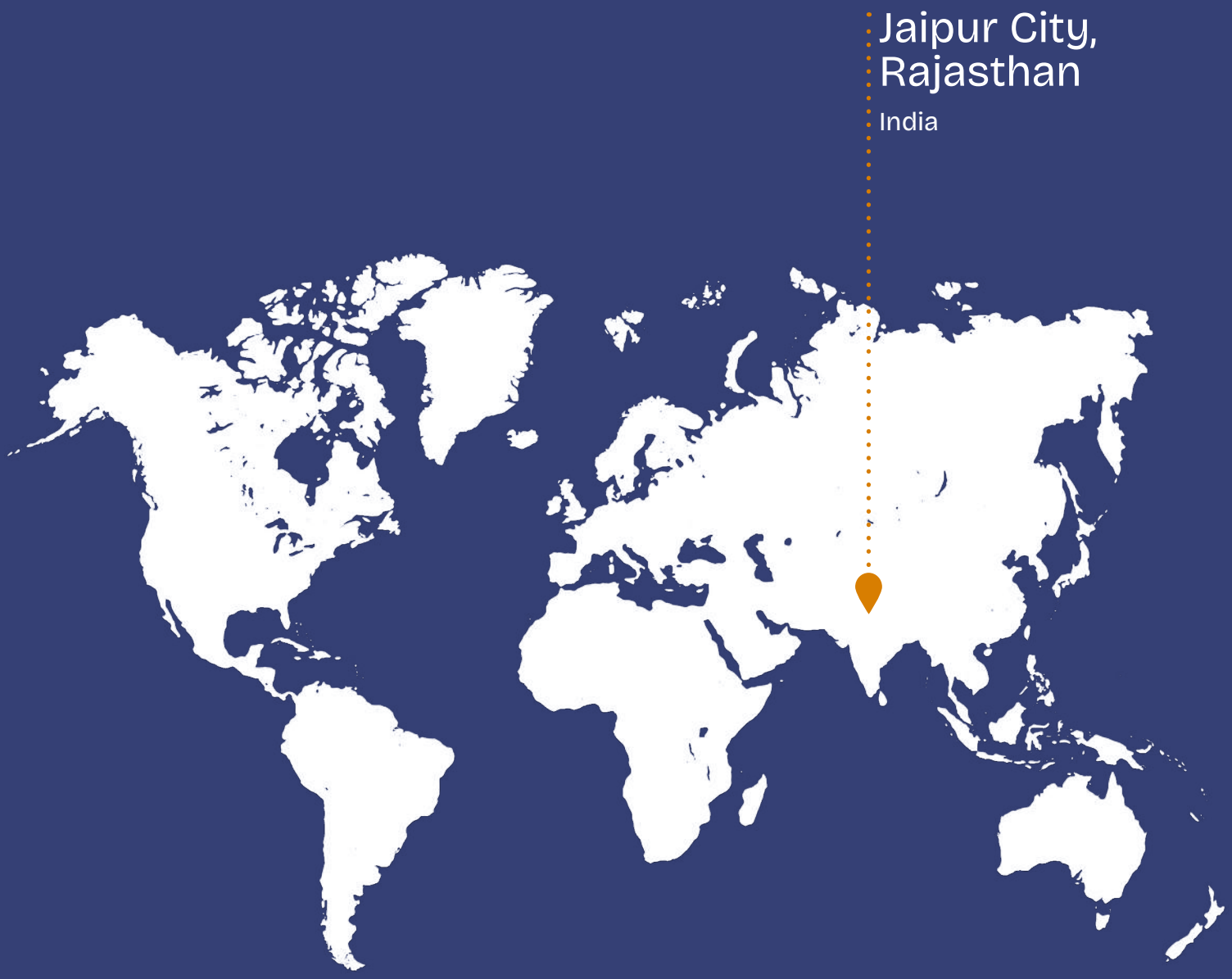
UNESCO 1992–2022. Great Zimbabwe National Monument, available at: https://whc.unesco.org/en/list/364/ [Accessed 28 April 2022].

UNESCO 2008. Enhancing Our Heritage Toolkit: Assessing Management Effectiveness of Natural World Heritage Sites, Paris, UNESCO World Heritage Centre.

UNESCO, IUCN, ICCROM & ICOMOS Forthcoming. Enhancing Our Heritage Toolkit 2.0: Assessing Management Effectiveness of World Heritage Properties. Paris, UNESCO.

World Heritage Committee 2007. Decision 31 COM 13B: The "fifth C" for "Communities", available at: https://whc.unesco.org/archive/2002/whc-02-conf202-25e.pdf
[Accessed 10 March 2022].

Entrance of the Great Enclosure.
Image by Maya Ishizawa (2024), with permission.

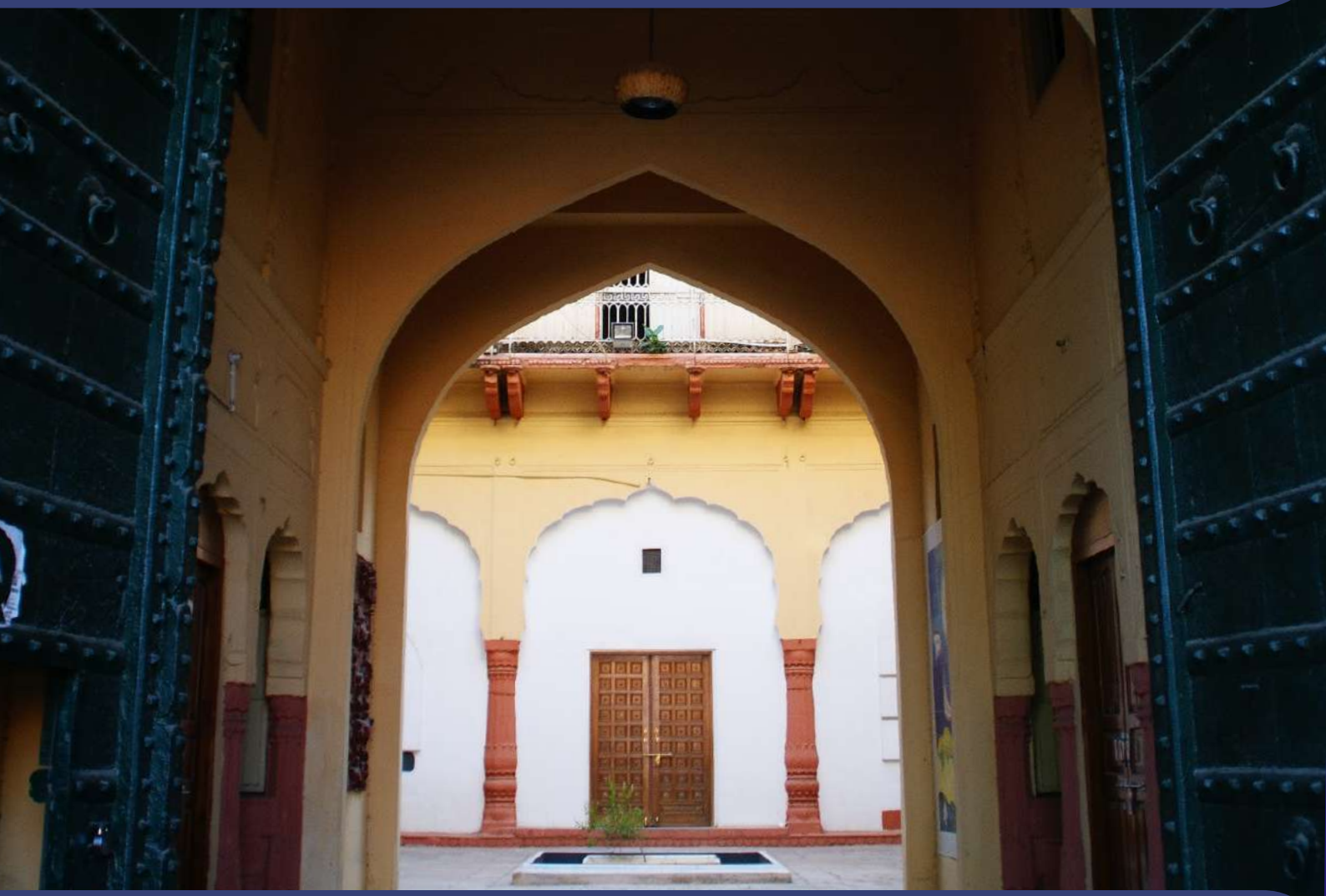

Jaipur City,
Rajasthan
India

Chapter 6

Restoring Nature-Culture Balance in the Wider Setting

Jaipur City, Rajasthan, India

Anuranjan Roy[1], Shikha Jain[2], Madhura Yadav[2], Nitya Khendry[3] and Chandni Chowdhary[3]



[1] Wildlife Institute of India Category 2 Centre on World Natural Heritage Management and Training for Asia and the Pacific Region under the auspices of UNESCO
[2] Manipal University Jaipur, India
[3] Jaipur Municipal Corporation and Town Planning Department of Rajasthan, India

Image of Coutryard. Copyright: Dronah Foundation.

I. Background

1. Brief description of the World Heritage property

Jaipur is the capital and largest city of the north-western Indian state of Rajasthan, located on the eastern side of the Aravalli Mountains. It is an economically vibrant city that is part of the highly popular Golden Triangle tourist circuit – being well connected to Delhi and Agra – with tourism, trade and commerce, and local handicraft industries notably as some of the city's key strengths (JDA, 2011). Jaipur has a semi-arid climate with three main seasons; a dry temperate winter, a warm summer, and a brief rainy season in between. With a current population of approximately 4 million and an annual (pre-pandemic) tourist inflow of 2.7 million (Paryatan Vibhag Rajasthan 2019), the city home to three World Heritage sites – the Amer Fort (as part of the Hill Forts of Rajasthan), the astronomical observatory of Jantar Mantar, and the walled Jaipur City.

Inscribed in 2019 on the UNESCO World Heritage List, the extent of the Jaipur City property (710 ha) comprises the historic walled city, founded in 1727 CE by the Rajput ruler Sawai Jai Singh II of the Kachwaha dynasty. The city wall encloses the historic urban settlement, divided into nine sectors with main roads intersecting at right angles (Figure 6.1).

Figure 6.1 Aerial map of Jaipur City (Source: Heritage Cell, NNJH, 2020).

One of the first planned cities in India, Jaipur was conceived and developed in a single phase with a grid-iron plan, with most of the city's infrastructure, public buildings and royal spaces completed within a span of four years. The city was planned as a trade and commerce-oriented city, built on the plains, as opposed to hilly terrain and military cities of the past. The buffer zone of Jaipur City (covering 2,205 ha) includes

the surrounding natural terrain and peaks that originally determined the layout and alignment of the city (Figure 6.2). Important surrounding features include the Ganeshgarh Hills to the North, the Galtaji Hills to the East, Nahargarh and Hathroi hill forts to the West, and the Shankergarh Hills to the South.

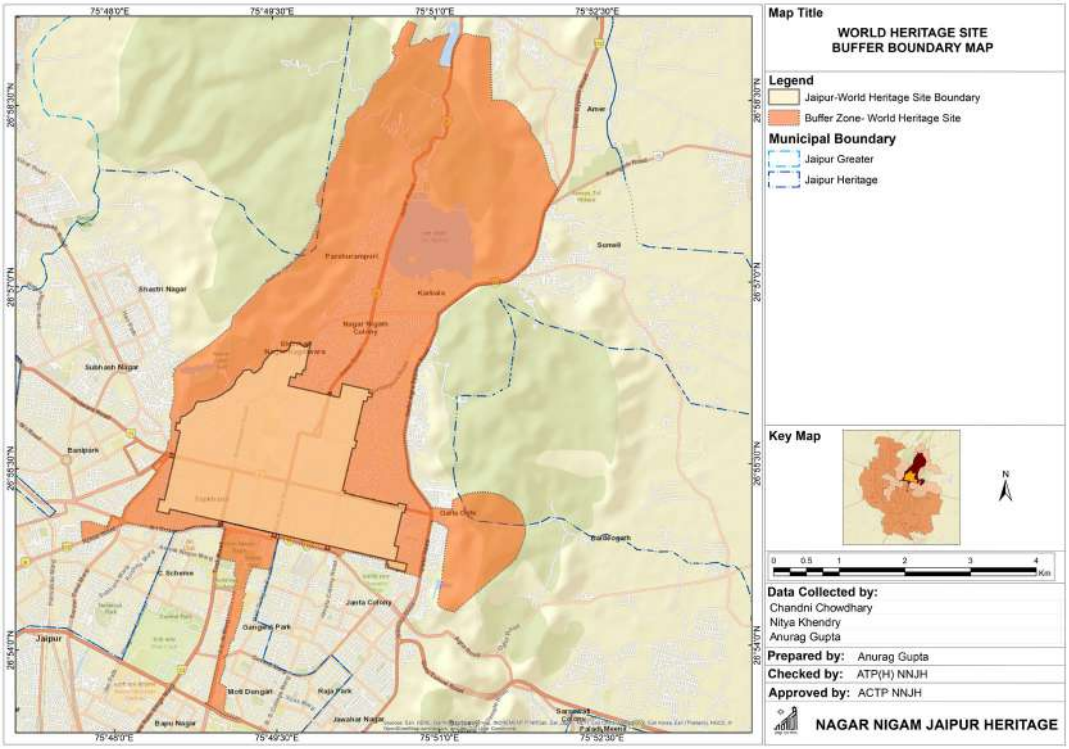


Figure 6.2 Boundary and buffer zone map of Jaipur City World Heritage Site (Source: Heritage Cell, NNJH, 2020).

The Outstanding Universal Value (OUV) of Jaipur City is defined under criteria (ii), (iv) and (vi). The continuity of the architecture and urban form is enhanced by the functions of trade and craftsmanship that reflect the living heritage character of this innovative urban settlement. Its vision as a new capital demonstrated a strong urban statement on par with Mughal cities to be recognized as a thriving trade and commerce hub for the region. This vision was translated into a city plan that integrated traditional planning guidelines with contemporary Mughal architectural vocabulary and showcased a political will to define new concepts for a trade city that became a norm for the later towns in the adjoining Shekhawati region and others across India. Jaipur is also a trendsetter and an extraordinary example of late medieval trade towns in South Asia, wwhich was emulated by others and made into a tradition. Jaipur clearly represents a dramatic departure from extant medieval cities with its ordered, grid-like structure – broad streets, crisscrossing at right angles, earmarked sites for buildings, palaces, havelis (historic courtyard houses of the nobles), temples and gardens, and neighbourhoods designated for caste and occupation. Sawai Jai Singh II, the city's founder, had conceptualized chattis karkhanas (36 industries) the majority of which included crafts like gemstones, lac jewellery, stone idols, miniature paintings and others, each with a specified street and market designed for each craft that continues to date. During the 19th century, the local crafts received further momentum with British-period influences in special exhibitions held in the United Kingdom and the establishment of institutions such as the Rajasthan School of Arts and the Albert Hall Museum.

Since 2015, Jaipur has also been recognized as a "City of Crafts and Folk Art" under the UNESCO Network of Creative Cities. Today, this legacy continues to bear witness to the diversity and vitality of craft and folk art industries, which employ approximately 175,000 people working in 53,500 workshops within the Jaipur district area.

2. Main management issues

The key management issues, described by the site managers in the Heritage Place Lab (HPL) Research–Practice Team, include challenges in the implementation and enforcement of heritage-related policies and proposals. Identifying the information needed to implement solutions to the following would help resolve several inter-related management issues:

- As part of the commitments made to the World Heritage Committee at the time of the inscription, the Heritage Cell in the Municipal Corporation, the Nagar Nigam Jaipur Heritage (Municipal Corporation) (NNJH), within the Urban Local Body, has been assigned specific responsibilities and is staffed with conservation architects and planners. The Cell forms the first tier of the administration responsible for effective management and upkeep of the World Heritage city. However, the Urban Local Body has not recognized the role and purpose of the Cell to its fullest potential due to their multiple responsibilities and increasing demands in other sectors besides heritage, such as services and infrastructure.

- Decentralized, independent functioning of various line departments and agencies compounded by a lack of coordination, diffused responsibility and fractured awareness among the departments are some of the key concerns in the management of this site. An overall lack of orientation and awareness among both the managers and local community is another aspect that needs to be addressed.

- There are serious issues of encroachment by property owners, whereby they have flouted the legislation of permissible heights as per approved bylaws. This is seriously impacting the city's visual skyline and the responsible local body is unable to uphold effective vigilance to control this issue, as in the case of the heritage space of Paundrick Park, which was being used as a parking lot before authorities intervened.

- Development pressures have led to rampant construction of additional floors, repairs and restoration without adherence to specific styles that retain the heritage element of the properties. Due to insufficient historical data to inform them, managers feel that current control guidelines do not achieve heritage preservation objectives.

- Local knowledge passed through families of original residents of the World Heritage property is yet to be formally documented and used. As the conflict between a desire for modern amenities and retaining cultural lifestyles grows, this information could be very rapidly lost (Figure 6.3).

Figure 6.3 Generations of families continue to live within heritage structures near Kishan Pole Bazaar (Source: Anuranjan Roy, 2020).

- The city is broadly classified into two major eco-zones, the Aravalli hills and outcrops with their scrub forests, and the alluvial plain to the south and west of the hills with semi-tropical vegetation. While development plans for the city over the years have identified certain natural heritage features of primary importance and potential areas for eco-tourism in the Jaipur region, an overall review of the historic open spaces in the World Heritage property and its vicinity, which combines natural heritage and ecosystem services, remains unavailable for managers to use.

- The complexity of the property, owing to it being a continuously inhabited city with a population that has risen from 50,000 people in the 18th century to more than 400,000 today has resulted in serious impacts on its micro-environment alongside over-exploitation of natural resources leading to issues, such as severe water shortages. The surrounding hills have have seen extensive construction activity as the city expanded, while the traditional water management systems and waterbodies are dry, deteriorated, or have vanished completely.

- The natural and artificial lakes, district parks, gardens, orchards, and campus spaces serving as corridors could function as wildlife habitat, reduce pollution including lowered noise levels, minimize the urban heat island effect, and make neighbourhoods more liveable, thereby making a case for natural heritage conservation. However, a management plan quantifying the ecosystem services provided by these green and blue spaces, and addressing their possible interlinkages, is yet to be developed.

East facade of Hawa Mahal, Jaipur, Rajasthan.
Image by Chainwit (2022) via Wikimedia Commons. Creative Commons Attribution-Share Alike 4.0.
Original image cropped for design purposes.

II. Research Agenda

Both the Historic Urban Landscape (HUL) Recommendation (UNESCO, 2011) and the New Urban Agenda (NUA) (United Nations, 2017) note that "rapid and uncontrolled urbanization (...) may frequently result in social and spatial fragmentation and in a drastic deterioration of the quality of the urban environment and of the surrounding rural areas" (UNESCO, 2011, p. 2) and that urban areas should "fulfill their social function, including the social and ecological function of land (...) engender a sense of belonging and ownership among all their inhabitants" (United Nations, 2017, p. 5). In this context, managing historic urban areas and their wider geographical settings, like that of Jaipur and the enclosed Jaipur City World Heritage Site, becomes important, so that the potential of sustainable urban development – environmental, social and economic – can be harnessed to provide citizens with a better quality of life.

The Jaipur Development Authority (JDA) is tasked with the planning and orderly development of Jaipur City and the contiguous areas, including the walled city where the World Heritage site is located. Through a series of Master Development Plans (MDPs) in 1976, 1982, 1998, 2009 and, most recently, MDP-2025 (released in 2011), the walled city has been identified as a Heritage Zone for which a Special Area Heritage Plan (SAHP) is being developed. The SAHP shall be notified under the MDP and serve the purpose of a management plan for the Jaipur City World Heritage Site.

The main research priorities as detailed in the following sections were developed by researchers in dialogue with site managers through the HPL workshops, and serve to, among other things, augment the SAHP in the matters of a ensuring a robust environment and landscape plan, heritage construction guidelines, and water system revitalisation. For appropriate management of the environmental and natural assets within the urban form and its surrounding areas, and taking into account their socio-economic and cultural associations, necessary measures include studies on the existing biodiversity of the forest areas within the buffer zone of the property; conservation measures to protect identified natural heritage features of primary importance; a detailed review of the scope for rejuvenation of water channels with their associated ecology and ecosystem services; analyses of the effects of deforestation and climate change in the area; and the mapping of traditional conservation practices.

Upon discussion at the HPL workshops and learning process, it was concluded that natural heritage in and around the urban area of Jaipur City constitutes the most urgent research priority. Further, a detailed plan linking climate change and other environmental factors affecting the heritage place, strengthened by research on traditional planning guidelines for Jaipur along with the mapping of lost historic gardens and waterbodies in the city, is essential to feed into the management framework for Jaipur City. This would feed into the ongoing work on the overall Special Area Heritage Plan for the World Heritage site committed for submission by December 2023 to the World Heritage Committee to ensure enhanced management of the property.

1 Research Priority 1
Wider setting, natural heritage and landscape of Jaipur

According to the latest Assessment Report of the Intergovernmental Panel on Climate Change (IPCC, 2022), the South Asian region, within which Jaipur is situated, is predicted to have more intense and frequent heat waves, making the study and restoration of the natural environment a key priority. Besides countering the heat island effect, reducing energy budgets and facilitating precipitation, mature green cover absorbs noise, improves air quality, and reduces erosion and water runoff as well as functioning as spaces for enhanced mental well-being. Urban green spaces and wetlands are critical to ensuring hydrological balance as soil and vegetation retain moisture much longer than human-made surfaces, slowing sewer runoff, and storing and cleaning rainwater through natural processes. Thus, a management goal of the restoration of local ecosystems encompasses a number of cultural and social benefits.

Various issues have been encountered by the Practice Group regarding projects impacting the green and blue spaces within the city. As stated by the ICOMOS technical evaluation mission, who visited the site prior to its inscription on the World Heritage List, "Open spaces are an essential part of the city plan but are gradually disappearing. In some cases these are being built upon" (ICOMOS, 2019, p. 128). Various development have been proposed in existing open spaces including Paundrick Garden, Chaugan, Atish Market Open Area, and Janta Market near Govind Dev Ji Temple, which show the urgent need for a management framework to protect the natural heritage of the property (Figure 6.4). Thus, existing research could be used to identify data gaps as the basis for developing a detailed environmental and landscape plan for Jaipur City.

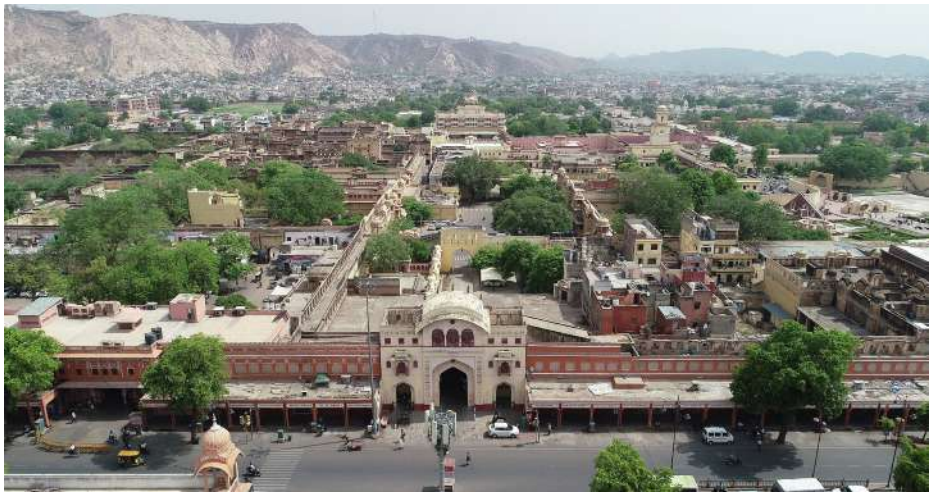


Figure 6.4 Tripoliya Bazaar and City Palace set against the backdrop of northern hills, Jaipur (Source: Shikha Jain, 2021).

Better integration of natural heritage into Jaipur's conservation will necessitate a participatory planning approach that manages its original mosaic of ecosystems through identification and restoration to maintain its biodiversity and flow of ecosystem services. One approach would be to develop a land-use survey of the city, identifying forested hills, agricultural lands, public parks, institutional campuses, and waterbodies as well as analysing their potential ecological connectivity and potential for restoration. Additionally, the city's key natural features (i.e. Jhalana Doongri, the Amargarh Hills, the Amber and Jaigarh Hills, the Nahargarh Hills, and Moti Doongri, as identified in MDP-2025), potential areas for eco-tourism in the Jaipur region (i.e. Galta Forest, Hawa Hodi, Jamwa Ramgarh, the Jhalana Hills, Mayalabag, and Nahargarh), and the waterbodies of Mansagar Lake and Amanishah Nala need to be integrated in the wider planning framework of the World Heritage site.

Maps of historic gardens, canals and water systems, such as those found in the archives of the Jaipur City Palace library, could be utilized to understand the traditional management systems. Existing documentation may also prove useful, including the publication "Naturalizing Jaipur" by the Indian National Trust for Art and Cultural Heritage (INTACH, 2018). Further, satellite image evaluation and historic maps may provide data on the temporal changes in green and blue spaces that can help evaluate the potential for connecting fragmented pockets of the Aravalli Ranges and restoring forests, which is especially important in the west and southwest of the city to combat windblown sands and desertification. Initiatives like the Firenze Greenway (Francini, 2021) as discussed during the HPL sessions may serve as useful guidance for Jaipur by incorporating natural heritage aspects into management and visitor itineraries.

To ensure a comprehensive environment and landscape plan, questions that will need to be addressed include:

• What is the value of ecosystem services provided by existing natural features in Jaipur?

• How can natural features within and in close proximity to Jaipur be classified/ categorized in the context of their cultural uses?

• What is the existing biodiversity of the city's natural patches and corridors?

• What has been the pattern of temporal changes in land use and desertification within the city and its surrounds?

Addressing these questions requires inputs from urban planners, landscape architects, ecologists, local stakeholders, and environmentalists to ensure a diverse representation of views and uses.

2 Research Priority 2
Historic architectural and urban conservation in Jaipur town planning

The city of Jaipur has unique planning, as recognized under World Heritage criterion (iv), and also exhibits an innovative cultural exchange in its urban design elements, as recognized under World Heritage criterion (ii). While extensive research has been done on the city's town planning (Roy, 1978; Sachdev, 2002; Borie, Cataláa and Papillaut, 2020) as well as the key historic typologies and styles through three distinct periods of the 18th, 19th and 20th centuries (Vidyarthi and Singh, 2018), there is a large amount of archival resources held by the Royal Family Foundation as well as the State Archives of Rajasthan that need to be interpreted to understand the city's construction phases more fully (Figure 6.5).

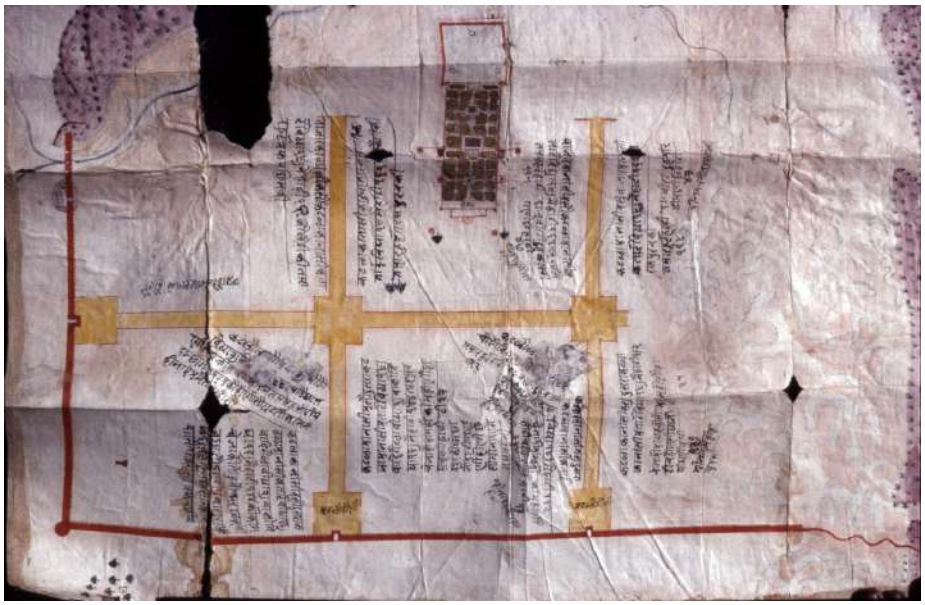


Figure 6.5 Archival 18th-century Construction Map of Jaipur showing the Jai Niwas garden at the centre (Source: City Palace Museum, MSMS-II, Jaipur, 1726).

As mentioned in its statement of OUV, the city was built in a short period of only four years. There are several 18th-century records, maps and plans of the city's construction in these four years that have not been studied until now. While most maps have been visually analysed, the construction drawings that specifically record instructions in the local Dhundhari language have not been studied. In addition to details on construction methodology, units and proportions used during the initial phases of development, these data will also throw light on the historic control guidelines in terms of scale, colour, proportion and use of architectural elements such as chatri (domes) that define the city skyline. Furthermore, the city's second major phase of construction in the late 19th century is well recorded in photography; the then Maharaja (king) who oversaw urban transformations including complete facade renovations of bazaars and the construction of iconic

landmarks was himself an avid photographer. However, again, while these photographs have been visually analysed, records of this phase of the city's development, and especially the control guidelines used by the Maharaja, remain largely unexplored. The final phase of changes to the city, during the early 20th century (with Art Deco features), are well documented and possibly became the basis for the bylaws and architectural control guidelines that the municipal corporation later officially adopted in the 1970s.

Currently, as part of its commitment to the World Heritage Committee, NNJH is working on detailed architectural construction guidelines for each area that will be included in its Special Area Heritage Plan (equivalent to the management plan). At present, the three primary phases of Jaipur's development are being used to develop these new construction guidelines. Therefore, it is important to understand the historic control systems used during these periods to help inform construction guidelines for the existing management plan. A detailed study of these guidelines will also establish norms for one of the city's key attributes – its "pink" colour. It is expected that these records will reveal moments in history when facade colours were changed across the city.

Updates to the city's construction guidelines can be made on the basis of the following research questions:

- **What was the management regime during the various phases of Jaipur's development?**

- **What were the Royal Guidelines for maintaining the unique colour and architectural features of Jaipur's urban bazaars?**

- **When and why was the tone of the red sandstone (now popularly called pink) chosen?**

- **Which urban structures already had similar colours and which were left lime yellow?**

Addressing these questions will require input from a mixed team of historians, urban planners and conservation architects.

3 Research Priority 3
Traditional water management systems in Jaipur

All historic waterbodies in the walled city of Jaipur and its surroundings were initially mapped in 2007 and, subsequently, a GIS map was developed in 2021 as part of an ongoing project by the tourism department, due to be published at the end of 2022. The waterbodies identified include several defunct wells and unused waterbodies. Historically, Jaipur had a total of 820 wells of varying sizes but only 40 of them had drinkable water while the rest had brackish water (Roy, 1978). The water history of Jaipur since the 18th century is well recorded, and a large number of original wells and water systems still exist today (Figure 6.6). Historically, even the main squares (chaupars) of the city had huge reservoirs, but these were closed in the 1870s with the advent of piped water supplies. Recently, a detailed study of physical infrastructure carried out for one chowkri, Chowkri Vishveshvarji, as part of the SAHP, revealed the presence of several wells from the 18th century and some British-period hand pumps from the 19th century as relevant historic elements to be safeguarded. According to the field surveys carried out by members of the Research–Practice Team and in collaboration with the local community, it was discovered that the stakeholders living and working within the property still have extensive knowledge of various traditional conservation systems including those related to traditional water conservation techniques. Research on the historic and traditional techniques of water management could, therefore, provide a basis for restoring original ancient systems to supplement modern infrastructure.

Figure 6.6 Jaigarh Fort water reservoir built around a natural depression in the landscape (Source: Anuranjan Roy, 2020).

While there are several past and ongoing studies on the city's traditional water systems, these need to be reviewed, collated and authenticated further with evidence and the oral histories of the local community. It area of work is especially important to guide solutions to the water shortages that the city is facing today. Though human-made, the traditional systems of water storage, like stepwells, public wells, johads and chaupars (Figure 6.7), were designed to take advantage of the slope and elevation of the natural terrain, and a detailed documentation of their locations could inform decision about whether any of these could be reinstated or whether the modern water supply could be improved. These traditional structures, if restored, could serve as repositories for stormwater drainage, reducing flooding and standing water problems in vulnerable areas.

Figure 6.7 Nahargarh step well (Source: Anuranjan Roy, 2020).

Research in this area could be enhanced by the work being undertaken within various external departments, which could be adapted for Jaipur city. This includes the Integrated Urban Water Management (IUWM) Toolkit for Indian Cities Adopting Integrated Urban Water Management in Indian Cities (AdoptIUWM) by the International Council for Local Environmental Initiatives (ICLEI) (ICLEI South Asia, 2020). Indigenous/traditional knowledge systems could also be used to analyse the requirements for meeting the Sustainable Development Goals, which some departments within Jaipur are already working towards.

The research questions identified by the HPL Research–Practice Team relating to historic water systems include:

- **What were the traditional water systems of Jaipur before piped water supply?**

- **What were the sources of these water systems and which were human-made/natural?**
- **Could some of the existing historic waterbodies be reused to supplement current water shortages in the city?**

- **What were/are the social functions of the historic waterbodies, and could some of the functions be revived in a modern context?**

Addressing these questions requires input from sociologists, ethnologists, anthropologists, and water engineers as well as architects, urban planners, and historians.

III. Inputs Needed and Expected Outputs

As outlined in Section II, the HPL Research–Practice Team recognizes the need for a more rigorous and interdisciplinary approach to address the three research priorities involving more expertise as well as civic engagement. This opens the dialogue for potential collaborations with academic institutions, independent experts, NGOs and Trusts with the view to achieve a more in-depth understanding of the myriad issues that affect the historic urban landscape of the Jaipur City World Heritage Site (Figure 6.8). Going forward, the following primary input needs have been identified:

→ **Human Resources:** Involvement of experts in the fields of sociology, anthropology and hydrology as individuals or members of the concerned governing departments or academic institutions may be required, such as officials from the Forest and Irrigation Departments of the Government of Rajasthan. Additional human resources may include students/interns from relevant disciplines for field surveys and oral history recording of residents, which would also build capacity in the next generation of heritage professionals through their direct engagement with society. The involvement of local residents through focused workshops around the research agenda should be encouraged, with identified local experts such as lawyers, historians and craftspersons who are stakeholders within the property and have first-hand knowledge of the changes that the city has undergone through the centuries.

→ **Infrastructural Resources:** Information resources include two primary archives, the Maharaja Sawai Man Singh-II Museum Trust owned by the Jaipur Royal Family, and the Rajasthan State Archives. Databases on

demographics, climate, changing uses and requirements of residents, modes of transportation, and changes in nature-culture attributes over time are required; and collating and recording of traditional knowledge on nature and water management systems of the city must be undertaken through relevant departments and local stakeholders. Access to public project data from various departments and sophisticated technology, such as 3D mapping and analysis, geospatial software, drone and LiDAR surveys, would further enhance the research. A document that collates the information gathered could also be created for public dissemination and exhibition, which would be of interest to future researchers who study Jaipur and anyone who wants to learn more about its heritage. The research agenda document itself could serve a similar purpose, providing guidance on topics that need further study.

For Research Priority 1 (Wider setting, Natural Heritage and Landscape), data needs include a review of ecosystem (including cultural) services provided by natural features; potential areas of natural heritage including area, terrain and significance in a larger matrix of natural features; the analysis of existing official documents for assets previously identified to be of natural value; the quantification of ecosystem services provided by natural features and the classification of natural heritage as a source of, and as corridors for, nature. A compendium of available information on natural heritage resources from sources including the Forest Department, Master Development Plan, and INTACH would further enhance this research.

Government–research institution collaboration: Institutional collaboration/MoUs between Manipal University Jaipur (MUJ), the Wildlife Institute of India Category 2 Centre (WII-C2C), and NNJH could contribute to preparing an environment and landscape plan for Jaipur, with the main output of Research Priority 1 being its inclusion in the SAHP. Research collaboration between the institutions involved in the Research- Practice Team and the City Palace Archives, through workshops on old maps and records of the city, could evolve into a public exhibition of the historic maps, helping increase local community awareness and outreach. Data from this work may also feed into a permanent exhibition for the proposed Citizens' Centre by NNJH within the property, which could evolve into construction guidelines for the site.

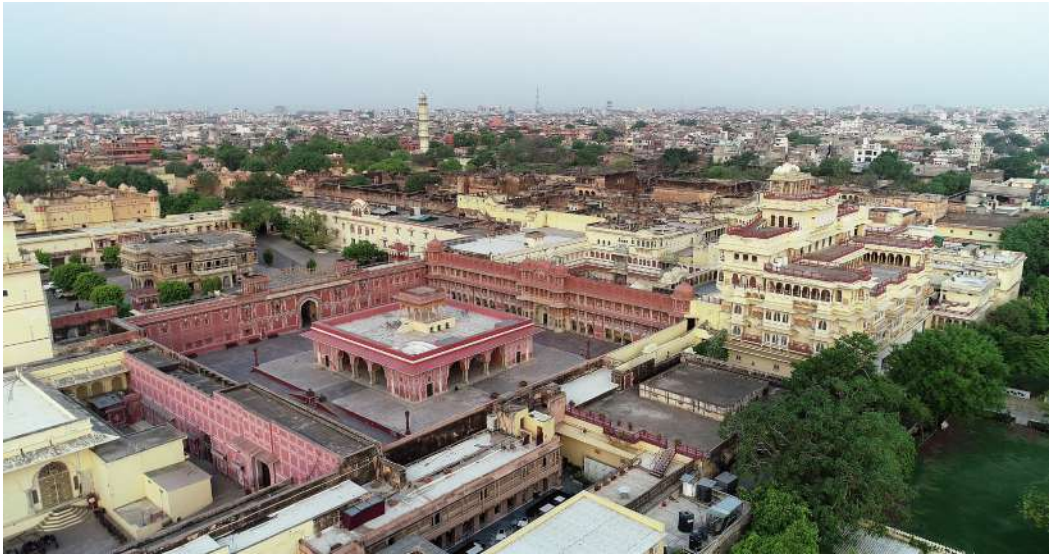


Figure 6.8 City Palace and an aerial view of Jaipur (Copyright: Shikha Jain, 2021).

NGO collaboration and outreach: At present, a number of active institutions in Jaipur come together to organize heritage walks, special events on public holidays and workshops as well as maintaining the "jaipurworldheritage.com" website to increase civic engagement. All of these organisations, along with others such as the Indian Institute of Crafts and Design (IICD), could be approached to collectively organize a series of events across one calendar year on the specific theme on "Replenishing Jaipur's Natural Features".

Financial Inputs: Considering the financial inputs for all three research priorities, a rough costing would be approximately 30,000 USD for additional individual experts, academics and interns besides the existing Research–Practice Team. Infrastructural inputs will require the greatest financial input (approximately 200,000 USD), which could be supported by the NNJH and other institutions given the existing infrastructure of software and laboratories on campus, or by potential long-term investment by NNJH to strengthening the Heritage Cell and Planning Wing. Ongoing collaboration and events should largely be self-sufficient and mobilized through the NGOs and government departments already involved in these activities.

IV. Desired Outcomes

The tentative timeline of the implementation of the proposed research agenda is a minimum of 12 months for the research work itself and 18–24 months for publishing the results it in an accessible format (i.e. manuals/books) and integrating them into the SAHP for Jaipur.

The intensive and multi-pronged approach required for the management of a living heritage site like Jaipur is necessitates a holistic approach. The Research–Practice Team recognizes that development involves the sustainable management of change, and has identified three research priorities (Section II) grounded in sustainable development to address both the tangible and intangible, cultural and natural. While the proposed strategies will be aligned with the tools of the HPL approach, the process will ultimately be modelled on the historic urban management tenets and tools that were employed in the city during the last three centuries, since its inception in 1727 CE.

The first of the three research priorities lays emphasis on the need for the management of natural components of Jaipur (Figure 6.10), as an integral part of heritage management, supplemented by appropriate policy and regulations. This will underpin an environment and landscape plan for the city based on adapting traditional management practices to safeguard Jaipur's heritage attributes from the effects of climate change as well as maximising the values derived from the city's green and blue assets, including the central historic garden that served as the genius loci for the city. Supplemented by the existing listing of natural features of importance in the current MDP, Research Priority 1 aims to identify those potential management practices best suited to the restoration of local ecosystems and their plethora of associated cultural and social benefits. Tools and techniques available for producing research on the potential and

prospect of efficient management strategies for Jaipur's natural resources include GIS, satellite imagery, and primary and secondary data sources. This proposed research will help identify vulnerable areas within the property and the buffer zone for targeted intervention to maximize the positive effects of connecting the local community with nature, reducing stress, improving focus, lowering risk of psychiatric disorders, and improving peoples' ability to empathize. Furthermore, connecting urban forests and natural areas to the urban fringe, protected areas and areas beyond the borders of the World Heritage property would enhance habitat connectivity and biodiversity.

Research Priority 2 focuses on developing a fuller understanding of the factors underpinning the property's inscription under criteria (ii). The intention is to study the conception and subsequent progression of building activity in the built historic core of the city (Figure 6.9), guided by historic architectural and urban control guidelines. Relevant resources (proposal and progress maps, written documents and reports) available in the City Palace repository as well as in the State Archives have been preliminarily evaluated and are recognized as being of immense significance for developing a clearer understanding of the city's construction process. The desired outcomes from the planned research are clarifying the documenting of the nuances of the city's initial construction methods, units and proportions, and the prescribed scale, colour, proportion and use of features that lend to the city its architectural character.

Another outcome will be the cataloguing of the architectural styles of the city, as recorded in the statement of OUV, and a critical appraisal of the evolution of the control guidelines that have allowed transformation while ensuring compatibility with the original fabric. The study of previous iterations of the municipal building bylaws for the city would assist the State Party of the NNJH address gaps and loopholes, and build on the potential for a legal framework that effectively guides urban development. The priority here is to build on the current preparation of a guidance document for Architectural and Control Regulations for the property by the Heritage Cell members in the Research–Practice Team.

Figure 6.9: Aerial View of Jantar Mantar World Heritage Site inside the Walled City of Jaipur (Source: Shikha Jain, 2020).

The third research priority seeks to explore the pressing need for improved management and revitalisation of water management in the city. Following a detailed documentation and recording of historic water infrastructure (wells, tube wells, hand pumps, bawris [historic stepwells], and nalas [water channels]), research should explore the potential and practicalities of improving the existing water infrastructure, especially in the city's historic core. An improved understanding of the layout and interconnected network of community water features within the property and buffer zone, such as tanks and wells, as well as the natural terrain and topography offer an effective tool to enhance the city's resilience in the face of urban flooding and deforestation. Such understanding will allow for the optimum distribution and utilisation of resources. One possible approach involves exploring the potential for historic water features to function as receptacles for rainwater harvesting and to supplement groundwater recharge. Steps taken to reduce surface runoff and redirect excess water as groundwater recharge have already been acknowledged as a sustainable solution to urban flooding. Borrowing heavily from vernacular knowledge, the revival of traditional systems can supplement modern infrastructure and reduce the pressure on an already strained supply chain.

Figure 6.10 Jai Niwas Garden - Central Axis of the city with Aerial View of the first historic garden of Jaipur with the palace on one end and Govind Dev ji temple on the other in alignment (Source: Shikha Jain, 2020).

The success of the proposed research activities relies heavily on the wealth of Indigenous and local knowledge possessed by multiple stakeholders. This necessitates stakeholder participation in the formulation of management strategies and policies, aligning the proposed methodology with the UN's NUA and UNESCO's HUL Recommendation.

View of Jaipur city from Nahargarh Fort

References

Bandarin, F., & van Oers, R., eds. 2012. The Historic Urban Landscape: Managing Heritage in an Urban Century. The Historic Urban Landscape: Managing Heritage in an Urban Century. Sussex, UK, Wiley-Blackwell.

Borie A., Cataláa F., & Papillault, R. 2020. JAIPUR, A planned City of Rajasthan. Barcelona, Spain, Altrim.

DRONAH & JVF. 2007. Jaipur Heritage Management Plan. Jaipur, India, Government of Rajasthan.

DRONAH. 2017. Nomination of The Walled City of Jaipur, Rajasthan, India for inclusion on the World Heritage List. Jaipur, India, Jaipur Nagar Nigam.

DRONAH. 2022. Jaipur World Heritage. Jaipur, available at: https://jaipurworldheritage.com/.

Francini, C. 2021. Firenze Greenway: ecological itineraries connecting World Heritage sites and neighbourhoods in Florence, Italy. Panorama – Solutions for a Healthy Planet, available at: http://panorama.solutions/en/solution/firenze-greenway-ecological-itineraries-connecting-world-heritage-sites-and-neighbourhoods.

ICOMOS. 2011. Guidance on Heritage Impact Assessments for Cultural World Heritage Properties. Paris, France, ICOMOS.

ICOMOS. 2019. Jaipur City (India) No 1605. In: 2019 Evaluations of Nominations of Cultural and Mixed Properties - ICOMOS Report for World Heritage Committee, Baku, pp. 122–132. Paris, ICOMOS.

ICLEI South Asia. 2020. Local Biodiversity Strategy and Action Plan for Gangtok Municipal Corporation. Gangtok, Sikkim, ICLEI South Asia.

INTACH. 2018. Naturalizing Jaipur: A Plan for Enhancing Climate Resilience, Urban Biodiversity and Habitats. Jaipur, India, INTACH.

IPCC. 2019. Sixth Assessment Report - Regional Fact Sheet - Asia. Geneva, Switzerland, IPCC.
Jaipur Development Authority. 2012. Master Development Plan - 2025 Jaipur Region - Volume 1. Jaipur, India, JDA.

Paryatan Vibhag Rajasthan. 2019. Prashashanik Pragati Prativedan 2018-19, available at: http://tourism.rajasthan.gov.in/hi/annual-progress-report.html.

Roy, A. 1978. History of the Jaipur City. New Delhi, India, Manohar Publishers & Distributors.

Sachdev, V. 2002. Building Jaipur: The Making of an Indian City. London, UK, Reaktion Books.
UNESCO WHC. 2019. Jaipur City, Rajasthan. In: UNESCO World Heritage Convention. Paris, available at: http://whc.unesco.org/en/list/1605/.

UNESCO. 2013. New Life For Historic Cities: The Historic Urban Landscape Approach Explained. Paris, France, UNESCO.

UNESCO. 2011. Recommendation on the Historic Urban Landscape. Paris, France, UNESCO. United Nations. 2017. New Urban Agenda. New York, USA, United Nations.

Vidyarthi, S. & Singh, P. 2018. Jai Jaipur. Barcelona, Spain, Altrim.

Stepwell in Jaipur fort.
Image by Mollie Kate Cohen (2024), with permission.

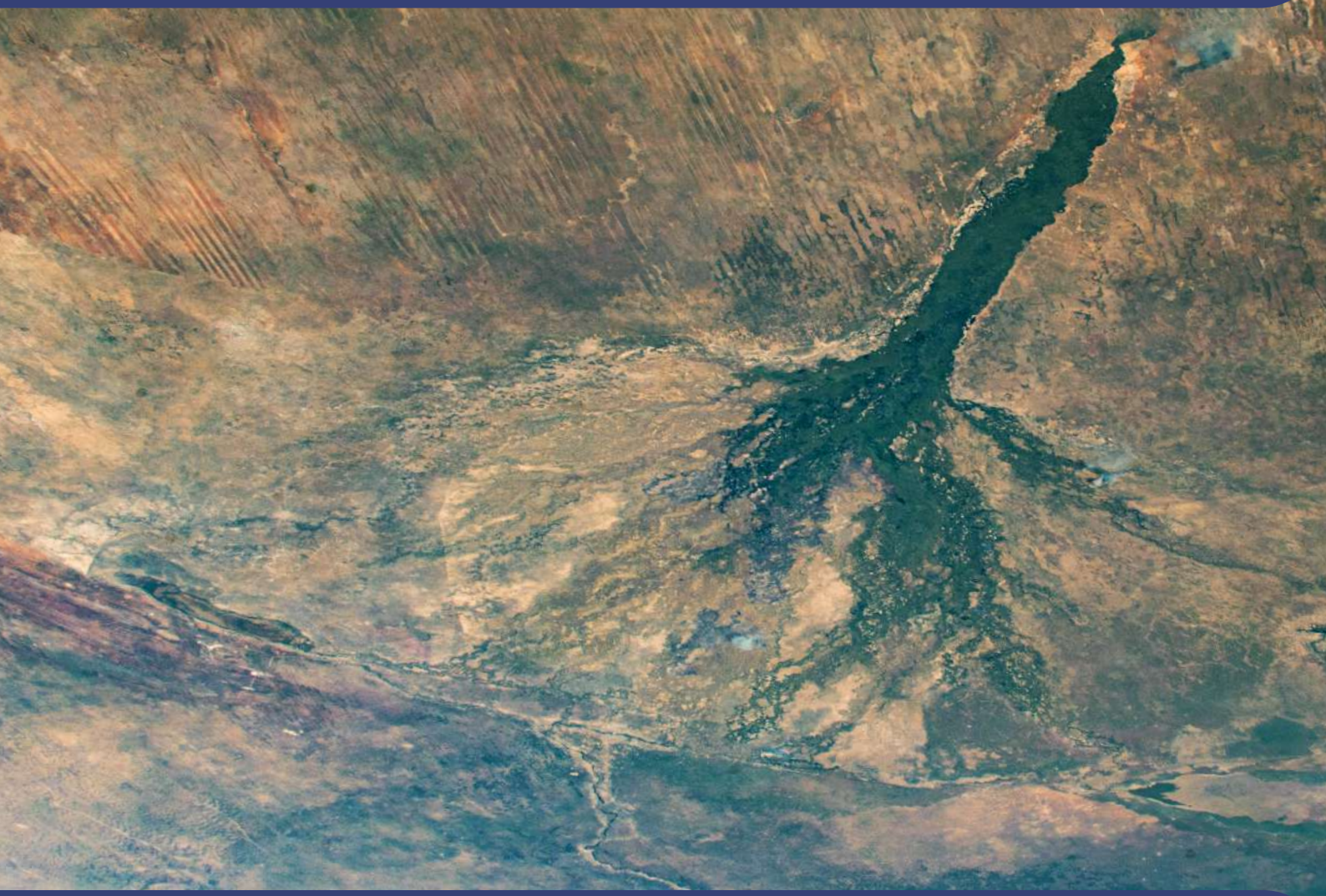
Okavango Delta

Botswana

Chapter 7

Cultural values of African wetlands: Okavango Delta World Heritage Site Botswana

Susan Osireditse Keitumetse[1], Katlego Pleasure Mwale[1], Kgosietsile Velempini[1], Onalethuso Petruss Buyile Ntema Mambo[1], Ompabaletse Vasco Baitsiseng[2], Gakemotho Satau[2], Stephen Mogotsi[2], Jobe Manga[2].



[1] University of Botswana – UNESCO Chair on African Heritage and Sustainable Development
[2] Botswana National Museum

Arial image of Okavango Delta from NASA Space Station (2023) via Wikimedia Commons. Public domain.

I. Background

Assessment of conservation needs of a World Heritage site include bio-physical characteristics, management and legislation, the populations inhabiting the landscape, as well as networks of stakeholders, both national and international. This chapter describes these characteristics of the Okavango Delta World Heritage Site (OD-WHS) and the key elements found by the OD-WHS team during their participation in the Heritage Place Lab (HPL). By so doing we present and assess the existing management system, and identify issues of conservation with a view to recommending relevant solutions to the concerns or challenges identified through the establishment of a specific research agenda.

In assessing the current management system of the Okavango Delta World Heritage site, its Outstanding Universal Value (OUV), institutional arrangements and stakeholder networks, it became apparent that cultural values associated with the landscape are not significantly outlined and recognized. For this reason, the first priority for our research agenda has focused on assessing and documenting cultural values of the landscape. This is directly related to the two other research agenda priorities identified: the assessment of stakeholders (research priority 2) and the assessment of human-wildlife interactions (research priority 3). Each of these illustrates the importance of fully incorporating cultural values as key indicators for the sustainable conservation of the landscape. The cultural values of the landscape are mainly identified by local communities. The outputs illustrate that where all stakeholders are represented, cultural values can be identified, acknowledged, and included as conservation indicators. When local cultural values are recognized as conservation indicators, human-wildlife conflicts are likely to abate as local communities are motivated to view wildlife and wilderness as means that enable them to express their cultural values within the landscape.

1. Brief Description of the World Heritage property

Okavango Delta World Heritage site is located in the north-west area of Botswana. The site was inscribed as the 1000th World Heritage property in June 2014 . Before the World Heritage listing, the Okavango Delta was already protected since 1996 through the Convention on Wetlands of International Importance (Ramsar Convention) as one of the largest Waterfowl Habitats in the world (55,374 km2).

The OD-WHS encompasses an area of 20,235.9 km² with a buffer zone of 22,866.3 km². As a World Heritage site, the Okavango Delta is globally important as one of the few inland delta systems in the world. The delta drains its water inland in the Kalahari Desert basin. Its wetland landscape comprises a system of permanent marshlands, flood plains, a network of seasonally flooded waterways and a variety of wetland plant species. Due to this seasonal flooding, native plants and animals in the Okavango Delta have adapted their biological cycles to these seasonal changes. This interplay

between biological, ecological and hydrological systems is near pristine and is the reason behind the World Heritage inscription of Okavango Delta. The OUV of the OD-WHS is justified according to criteria (vii), (ix) and (x) which focus on its unique natural beauty as an inland delta landscape and a habitat for endangered species of large mammals. In addition to the biophysical aspects, the site also hosts communities of various ethnic groups. The majority of these now live in the Gateway villages of the Delta (Keitumetse and Pampiri, 2016). Cultural groups in Ngamiland District include Hambukushu, Baherero, Basarwa (Hunter-Gatherers), Batawana, Wayei, Bakgalagadi, Basubiya, and BaGciriku (Ramsar 2021).

The source of the Okavango Delta waters originates in the highlands of Angola flowing through Namibia and downstream into Botswana. This characteristic of the Delta renders it a transboundary feature as reflected in the Permanent Okavango River Basin Water Commission Agreement (OKACOM) which was established in 1994 and includes representatives of Angola, Botswana, and Namibia.

The Okavango Delta landscape is also a haven for recreational, ecological and cultural activities for its inhabitants, as well as a support for their livelihoods. The inland delta is also a source of water for both human and wildlife. Additionally, the Moremi Game Reserve, situated in the heart of the Okavango Delta, is home to the 'big five' (buffalos, elephants, leopards, lions and rhinoceros) and attracts tourists from all around the globe.

Figure 7.1: Map showing location and features around the Okavango Delta World Heritage Site (Map Source: Botswana National Museum 2021).

II. Management System

1. Legal system

The site management of OD-WHS is based on national and international legislation, as well as other on-site approaches that deal with the day-to-day sustenance of the Okavango Delta. This section describes the legal framework helping to protect the landscape against non-sustainable uses, as well as networking the site with transboundary and international bodies of similar interests.

The double international designation of Okavango Delta, as both a Ramsar and a World Heritage site, underscores its global importance and demonstrates the need for the integration of conservation and preservation efforts with the sustainable use of the wetland. Due to the presence of endangered wildlife and plants species of international importance, the Government of Botswana has also recognized the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), a global agreement to regulate international trade of species to ensure that the survival of important species, including elephants and rhinos that are targeted for their horns. In addition, the country is a signatory to the 1992 Convention on Biological Diversity whose three main goals are to regulate the conservation of biological diversity in sites such as the Okavango Delta, support the sustainable use of biodiversity components, and ensure a fair and equitable sharing of the benefits from the use of genetic resources. These three goals are therefore key to the preservation of the heritage values of the Okavango Delta.

At a regional level, Botswana's government has joined forces with neighbouring countries to establish agreements such as the OKACOM which guides Angola, Botswana and Namibia on common matters relating to the conservation, development and use of the Cubango water resources system. Specifically, the Commission determines the long-term safe yield of the water available from all potential water resources in the Okavango basin; the reasonable demand for water from consumers in the basin; and develops criteria for the conservation and equitable allocation and sustainable utilization of water resources in the Okavango River Basin.

The OD-WHS is situated in Tribal Land administered by the Tawana Land Board (TLB), a local body established through the Tribal Land Act of 1968 (revised 2018), with the exception of NG41 (Figure 1), which is a community use controlled hunting area (CHA) under the administration of the Mababe Zokotshama Community Trust (MZCT).

Another national law important for safeguarding the wilderness of the World Heritage site is the Forest Act 1968 which guides the management and utilization of forests and wood resources in the Okavango Delta. The Department of Forest and Range Resources in the Ministry of Environment is responsible for implementing this Act.

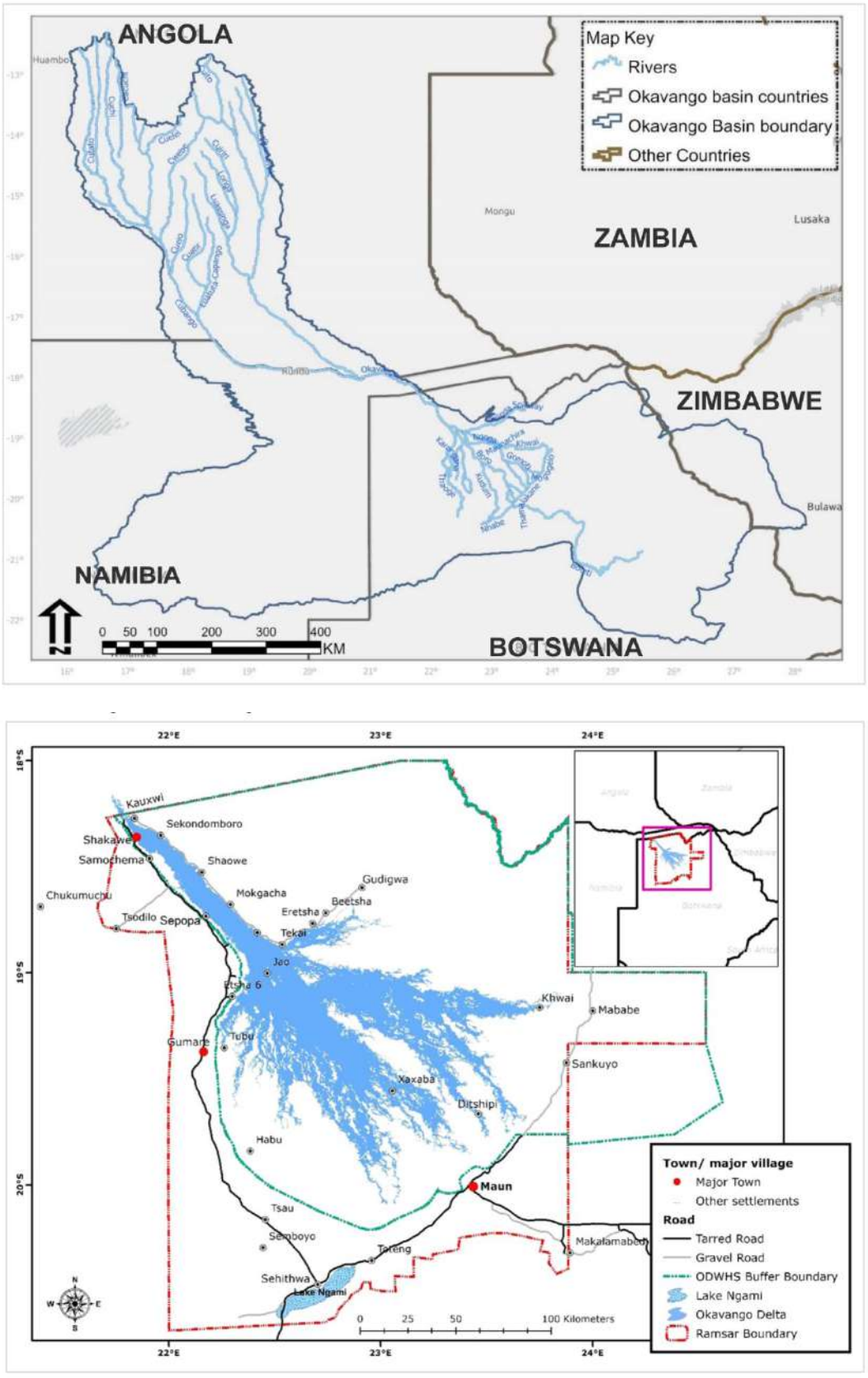


Figure 7.2. Maps showing transboundary catchment area of the Okavango systems

In addition, the Wildlife Conservation and National Parks Act of 1992 is a key national law which protects national parks, game and private reserves, sanctuaries, and Wildlife Management Areas. The Act provides guidance on wildlife-related crimes in the Delta and regulates hunting licenses for local communities as subsistence hunting, and for private businesses and tourism hunting.

The rich hydrological habitat of the Okavango Delta provides for abundance in fish species that are used by local populations and businesses for subsistence and tourists' culinary delights. The Fisheries Protection Act of 1975 was formulated to regulate and control fishing, and at the same time to protect and improve fish species in the Delta.

Most of the national legislation presented above deals with regulating people's use of resources.

2. Management authorities

The Okavango Delta is a multi-layered landscape with multiple actors, including several government departments at the national and local government levels, traditional and political leaders, local resident communities, non-governmental organizations (NGOs), community-based organizations, academic institutions, international bodies working with the Ramsar and the World Heritage conventions, and private sector operators. The management of the OD-WHS is coordinated by Botswana's Ministry of Environment, supported by other ministries such as the Ministry of Local Government. At the local level, the Okavango Wetlands Management Committee (OWMC) has been formed as a district multi-sectoral structure to guide the implementation of the Okavango Delta Management Plan (ODPM) which has been recently revised for 2021-2028 (Republic of Botswana, Ministry of Environment, 2021).

Key departments that have regular operations within the Okavango Delta include the Department of Water Affairs which is responsible for managing water flows in the Okavango Delta. Nature-based tourism is the main economic activity inside the Okavango World Heritage site. The Department of Tourism is tasked with regulating tourism enterprises and sets out procedures for tourism inspections and licensing. The Botswana Tourism Organization is responsible for marketing and promoting the country's tourism activities and enterprises. A local government body known as the Northwest District Council (NWDC) deals with a wide variety of tasks ranging from physical planning of the environmental landscape as well as providing social services to communities in the Ngamiland District where the OD-WHS is located. The NWDC also provides a district-level political forum to discuss issues affecting communities through area Councillors and other local representatives.

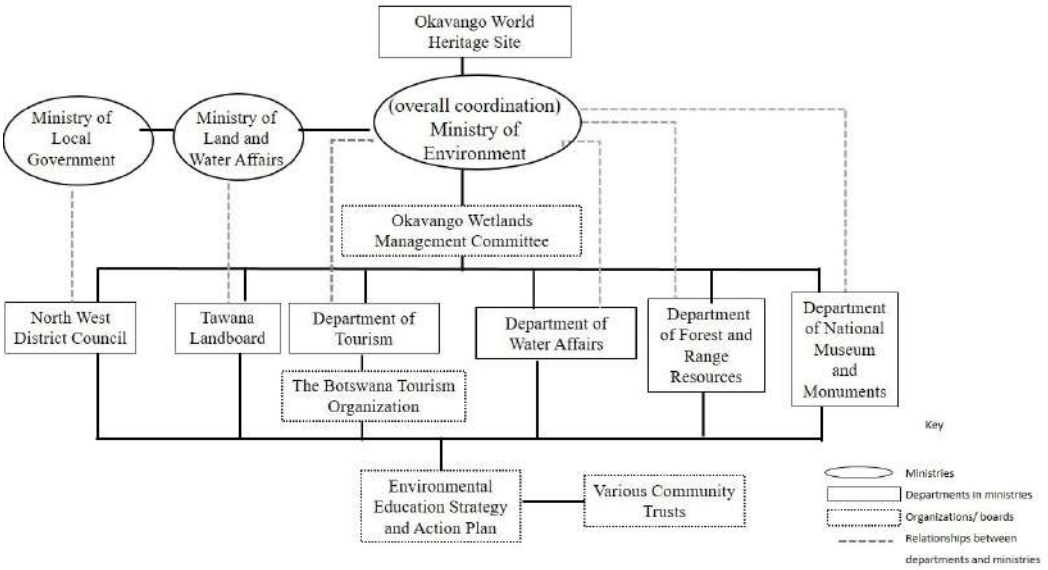


Figure 7.3: Diagram shows institutional relationships and responsibilities between ministries and departments (Source: authors)

The Okavango Delta region is home to many communities. These include San people (Bushmen), who are the members of various Khoe-speaking Indigenous hunter-gatherer and artisanal fishing communities that are the first cultures of Southern Africa and whose territories span across Botswana, Namibia, Zimbabwe, Zambia, Lesotho, Angola and South Africa. Botswana is home to approximately 63,500 San people, which is roughly 2.8% of the country's population, making it the country with the highest population of San people .

Environmental education and awareness are provided to ethnic groups through the National Environmental Education Strategy and Action Plan that engages the public in sustainable resource management, prevention of environmental degradation and strenghtening a sense of place in a heritage site.

The Community-Based Natural Resources Management (CBNRM) policy of 2007 is meant to guide various community-based organisations (CBOs) that exists in the Delta to use natural resources sustainably. It is crucial to note that even though substantial economic benefits are gained by a few CBOs in the Delta, the successful uplifting of family livelihood by the CBNRM policy is not yet visible. Local communities around the site have regulated access and use of the landscape. The CBNRM policy is designed to accord local people access to the management and use of some of the natural resources in the OD-WHS and it is also an instrument to engage local communities in the management of the World Heritage site.

3. Intertwining Management and Research at the OD-WHS

The Okavango Research-Practice Team comprises the UNESCO Chair in African Heritage Studies and Sustainable Development of University of Botswana and the Botswana National Museum. The two institutions, with different backgrounds, have been working together on various projects but had not yet collaborated in a framework

such as the one proposed by the ICCROM-IUCN World Heritage Leadership Heritage Place Lab (HPL). Both institutions co-opted members from the local community of the Okavango Delta region to participate in the initiative.

The approach of HPL promoted the collaboration between researchers and practitioners working together to exchange ideas to find shared approaches in the management and conservation of the site, and develop priorities for a research agenda. Research institutions often conduct studies that are not targeted to support the management needs of a World Heritage site. With the two teams working together, it has been possible to identify common issues on which research needs to focus to produce knowledge that can directly support the management of OD-WHS and improve relevant heritage policies.

4. Recognition of other actors

The bio-physical, human and socio-economic features of OD-WHS are considered transboundary, indicating the need to extend both professional and social collaborations across the three countries. This also provides the potential to nurture cultural diversity and related knowledge systems.

In terms of local populations, Barnard et al. (1992) indicate that the northern boundary of the site has Khoe speaking traditional hunter-gatherers and is an ancient site of human occupation. It is a territory with several centuries of contact between hunter-gatherer-fishing San aboriginal peoples and later in-migrating agro-pastoral-fishing Bantu-speaking peoples from the North. However, the cultural values associated with these local communities have not been significantly brought out yet.

In addition to the cultural values of local communities, other actors are also missing from the heritage management of the Okavango. As already stated, the management of the OD-WHS involves multiple actors that are, at times, in conflicting positions. For example, the Okavango Delta Management Plan (2008, p. 106) states that "the overlap of commercial fishing and angling/recreational activities on the same fishing grounds have often resulted in conflicts". Continuous collaboration between various actors, participation and inclusion of managers and researchers can reduce potential negative impacts and costs associated with uninformed decision making.

The coordination of actors is a challenge as different stakeholders are scattered across the country and are disconnected from each other. Input from various actors is needed to build collaborations to deal with some of the challenges present at the site.

Following the World Heritage inscription, the Botswana National Museum became the main manager of the property as provided for under Botswana policy, and is also in charge of all matters concerning the implementation of the World Heritage Convention nationally. The Botswana National Museum is a department under the Ministry of Environment and it is tasked with the management of all heritage sites in the country.

Prior to the World Heritage designation, the protection of the Okavango Delta fell under the Department of Environmental Affairs (DEA) that coordinates all matters regarding the Ramsar Convention. Under the DEA, the site was managed through the ODMP (2008). This was reviewed in June 2021 to incorporate World Heritage requirements and processes.

Within the Ministry of Environment, there are other departments responsible for some components of the management of the site. The Department of Wildlife and National Parks is responsible for the management of the Moremi Game Reserve that constitutes 60% of the Ramsar designation.

Arial view of Okavango Delta.
Image by Teo Gómez (2006) via Wikimedia Commons. Public domain.

II. Research Agenda

1. Introduction

The Research-Practice team of OD-WHS identified three priority areas for the research agenda for the Okavango Delta site:

1. Identification/recognition of cultural values of the World Heritage site
2. Stakeholder synergy
3. Human-wildlife interaction

This research agenda aims to address issues so that all actors are recognized, and their values are incorporated in efforts for the optimum management of the site. The first research priority focuses on the recognition of cultural values to improve the overall understanding of the site. Identification of cultural values allows for the recognition of the roles and identities of local people, involving them in the interpretation and conservation of the area. Research priority two explores the possibility of developing stakeholders collaboration models; and the third research priority aims to look into the wilderness and wildlife resources, searching for approaches that can be adopted to minimize conflicts associated with use of natural resources.

2. Research Priorities

1 Research priority 1
Cultural heritage values of the OD-WHS

The OD-WHS has been listed as a natural World Heritage site, but at the local level the site is considered important for both its natural and cultural values. Research focusing solely on the natural aspects of the site (e.g., McCarthy et al., 1998; Wilk et al., 2006; Fryirs et al., 2018; Mosepele et al., 2022) has contributed to this skewed recognition.
To explore this priority, the team aims to investigate the following research questions:

- **What are community heritage values associated with the Okavango Delta?**
- **What forms of cultural heritage exist in the property?**

Keitumetse's work (2005; 2009; 2016; 2020; Keitumetse and Pampiri, 2016; 2023) has indicated the importance of research that aims to recognize the cultural values of the OD-WHS as a way to engage local Indigenous knowledges in site management, but also to enhance the way the site is presented, and subsequently experienced by visitors. The Okavango Delta landscape is a key element of the cultural identity for local communities and has been inhabited for centuries by various Indigenous peoples, mainly different hunter-gatherer groups which adapted their culture and

lifestyle to the local environment and the use of its resources. Most of these communities were forced to leave the site and were relocated to the periphery when the Delta first became a protected nature reserve under the Wildlife and National Parks Act.

The cultural values of the OD-WHS are currently not well documented as compared to its natural values (Keitumetse 2016; Keitumetse and Pampiri, 2016), therefore this is a gap that needs to be researched and filled to better understand the site and to interpret its values. Given the cultural significance of the site, more research is needed to explore how the different cultural identities and socio-cultural relationships with the environment could be incorporated as part of the significance of the heritage place. This will allow local communities to become active participants in the conservation and management of the site. The World Heritage designation also provides opportunities for research on the living heritage of communities, such as the cultural landscape and architectural heritage of communal villages in the Okavango Delta (Mwale and Lintonbon, 2020). In the future, when research on the cultural values of the site is advanced, there could be an opportunity to consider whether the OD-WHS should be re-nominated as a mixed site to recognise them, provided that OUV requirements could be met. An acknowledgement of the cultural values and attributes of the site could inspire local communities to becoming more active in the conservation of the OD-WHS.

Due to outstanding biodiversity, hydrology and ecology of the Okavango Delta, the majority of research has focused largely on the natural environment (Ringrose et al, 2003; McCarthy et al, 1998), economic issues (including tourism) (Mogomotsi, 2019) and the implementation of land management plans. However, opportunities exist for future research to explore how communities that have historically inhabited the landscape have interacted with and adapted to the environment. For instance, studies such as those that explore human habitation patterns of this area which could contribute to the documentation of underwater archaeology or the built heritage of the OD-WHS, illustrating the uses within the site that have sustained cultural lives through time.

A recent study exploring in detail the physical characteristics of OD-WHS by Fryirs et al. (2018) uses a geomorphological approach to detail the characteristics, origins and development of the landscape at different scales. This study makes a significant contribution to the exploration of changes in the geomorphological characteristics of the site. However, its scope of inquiry is limited to geomorphological features and does not engage with the use of the site by communities and the spatial socio-cultural character/ contexts of these places. The proposed research will seek to extend this line of inquiry to explore how communities have continued to interact and shape the character of the site through local cultural practices. We will

seek to prioritize a co-production of knowledge through a participatory and action research in collaboration with the research-practice team and community members – to document how different ecosystems may benefit the communities in a sustainable way.

Several studies have shown that culture and heritage remains are often overlooked in modern urban planning systems in Botswana (Hammami, 2012; Mwale and Lintonbon, 2020). This problem is attributed to the perpetuation of expert-led 'top-down' approaches to urban planning (Hammami, 2012) which fail to acknowledge existing local values, cultural identities (Keitumetse and Pampiri, 2016), cultural continuity and most importantly the spatial character and architectural reading of place.

Nonetheless a study by Keitumetse (2009) has argued that natural sites, in particular those inhabited by local communities in Africa, have undergone years of communal management and that this process has sedimented local values and promoted Indigenous heritage management systems rooted in communal identities.

In this light, communities have inhabited these landscapes over centuries, and continue to shape their spatial character through architecture, culture and everyday life practices. This intersection between the physical landscape and lived practices contributes to the recognition of both intangible and tangible heritage (Mwale and Lintonbon, 2020), other than the natural biophysical heritage. It is for these reasons that emerging heritage studies have begun to explore community participation empowerment through CBNRM policies and community based organizations, and most recently the need to document the identities of communities and how these could be enhanced in the conservation and management of the biodiversity of World Heritage sites. An area which remains largely unexplored that will be considered in our future research is the examination of how natural heritage weaves into the local architectural heritage and its socio-cultural contexts and spatial arrangements as it depicts people's lived experiences – examining how people relate to the landscape through settlement patterns and land use. This approach is relevant in Botswana where natural features and pre-colonial heritage are often privileged over living heritage and local architectural heritage and their relationships to the natural landscape (Mwale, 2017). Part of the exploration will look into Indigenous knowledge systems as a broad topic that covers cultural aspects of the landscape. Some of the Okavango Delta management approaches can be said to be hampered by the absence of Indigenous knowledge which has resulted in the systematic exclusion of Indigenous peoples from governance models. Studies show that the use of Indigenous knowledge is highly recommended and is slowly being re-introduced in the management of natural and cultural

heritage in some parts of the world. This paradigm shift is attributed to the resilience rooted in the Indigenous people's knowledge and their reactiveness to the existing environmental challenges.

The Convention of Biological Diversity and the International Indigenous Forum on Biodiversity advocate for the integration of the traditional knowledge and customary practices, and encourage participation of communities in the conservation of natural resources. Studies observed that if communities understand the benefits of biodiversity conservation, they would be careful with practices that can lead to degradation of the biodiversity. Some studies argue that Indigenous Peoples are excellent conservationists. In Botswana, there are policy limitations to systematically evaluating, including and using Indigenous knowledge. For example, the government of Botswana does not recognise specific groups of people as Indigenous, arguing instead that all people in the country who are citizens are Indigenous and that all citizens regardless of their ethnic backgrounds have the same rights to the use of the land and resources in the country. This results in a limited understanding of the knowledge held by Indigenous peoples and the ability to embrace useful bodies of knowledge needed for the valuation and management of a broader landscape that is rich in biodiversity (Republic of Botswana, 2008).

A similar observation was made in the principles developed under the Convention on Biological Diversity which advocate for the adoption of an ecosystem approach which considers both cultural and biological diversity in the management of ecosystems, and the need to integrate the understanding of societal choices in conservation for effectiveness and efficiency.

2 Research Priority 2
Stakeholders engagement and coordination

The second research priority identified is the need to broaden the recognition of natural and cultural heritage-related stakeholders. As indicated above, the Okavango Delta hosts an array of stakeholders and institutions that operate in a disconnected manner. This research priority will therefore look into the relationships between these stakeholders and assess how the stakeholders are organized, collaborate, and are involved in the management of the site to identify ways to improve the site's governance.

Research questions include:

- **Who are the stakeholders in the management of the OD-WHS? How are they organized?**
- **Which institutions are key in the management of the Okavango Delta? (see Figure 2)**
- **What is the most optimal model of bringing together important stakeholders of the OD-WHS?**

The management of the Okavango Delta World Heritage site involves multiple stakeholders, some of which are in conflict due to issues related to access and use of resources. These are issues that need research to collect a body of knowledge that can lead to equitable sharing and sustainable use of the World Heritage site resources, hence helping to mitigate/mediate existing conflicts.

Stakeholder networking and collaboration is also a challenge because stakeholders are disconnected from each other. Research can support the development of platforms that allow for direct collaboration in knowledge sharing and ideas exchange to bring stakeholders together in real time when an issue arises in any part of the World Heritage site. Thus, there is the need for building networks of stakeholders that could pull together for managing the issues at the site.

3 Research Priority 3
Human-Wildlife Interactions

Assessing interaction between humans and wildlife in the Okavango Delta has become an important topic due to increasing conflicts (Buchholtz, et al., 2023; Velempini, 2021). This research field deals with issues of land planning, land uses, wildlife corridors, socio-economic activities of local communities and stakeholders some of which were already identified in the above priorities one and two.

Research questions:

- **How is land planning conceived in the Okavango Delta?**
- **What are the socio-economic activities that encroach into animal habitat?**
- **What wildlife movements encroach into communal areas?**
- **How is access to resources managed in the Okavango Delta?**

The OD-WHS is key habitat for wildlife and particularly large mammals. Human populations in the Delta have also increased over time and land has been allocated for residential, agricultural, commercial and recreational purposes. This has led to increased conflicts between people and wild animals (Velempini, 2021). Research is needed to ensure sustainable co-existence and assess how eco-pedagogy practices can be implemented in the OD-WHS.

Wildlife, such as elephants, hippos and crocodiles still pose a danger to the lives of children who walk through wildlife corridors on their way to school. Some interventions by certain NGOs have adopted the implementation of what is known as eco-pedagogical practices. The NGO called Save the Elephants reported as follows:

As part of response to concerns raised by some villagers in North-West Botswana regarding safety of the school children, an NGO called Ecoexist Trust with funding support from cooperating partners, is set to undertake a feasibility study towards the introduction of “Elephant Express Buses” in some parts of North Western Botswana that makes part of the Okavango Delta area.

Such studies and interventions for elephant express buses will provide transport across elephant corridors for school children to increase their safety around elephants and in the process promote coexistence of people and wildlife.

According to Space for Giants , the adoption of integrated land use planning can reduce the existing human-wildlife conflicts. A systematic approach in rethinking how local people and wild animals can co-exist needs to be employed both in research and practice to create opportunities for a sustainable management through eco-pedagogy practices (Velempini and Martin, 2019; Velempini and Perkins, 2008).

Relating to research priorities 1 and 2, the recognition of people-centred approaches and the identification of associated cultural values through research will also enable acknowledgement of nature-nurture interactions, some of which can be assessed through this research agenda, such as human-wildlife conflict.

Red Lechwe in a lagoon in the Okavango.
Image by Ian Restall (2007) via Wikimedia Commons. Public domain.

III. Inputs needed and expected outputs

There are various inputs needed to achieve knowledge of the site that can later lead to effective management of the OD-WHS. In order to understand these needs, some gaps are identified as follows:

- Research funding: In most of Africa, research is not budgeted for, and is somehow viewed as a luxury compared to other issues such as health. It therefore becomes difficult to pursue approaches that can generate knowledge for informed management of sites such as the Okavango Delta. Lack of financial resources and capacities to enhance conservation knowledge of the site make it difficult to achieve effective management.

- Equipment and personnel: Through the government of Botswana, various departments are investing in personnel and equipment to manage the resources of the Okavango Delta. However, managers have very limited resources to effectively carry out their responsibilities. Resources such as transport, equipment and tools, finances, personnel capacity are needed. Due to this diverse stakeholder base, it is therefore pertinent that research on how these multiple stakeholders could cooperate, interconnect and collaborate in a meaningful manner is carried out.

- Active community participation: Indigenous skills in management are missing. Ways to significantly bring local policing of the site are needed. Practical implementation of the existing Okavango Delta Management Plan is urgent (2021). However, resources necessary to ensure implementation are lacking in terms of skilled personnel, specialized equipment, amongst others.

IV. Desired outcomes

- Research priority 1: A balanced body of knowledge on cultural values alongside the already existing robust literature on natural and biophysical aspects of the Okavango Delta would be a desired outcome of this research priority. It is hoped that this body of knowledge will enable a balanced interpretation and presentation of the site.

- Research priority 2: A model that allows all the stakeholders with interest in the Okavango Delta site to be recognized and involved in equal measure where conservation and management decisions are concerned is the desired outcome of this research priority. The tools developed for achieving Sustainable Development Goal (SDG) 17 on partnerships can be used in developing a model of this nature.

- Research priority 3: A model for peaceful co-existence between wildlife and humans in the Okavango Delta, where threat of animal extinction though human activities is eliminated and threat of human subsistence streams are not destroyed by wildlife is the desired outcome of this research priority. This can only take place where knowledge on how these encounters can be managed properly is generated through research.

- Increase of the number of research-practice teams to allow for more issues to be covered in other areas the World Heritage site is a desired outcome of the development of this research agenda as a whole.

- Focused and consistent resource allocation: The most desired outcome is to ensure that sustainable resources for implementation are budgeted yearly, rather than depending on sporadic resources and efforts from external sources. For instance, researchers usually come in with a research topic to explore, looking out for a single topic that may be relevant to the site management but that it is not sustained in a way that the data can be monitored for management lessons over the years resulting in a potentially haphazard approach. This is why each site needs a focused funding resource through which its management needs can be researched on the spot when they arise, rather than depending on sporadic external funding.

In conclusion, the participation in the HPL has increased the level of collaboration between researchers and managers, and in the process opened up channels for knowledge sharing across the two institutions that will be explored through a long period of time. Our discussion has shown that the research priorities identified require focused research and resources (including time) to achieve the outlined outcomes. It must be noted that this kind of research would involve collaboration between different stakeholders, and will be implemented over a long period of time rather than within the confines of a short-term project. Our research agenda therefore is a step in developing a collaborative research agenda, the identification of priority research areas and possibly building local stakeholder capacity.

"Makoro" - dugout canoes in the Okavango Delta region, Botswana.
Image by Magalex (2008) via Wikimedia Commons. Public domain

References

Barnard, A., 1992. Hunters and herders of southern Africa: a comparative ethnography of the Khoisan peoples (No. 85). Cambridge University Press.

Buchholtz, E. K., McDaniels, M., McCulloch, G., Songhurst, A., & Stronza, A. 2023. A mixed- methods assessment of human-elephant conflict in the Western Okavango Panhandle, Botswana. People and Nature, 5, 557–571. https://doi.org/10.1002/pan3.10443

Fryirs, K. A., Ralph, T. J., Larkin, Z. T., Tooth, S., Humphries, M., McCarthy, T., Hesse, P. P., and Mosimanyana, E., 2018. A nested hierarchical perspective to enhance interpretations and communication in fluvial geomorphology for use in water resources management: Lessons from the Okavango Delta, Botswana. Geographical Journal, 184 (2), 192-207. https://doi.org/10.1111/geoj.12250

Hammami, F., 2012. Culture and planning for change and continuity in Botswana. Journal of planning education and research, 32(3), pp.262-277.

Keitumetse, S.O., 2005. Sustainable development and archaeological heritage management: Local community participation and monument tourism in Botswana (Doctoral dissertation, University of Cambridge).

Keitumetse, S.O., 2009. The eco-tourism of cultural heritage management (ECT-CHM): Linking heritage and 'Environment'in the Okavango Delta regions of Botswana. International Journal of Heritage Studies, 15(2-3), pp.223-244.

Keitumetse, S.O., 2016. African cultural heritage conservation and management: theory and practice from Southern Africa. Springer, Cham.

Keitumetse, S.O. and Pampiri, M.G., 2016. Community cultural identity in nature-tourism gateway areas: Maun village, Okavango Delta World Heritage Site, Botswana. Journal of Community Archaeology & Heritage, 3(2), pp.99-117.

Keitumetse, S.O., 2020. Linking African World Heritage and Sustainable Development: Appraisal of Policies, Concepts, Principles and Approaches to Agenda 2030. In Sustainability in Developing Countries (pp. 113-129). Springer, Cham

Keitumetse, S.O., Katlego, P.M., Satau, G., Velempini, K., Baitsiseng, V.O., Ntema, MO.P.B.M, Manga, J., and Mogotsi, S.T. 2023. Exploring cultural values of African wetlands for sustainable conservation: Okavango Delta World Heritage Site, Botswana. Journal of Cultural Heritage Management and Sustainable Development. DOI: 10.1108/JCHMSD-09-2022-0167

McCarthy, T.S., Bloem, A., and Larkin, P.A. 1998. Observations on the hydrology and geohydrology of the Okavango Delta. South African Journal of Geology. 101, 2, 101-117. https://doi.org/10.10520/EJC-1abed244bb

Mogomotsi, P. K. 2019. An institutional framework for the sustainable co-existence of tourism and agriculture in Botswana. PhD dissertation, North-West University, South Africa.

Mosepele K., Kolding J., Bokhutlo T., Mosepele B.Q. and Molefe M. 2022. The Okavango Delta: Fisheries in a fluctuating floodplain system. Front. Environ. Sci. 10:854835. doi: 10.3389/fenvs.2022.854835

Mwale, K.P. and Lintonbon, J., 2020. Heritage, identity and the politics of representation in tribal spaces: an examination of architectural approaches in Mochudi, Botswana and Moruleng, South Africa. International Journal of Heritage Studies, 26(3), pp.281-298.

Mwale, K. 2017. Culture, Heritage and the Politics of Identity in National and Tribal Spaces: the city and the traditional village in Botswana, A thesis submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy, University of Sheffield, UK.

OKACOM - www.okacom.org (Accessed 05th June 2022)

Ramsar (2021). Botswana Okavango Delta System. RSIS. V1.6. https://rsis.ramsar.org/RISapp/files/RISrep/BW879RIS_2103_en.pdf

Republic of Botswana, Ministry of Environment, 2021. Okavango Delta Management Plan 2021

Republic of Botswana. 1968. Forestry Act

Republic of Botswana. 1975. Fisheries Protection Act

Republic of Botswana. 1992. Wildlife Conservation and National Parks Act

Republic of Botswana. 2007. Community-Based Natural Resources Management (CBNRM) Policy.

Republic of Botswana. 2008. Okavango Delta Management Plan (ODMP).

Ringrose, S., Vander post, C. and Matheson, W., 2003. Mapping ecological conditions in the Okavango delta, Botswana using fine and coarse resolution systems including simulated SPOT vegetation imagery. International Journal of Remote Sensing, 24(5), pp.1029-1052.

UNESCO World Heritage List. https://whc.unesco.org/en/list/ (Accessed 09th May 2022)

Velempini, K. 2021. “About the human–elephant conflict in Botswana, what did people in the Okavango Delta panhandle have to say from their experience?" Socio-Ecological Practice Research 3, 4: 411-425.

Velempini, K. and Martin, B. 2019. Place-based education as a framework for tourism education in secondary schools: A case study from the Okavango Delta in Southern Africa. Journal of Hospitality, Leisure, Sport and Tourism Education (25). Retrieved from https://doi.org/10.1016/j.jhlste.2019.100197

Velempini, K, and Perkins J.S. 2008. Integrating indigenous technical knowledge and modern scientific knowledge for biodiversity conservation and human livelihoods in the southern Kalahari, Botswana. Botswana Notes and Records 39, 75-88. http://www.jstor.org/stable/41236635

Wilk, J., Kniveton, D., Andersson, L., Layberry, R., Todd, M.C., Hughes, D., Ringrose, S., Vanderpost, C. 2006. Estimating rainfall and water balance over the Okavango River Basin for hydrological applications, Journal of Hydrology, 331, 1–2, 18-29, https://doi.org/10.1016/j.jhydrol.2006.04.049.

Rainbow in Okavangodelta Xakanaxa.
Image by Hp.Baumeler (2009) via Wikimedia Commons. Creative Commons Attribution-Share Alike 4.0.
Original image cropped for design purposes.

Quebrada de Humahuaca

Argentina

Chapter 8

Impacts of Tourism and Landscape Change Quebrada de Humahuaca, Argentina

Graciela Aguilar[1], Alfredo Conti[2], Raquel García[3], Josefina Mallo[2], Valentina Millón[4], Andrea Morello[1] and Sebastián Pasin[3]

[1] Center for Conservation of Urban and Rural Heritage, University of Buenos Aires
[2] Institute for Research on Tourism, Faculty of Economy, National University of La Plata
[3] World Heritage Coordination, Quebrada de Humahuaca Provincial Management Unit
[4] Provincial Directorate of Heritage of Jujuy, Quebrada de Humahuaca Provincial Management Unit

I. Background

1. Brief description of the World Heritage property

Quebrada de Humahuaca is a narrow arid valley in the province of Jujuy, northern Argentina (Figure 8.1). The site has an asymmetrical profile forming a natural north–south corridor approximately 155 km long, where the Rio Grande runs, flanked to the west and north by the Puna plateau with an average height of 3,800 m above sea level, to the East by the sub-Andean mountains, and to the South by temperate valleys. The region constitutes a representative example of the South-Andean valleys with an exceptional system of north–south and east–west physical, economic, social and cultural routes. Quebrada de Humahuaca bears testimony to 10,000 years' of human presence, encompassing a diverse, rich cultural heritage that includes both tangible and intangible components (Almirón et al., 2006). Most of its current 32,000 inhabitants reside in towns and villages, such as Volcán, Tumbaya, Tilcara and Humahuaca, while the rest of the population occupies smaller villages and dispersed rural areas. The main economic activities are agriculture, pastoralism, tourism and a few extractive industries.

Figure 8.1 Jujuy Province in Argentina (Source: World Heritage Coordination, Quebrada de Humahuaca Provincial Management Unit, 2022).

Quebrada de Humahuaca was inscribed on the World Heritage List in 2003 as a cultural landscape under criteria (ii), (iv) and (v) (Figures 8.2 and 8.3). Its Outstanding Universal Value (OUV) is based on the role played by this valley as a communication route between the Northern Andean region (present-day Bolivia) and the Southern valleys that lead to the Argentinian plains (pampas) during the last 10,000 years of human occupation. The interaction between humans and nature over such a long period is reflected in the shaping of the landscape (Figure 8.4), especially by agricultural practices (Figure 8.5) and the presence of archaeological sites that testify to different periods of human occupation and in towns and villages established during and after the Spanish colonisation of the area. All of these layers of significance comprise an outstanding cultural landscape (Province of Jujuy, 2002; Solís and Vilte, 2008; Belli and Slavutsky, 2009; Benedetti, 2010).

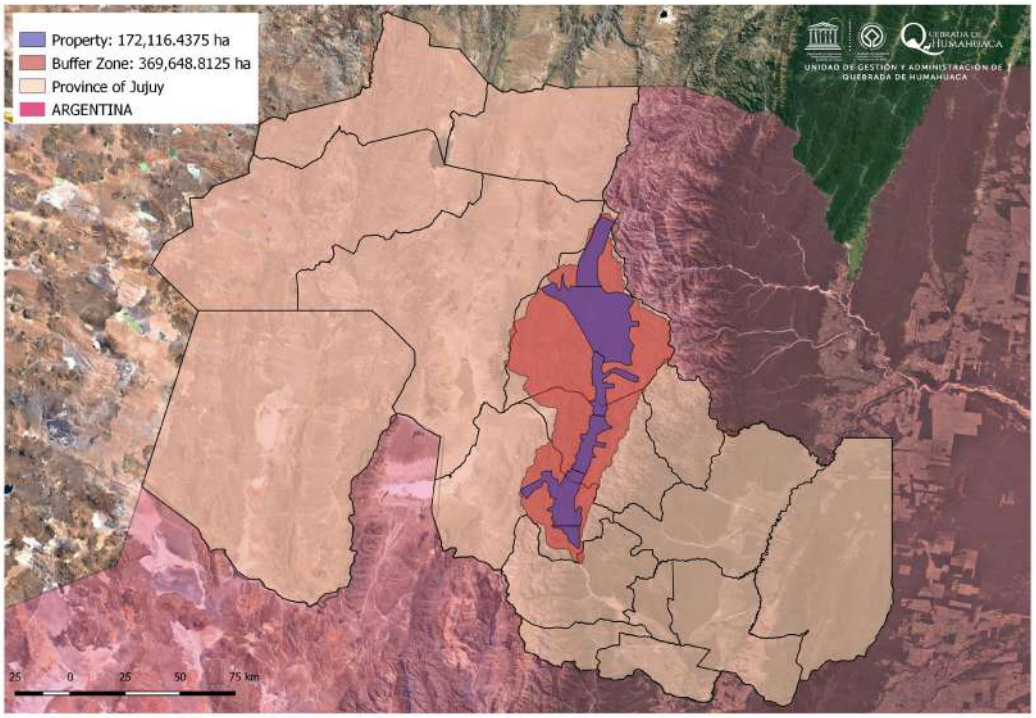


Figure 8.2 Quebrada de Humahuaca World Heritage property in Jujuy (Source: World Heritage Coordination, Quebrada de Humahuaca Provincial Management Unit, 2022).

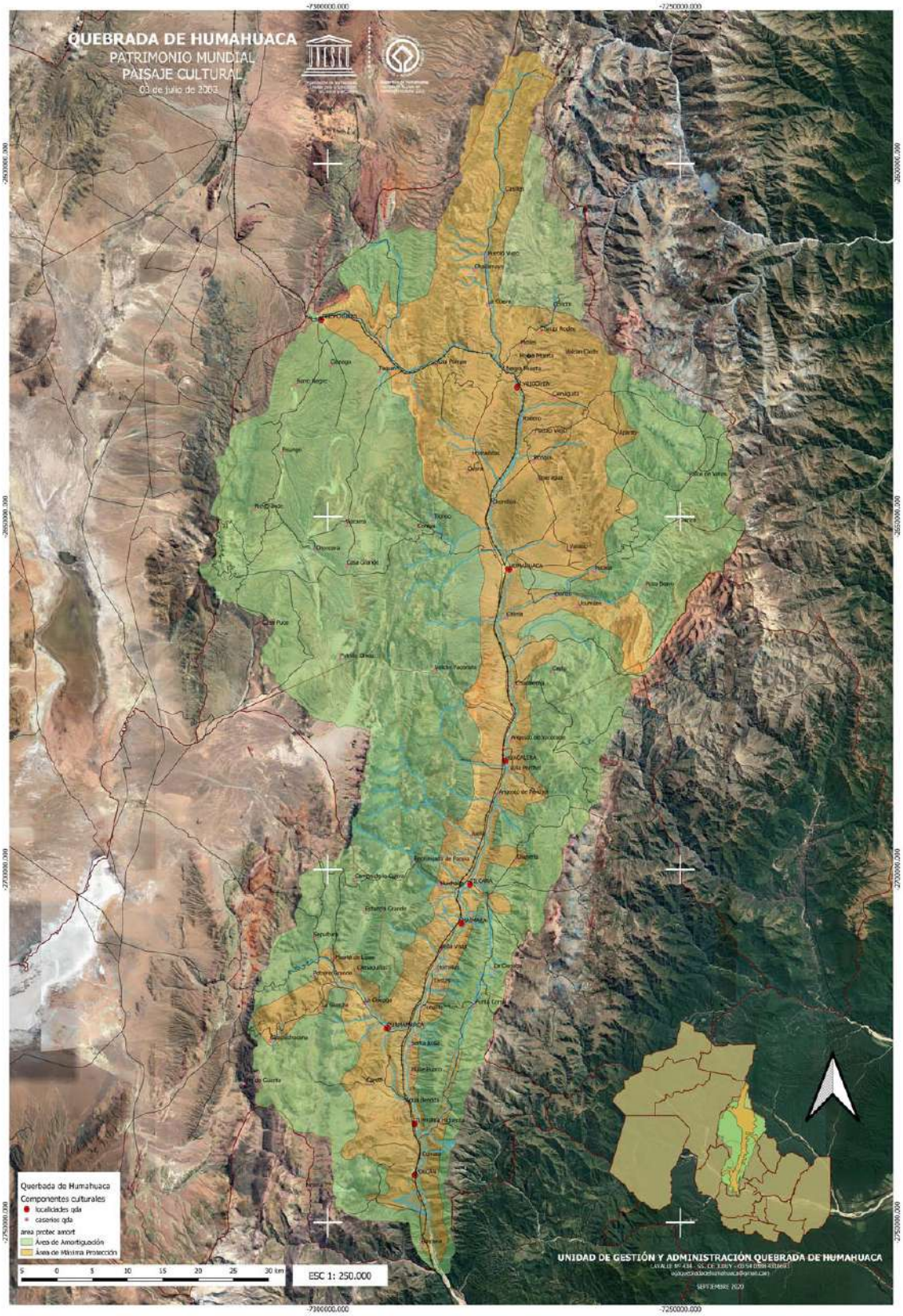


Figure 8.3 La Quebrada de Humahuaca, World Heritage Cultural Landscape (Source: World Heritage Coordination, Quebrada de Humahuaca Provincial Management Unit, 2022).

Figure 8.4 Tumbaya - Nature (Source: Reinaga, W., 2020).

Figure 8.5 Cultivation platforms in Coctaca, Humahuaca (Source: Walter Reinaga, 2019).

Besides its international significance, the property has also been recognized as an important heritage place at national and provincial levels. The first national heritage declarations date from the 1940s, when several religious buildings from the Spanish colonial period were designated as National Historic Monuments (Figures 8.6 and 8.7) under the framework of National Law 12665 on Historic Monuments, on the grounds of their historic and artistic values. In 1975, some of the colonial towns and villages, such as Purmamarca and the historic area of Humahuaca, were designated National Historic Places as a recognition of their historic, urban and architectural values (Figure 8.8). All of the region's the archaeological sites are also protected at national and/or provincial levels (under National Law 25743 and Provincial Law 3866/82), and four

were designated as National Monuments in 2000 (under National Decree 1012/2000). Since 2002, the Quebrada de Humahuaca has been declared a protected landscape at the provincial level (Provincial Law 5206).

Figure 8.6 Church of the Holy Cross and San Francisco de Paula de Uquia, built in the 17th century (Source: Walter Reinaga, 2021).

Figure 8.7 Hornillos Post Chapel, Maimará (Source: Walter Reinaga, 2020).

Figure 8.8 Rural architecture (Source: Lucio Boschi, 2002).

The numerous settlements in Quebrada de Humahuaca account for the interactions between human beings and their environments over 10,000 years, generating a series of landscape units. This complexity illustrates a significant period of human history, enriched by cultural manifestations characterized by population mobility (García and Madía, 2005; Eklund, 2012).

The popular culture in Quebrada de Humahuaca is exceptional; a 155 km corridor of unique cultural practices (Figures 8.9, 8.10 and 8.11) with numerous traditional cultural ways intertwined with the contemporary society's practices, as expressed through music including "el carnavalito" (Civila-Orellana, 2018), oral narratives (Espósito, 2012; Montenegro and Aparicio, 2017), religious expressions such as "ermitas" (large paintings, made with seeds and flowers by families, that represent the stations of the Via Crucis during the Easter period), and processions ("misachicos", e.g. Punta Corral), and crafts including textiles made from llama and vicuna wool as well as pottery. These features demonstrate a fruitful intercultural relationship between the Andean and Spanish cultures, establishing a strong social cohesion and reinforcing social networks (Pelegrin and Forgione, 2018; Ochoa and Otero, 2020). The current population, which includes a wide range of cultural groups (Indigenous communities, creole communities, and migrants), practices a set of traditions and customs that merge the survival of ancient Indigenous cultures, which underwent transformations following their contact with the Spanish colonists, and the modern world. Beliefs and rites, religious and secular festivals (Lopez et al., 2010; Lambaré et al., 2015), music, cuisine (Álvarez and Sammartino, 2009; Troncoso and Arzeno, 2019), crafts, construction styles and techniques, agricultural technologies, and other Indigenous and traditional knowledge constitute a living cultural heritage unique to Quebrada de Humahuaca.

8.9 Pachamama (Mother Earth) festivity in Hornillos, Maimará (Source: Sebastian Pasin, 2021).

Figure 8.10 Humitas and goat cheese, traditional gastronomy, Maimará (Source: WalterReinaga, 2020).

Figure 8.11 Boy playing the quena (Source: Lucio Boschi, 2002).

2. Main management issues

During the Heritage Place Lab (HPL) pilot phase, the Research–Practice Team identified the following key issues that affect the property and which require addressing in order to enhance the heritage place's management:

→ **A lack of a shared understanding of the heritage values of Quebrada de Humahuaca and lack of coordination between heritage managers.**

In order to explain the heritage place's management structure, it is necessary to clarify that Argentina is a federal country made up of 24 provinces, each having their own Constitution and specific powers that are not necessarily assigned with the federal government. In the case of natural or cultural places protected at national level, the relevant national authorities act in concurrence with the corresponding provincial and local governments. At the same time, the provinces are divided in local political units, with different designations according to each province, whose specific competences are established by provincial laws, usually named Organic Law on Municipalities.

The Quebrada de Humahuaca Management Unit, under the Secretariat of Culture of the provincial government, is the main body responsible for the management of the site. This unit acts as a liaison for the 11 local site commissions, where the communities related to the 11 municipalities (political local units) that integrate the whole territory are represented. The management structure includes the interaction among provincial governmental agencies related to specific aspects of the place, among which are the Ministries of Culture and Tourism, Environment, Infrastructure, Public Services, Land and Housing, Education, Human Development, Economic Development and Production, and Security and Civil Defense. The roles of these ministries in the heritage place's management

structure are defined by the provincial laws that establish their competences, while the provincial law that regulates the functioning of local governments (Law 4466 on Municipalities) establishes their specific competences. This management structure is clearly documented through transparent and accessible legal instruments including the specific laws related to each ministry as well as Law 5206 and Decrees 789/2004 and 3095/2021 that were enacted on the establishment of the provincial World Heritage Coordination.

Although the management and governance structures are clear in principle, in practice, there are conflicts arising from the lack of communication between the actors involved in the management of the heritage place, particularly at the level of local government. At the same time, there is a lack of legal and institutional instruments necessary to grant power to the managers to administer the property. Furthermore, the Research–Practice Team notes that there is no clear and shared understanding of the heritage place's Outstanding Universal Value (OUV) among all the actors involved in the property's management (Bertoncello and Troncoso, 2003; Almirón, Bertoncello and Troncoso, 2006; Macchiaroli, 2015).

Therefore, it is necessary to establish an adequate coordination between the Management Unit, under the provincial government, and the local governments based on a shared understanding of the heritage values of Quebrada de Humahuaca. This requires reinforcing and strengthening the active participation of local communities and promoting the inclusion of young people, as future managers, in the decisions-making processes (José and Pasin, 2005; Vilte et al., 2010).

→ **Significant growth of tourism activities and a lack of sustainable tourism planning.**

Due to the increase of tourism in Quebrada de Humahuaca following its inscription on the World Heritage List, factors that negatively affect the heritage place have been identified alongside a lack of capacity of the local governments and communities to manage this activity. A lack of planning for sustainable and responsible tourism based on the heritage place's OUV is evident. Tourism has become an active agent in the territorial transformation of Quebrada de Humahuaca, causing positive impacts from an economic point of view but also negative ones from environmental and social perspectives.

→ **Land-use change, habitat (housing) transformations and unplanned urban development.**

As previously stated, Argentina has a federal political organisation whereby provincial and local governments have exclusive rights including the regulation of land uses and land exploitation. Construction permits are the exclusive

responsibility of local governments; in Quebrada de Humahuaca, these regulations are not always in line with the heritage management principles established by the provincial government in management instruments oriented to balance development and the preservation of natural and cultural values. At the same time, architectural and stylistic features of new constructions are not always in line with the features that determine the identity of the historic towns and villages within the valley.

The pressures caused by development in Quebrada de Humahuaca have generated changes in the territory. Unplanned urban growth is taking place on the outskirts of towns and villages, resulting in changes in the urban landscape at the edge of those urban settlements. In some cases, agricultural land has been transformed into areas for urban expansion. Some of these processes are linked to the development of tourism, especially through the construction of accommodation infrastructure and other facilities (Almirón et al., 2006; Troncoso and Arzeno, 2019). Through the study of maps and aerial views corresponding to different periods, it is possible to verify the urban expansion of towns and villages, the changes in the appearance of landscapes and urban settlements, the reduction of cultivated areas, and new accommodation ensembles (Vecslir et al., 2011).

All of these management issues are interrelated. The lack of a shared understanding of the heritage place's OUV and other national or local values; the inadequate articulation amongst actors involved in management; and the lack of appropriate legal instruments to control and regulate construction, urban expansion and changes in land use are impacting the cultural landscape and its values.

The Hill of Seven Colours, Purmamarca.

II. Research Agenda

1. Introduction

In the framework of the ICCROM–IUCN World Heritage Leadership Heritage Place Lab, the Management Unit, the government of the province of Jujuy, and the Universities of Buenos Aires and La Plata, collaborated on building a new research agenda for Quebrada de Humahuaca. Up to now, research interests have been guided by academic priorities, and the Management Unit of Quebrada de Humahuaca, despite many interactions with researchers, has lacking information about the research priorities of academic institutions. The association between site management and researchers in the Research–Practice Team allowed the building of a more accurate proposal that reorganized research priorities to address specific management issues. These priorities derive directly from the main management issues described in Section I and have been prioritized according to the needs expressed by the practitioners within the Research–Practice Team with a focus on improving the heritage place's management.

2. Research priorities

1

Research Priority 1
Tourism impacts on the cultural landscape of Quebrada de Humahuaca

Before its inscription on the World Heritage List, Quebrada de Humahuaca was an important national tourism destination. One of the impacts of the inscription was a significant increase in the number of visitors. This has generated cumulative impacts, such as an increase in investment in infrastructure particularly related to visitor accommodation as well as new products and services. The impacts of this on the environmental, social and economic spheres include, for instance, land-use change, urban sprawl, and changes in the ways of life and social practices of traditional communities (Bertoncello and Troncoso, 2003; Almirón et al., 2006; Troncoso and Arzeno, 2019; Troncoso, 2010). It is necessary, therefore, to obtain accurate information on these impacts, which can then be used for planning management processes. Due to the multidimensional nature of tourism, research on this topic requires the participation of professionals from different disciplines including tourism, territorial and urban planning, heritage, archaeology, economics, and anthropology. Specific research questions identified under this priority are:

- **Environmentally, what kind of impacts are produced by visitors and the construction of tourist infrastructure in the natural and built environment? What changes in land use occur? What are the impacts derived from the generation of waste and pollution? Is an excessive number of visitors leading to environmental damage, changes and loss of natural resources?**

- **Economically, are there initiatives to prepare a Sustainable Tourism Plan to control the regional tourism investments? How can the investments made in infrastructure and tourism equipment, both from the public and private sectors, be identified and quantified? Where do the investors come from? What is the average spend of visitors and what items are these costs incurred? How are the benefits obtained by tourist activities distributed? How do the local communities benefit? Are there any mechanisms that ensure a holistic and integrated planning process?**

- **Socially, what is the reaction of local communities to the increase in visitors? What are the impacts of tourism on traditional ways of life and social practices? What is the degree of acceptance of the residents regarding visitors and their impact on employment and training opportunities?**

- **In terms of tourist demand, what is the number and origin of visitors? What are their motivations for visiting? Has the World Heritage status had any influence on their choice of the destination? What types of attractions are most requested? What is the degree of satisfaction with the visitor experience? Are the values of the heritage site adequately interpreted? What are the impacts of tourism on the heritage values of the property and the attributes that convey those values?**

To answer these questions, both quantitative and qualitative methodological approaches should be used. Data required to address this research priority includes the number of visitors per year; the number and location of tourism facilities (hotels, bungalows, restaurants, shops, etc.); the number and types of investments related to tourism each year, from both local and external investors; the origin of tourism investors; and the average visitor spend per day. To assess the environmental and social impacts of tourism, in situ observation and recording is required, complemented with interviews with local informants including representatives of the local communities and Indigenous groups.

2 Research Priority 2
Governance arrangements and communication of Oustanding Universal Value and other values

Through the HPL process, work carried out to date includes the preparation of a map of actors directly or indirectly linked to the management of Quebrada de Humahuaca and their roles as well as identifying various types of factors with real or potential impacts on the heritage place. At the institutional level, one aspect that emerged as a result of a HPL exercise using EoH Toolkit 2.0 (UNESCO, IUCN, ICCROM and ICOMOS, forthcoming)

is that, despite a clearly stipulated management system, under the provincial government, there is insufficient shared vision and coordination with other governmental agencies, especially considering the large and complex nature of the site and that, in concurrence with the provincial government, the powers of the national and local agencies. During the HPL process, the role played by local governments was particularly discussed as, considering the current regulatory framework, these have exclusive powers over some issues, such as the regulation of land use and permits for new constructions. The issues identified by the practitioners within the Research–Practice Team included the fact that the values for which Quebrada de Humahuaca was inscribed on the World Heritage List are not sufficiently known and shared by all the actors related to the property's management. The way in which local communities participate in the governance of the site and their knowledge of international values was also discussed, along with the existence of values arising from those communities that may not be taken into account by governmental agencies.

Within this context, the Research–Practice Team agreed that governance should be a priority research topic, with the need to guarantee the right for communities to live in a healthy environment, and to reach a balance between the preservation of the site's values and the attributes that convey them while considering the current requirements to ensure an adequate quality of life. Specific research questions identified under this priority include:

- **How can institutional strengthening be achieved through a deeper relationship and improved communication between different governmental levels?**

- **To what extent is the OUV of the property recognized and shared by all managers and stakeholders? Are other types of values being recognized?**

- **Are these values being recognized by rightsholders (i.e. local communities)? What are the attributes recognized by local communities considering that they are the conveyors of the different values of the site?**

- **What tools can be used for a better communication of the values to the different actors involved in the management and for improved communication between political and technical teams?**

- **How can local communities be engaged in the use of these tools to ensure better communication?**

The general objective of this research priority is to improve the management of the site through a democratic and inclusive governance arrangement, with a vision shared by all actors involved. Once the problems have been identified, research on this topic requires the participation of professionals from a range of disciplines including municipal law, economics, state management, anthropology, territorial and urban planning, heritage, archaeology, communication, and education.

3 Research Priority 3
Land-use change in Quebrada de Humahuaca

As a result of population growth, which demands housing solutions and new utilities and services, coupled with tourist development, pressures on land availability and land-use change are threatening the integrity of the Quebrada de Humahuaca cultural landscape (Braticevic, 2018). Some studies suggest that during the period 1936–2004, the growth of the main tourism enclaves (Purmamarca, Tilcara, Maimará and Humahuaca) occurred due to internal migration (in Humahuaca and Maimará) compared to stagnant towns with little urban growth (Uquía and Volcán) and in contrast to the large subdivision of land carried out over the last two decades (e.g. 2 de Abril, Sumay Pacha and Chalala; Vecslir et al., 2013).

Due to its geological and geomorphological characteristics, there is scarcity of suitable and safe land in Quebrada de Humahuaca both for agricultural activities and urban development. Thus, in addition to the value raised by tourism, land is a high-value commodity. Impacts on the urban landscape and skyline of some villages and towns, particularly those where tourism activities have been developed, are the result of the increase in the development of facilities dedicated to tourism, including tourist accommodation. Some changes have also occurred in the traditional agricultural systems and types of crops, such as the presence of vineyards, which although a common type of development in colonial times, remained in disuse until relatively recently, when wine production has significantly increased in value. Furthermore, demographic changes (i.e. positive natural growth in most localities and immigration), which will be validated with the 2022 national census on population and housing, indicate a future increase in these pressures. This highlights the need for collecting accurate data to assess and manage acceptable changes in the cultural landscape while preserving its natural and cultural values. Specific research questions under this priority include:

- **What have been the changes produced in the cultural landscape since its inscription on the World Heritage List? Have the heritage values and land use been transformed? Have these changes been measured? Has the inscription as World Heritage accelerated this process?**

- **What would be an acceptable level of change that allows the heritage values of the cultural landscape to be authentically preserved? How should change take place and how should this process be handled without negatively impacting OUV?**

- **To what extent does land-use change alter the natural values of the site, and does this endanger the conservation of natural resources? What indicators are being used today to manage this process?**
- **Are the attributes of the landscape units correctly identified? How do the local regulations value these components and ensure their transmission with authenticity?**
- **How is urban sprawl endangering the heritage values of the Quebrada de Humahuaca cultural landscape?**

- **How does local migration alter the identity of the cultural landscape? Does such transformation make a contribution to the site or is it a factor of degradation?**

The lack of communication between different areas of government, regulations, and conservation objectives with regard to OUV is recognized as having an impact on territorial planning and land use. There is a dissociation between the land-use regulations of the different localities, the recognition of an evolving landscape of heritage value, and the conservation of its OUV. Therefore, the study of local regulations is needed to identify their impact on the different attributes of the World Heritage property.

Overall, this research priority aims to contribute to the elaboration of guidelines to complete and improve local regulations. These would be based on the identification of landscape units within the entire cultural landscape as heritage. In this way, communication among different governmental levels would be enhanced in the decision-making processes related to the management of the World Heritage property. Thus, an appropriate evolution of the cultural landscape could be ensured, preserving its OUV and its associated attributes.

III. Inputs needed and expected outputs

The Research–Practice Team identified potential projects, partnerships and events that could support the delivery of the proposed research agenda. In the case of funding, the practice group, comprised of the Secretary of Culture of the Province of Jujuy, relies on a budget that allows it to carry out these foreseen activities. Extra budgetary funds can also be requested. The research group, comprised of Buenos Aires and La Plata Universities, also has the possibility of securing funds for these activities in their respective research centres. Funds for the proposed field activities must be requested within the framework of specific calls from the universities.

Potential research projects identified by the Research–Practice Team are:

- Elaboration of a database to keep systematized information;
- Elaboration of indicators for tourism activities (accommodation, transportation, overnight stay ratio, etc.);
- Construction of a permanent visitor monitoring system;
- Guidelines for land-use regulation;
- Elaboration of a landscape impact monitoring system; and
- Elaboration of a system for registering landscape units.

Relevant strategic partnerships should include the following actors:

- Secretary of Culture of the Province of Jujuy;
- Secretary of Tourism of the Province of Jujuy;
- Tourism Observatory of the Secretary of Tourism of the Province of Jujuy;
- Secretary of Territorial Planning and Housing;
- Ministry of Environment and Climate Change;
- Secretary of Municipal Affairs;
- Hoteliers Chamber of Quebrada de Humahuaca;
- Chamber of Tourism Agencies of Jujuy;
- Association of Tourism Guides;
- Local Site Commissions;
- National University of Jujuy; and
- Experts from different national universities who work on the heritage place.

The planned events in support of delivering the research agenda include:

- Participatory information workshops with local communities and Indigenous groups;
- Participatory workshops with local and Indigenous communities to build strategies and methodologies, and the incorporation of inputs and local knowledge;
- Participatory workshops using the EoH Toolkit 2.0 to assess the effectiveness of the management system and as a methodological approach for the construction of a participatory management system;
- Participatory workshops to present and validate outputs from the research priorities identified;
- Presentation of the collaborative work methodology of the HPL process in congresses and/or events to promote further collaborative work between researchers and managers, and explore further lines of research necessary for the conservation of Quebrada de Humahuaca's OUV.

As a first step, the practice group held a regional workshop in October 2022, with the participation of national experts in the disciplinary fields included in the research agenda.

IV. Desired outcomes

As the outlined research priorities are interconnected and imply a significant amount of work to collect and interpret information, the Research–Practice Team agreed to start with Research Priority 1, focusing on the impacts of tourism, as this underpins many of the issues relevant to improving the management of the heritage place. At the same time, after completing the EOH 2.0 Tool 1 worksheets on values and attributes, the Tool 2 worksheets on the factors affecting the heritage place, and the Tool 4 worksheets on the mapping of actors for the entire heritage place, the Research–Practice Team considered it difficult to work across the entire site, given its spatial extent and complexity. Therefore, it was agreed that the research methodology would be tested through a pilot case study of the town of Tilcara and its surroundings (Figure 8.12). This choice reflects the fact that Tilcara is one of the two largest towns within the heritage place (Figure 8.13), the other being Humahuaca, with a significant amount of tourism infrastructure and, for that reason, is significantly impacted by tourism activities. The outcomes of this pilot project is expected to lead to the wider application of research in other areas within the heritage place as well as yield general conclusions on the impacts of tourism, which can be used to improve the relevant management instruments and mechanisms.

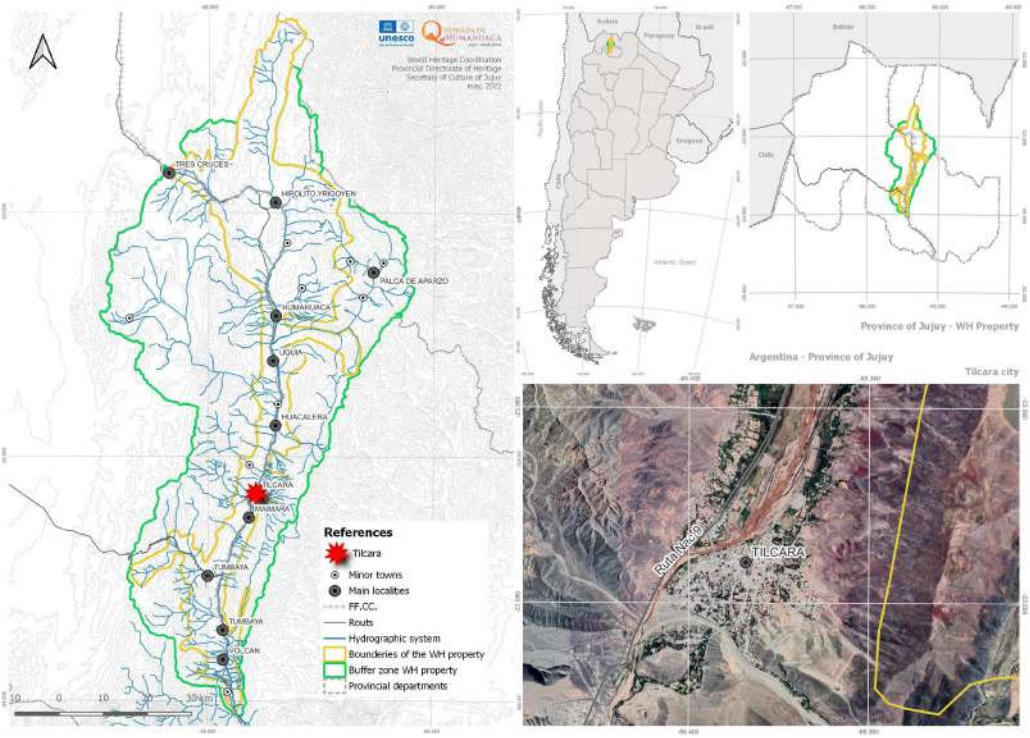


Figure 8.12 Location and aerial view of the town of Tilcara (Source: World Heritage Coordination, Quebrada de Humahuaca Provincial Management Unit, 2022).

Figure 8.13 Tilcara, street view (Source: Alfredo Conti, 2007).

The fundamental research questions that underpin Research Priority 1 were outlined in Section II. To develop the corresponding research activities, the Research–Practice Team agreed that a combination of quantitative and qualitative methodological approaches are necessary, estimating a period of 18 months will be required (Table 8.1). Given the interrelations among the three research priorities, the following proposed activities are also expected to advance some aspects of Research Priorities 2 and 3 over the indicated timeframes:

- Building the research team through invitation to other professionals and collaborators. The incorporation of sociologists, anthropologists, urban planners, and legal experts will be essential.
  Estimated time: one month.

- Elaboration and agreement of a transdisciplinary methodology to develop the research programme; and conformation of subgroups according to the topics to be researched.
  Estimated time: two months.

- Identification and selection of scientific literature related to the impact of tourism in the heritage place including the recording of specific practices and plans related to tourism, management and governance problems; land-use survey; and the collection of data on specific practices and plans related to the land uses in Tilcara, framed within the local territory.
  Estimated time: four months.

- Interviews with selected actors (e.g. provincial and local governments, tourism agencies, investors, urban planners, developers, etc.) on the basis of designed questionnaires to organize the interviews.
  Estimated time: three months.

- Design of questionnaires and surveys for interviews with representatives of local populations, visitors and tourists; and the identification of topics to be included and pilot tests of the final questionnaires.
  Estimated time: two months.

- Workshops with local communities based on the questionnaires and surveys, including surveying of visitors and tourists.
  Estimated time: five months.

- Interpretation of the collected information, identifying types and degrees of tourism impact at environmental, social and economic levels.
  Estimated time: four months.

- Elaboration of conclusions and recommendations to deal with tourism impacts, governance issues and land use, with dissemination among relevant authorities and local communities.
  Estimated time: three months.

Notably, the outlined research agenda and timeframe were developed based on the estimated time needed to carry out each activity. The ultimate start date(s) of each activity depends on the availability of human and financial resources, especially considering that a wider team will need to be established. Nevertheless, in the case of any delays, the proposed timeframe could be revised. Finally, the Research–Practice Team is conscious that one of the key challenges going forward will be the coordination of a large and varied research team, which will be overseen by the research and practice leaders.

Implementing the proposed research agenda will contribute to improving the management of the Quebrada de Humahuaca World Heritage Site through the provision of accurate information on the current situation and suitable approaches and methods to deal with the factors impacting on the site. The Research–Practice Team intends to disseminate the final report of the HPL process and associated research activities among relevant actors related to the site's management as well as the wider public. This will ensure that the outcomes can be used not only by managers but also by researchers. Given that Quebrada de Humahuaca's management plan is in process of being updated, the Research–Practice Team also proposes that this research agenda is included within this planning document, in the section corresponding to strategies and programmes.

Landscape of Quebrada de Humahuaca near Uquía, Argentina.
Image by Bernard Gagnon (2018) via Wikimedia Commons. Creative Commons Attribution-Share Alike 4.0.
Original image cropped for design purposes.

References

Almirón, A., Bertoncello, R. & Troncoso, C. 2006. Turismo, patrimonio y territorio. Una discusión de sus relaciones a partir de casos de Argentina. Estudios y Perspectivas en Turismo, 16(2): 101–124.

Álvarez, M. & Sammartino, G. 2009. Empanadas, tamales y carpaccio de llama: Patrimonio alimentario y turismo en la Quebrada de Humahuaca-Argentina. Estudios y perspectivas en turismo, 18(2): 161–175.

Belli, E. & Slavutsky, R. 2009. Tierra y producción simbólica: Las condiciones materiales del patrimonio. Avá, 14, available at: http://www.scielo.org.ar/scielo.php?script=sci_arttext&pid=S1851-16942009000100013.

Benedetti, A. 2010. Quebrada de Humahuaca: ¿hoya, unidad fisiográfica, región geográfica, ambiente o lugar? Estudio bibliográfico sobre la toponimia y el pensamiento geográfico regional argentino (siglos XIX y XX). Facultad de Arquitectura, Urbanismo y Diseño, Universidad Nacional de Mar del Plata, Registros, 7: 111–138.

Bertoncello, R. & Troncoso, C. 2003. El lugar y las redes: turismo en Quebrada de Humahuaca (Argentina). Huellas, 8: 11–38.

Braticevic, S.I. 2018. Recent real estate valorization in the Quebrada de Humahuaca. A case study of Tilcara, province of Jujuy, Argentina. Economía, Sociedad y Territorio, 18(56): 291–317.

Civila-Orellana, F.V. 2018. Entre iconos, polifonía, performance coplera y un alud: el paisaje textual del patrimonio en Tilcara y Volcán, Jujuy, Argentina. Apuntes: Revista de estudios sobre patrimonio cultural, 31(2).

Espósito, G. 2012. La polis colla. Tierra, cultura y política en la Quebrada de Humahuaca, Jujuy. Nuevo Mundo, Mundos Nuevos-EHESS, 11.

Eklund, K. 2012. La convención del patrimonio de la humanidad de 1972 de la Unesco: la emergencia, los valores y los efectos del patrimonio de la humanidad en la Quebrada de Humahuaca, Provincia de Jujuy, Argentina. Unpublished PhD thesis, Universidad del Salvador, Argentina.

García, G.R. & Madia, E.H. 2005. Quebrada de Humahuaca. Patrimonio de la Humanidad. Revista Habitat, 47: 74–75.

ICOMOS 2003. Evaluation report. Quebrada de Humahuaca, Argentina, No. 1116, available at https://whc.unesco.org/en/list/1116/documents/

José, N. & Pasin, S. 2005. El proceso de gestión de la Quebrada de Humahuaca Patrimonio – Mundial. El rol de la participación comunitaria en los procesos de Gestión. Asociación Argentina de Estudios de Administración Pública, Repensando las relaciones entre estado, democracia y desarrollo, Tucumán, AAEAP.

Lambaré, D.A., Vignale, N.D. & Pochettino, M.L. 2015. Las ferias y festivales regionales como instancia de reafirmación del patrimonio biocultural en la quebrada de Humahuaca (Jujuy, Argentina): el intercambio de duraznos (Prunus Persica). Gaia Scientia, 9(1): 1–9.

Ley Nacional 12665 1940 Creación de la Comisión Nacional de Museos y de Monumentos y Lugares Históricos, República Argentina.

Ley Provincial 3866 1982 Declarando propiedad de la Provincia, las ruinas, yacimientos y vestigios arqueológicos, paleontológicos, paleoantropológicos e históricos de interés científico existentes dentro del territorio de la Provincia de Jujuy, Provincia de Jujuy.

Ley Provincial 4466 1989 Ley Orgánica de Municipios, Provincia de Jujuy.

Ley Provincial 5206 2000 Designando como Paisaje Protegido la Quebrada de Humahuaca en toda su extensión, Provincia de Jujuy.

Ley Nacional 25743 2003 Protección del Patrimonio Arqueológico y Paleontológico, República Argentina.

Lopez, M., Acevedo, V. & Mancini, C. 2010. Miniaturas en la Fiesta/Feria de Santa Ana (Quebrada de Humahuaca, Jujuy, Argentina). In: E.N. Cruz, ed. Carnavales Fiestas y Ferias en el mundo andino de la Argentina, pp. 219–242, Purmamarka Ediciones.

Macchiaroli, L. 2015. Impactos socioculturales en la Quebrada de Humahuaca luego de su inscripción en la Lista del Patrimonio Mundial. Unpublished PhD thesis, Universidad Nacional de La Plata, Argentina.

Montenegro, M. & Aparicio, M.E. 2017. Patrimonio Cultural, Memoria Social y Turismo en Humahuaca, Jujuy, Argentina. Celebraciones en el Regimiento Carnavalero No44: "Pancho Villa". Difusiones, 13(13): 21–34.

Ochoa, P.A. & Otero, C. 2020. Usos productivos y rituales de las rutas incaicas del sector central de la Quebrada de Humahuaca (Jujuy, Argentina). Chungará (Arica), 52(3): 427–444.

Pelegrin, M. & Forgione, C.A. 2018. Ricardo Alancay, tejedor andino. Saber patrimonial en su dimensión laboral sustentable. Quebrada de Humahuaca, Jujuy, Argentina. Anuario de Investigación USAL, (4), available at: https://p3.usal.edu.ar/index.php/anuarioinvestigacion/article/view/4185.

Province of Jujuy 2002. Quebrada de Humahuaca. A Cultural Itinerary of 10,000 years. Nomination dossier for inscription on the UNESCO World Heritage List, available at: https://whc.unesco.org/uploads/nominations/1116.pdf.

Salleras, L. 2018. Disputas de sentido, conflictos y negociaciones en torno al patrimonio cultural y el desarrollo del turismo en la Quebrada de Humahuaca (Provincia de Jujuy, Argentina). Runa, 39(1): 119–120.

Solís, M. & Vilte, V. 2008. Maimará: Relación cultura-actividad agrícola. Quebrada de Humahuaca, Provincia de Jujuy. Contribuciones científicas GAEA, 20.

Stegmeijer, E., Veldpaus, L., & Janssen, J. 2021. A Research Agenda for Heritage Planning: the state of heritage planning in Europe, Geography, Planning and Tourism subject collection. Edward Elgar Publishing INC.

Troncoso, C.A. 2010. Patrimonio, turismo y lugar: selecciones, actores y lecturas en torno a la Quebrada de Humahuaca (Jujuy, Argentina) como Patrimonio de la Humanidad. Cuadernos de Turismo, 25: 207–227.

Troncoso, C.A. & Arzeno, M.B. 2012 Alimentos tradicionales andinos, turismo y lugar: definiendo la nueva geografía de la Quebrada de Humahuaca (Argentina). Revista de Geografía Norte Grande, 52: 71–90.

UNESCO World Heritage Committee 2013. Retrospective Statement of Outstanding Universal Value, Quebrada de Humahuaca, available at https://whc.unesco.org/en/list/1116

UNESCO World Heritage Centre 2021. Quebrada de Humahuaca (Argentina), State of Conservation Report, available at https://whc.unesco.org/en/soc/4176/

Vecslir, L., Potocko, A., & Tommei, C.I. 2011. Gráficas Interpretativas In: A. Novick, A, ed. Las Transformaciones Del Territorio. Mapas, Patrimonio y Lugares de La Quebrada de Humahuaca, Seminario de Crítica, pp. 11–16. Instituto de Arte Latinoamericano, Buenos Aires, Argentina.

Vecslir, L., Tommei, C.I., Mancini, C.E., & Noceti, I. 2013. Lecturas territoriales: nuevas cartografías interpretativas de la Quebrada de Humahuaca. Apuntes: Revista de Estudios sobre Patrimonio Cultural. Journal of Cultural Heritage Studies 26: 114–137.

Vilte, S., Borja, M.A.G. & Sanz, G.L. 2010. Los modelos de gestión en ciudades patrimonio de la humanidad: un estudio comparativo entre España y el norte de Argentina'. In: G. Ferrari, J.M.M. Lorenzo, J.M. Jiménez & M.V. Vargas, eds. Investigaciones, métodos y análisis del turismo. Septem ediciones, pp. 173–184. Septem ediciones.

Rjukan-Notodden Industrial Heritage site

Norway

Chapter 9

Understanding Social and Environmental Change Rjukan-Notodden Industrial Heritage site Norway

Juliana Strogan[1], Steffen Fagernes Johannessen[2], Inger Birkeland[2], Vicky Mikalsen[3], and Audhild Kennedy[2]

[1] Vestfold and Telemark County Council
[2] University of Southeast Norway
[3] Notodden Municipality

I. Background

1. Brief description of the World Heritage property

Rjukan-Notodden Industrial Heritage site was inscribed on the UNESCO World Heritage List in 2015. The property is located in the southern part of Norway and is the most recent World Heritage inscription in the country. The approximately 92-km long World Heritage site spans three municipalities in Vestfold and Telemark County. The long and narrow shape of the site is due to a historical focus on early 20th century developments in hydro-powered industrial production. Following the watercourse from the Lake Møsvatn reservoir, which is located over 900 m above sea level on the Hardangervidda interior highland plateau in Vinje municipality, the site stretches in the direction of Norway's east coast and includes streams, lakes, waterfalls, pipes and canals through the steep river valley of Tinn municipality down to Lake Heddal in the municipality of Notodden. Despite the historic significance of the property's natural surroundings, the Rjukan-Notodden Industrial Heritage site is officially categorized as a cultural World Heritage property.

The World Heritage attributes comprise, amongst other elements, 97 representative objects that relate to rapid industrial developments in the first half of the 20th century. The vast majority of these have been properties of the Norsk Hydro company, which specialized in the production of artificial fertilizer. Central to the site are large hydroelectric power plants, tunnel systems, dams and turbines, process-industry factories and production buildings, railway stations, lines of communication and related infrastructure including train-tracks and ferries, as well as company town housing, city buildings, parks and market squares. The elements are enclosed in a dramatic natural landscape, with a specific topography which enabled the production of large amounts of electricity to supply the industrial production systems.

The extensive industrial expansion into the remote Norwegian interior, represented by the inscribed area shown on the map below (Figure 9.1), commenced with financial speculation of waterfalls at a time of international hydropower technology developments. Engineer-educated capitalists procured lands and waterfalls and founded Norsk Hydro in 1905. Backed by Swedish and French financial institutions, the company developed and made use of new technologies for extracting nitrogen from the air, a key ingredient to fertilizer production. After building a first production line in Notodden, to prove profitability and secure investment from international actors as Bank Paribas and the Swedish Wallenberg Brothers, the company management then proceeded to develop a large-scale hydro-powered processing industry specialising in energy-intensive artificial fertilizer products, which, due do population growth, were in high demand on the world market. Large processing factories were constructed in the immediate vicinity of the power plants. To transport large quantities of end products from the Norwegian interior to the coast, considerable investments in railway infrastructure were also required. Moreover, to recruit a stable workforce to the sparsely populated area, Norsk Hydro constructed and facilitated high-standard

housing, educational facilities, hospitals and other welfare initiatives including an electric cable car enabling workers in the steep and shaded valley of Rjukan to experience wintertime sunlight. While Norsk Hydro has sold off much of its property and focused on products other than fertilizer after a demerger in 2004, the multi-national company remains an important proprietor and energy producer within the World Heritage site. As the remaining infrastructure reveals today, throughout the 20th century, the hydro-powered fertilizer industry underwent considerable changes before the local processing industry was terminated in the early 1990s (Taugbøl et al., 2014).

The Outstanding Universal Value (OUV) of the Rjukan-Notodden Industrial Heritage site is grounded in the development and application of international science and research in the fields of hydroelectricity, nitrogen extraction, fertilizer production and social innovation. The property demonstrates how science-based innovations were developed for a major hydro-powered processing industry, producing artificial fertilizer to meet growing demands on the world market. This second industrial revolution endeavour – of which the property is considered an outstanding example – included social innovations in workforce provisions that were inspired by international trends and new planning ideas. While demonstrating important transnational exchanges of ideas propelling early 20th century technological developments, the property also shows the dependency of the industry on the local landscape and topography for sufficient power to turn the highly energy intensive fertilizer-manufacturing process into an important new global industry. As stated on UNESCOs official website, the site's OUV is recognized under UNESCO criterion (ii) and (iv), as follows:

- Criterion (ii): Rjukan-Notodden Industrial Heritage Site manifests an exceptional combination of industrial themes and assets tied to the landscape, which exhibit an important exchange on technological development in the early 20th century.

- Criterion (iv): The technological ensemble of Rjukan-Notodden comprising dams, tunnels, pipes, power plants, power lines, factory areas and equipment, the company towns, railway lines and ferry service, located in a landscape where the natural topography enabled hydroelectricity to be generated in the necessary large amounts stands out as an example of new global industry in the early 20th century.

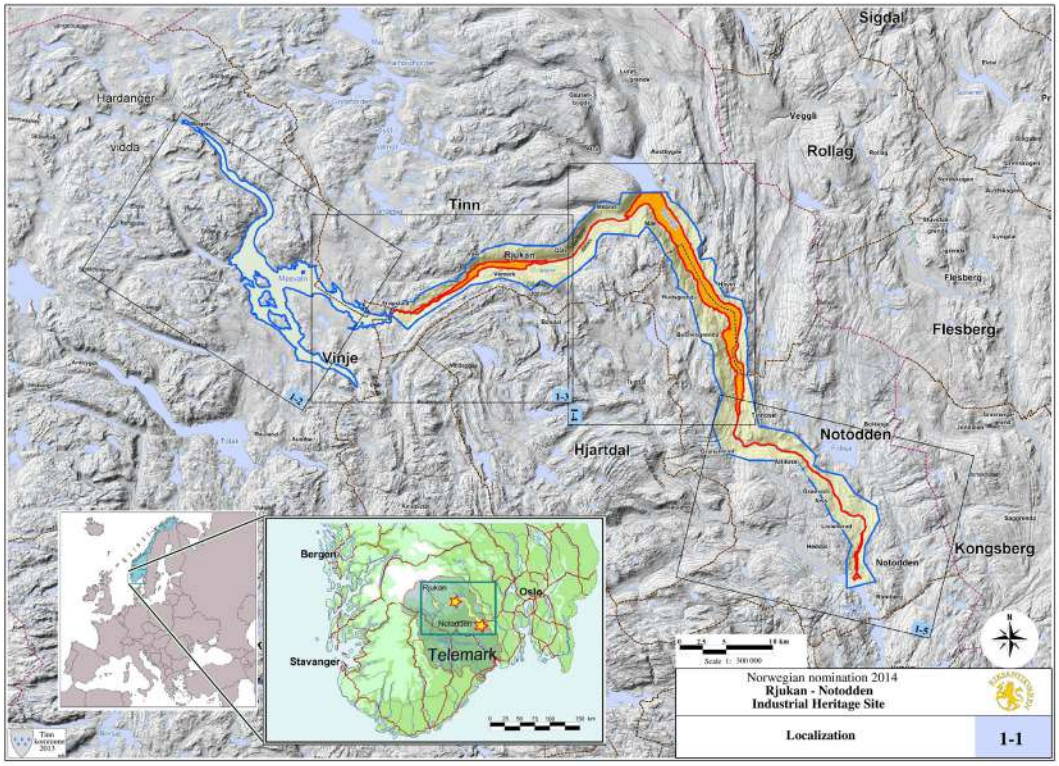


Figure 9.1 Map of Rjukan-Notodden Industrial Heritage site with core zone in red and orange and buffer zone in blue (Source: Svein Olav Hagen in Nomination file for Rjukan-Notodden Industrial Heritage Site, Taugbøl et. al., 2014).

Although the OUV of the Rjukan-Notodden Industrial Heritage site is clearly defined, there are important discrepancies between the OUV and local values on the ground. Less surprisingly, the recognized OUV does not fully correspond with how historical places and their variety of material objects are understood, and hence valued, by actors within and around the World Heritage place. Inconsistencies between OUV and how World Heritage is valued on the ground has been studied elsewhere (e.g. Brumann and Berliner, 2016). Within the Rjukan-Notodden Industrial Heritage site, research has already shown that what is communicated as valuable elements of this World Heritage Site is contested, and that local emphasis and interpretations often deviate from the OUV emphasis on global trends and transnational communication. Crucially, local meanings and values are not fixed but shift and change along with wider economic and socio-political contexts (Johannessen, 2019). As Birkeland (2015, 2017) has demonstrated, this is also the case at a national level, whereby, in Norwegian public discourse, these mono-industrial areas were transformed from modern places defining the future to places lacking a future when threatened by deindustrialization less than a century later. With strong parallels to how Norsk Hydro has presented itself as a key contributor to developing the modern Norwegian nation, a significant number of local people continue to stress that the World Heritage property reveals how Norway became a wealthy welfare state. Moreover, different people tend to highlight different historical phenomena, such as labour union achievements, the introduction of important laws and regulations, and the role and achievements of educated individuals, including scientists, architects, engineers and entrepreneurs.

A growing tourist sector also underpins economic interest in profiling the role of the site during the Second World War, thus drawing attention to values on the margins of the official OUV as recognized by UNESCO and many times misleading the general

public into what is in fact designated as World Heritage. At the same time, some suggest that promoting the property's industrial and wartime history overshadows important past activities beyond the mainstream industrial narrative, such as pre-industrial forestry, farming culture, and local industries other than Norsk Hydro. Moreover, not all people embrace, let alone identify with, the local industrial heritage as a success story, because the expanding hydro-powered industry had severe environmental and economic impacts on, for instance, farmers and farmland on the settlement of Møsstrond around Lake Møsvatn, on the flat highland plateau (Figure 9.2). For future research aiming to support sustainable management, it is important to be aware of such discrepancies between OUV and local values; respect for diversity in local values may be crucial for long-term sustainable preservation.

Figure 9.2 Dammed area of Lake Møsvatn, where the surrounding farms of Møsstrond lost several meters of fertile land to the rising waters. (Source: Per Berntsen)

2. Main management issues

At the outset of the Heritage Place Lab (HPL) process, the Research–Practice Team identified eleven central management issues. These included "living site", "complexity of stakeholders", "trans-municipal organisation", the considerable "costs of industrial heritage conservation", the question of "re-use versus legal protection", "development pressure", "disappearing knowledge and skills", and with the course of time, "community engagement", "social inclusive development", and "anchoring of the Management Plan". Given some degree of overlap between these themes, these were subsequently grouped under three broader challenges:

1. How can socially inclusive development and community engagement be achieved in a complex living site that includes a variety of stakeholders across different municipalities with different historical starting points in the site's formation?

2. How can the fact that important intangible dimensions of the heritage site, such as skills and knowledge, that are rapidly disappearing due to the discontinuation of the original industrial production and ageing of local people possessing first-hand experiences be addressed?

3. How can the World Heritage site be best managed, and the Management Plan implemented in the face of conflict of interests, development pressures and high costs, while also striking a good balance between, among other things, re-use and legal protection?

These issues are all highly relevant for the Rjukan-Notodden Industrial Heritage site. Perhaps most notably, there is a need to address the social facets of this heritage. Through the HPL initiative, by means of tools, as the Enhancing our Heritage toolkit and other resources provided by the organizers along with valuable feedback from international peers, these identified management challenges were re-examined in detail. An important step en route to a more comprehensive research agenda for the World Heritage place was a more holistic reframing of the identified management issues. While the majority of these management challenges remain important in the developed research agenda outlined in Section II, the effects and risks related to environmental change are included (as Research Priority 3) as a result of the HPL process.

It is important to note here that Research Priorities 1, 2 and 3 as outlined in Section II are to be understood as areas of research; these are not research projects or questions, but broader research fields open to the development of different and more concrete research projects. These priorities are, in other words, wider fields of research within which more in-depth knowledge and understanding is needed and, in line with the HPL objectives, need to be addressed for the purpose of improving sustainable World Heritage management of the Rjukan-Notodden Industrial Heritage site.

The Vemork power plant in Rjukan.

II. Research Agenda

1. Introduction

No prior research agenda exists for the Rjukan-Notodden Industrial Heritage site; however, since before the property was inscribed on the World Heritage List, researchers have paid attention to the area's particular history, or what Fjågesund (2007) describes as a "multiple layered past". The site benefits from much archived historical data, including photographic material, maps, planning and technical drawings, documents, objects, papers, and audio-visual materials, some of which kept at the Norwegian Industrial Workers Museum. As the rather extensive nomination dossier demonstrates (Taugbøl et al., 2014), considerable literature in the field of history already exists. It is worth mentioning, however, that a considerable portion of this material was commissioned by the Norsk Hydro company itself, and that the rather biased company founder's autobiography (Eyde, 1956) remains a much-favoured source.

Since the awarding of World Heritage status in 2015, a growing number of researchers have shown interest in exploring heritage-related issues within the property, although the management of the site in the context of World Heritage has received little research attention. That said, the history of the site is very much relevant to changing management practices, which currently involves the management of two large industrial complexes (Figure 9.3), whose buildings and structures are no longer used for what they were originally designed. The original management system of Norsk Hydro's industrial and satellite assets, such as the company towns or the transportation system, although very effective, as all successful industrial endeavour need to be, was based on a centralized decision-making structure at the service of one utmost goal, the profitability of the industry. With the transfer of the industrial production to other more profitable localities, as a result of a management measure in itself, and consequent discontinuation of the industry in Notodden and Rjukan, ownership of Hydro's assets were gradually distributed between a wide range of new public and private owners, originating the complex landscape of stakeholders and rights-holders we find today (Figure 9.4). As such, long-term conservation to protect the OUV of the property will require clever management grounded in values and practices quite different from those characteristic of the past capitalist management of the rapidly expanding and ever-changing hydro-powered processing industry.

Figure 9.3 Hydropark, the industrial park of Notodden which, despite changes in activities, has conserved it's buildings, the industry's overall processing structures and it's architectural landscape. (Source: Per Berntsen)

Figure 9.4 Overview of the company town of Rjukan, which is now owned by thousands of different stakeholders. (Source: Per Berntsen)

This research agenda is foremost concerned with useful research for the purpose of good and sustainable management. This does not mean that research in line with this agenda is limited to the field of management studies. Grounded research-based information and scientific analyses of the World Heritage place, its diverse and changing population, and probable future threats within the wider environment, are critical to strategic work and decision-making processes for the challenging times ahead. Against this backdrop, the research agenda highlights three research priorities. The first priority addresses different but interconnected intangible dimensions of the site, focusing on disappearing first-hand skills and knowledge among the elder generation, and to understand local values held by different people and groups who, in times to come, are likely to be affected by, and even involved in handling, World

Heritage limitations, opportunities and responsibilities. The second priority concerns the current World Heritage management model and organisational structure. During the HPL process, the first-hand experiences of the Research–Practice Team members of the site's decentralized and complex World Heritage management model revealed that scientific analysis of decision-making forums and processes will likely lead to important improvements, especially if analyses are supported by empirical evidence. Third, the agenda prioritizes research on the effects (including social effects) of environmental change, notably more frequent extreme weather events. As the heritage place is geographically defined by flows of water, research on the potential effects of heavy rain, periods of reduced precipitation, and more frequent and extreme fluctuations in temperature is considered of central importance for preserving the World Heritage property. The last factor, for example, extreme fluctuations in temperature, is important to understand deeper as it is central to air mass movements and can be at the origin of severe winds and storms. This factor was, for instance, likely to be at the origin of the extreme winds that wiped the Westfjord Valley (Vestfjorddalen) in November 2021, damaging the two railway ferries and related infrastructure, all valuable attributes to the OUV of the property (figure 9.5).

Figure 9.5 Damage to the mooring structures of the railway ferries at the wharf facility of Mæl, a consequence of the extreme weather events of 2021. (Source: Norsk Industriarbeidermuseum)

2. Research priorities

1

Research Priority 1
Local values, multivocality and knowledge transfer

This research priority was, in part, identified during the process of applying for participation in the HPL pilot phase. Research–Practice Team members analysed the fact that the Rjukan-Notodden Industrial Heritage site stretches through a considerable geographical area. Thus, the property spans a varied topography where the last generations of people from different backgrounds have been affected in different ways, both by earlier industrial developments and, more recently, the processes of "heritagization" of the site. This local plurality should not only be considered a challenge to World Heritage management, but also a starting point, and more importantly, a resource for sustainable and inclusive site management. A precondition for securing local anchorage and long-term support for World Heritage conservation, management plans, and development in and around the World Heritage place is that variations in local values and meanings are properly understood and taken into account. To achieve sustainable management, it is important that local communities are heard and given a voice. This can be particularly important in living sites where many residents and former workers, more than just affected in one way or the other by the World Heritage status, can be said to qualify as unofficial, or even official, specialists on the closed-down factories, which have been transformed into World Heritage attributes.

In this context, there is a need for more research on local understandings, meanings and values among different groups and sections of the local population. It is important to note that as heritage responsibilities pass on to younger generations over time, opportunities for securing further historical knowledge about the site, skills, social relations, and the meanings and uses of objects and landscapes around the World Heritage area will narrow in the near future. There is, accordingly, a sense of urgency connected to questions of disappearing knowledge and skills. Provided that public data is stored in line with national regulations, valuable data can still be collected and made available from first-hand sources. But given the private nature of Norsk Hydro as a company, securing access to data present in its archives is dependent on host organizations that take in private archival material as the National Archives of Norway, the Norwegian Labour Movement Archives and Library, or museums such as the Norwegian Industrial Workers Museum among others. This also means that the safeguarding and access to this data is highly dependent on the financial health of these institutions. In terms of conservation, however, facilitating the transfer of knowledge is a sustainable way of dealing with these matters. Yet, the transfer of knowledge is not a one-way process. Several retired Norsk Hydro employees now undertake voluntary work

to maintain the historic infrastructure, but their voluntary organisations suffer from a lack of recruitment among the younger generation (Figure 9.6). To better understand the younger generation, research on their motivations and what the place means to them would be highly beneficial. One can hardly assume that the OUV of the property is embraced, or even recognized, in the same way by industrial workers once employed and laid-off by the company as by young people growing up among large, non-functioning industrial structures. For management to deal with the transfer of skills and knowledge, the receiving end of that knowledge also needs to be understood.

Figure 9.6 The volunteer organisation Friends of the Rjukan Railway receive a recognition prize from the Directorate for Cultural Heritage in 2021. (Source: Juliana Strogan)]

The question of diverging local values should not be restricted to the variable of age only. As previously noted, the heritage place is extensive and much defined by a varied topography; the site spans different municipalities, towns and suburbs, and the area has long since been marked by significant differences in cultural, social and economic organisation. Accordingly, the 20th century industrial expansions affected local communities differently. It is important to understand how memories of the ways the industry expanded, and how these expansions were dealt with, affect how different local communities regard and value the World Heritage site today. For example, whilst contemporary World Heritage commemorations in the central parts of the site celebrate the company's industrial developments, a number of families on the outskirts still live with the less favourable consequences of extensive damming (Kostveit, 2000). Research to uncover and analyse how past initiatives affect local communities, and how this informs contemporary understandings, values and attitudes of the area's transformations into a celebrated World Heritage site and destination, would contribute to raising inclusive historical sensitivity, empathy and awareness. Better understanding of the variations in local perspectives can benefit site management, not only for purposes of knowledge transfer, but also in decision-making processes. Such research may also enrich the site, adding both deeper understandings

as well as new layers of meaning to the property. Most importantly, this is a matter of socio-political inclusion. In this sense, too, understanding nexuses, gaps and overlaps between diverse local values and the official OUV are important for sustainable conservation (Figure 9.7, 9.8 and 9.9).

Figures 9.7, 9.8 and 9.9

The Rjukan-hydrant has been a strong social identity marker at the company town of Rjukan and are highly valued by its inhabitants. Despite engagement from the local community the hydrants, without a formal individual heritage classification, gradually disappear from the local urban landscape. (Sources 9.7 and 9.8: Bjørn Iversen. Source 9.9: Juliana Strogan)

Accordingly, research into the multivocality of the heritage place forms an important early step towards improving sustainability with regard to heritage management, democratic participation and legitimacy, as well as preserving this relatively young World Heritage site. Research can, thus, contribute to improving the basis for informed decision-making and enhanced preservation through bettered social inclusion. As previously noted, the Rjukan-Notodden Industrial Heritage site is also subject to development pressures of different kinds, yet the construction of roads, cabins and other tourist-related facilities are not initiated independently of socio-economic and political factors, such as employment and rural out-migration. For management to deal with such pressures in sustainable ways, understanding variations in local values across variables that include, but are not limited to, age is important.

Research Priority 2
Management system and implications for sustainable heritage

The Research–Practice Team participating in the HPL process consisted of four researchers and four managers of the Rjukan-Notodden Industrial heritage site. Of the latter, three managers represented one World Heritage municipality each, while the fourth held the property's overarching site responsibility at the county level. These managers are all members of the Rjukan-Notodden World Heritage Council, a body central to how the World Heritage site is being managed. The council holds no decision-making authority but functions as a consensus-based collaborative body with a mandate to advise local and regional government decisions, as well as delivering statements about formal positions from the site regarding national hearings and other matters. Representatives of these governments, including heads of opposition, are also council members. Observers to the council are the Directorate for Cultural Heritage in Norway, the Regional Political Committee for Culture, the World Heritage Visitor Centre at the Norwegian Industrial Workers Museum, and the University of South-East Norway (Figure 9.10).

Figure 9.10 Official visit of the Rjukan-Notodden World Heritage Council to the industrial park of Rjukan in June 2023. (Source: Juliana Strogan)

During the collaborative HPL process, the Research–Practice Team members held a special online meeting to discuss preliminary suggestions of research areas for improving sustainable World Heritage management. These debates revealed differences among team members with regard to their experiences of the disparity between World Heritage management on the one hand, and local activities, politics and people on the ground on the other. A more fundamental question then came to surface – how management of the World Heritage site was organized. Central practice group members highlighted that roles and responsibilities are less than clear; they also reported that being employed within local bureaucracies, while safeguarding World Heritage and assisting in local development, was often hard to balance. This apparently had to do with the site's complex management model, intimately connected to local and regional governments and bureaucracies. The management structure seeks to bridge and facilitate communication across municipalities and the regional government. On different levels within this structure, however, managers are equipped with different kinds of resources; they face different expectations, in part due to unclear roles, and become subject to political influences as municipality employees. To handle and negotiate a multitude of (often conflicting) interests and influences on the ground in line with central World Heritage authorities and guidelines is highly complex, especially when municipal-level managers, who represent the street-level bureaucracy (Lipsky, 1971), experience their roles within complex decision-making regimes.

Accordingly, there is a need for further research on the established structure for organizing World Heritage management in this site and its implications for sustainable heritage around the World Heritage place. Since Rjukan-Notodden Industrial Heritage was included in the UNESCO World Heritage List less than a decade ago, members and observers to the World Heritage Council have acquired important experiences regarding management challenges and heritage development. To benefit future management, it is recommended that research on this topic be undertaken in due course. Core early generation managers and board members are in the process of retiring or shifting jobs, and their first-hand experiences undoubtedly form valuable data for site management improvements. This agenda recommends research into networks and structures of management relations, and also key stakeholders' understandings and expectations of these roles. Stakeholders should include (but not be limited to) local and regional politicians, museums, people and organisations in the voluntary sector, rights-holders, local businesses, and representatives of the creative industries. Most importantly, research should inquire and analyse how heritage place managers experience their own roles and responsibilities vis-à-vis external expectations and pressures in the field, and their positions within the wider World Heritage management structure. Research should address questions of access to resources or capital of different forms, and map how positions are subjected to diverse pressures and influences that both limit and enable management work.

Preferably, research should expose and analyse good practice examples of balancing day-to-day management within municipalities and inter- or trans-municipal cooperation with the wider World Heritage team of managers.

To research these matters, it is important to study how decisions are made in practice. What influence do stakeholders have in the processes leading up to important decisions? What role and power does the Rjukan-Notodden World Heritage Council actually possess when it comes to deciding on issues with real impacts on the ground? Understanding how the World Heritage Council functions in situations where members' interests are in conflict would no doubt be valuable for future management improvements. Beyond a simple mapping of appointed officials and channels of financial support, research should, in other words, consider de facto influences and limitations as experienced by managers at different levels within the organisation. Cross-pressures and influences are also connected to informal expectations, and how this affects everyday management practices is important to understand. Research should, therefore, consider what role the chosen model or structure of management plays in such processes, and identify challenges, opportunities, and good practice examples for critical improvements and/or revisions of the model itself.

3 Research Priority 3
Risks of environmental change on the World Heritage place and peoples

This research priority was developed during the HPL process, as members were identifying factors and potential threats to the World Heritage place. This topic was, in part, identified as a factor in the original nomination dossier, but its relevance has increased over the last few years. In view of expected environmental challenges alongside politicized economic transformations that follow tighter integration to the European energy market, there is a need for further research on the risks and impacts of environmental change on the Rjukan-Notodden Industrial Heritage site.

The Rjukan-Notodden Industrial Heritage site is located in a particular topographic setting (Figure 9.11), defined by dammed, falling and flowing water, hydro-engineering and capitalization. As disastrous effects of heavy rain recently demonstrated in comparable topographies in the German Ahrthal in 2021, more extreme weather conditions can lead to severe destruction in river valleys and around lakes and waterways; "Most catastrophes related to global warming have to do with water", wrote Anders Dunker (2022). In this respect, the heritage place is particularly vulnerable to climate change. The effects of heavy rain may be accentuated in combination with the rapid melting of snow and ice, also increasing risks of avalanches and falling rocks in the steep terrain that rise above populated areas. Longer periods of dry weather, too, can impact the World Heritage place. Notably, healthy hillside vegetation has preventive effects on the risk of flood, avalanche and landslide. An increasing risk of fire is

also a factor to consider, as much of the World Heritage property consists of wooden structures. Furthermore, in many areas, often close to the river, buildings are erected on industrial waste material (locally called "subbus"), and understanding how these substances will react to increasing and, perhaps, shifting levels of water is important. Research should not neglect the role of hydropower technologies and installations, given that the main watercourses are heavily regulated and monitored and damming responds to higher levels of control. Nevertheless, more extreme weather events combined with tighter integration with the European energy-market may affect predictability in seasonal cycles of high and low levels of magazine water. In exploring these phenomena, market mechanisms should be included in the equation as fluctuations in international energy prices can affect hydropower-production practices.

Figure 9.11 Aerial perspective of the World Heritage property in the Rjukan area, where the buffer zone is limited by the highest topographic points of the surrounding natural landscape. (Source: Per Berntsen)

The Research–Practice Team establishes that research under this priority requires a broad and holistic approach that considers the nexus between environmental change and social change. Exploring what impacts of expected environmental change may have on populations in different parts of the World Heritage place is also important. Environmental pressures related to further developments in, for instance, the tourist sector also need to be explored.

III. Inputs Needed and Expected Outputs

Inputs of different kinds are necessary to support the delivery of the research agenda outlined in Section II. The practice-led agenda, which is an outcome of collaborations between researchers and World Heritage management, would benefit from being linked to policy documents such as development or management plans. Some of

the competencies needed are not covered by expertise within the Research–Practice Team. If financial resources are made available, expertise in most of the fields needed to implement the agenda are accessible within and beyond the region. Collaboration across disciplines and between different institutions is recommended, including universities or other research institutions, museums, county, and municipalities as well as the Norwegian Water Resources and Energy Directorate.

For Research Priority 1, there is a need for competencies within the fields of social science and the humanities. Research should be developed in close dialogue with people in these fields. Most urgent are the voices of the older generation, who are still around to explain and demonstrate how the complex industry functioned, what industrial development has meant to families living and working in the area, and the socio-economic consequences of these changes. Such data collection can also have museal value as it contributes to the building of a more authentic narrative and could be undertaken by museums, possibly in cooperation with students and/or staff from universities or other research centres. Studies on multivocality are better addressed by established researchers or recruited Ph.D. students, possibly through private or public sector doctoral collaborations in part supported by the Norwegian Research Council.

To address Research Priority 2, there is a need for competencies within the social sciences and management studies, and academics in the field of economy could also benefit research under this priority. A comparative approach is much preferred to identify the strengths and weaknesses in the particular way the World Heritage management is currently organized. Thus, it is advised that a comparative approach is extended to cases beyond Norway, since management networks are bridged or bonded at the national level. There is much to gain by initiating a study in this field as soon as possible, since positions and networks established already through the process of nomination are challenged by the turnover and retirement of key personnel.

Research Priority 3 requires natural science competencies, including geology. Scientists with a background in environmental studies, risk management and finance or economics would be beneficial. The Norwegian Water Resources and Energy Directorate could provide both human resources as well as important data on developments within the field of water resource management. It is recommended that this research is complemented by social scientists, possibly from the field of human and physical geography, offering a more holistic analysis of the identified factors. In exploring this priority, collaboration with other World Heritage places in the Nordic region could be beneficial for both financial and comparative reasons.

IV. Desired Outcomes

Addressing all three research priorities outlined in this agenda would improve management of the World Heritage place. The Rjukan Notodden Industrial Heritage site is still a young World Heritage site and, therefore, a better overview and understanding of local variations and values within the area is needed to underpin qualified decision-making. Moreover, to ensure sustainable preservation, management needs to be inclusive and forthcoming, something that preconditions a solid understanding of the

diversities with the heritage place. It is also important that the way a World Heritage property is organized does not complicate or get in the way of exercising management. Eight years after the site was inscribed in the UNESCO World Heritage List, important experience with the selected organizational structure of World Heritage management should prove valuable when analysing the pros and cons of the current situation, which is a matter identified as challenging to managers in the practice field. Finally, World Heritage management needs to engage with long-term perspectives; scrutinizing the possible impacts of environmental change on the World Heritage place, such as more frequent extreme weather events, is a way to prepare management for the times ahead as well as enable and give time to implement what research finds necessary to protect attributes, values and peoples.

The Research–Practice Team recommends that this research agenda be integrated into the management plan of the World Heritage site. Notably, the timeline for implementing the research agenda will depend on available funding. Considering the urgent nature of some of the issues identified, it is recommended that much of the research be conducted within the next five years. This would also enable recruitment and finalisation of Ph.D. projects within the relevant fields. Most of the required research would benefit greatly from collaborations between different institutions, something this research agenda highly recommends. Such collaborations could also benefit future additional heritage place research if institutions make use of the research agenda to organize collaborations into more durable structures or networks for continued exchanges between practice and research.

Overview of lake Tinn with the rail ferry D/F Ammonia and related transportation infrastructure.
Copyright: Guri Dahl. File name: NVA_RN-0269_GD.
Original image cropped for design purposes.

References

Andersen, K.G. 2005. Flaggskip i fremmed eie: Hydro 1905–1945, Oslo, Pax.

Birkeland, I. 2015. The potential space for cultural sustainability: Place narratives and place-heritage in Rjukan (Norway). In: E. Auclair & G. Fairclough, eds. Theory and Practice in Heritage and Sustainability, pp. 161–175. Routledge.

Birkeland, I. 2017. Making sense of the future: Valuing industrial heritage in the Anthropocene. Future Anterior: Journal of Historic Preservation, History, Theory, and Criticism, 14(2): 61–70.

Brumann, C. & Berliner, D., eds. 2016. World heritage on the ground: ethnographic perspectives, Vol. 28, Berghahn Books.

Dunker, A. 2022. Vannets visdom i storflommens tid. Le Monde Diplomatique, June 2022.
Eyde, S. 1956. Mitt liv og mitt livsverk. Oslo, S. Eyde.

Fjågesund, P. 2007. From Sacred Scenery to Nuclear Nightmare: Rjukan and Its Myths. In: K. Klitgaard Povlsen, ed. Northbound: Travels, Encounters, and Constructions 1700-1830, pp. 377–397. Aarhus, Danmark, Aarhus University Press.

Johannessen, S.F. 2019. Demokratisk industriarv? Kulturarvifisering og identitet i øvre Telemarks verdensarvområde. Tidsskrift for Kulturforskning, 2: 57–81.

Kostveit, Ø. 2000. Fjellbygdi ved Møsvatn: historiske glimt. Oslo, Landbruksforlaget.
Lipsky, M. 1971. Street-level bureaucracy and the analysis of urban reform. Urban Affairs Quarterly, 6: 391–409.

Taugbøl, T., Andersen, E.M., Grønn, U. & Moen, B.F. 2014. Rjukan-Notodden industriarv. Nominasjon til Unescos verdensarvliste. Notodden, Telemark Trykk AS.

Major flood in Rjukan, 1927.
Credits: Collection Kaja Pedersen/NIA.
Original image cropped for design purposes.

Conclusions

The Heritage Place Lab initiative was created to foster a closer connection between researchers and managers working on World Heritage sites. The aim of the pilot phase (2021-2022) was to test a model and method for collaboration, where researchers and managers could together, elaborate a research agenda that could support the management of the sites. Collaboratively, researchers and managers identified management issues where addressing research gaps could support a better decision-making and contribute to the effective management of properties.

The pilot phase counted with eight Research-Practice Teams, composed of professionals working on academic and research institutions and on management authorities in charge of World Heritage properties in four UNESCO regions: Asante Traditional Buildings in Ghana, Great Zimbabwe in Zimbabwe, Historic Sanctuary of Machu Picchu in Peru, Jaipur City, Rajasthan in India, La Antigua Guatemala in Guatemala, La Quebrada de Humahuaca in Argentina, Okavango Delta in Botswana, and Rjukan-Notodden Industrial Heritage Site in Norway. The diversity of sites, both in terms of geographic distribution and typology, allowed for addressing a wide range of factors affecting World Heritage properties, and also, to find common trends and common challenges.

The Heritage Place Lab worked with the Enhancing Our Heritage Toolkit 2.0 during its development phase, which is a new resource for managers to self-evaluate their management systems' effectiveness that was eventually published in 2023. The use of the tools provided with this methodology allowed for teams to work collaboratively and identify together the main management issues that can be addressed through research. Research priorities have been presented in the research agendas drafted by the Research-Practice Teams in this volume.

The main issues identified include the lack of management plans and unclear governance arrangements which are impacting in the effectiveness of the management systems in place. Furthermore, a lack of clear property boundaries or buffer zones, and the diversity of managing authorities without clear mechanisms for coordination, were revealed as important issues in the management of World Heritage. A recurrent topic found in all the sites was the need to reconcile the recognition of Outstanding Universal Value and the recognition and protection of local values. In many cases, these local values are also related to intangible cultural heritage, including practices, that may have not been recognised in the Statements of Outstanding Universal Value of the properties when inscribed, but that are fundamental for the well-being of local communities inhabiting or living in the surroundings of World Heritage places. The need to investigate further local values, Indigenous and traditional knowledge systems connected to these, and their consideration in the management of World Heritage, is present in several of the research agendas proposed in this volume. The need to investigate further in innovative governance arrangements, which are inclusive of

local voices as well as diverse sectors, including natural and cultural heritage is also frequently cited. To delve into research that can support the development of integrated planning instruments has been highlighted as a general theme, and particular themes such as tourism management, human-wildlife conflict, among other specific areas of research, have been explored by the Research-Practice Teams. The need to include other than heritage researchers to investigate on these matters was also pointed out, as well as the need to work with an interdisciplinary approach. Environmental pressures and risks increasing due to climate change were mentioned as an important area of research, where both managers and researchers need more capacity building. These are topics that the World Heritage Leadership programme is taking on board for further exploration, both in capacity building activities and the production of new resources for managers.

It is worth nothing that the design, planning and implementation of the Heritage Place Lab was directly connected to the pandemic environment in which it was conceived. Hence, the activity was delivered fully online, enabling the participation of a large number of teams and guest speakers from all over the world in the series of six incubation workshops. Nevertheless, as much as the online environment resulted more inclusive, the differences in accessibility to internet and technology remain an issue for the collaborative work, added to the lack of time, when both researchers and managers have duties to address, sometimes in an emergency basis.

Way forward

The World Heritage Leadership programme has renewed its commitment to provide capacity building to World Heritage site managers and heritage practitioners in general in a second phase that started in 2023 and will run for six years. In this context, and after having assessed the results of the Heritage Place Lab pilot phase, the World Heritage Leadership will launch a new delivery of the activity which aims to refine the methods tested in the pilot phase and gather enough experience to propose a guidance for the development of practice-led research agendas for World Heritage properties. This undertaking will unfold in the next two years, 2024 and 2025, with the goal to have a guidance for managers and researchers released in 2026.

List of contributors

Dafné Adriana ACEVEDO QUINTANILLA

Dafné is a Professor of Architectural Design at the University of San Carlos de Guatemala since 2005. She is coordinator and lecturer at the master's degrees in Landscape Planning and Design, Management for Risk Reduction and Design, Planning and Environmental Management since 2014. She is a co-owner of the private company: Paisajes design, which specializes in the planning and execution of landscape projects of urban-scale condominium projects, single-family residential architectural scale and apartment buildings, educational centers, in addition to commercial projects and events.

Graciela Edith AGUILAR

Graciela is a researcher at the Center for the Conservation of Urban and Rural Heritage and Post graduate Professor of the Career in Conservation and Rehabilitation of the Cultural Heritage, University of Buenos Aires, Argentina. She currently works in "Poblados Virtuosos. Conservation of Cultural Heritage as a tool for promoting the development of rural towns". She is an advisor in Cultural Heritage for the Ministry of Culture, Buenos Aires City. She is co-leads MORELLO & AGUILAR, ARCHS, Cultural Heritage Projects. She is an associate member of ICLAFI - ICOMOS International Scientific Committee on Legal, Administrative and Financial Affairs.

Ompabaletse Vasco BAITSISENG

Vasco Ompabaletse Baitsiseng is a trained archaeologist and lecturer at the University of Botswana. After completing his studies Mr. Baitsiseng took a sojourn journey to work as a History teacher at a local government school from 2000-2008. From 2008 to present, he joined the Department of National Museum and Monuments where he was assigned various responsibilities ranging from Salvage pre-development processes, coordinating the Departmental Monument Development initiatives and the supervision of National Development Plan projects. Currently Mr. Vasco Ompabaletse Baitsiseng is deployed as the North West Regional Coordinator for the Department based in Maun. Mr. Baitsiseng also doubles up as the Okavango Delta World Heritage Site Manager from November 2019.

Inger BIRKELAND

Inger is a Professor in Human Geography at the University of South-Eastern Norway, Norway (USN). Her research interests are people-place relations, heritage-making and cultural aspects of sustainability, with a focus on strengthening the cultural and sustainable development of post-industrial places, the empowerment of children and youth, and civil society development. She has much experience in international interdisciplinary research and innovation co-operation, has supervised many MA and PhD-students, and has developed new teaching and training seminars within USN and with external partners. Her latest book is Cultural Sustainability and the Nature-Culture Interface (Routledge 2019) edited by I. Birkeland, R. Burton, C. Parra and K. Siivonen.

Chandni CHOWDHARY

Chandni Chowdhary is an architect with a postgraduate degree in Architecture and Settlement Conservation with an expertise in Heritage-based Urban Development, currently pursuing her Ph.D. in Architecture and Planning from Malviya National Institute of Technology Jaipur. She serves as the Heritage and Conservation Consultant for the Heritage Cell, Jaipur Municipal Corporation, the core team that is preparing the Special Area Heritage Plan for the Jaipur City World Heritage Site. She also runs her architectural practice in the city and freelances as a consultant towards preparing Detailed Project Reports for Urban Revitalisation and Development projects.

Alfredo Luis CONTI

Alfredo is an architect, specialised in heritage conservation at the University of Buenos Aires, Argentina. His main field of research and practice are urban heritage conservation and management and sustainable tourism at heritage places. From 2000 onwards, he has acted as ICOMOS and UNESCO expert for the evaluation of nominations and monitoring of World Heritage properties in Latin America. He lectures since 1978 at the Universities of La Plata and Buenos Aires. Currently, he is a Professor and the Director of the Institute on Research on Tourism, Faculty of Economy Sciences, National University of La Plata.

Josué Roberto GARCÍA VALDEZ

Josué has a degree in Archeology with a Master's degree in Geometrics. He has been an Assistant Professor at the University San Carlos de Guatemala, and has done research on more than 38 Pre-hispanic sites in the area known as La Cuenca Mirador, and has carried out excavations in El Mirador and in World Heritage Sites such as Quiriguá. He also drew the excavations where the Act of Independence of Guatemala was signed, and he has published more than nine articles. He is currently the Vocal III of the TICCIH-GUATEMALA.

Raquel Elisabet GARCÍA

Raquel has a degree in Anthropology with a major on Historical Archeology. Her thesis "Entre Muros de Adobe y Piedra. Archeology of the Architecture of the Historic Post of Huacalera (Quebrada de Humahuaca 1700-1930)" is the first in this line of research at the National University of Jujuy, Argentina. Her performance as a technician in the Quebrada de Humahuaca Management and Administration Unit prompted her to develop various heritage projects around ancestral knowledge and the protection of archaeological sites, as well as to continue her studies in the conservation of these material remains (archaeological structures on land, ceramics, heritage textiles).

Kodzo GAVUA

Kodzo Gavua is an Associate Professor of Archaeology and Heritage Studies at the University of Ghana, is a scholar on early cross-cultural interactions in West Africa and their effects on society, culture, cultural heritage, and economic development in the sub-region. He is currently engaged in studies of how the past is memorialized, archived, presented and used in Ghana to enhance social cohesion and sustainable peace. Professor Gavua chairs the Technical Committee of the Ghana Heritage Committee and is a member of the Board of Trustees of the Ghana Culture Forum and the Bisa Berwa Museum, Sekunde, Ghana.

William Narteh GBLERKPOR

Dr. Gblerkpor is a Senior Lecturer in Archaeology and Heritage Studies at the University of Ghana. He holds a Ph.D. in Anthropology from The University of Texas at Austin, USA, and a Master of Philosophy degree in Archaeology from the University of Ghana. His research and writing explore the dynamic role of material culture and landscapes in the historical and contemporary construction and maintenance of social identities in West Africa. Gblerkpor is the Principal Investigator of two archaeological projects in Ghana: The Shai Hills Archaeological Research Project and the Krobo Mountain Archaeological Project. He is currently coordinating the West Africa Biocultural Heritage Conservation Program, a research partnership initiative between the University of Ghana and the Forestry Commission. Gblerkpor is the founding Director and Curator of the Museum of Natural and Cultural Heritage at Shai Hills.

Clapperton GUTU

Clapperton Gutu is a senior Heritage Manager with the National Museums and Monuments of Zimbabwe. He trained as an Archaeologist and Heritage Manager at the University of Zimbabwe where he was awarded a BA Special Honours in Archaeology and a MA in Heritage Studies in 2016. In 2018, he acquired a certificate in stone conservation in Mexico under ICCROM. Clapperton was also the Project Manager and Director of the Naletale Restoration Project under the Ambassador's Fund for Cultural Preservation. He has also co-directed a number of restoration projects on dry-stone wall conservation at the World Heritage sites of Great Zimbabwe and Khami.

Maya ISHIZAWA ESCUDERO

Maya is the Heritage Place Lab project lead and editor of this volume. She is a heritage specialist focussed on the management of cultural landscapes and the study of nature-culture interactions in heritage places. Trained as an architect in Lima, Peru, she received a Master of Media and Governance from Keio University, Japan, and a Ph.D. in Heritage Studies at BTU Cottbus-Senftenberg, Germany. As a full-time researcher at the University of Tsukuba, Japan, she coordinated the capacity building programme of the UNESCO Chair on Nature-Culture Linkages in Heritage Conservation. Currently, she works for the ICCROM-IUCN World Heritage Leadership programme in diverse capacity building activities, collaborates with ICOMOS as a World Heritage advisor and serves as the secretary general of the ICOMOS/IFLA International Scientific Committee on Cultural Landscapes (ISCCL).

Abdul-Rauf ISSAHAQUE

Abdul-Rauf Issahaque is an architectural designer and researcher dedicated to sustainability and worked as a Curator for the Ghana Museums and Monuments Board in 2021/2022. Born in Wa, Ghana, in 1992, Abdul-Rauf is trained as an architect (B.Arch, M.Arch) at the Kwame Nkrumah University of Science and Technology (KNUST) in Kumasi, Ghana, and graduated in 2018. Abdul-Rauf's interest in urban research focuses on a critical approach to the multi-faceted complexities between nature and the built environment with keen attention to scale and context. His practice also aims to address social and climate justice through urban research and design.

María Magdalena IXQUIACTAP TUC

María Magdalena is a Mayan woman who works from the perspective of the Indigenous Peoples in Guatemala. She was in charge of the technical direction of Intangible Heritage 2012-2015, being national delegate for UNESCO, secretary of the Board of Directors of the Regional Council for the Safeguarding of Intangible Heritage-CRESPIAL. She has carried out research on the Traditional Games in Neighborhoods of Guatemala City in 1999, Intercultural Bilingual Education for Indigenous Students in 2004, the biocultural heritage of Rabinal, Baja Verapaz in 2017. She also lectured methodology courses at the University in 2018, and taught courses on Intangible Heritage with UNESCO Guatemala 2016-2020.

Shikha JAIN

Shikha Jain has an extensive portfolio on cultural heritage of India that covers Conservation, World Heritage and Museum Planning projects, largely realised through her organisation DRONAH. As an international expert on World Heritage, she has advised government organisations in Singapore, Malaysia, UAE, Myanmar and UNESCO Offices at Jakarta, Indonesia and Myanmar. She has worked as consultant to the UNESCO New Delhi and represented the Ministry of Culture, India as a Heritage Expert on the UNESCO World Heritage Committee along with steering inscriptions for World Heritage Sites in India. She is Vice President, ICOFORT, ICOMOS and Advisory Committee Member, MSc. UNESCO C2C at WII, Dehradun.

Eugene JO

Eugene is the Programme Manager of the IUCN-ICCROM World Heritage Leadership programme (WHL) since 2017, based in Rome, Italy, and editor of this volume. WHL is a capacity building programme aiming to improve management practices by interlinking culture and nature while taking a people-centred approach. The programme focusses on areas of effective management, building resilience and conducting impact assessments. She was the national focal point for World Heritage in Korea for nine years, and an independent researcher prior to her work at ICCROM. She holds a BA in Korean History, an MA in Cultural Heritage Studies, and is completing her PhD in World Heritage Studies.

Steffen Fagernes JOHANNESSEN

Steffen is an Associate Professor at the University of South-Eastern Norway, Norway, and the acting manager of the Cultural Management BA-program. He is the head of the "Heritage in Use" research-group, and represents the University at the Rjukan-Notodden Industrial Heritage Site World Heritage Board. Steffen has a PhD in Social Anthropology from the Martin-Luther-University of Halle-Wittenberg, Germany, partly funded by the Max Planck Institute for Social Anthropology. He has conducted long-term fieldwork within the Rjukan-Notodden Industrial Heritage site, and among evicted Chagos Islanders in the Indian Ocean. His research focuses on heritagization and social memory, mobility and performance, post-colonial studies and politics of identification.

Susan Osireditse KEITUMETSE

Dr. Susan O. Keitumetse is the author of a book titled "African cultural heritage conservation and management: Theory and Practice from Southern Africa" (2016). She is also a lead editor of a published book volume titled: Sustainability in Developing countries: Case studies from Botswana's journey towards Sustainable Development (2020). Dr. Keitumetse (Ph.D., Cambridge) is UNESCO Chairholder (African Heritage Studies and Sustainable Development) and a research scholar (Cultural Heritage and Tourism) at the University of Botswana. Her current research work is on projects that bring the relevance of cultural heritage in enhancing sustainable conservation of African landscapes such as the Okavango Delta ecosystem.

Audhild Lindheim KENNEDY

Audhild is a Ph.D.-fellow in Culture Studies at University of South-Eastern Norway, Norway (USN), currently writing her Ph.D. on the Rjukan-Notodden World Heritage on how knowledge about the local World Heritage is taught to children and youths in Notodden. She holds a M.Phil.-degree in Social Anthropology from the University of Oslo, Norway and has conducted two long-term fieldwork: on the Rjukan-Notodden Industrial Heritage (Ph.D.-research), and in Delhi, India (M.Phil.-research).

Nitya KHENDRY

Nitya Khendry is a conservation architect from Hyderabad, India, where she worked with the Aga Khan Trust for Culture on a conservation and landscape restoration project at the Qutb Shahi Heritage Park.
After receiving her Master's degree in Architectural Conservation from the University of Edinburgh, she has been working in the field of urban conservation in India, including the historic cores of the temple cities of Puri and Bhubaneswar, India. Nitya is now involved in the preparation of a Special Area Heritage Plan for Jaipur City World Heritage Site with the Jaipur Municipal Corporation.

Francis KWARAYIRE

Francis is a heritage conservation practitioner with years of experience in field practice and at management level. Having led the implementation of several projects at the Asante Traditional Buildings (ATBs) World Heritage property since 2013, he has developed expertise in performance reporting and conditional survey for heritage places. He was responsible for the ATBs Periodic reporting cycle in 2020. He currently serves as the Ashanti Regional Director of the Ghana Museums and Monuments Board and as the site manager for the property. He took part as well in the formulation of a management plan for Ghana's Forts and Castles World Heritage site.

Lesley Hatipone MACHIRIDZA

Lesley Hatipone Machiridza is a current Alexander von Humboldt post-doctoral fellow and senior lecturer at the Great Zimbabwe University. He holds a Ph.D. in Archaeology from the University of Pretoria, the same institution that awarded him a Master of Philosophy in Archaeology. He also holds a BA Special Honours in Archaeology and a BA General with majors in Archaeology and History from the University of Zimbabwe. Machiridza has acquired a wealth of knowledge and experience revolving around theories and the general practice of archaeology, heritage and museum business. Having started at the Natural History Museum in Bulawayo, his illustrious career in such enterprises now spans over fifteen years.

Nyaradzayi MADURO

The experience that Nyaradzayi gained since 1997 in the interpretation of cultural and natural heritage at Great Zimbabwe inspired her to become a researcher and focus more on heritage conservation and management issues at the same site. To this end, she attained a degree in Social Anthropology at the Great Zimbabwe University. Her work at the site revolves around coordinating and harmonizing relations between the management authority at Great Zimbabwe and local communities. She is also a Project Manager for the Shona Cultural Village, a living theme park that aids visitors to Great Zimbabwe to better understand Shona lifeways, traditions and culture.

Mahmoud MALIK SAAKO

Mahmoud Malik Saako is a Principal Curator and Archaeologist with Ghana Museums and Monuments Board (GMMB). He was the former Director of the Upper East Regional Museum from 2009 to 2014 before he was transferred to Accra to head the Museum of Science and Technology. His research focuses on the Lobi and Dagaaba in the Northwestern part of Ghana. He is currently pursuing a distance Ph.D. Programme in archaeology at the University of South Africa. His research topic focuses on "Archaeology of Islam and its architecture in Northern Ghana from 1500-2019 CE". Mr. Mahmoud has seven academic publications in the field of archaeology, history and ethnography to his credit.

Josefina MALLO

Josefina is a professor in history and a doctorate in Psychology at the National University of La Plata, Argentina. Her main field of research is the history of emotions, and their development both in the history of families and in the field of the construction of historical memory. She lectures since 2000 at the National University of La Plata and the Catholic University of La Plata. She is a Professor and Member of the Institute on Research on Tourism, Faculty of Economy Sciences, National University of La Plata, and Professor at the Catholic University of La Plata, Humanities Faculty.

Jobe MANGA

Upon graduation with a Bachelor of Arts in Social Science, Jobe joined the Department of Environmental Affairs as a Natural Resources officer. He contributed to the economic valuation of Makgadikgadi wetlands. As an Environmental Economics program officer, he facilitated the development of water, livestock and mineral accounts. He is experienced in participation in regional and international forums including the CBD, Ramsar Convention, COPs, and World Heritage Committee meetings. As National Focal Point, he coordinates the domestication of the Ramsar Convention and is involved in the domestication of the World Heritage Convention. He is also responsible for the coordination of the implementation of the Okavango Delta Management plan

Vicky MIKALSEN

Vicky is a World Heritage coordinator for Notodden municipality since 2017. Her professional background is on museums, education and festival management. She is the Head of the Industrial promenade project, focusing on improving quality of life for the local community, and connecting industrial heritage, town planning and art.

María Valentina MILLÓN REY CAMPERO

María Valentina is an architect, graduated from the Faculty of Architecture and Urbanism of the National University of Córdoba, Argentina, in 2001. She is a specialist in conservation of built heritage, and public policy. She coordinates restoration projects and structural consolidation of historic buildings, with interdisciplinary teams and community participation. She is the Provincial Director of Heritage of the Province of Jujuy, and a delegate of the National Monuments Commission. She is also a member of the Advisory Committee of the Observatory of Cultural Heritage of the Province of Jujuy.

Stephen MOGOTSI

Stephen Mogotsi is an exhibition designer by profession with over 30 years of work experience in the heritage environment. He holds a Master of Arts Degree in Communication Design from the Manchester Metropolitan University in the United Kingdom. He is currently the Director of the Botswana National Museum and has been involved in the development and promotion of cultural heritage programmes in the country including the coordination of the National Monuments Development Programme geared towards community participation in heritage development. His main interest is in the sustainable utilisation of heritage and the potential benefits for improvement of livelihoods. He is a painter in his own right and has been instrumental in the development of the visual arts in Botswana.

María Elena MOLINA SOTO

María Elena is an architect from the University of San Carlos of Guatemala (USAC), specialized in Urban and Architectural Conservation from ICCROM, and has a Master's degree in Restoration and Conservation of Historic Monuments, Sites and Urban Centers. She is currently writing her Ph.D dissertation at USAC. Her professional practice is focused on the planning and management of built heritage and mixed areas (cultural and natural) for their conservation and sustainable use. She is a professor and researcher at the USAC Faculty of Architecture and has been working with local communities, the Ministry of Culture ad Sports, the National Council of Protected Areas, and organizations such as The Nature Conservancy, UNESCO, UNDP, IDB and USAID. From 2020-2022 she was a member of the Board of Directors of the National Protection Council of La Antigua Guatemala.

Andrea Fabiana MORELLO

Andrea is a researcher at the Center for the Conservation of Urban and Rural Heritage and Post graduate Professor and Thematic Coordinator of the Career in Conservation and Rehabilitation of the cultural heritage, Buenos Aires University, Argentina. She currently works in "Poblados Virtuosos. Conservation of Cultural Heritage as a tool for promoting the development of rural towns". She leads the Project Team in the National Commission of Monument, Places and Historical Buildings, Secretary of Culture, Ministry of Culture, Argentina. She is External Advisor in Cultural Heritage Projects for the United Nations Office for Project Services (UNOPS), and co-leads MORELLO & AGUILAR, ARCHS, Cultural Heritage Projects, where they focus on the identification and intervention of cultural heritage as a resource capable of generating social development processes.

Tawanda MUKWENDE

Tawanda Mukwende is the Resident Archaeologist at Great Zimbabwe World Heritage Site. A holder of a Ph.D. in Archaeology from the University of Cape Town in South Africa, he has worked on dry-stone wall conservation projects at the World Heritage sites of Khami and Great Zimbabwe and numerous other sites. Tawanda serves as the Focal Point for the World Heritage Convention in Zimbabwe. His interests include dry-stone wall conservation, community participation in heritage conservation and World Heritage management. Tawanda is also a member of the UNESCO-Great Zimbabwe University Chair in African Heritage.

Tendai Treddah MUSINDO

Tendai Musindo is the chairperson and senior lecturer in the department of History, Archaeology and Development studies at Great Zimbabwe University. She is a holder of a Ph.D. in Archaeology from the University of Pretoria. Major research interest is in computer applications in archaeology and heritage management. In particular she uses GIS and Remote Sensing techniques in understanding archaeological sites as well as in their conservation. She has experience in the management of heritage, having worked as curator of Archaeology at Great Zimbabwe World Heritage site for five years.

Katlego Pleasure MWALE

Katlego Mwale is a qualified and registered architect with the Architectural Registration Board in Botswana (ARC). She is also an accredited architectural historian and architectural heritage specialist. She holds a Ph.D. in Architecture from the University of Sheffield completed in 2018. Prior to that she obtained a Masters of Arts in Conservation and Regeneration in 2014 and also holds a degree in Bachelor of Architecture from the University of Botswana completed in 2009. Her research interest is to explore how architecture and urban spaces are framed by identity politics and the spatial consequences of these.

Onalethuso Petruss Buyile Mambo NTEMA

Onalethuso Ntema (Mambo Ntema) is a Sociologist and creative artist, drawing inspiration from daily life encounters, culture, nature. He obtained a BA Degree – Sociology from University of Botswana in 2009. He has worked as a land rights specialist advocating for land and related resources rights of minorities and vulnerable communities. He was nominated in 2017 at the national Botswana Youth Awards under Best Youth Promoting Culture and Heritage category. As a writer, he published a collection of 143 poems on a poetry anthology "SOUL SEEDS" in 2014 in the United Kingdom. He participated as a culture exhibitor at Markt de Voelker - Voelkerkunde Museum in Hamburg, Germany, 2015. Between 2014 and 2019, he conducts voluntary work as a concept developer and cultural heritage management practitioner. He is also a public speaker, multi-lingual native drummer, Folklore-Jazz musician and cultural entrepreneur. In 2020, he co-directed a short film documentary on the Impact of COVID-19 on Creative Arts and Livelihood in the Okavango Delta, funded by FNBB Foundation. He has coordinated the Botswana Climate Change Docu-Series with Game Zeus Bantsi alongside Joe Misika in 2022. He was nominated and reached top 5 finalist at the Africa Tourism Leadership Forum & Awards under Championing Sustainability in 2023. He is a storyteller, narrator and voice over artist, with numerous short films/video clips promoting the Okavango Delta world heritage site and its adjacent communities with TrekBond Media in 2023. His focal areas include culture, heritage and tourism. Board member for Nhabe Museum in Maun, and a team member of the Okavango Delta WHS Research-Practice Team.

Sebastián Matías PASIN

Sebastián is an architect, graduated from the Faculty of Architecture and Urbanism of the National University of Córdoba, Argentina, in 2001. In 2002, he joined the technical team of Quebrada de Humahuaca, in the area of architecture, as responsible for the study and management of built heritage. He is currently the Coordinator of World Heritage. He participated in various events related to heritage and was co-writer and general editor of the Quebrada Management Plan (2009).

Mario Raúl RAMÍREZ DE LEÓN

Mario is Doctor in Architecture from the National Autonomous University of México (UNAM), 2014. He obtained a Central America Peace Scholarship (CAPS) in 1988 at Arizona State University, USA; architect from the University of San Carlos of Guatemala (1992); master's degree in Hospital design at Universitá degli studi di Roma, Sapienza, Italy (2006); master in Conservation and restoration of monuments (USAC, 2006); master in architectural design (USAC, 2007). He has published scientific papers in specialized journals and participated in international congresses in Education and Heritage. He is currently the Research Director of the Faculty of Architecture of USAC. Researcher of the year (USAC, 2010). Since 2016, he has been editor of the journal Avance.

Anuranjan ROY

Anuranjan Roy works towards the strengthened implementation of the World Heritage Convention in Asia and the Pacific Region. A World Heritage Assistant at the Wildlife Institute of India's Category 2 Centre for World Natural Heritage Management (UNESCO C2C at WII), he is interested in the use of communication techniques and outreach to best convey the Convention's reach and benefits to local and administrative stakeholders. He is a co-editor of the anthology "Wild Treasures: Reflections on Natural World Heritage Sites in Asia", published in 2019, which pulls together nearly two centuries of nature writing on World Natural Heritage Sites in the Asia Pacific.

Olga Edith RUIZ

In 2002, Olga started research on multiculturalism at the Institute of Inter-ethnical Studies of the University of San Carlos (USAC). She has worked on gender issues for the GIZ (Germany), social planning for the Ministry of Culture and Sports of Guatemala, public policy and social development for the Rafael Landivar Private University of Guatemala, and on accreditation of careers at the Higher Education level for the Division of Academic and Institutional Evaluation of the USAC. Currently, she works at the Department of Educational Research of the University of San Carlos, in which educational research is carried out for curricular restructuring purposes.

Gakemotho SATAU

Gakemotho Satau contributed significantly to rural community development programs in Ghanzi and Okavango districts of Botswana. His community work includes; documentation, fundraising and advocacy. Satau contributed a chapter 'Information in Research and Development vs San (indigenous) Knowledge' on the book "Parallel Issues and Mutual Challenges for Indigenous Peoples and Research", a collaboration between San Botswana and Swedish Sapmi, (Skold, Bolaane and Sanstrom, 2014). His experience in governance, project management, leadership and management, made him an influential figure to many community development partners. He is currently an MPhil: Natural Resource Management Candidate at the University of Botswana-Okavango Research Institute.

Juliana STROGAN

Juliana is a conservator and heritage manager. She holds an MA. in World Heritage and Cultural Projects for Development from the University of Torino, Italy, and a bachelor degree in Conservation and Restoration from Instituto Politecnico de Tomar, Portugal. She has more than twenty years of work on conservation, dissemination, management and development of cultural heritage and collections, working at private and public institutions in several countries. She is a member of ICOMOS Norway National Committee and head of the ICOMOS Norway National Committee for Industrial Heritage. Currently, she is the head manager for the World Heritage Site Rjukan-Notodden Industrial Heritage in Norway, coordinating the work of the several authorities and stakeholders involved in the management of the site.

Genius TEVERA

Genius Tevera is a Lecturer at the Great Zimbabwe University, in the department of History, Archaeology and Development studies. Currently registered for a Ph.D. in Archaeology at the University of Cape Town, her research focuses on the interaction between communities and archaeological sites, with a particular focus on Great Zimbabwe World Heritage Site. The research situated community perceptions against formal heritage management and archaeological research approaches. It explores collaboration possibilities between communities and researchers to make archaeology more relevant to contemporary society. Genius is also interested in heritage and creative industries as pathways for sustainable economic development and poverty alleviation in rural areas.

Thomas Panganayi THONDHLANA

Thomas Thondhlana holds an MSc. and a Ph.D. in Archaeology from the University College London (UCL), United Kingdom. He is currently the Director of the Centre for Culture and Heritage Studies and holder of the UNESCO Chair on African Heritage at Great Zimbabwe University (GZU). He is a Visiting Lecturer in the post-graduate Cultural Heritage programme at Midlands State University (MSU). He currently serves as a member of the National World Heritage Committee and Standing Committee on Culture in Zimbabwe. His research interests are in the areas of pre-colonial mining and metallurgy, cultural entrepreneurship and economics, World Heritage, and museology. His forthcoming co-edited book is entitled "The Status Quo and the Way Forward in Implementing the 1972 UNESCO Convention Concerning. The Protection of the World Heritage in Africa: A Zimbabwean Context"

Kgosietsile VELEMPINI

Kgosietsile Velempini is a senior lecturer in the environmental education unit at the University of Botswana. He has a Ph.D. in curriculum and instruction from the Patton College of Education at Ohio University, USA. His research focuses on environmental and sustainability education, sustainable development goals, tourism, community-based natural resource management, climate change, and local knowledge systems. He has published in various international journals. He has master's degrees in international affairs and environmental sciences. He has a graduate certificate in environmental sustainability, a BA degree (environmental sciences), and a postgraduate diploma in education.

Benjamin WARINSIE KANKPEYENG

Professor Benjamin Warinsie Kankpeyeng is an Associate Professor in the Department of Archaeology and Heritage Studies. Professor Kankpeyeng, prior to his appointment at the University of Ghana in 2004 had curatorial responsibilities at the Ghana Museums and Monuments Board for 21years and has been credited with establishing the Bolgatanga Museum in the Upper East Region. He is a Fulbright and The Rockefeller Foundation ADIA Alumnus with Ph.D. and MA degrees in Anthropology from Syracuse University, USA. Professor Kankpeyeng is, therefore, a historical archaeologist and heritage professional. He is an ICAHM Expert member. His research interests cover culture contact studies, slavery, heritage conservation, and archaeology of ritual and religion. He has over 40 publications.

Christopher WETCHER

Christopher Wetcher has Bachelor's Degree in Archaeology and Linguistics, and a Master of Philosophy Degree in Archaeology. He has been working with the Ghana Commission for UNESCO as a Program Officer for Culture since 2018. He is currently enrolled in a Ph.D. Program in Museums and Heritage Studies at the University of Ghana, and his research focuses on heritage management through the fusion of indigenous knowledge systems and scientific practices; cultural contact studies; World Heritage Sites; tourism and sustainable tourism. He has delivered lectures and attended several conferences both abroad and in-country on the above-mentioned fields of study.

Claudia Blanca Verónica WOLLEY SCHWARZ

Claudia is an archaeologist with a degree from the University of San Carlos of Guatemala with Ph.D. studies in Anthropology from the Vanderbilt University School of Arts and Sciences, Nashville, Tennessee, United States. She has worked as technical and archaeology coordinator of the Tikal National Park, Guatemala, and she has developed various research projects as coordinator and researcher for the General Research Directorate of University of San Carlos of Guatemala. As the director of various rescue projects, she has carried out excavations in different buildings in La Antigua Guatemala, and since 2012 she is the head for the Historical Research and Support Studies Unit of the National Council for the Protection of La Antigua Guatemala.

Madhura YADAV

Dr. Madhura is an Architect Planner. Over the last two and a half decades, she has been associated with the Administration, Academics & Research. Currently, she is the Director of the School of Architecture and Design, Manipal University, Jaipur. She is actively involved as an expert in UPSC, AICTE, CoA and DST Rajasthan. She has also contributed as a team leader to prepare City Development Plans for towns, Heritage Conservation of Forts, and Slum Rehabilitation Projects in Maharashtra. She is a Hub coordinator for community-based participatory research and handling various responsibilities at the university level. She has also contributed to 'Inclusive Urban Planning' in the World Report on Higher Education published by GUNI, Barcelona. She is the recipient of the Education Leadership Award 2019.

Annexes

Annex 1:
HPL Assignments

World Heritage Leadership

Interlinking research and practice for enhancing World Heritage site management

Heritage Place Lab

Pilot Phase 2021-2022
Assignment I: Management Issues & Research Needs

In order to introduce your Research-Practice Team and your World Heritage property, we request that you prepare a 20-minute presentation to be delivered during **Workshop I: Research-Practice Collaboration.**

The presentation should be structured as follows:

PART 1 (13-minutes)
The **Management Group** of the Research-Practice Team will:
Provide an overview of the World Heritage property: name; map showing location; map showing boundaries and buffer zone (if exists); and Outstanding Universal Value.
Briefly outline the main issues and management challenges.

PART 2 (7-minutes)
The **Research Group** of the Research-Practice Team will respond the following:
What do you see as the main research needs of the World Heritage property and how does that fit your research interests?

In preparing your common Research-Practice Team presentation please:

- Use images to illustrate the heritage place;
- Do not exceed 15 slides and ensure that slides are not too heavy in content;
- Prepare a single PowerPoint file for the presentation;
- Ensure the presentation does not exceed 20-minutes;

Submit the PowerPoint to the Heritage Place Lab Organising Team by September 10, 2021 by uploading it to the Research-Practice Team corresponding file at the following Google drive link: https://drive.google.com/drive/folders/1phkP9tgPqzmesv_zI2rP7Qzvrdp-xdXf?usp=sharing (Each Research-Practice Team has an assigned folder). Kindly confirm your submission to <iccr24@iccrom.org>.

We look forward to receiving and then viewing your presentations. They will provide a strong basis for understanding each property, recognising current issues and challenges (some of which may be common to several properties), and provide initial thinking on the ways that research can contribute to improve site management.

World Heritage Leadership

Interlinking research and practice for enhancing World Heritage site management

Heritage Place Lab

Pilot Phase 2021-2022
Assignment II: Mapping values and attributes

The Outstanding Universal Value of a World Heritage property is the reason why the property is considered to be of common importance for present and future generations and inscribed on the World Heritage List. However, all properties will invariably have a wider range of values with different layers of importance (at the international, national or local levels) that are also part of the overall significance of the property. Therefore, it is essential to identify and recognise those other important values and ensure that the management of the property takes them into consideration as well.

A deeper understanding of all the values of the property will offer a solid foundation to explore the priority themes that help structure the Heritage Place Lab initiative and development. Therefore, we request that you **use a simplified version of Tool 1 of the Enhancing Our Heritage Toolkit** to map the different important values of the World Heritage property you are working with and the attributes that convey those values. This simplified version of Tool 1 on assessing values and attributes is provided below.

To present the results of this work, we request that you:

1. Complete the worksheet provided as part of Tool 1
2. Summarise the conclusions and lessons learned from your assessment of the values and attributes of the property in a short presentation to be delivered during Workshop II: Knowledge Systems Dialogues.

In preparing your presentation please:

- Use some images to illustrate the values rather than focusing too much on describing them (that information will be included in the worksheet you will need to submit);
- Do not exceed 5 slides outlining the main conclusions and lessons learned on the understanding of values and attributes (not too heavy in content);
- Ensure the presentation does not exceed 7-minutes;

Please submit the PowerPoint and the worksheet with the detailed assessment of the values and attributes of the property to the Heritage Place Lab Organising Team by September 30, 2021 at your Google Drive folder: https://drive.google.com/drive/folders/1phkP9tgPqzmesv_zI2rP7Qzvrdp-xdXf?usp=sharing

We look forward to receiving and then viewing your presentations to gather a deeper understanding of each property.

Tool 1: ASSESSING VALUES AND ATTRIBUTES (ADAPTED FROM DRAFT EOH 2.0)

This tool helps gathering a deeper understanding of all the important values of the World Heritage property and the attributes that convey and embody those values

Specific objectives of the Tool:
a) To explore if there is a good understanding of the Outstanding Universal Value of the World Heritage property and its attributes; and
b) To explore if there is a good understanding and documentation of the other important values of the property.

Definitions:

Outstanding Universal Value: Cultural and/or natural significance which is so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity. As such, the permanent protection of this heritage is of the highest importance to the international community as a whole.

Values: The reasons why a heritage place is considered important to be protected for present and future generations. Values are determined by a range of social and cultural factors. What is valued by one section of society may not be valued by another, or may be valued for different reasons, or one generation may value it but it may not be valued by the next generation. Heritage places normally have a range of values: aesthetic, architectural, biological, ecological, historic, geological, social, spiritual, etc. These values are embodied in the attributes of the heritage place.

Attributes: Attributes are the elements of a World Heritage property or other heritage place which embody and convey its values. They can be classified into three large groups:

- physical structures, features and tangible characteristics (such as colour, shape, size, volume, etc.); processes and intangible aspects (such as associations, meanings and relationships).
- Attributes are the focus of protection, conservation and management and their identification is vital to understanding the conditions of authenticity and integrity of a property.

Significance: The overall combination and interactions between the different values of a heritage place. Significance often has different layers, sometimes related to different scales: international, national, regional and local. This is for instance the case of World Heritage properties where the focus of the inscription of that property on the World Heritage List is on its Outstanding Universal Value.

Background information:

The Outstanding Universal Value of a World Heritage property is the reason why the property is considered to be of common importance for present and future generations and inscribed on the World Heritage List. However, all properties will invariably have a wider range of values with different layers of importance (at the international, national or local levels) that are also part of the overall significance of the property. Therefore, it is essential to identify and recognise those other important values and ensure that the governance and management arrangements for the property takes them into consideration as well.

Such an understanding of the different layers of importance of the property should, on the one hand, help to prioritise actions if there are conflicts between values and, on the other hand, help recognise that values are interrelated and that the protection of those other important values is critical to help maintaining the OUV of the property. This worksheet will also help you evaluate if the attributes that convey the values of the property have been sufficiently identified and are well understood.

Worksheet 1a. Values and attributes			
Level of importance	Values	Attributes	Sources of information used
OUV			
International			
National			
Local			
Analysis and Conclusions			
Gaps and challenges			
Opportunities, recommendations and follow-up actions			

Step 1 – Identify and analyse information sources documenting the values of the property

Key questions to consider:
Which sources of information document the Outstanding Universal Value of the property? Do these information sources also document the other important values of the property or are these other values documented separately? Are all the information sources being analysed well known to managers as well as the research group?

Identifying values and attributes, and in particular, distinguishing between the two concepts, is not an easy task but it is a critical one to ensure that the property is effectively protected and managed.

Completeing worksheet 1a

i. Start by looking at the Statement of Outstanding Universal Value (SOUV) of the World Heritage property. Ask if everyone forming part of the research team is familiar with this Statement. Consider that this can differ considerably depend on each person's involvement in the management of the property or general knowledge about it. If people who are expected to know about this document are unaware of its existence, discuss why. Note also that people might be unfamiliar with the SOUV but may be able to describe in their own words why the property is considered to be of Outstanding Universal Value. Discuss if everyone or most people have a similar understanding of the reasons why the property was included on the World Heritage List and if this matches what is included in the SOUV. And whether they might have a different idea about why the property was included on the World Heritage List.

ii. Verify if the main planning instrument available (e.g. management plan, conservation plan or other type of plan, if there is one) includes the SOUV or at least describes the Outstanding Universal Value of the property. Analyse if the instrument also documents the other important values of the property. If not, discuss what other information sources document these other important values.

iii. Discuss if there is a good understanding of those other values or if there are knowledge gaps that need to be addressed and more work done on the overall significance of the property.

Step 2 – List the values of the property

Key questions to consider:
Is the Outstanding Universal Value of the property relatively straightforward, making it easy to understand what needs to be maintained? If not, can you break it down in different values in order to facilitate its understanding? How about the other important values of the property documented in other information sources? Are they also easily identified and understood? Does the property have other important values that are not documented in the information sources available?

Based on the information sources available, summarise or break down the values of the property in column 1, using one row per value. The objective here is to identify and describe in a succinct way the values of the property (this is usually best described through a short sentence such as 'unique urban and architectural ensemble, wholly dedicated to watchmaking').

iv. SBased on the information sources available, summarise or break down the values of the property in column 1, using one row per value. The objective here is to identify and describe in a succinct way the values of the property (this is usually best described through a short sentence such as 'unique urban and architectural ensemble, wholly dedicated to watchmaking').

v. Start by identifying the different values that together make the Outstanding Universal Value of the property. This is particularly important if the property is inscribed according to more than one criterion. One way to do it is to break down the sentences in the justification of each criterion or extract the most important words from the justification.

vi. Repeat the same process for the other important values of the property based on the information sources available.

vii. Discuss if you consider that the property has other important values that are insufficiently documented or not mentioned at all in the information sources available. Consider in particular those values with local levels of importance. If there are gaps, note them in the gaps and challenges row at the end of worksheet and discuss with the participants what should be done about it. Be aware that an information source might include relevant information on values but might not describe it as such. For instance, this could be a research report on social aspects of the property which includes relevant information about the social values of the property but might call it social or cultural practices.

Step 3 – List the attributes of the property

Key questions to consider:
Have the attributes of the property been identified? Are these documented in the information sources? Is the distinction between values and attributes well understood?

viii. Distinguishing between values and attributes can be a difficult task. However, the distinction is crucial since attributes are vital to understanding authenticity and integrity, and mostly because they are the focus of protection, conservation and management actions. This process is particularly important for certain categories of values such as aesthetic values, social values or spiritual values – for which attributes are often processes and intangible elements rather than physical elements – in order to have a clear idea of what needs to be conserved.

ix. Analyse if the available information sources clearly identify the attributes of the property, particularly in relation to its Outstanding Universal Value. The Statement of Outstanding Universal Value (SOUV) for the property will only refer to its key attribute, since it is a relatively short document. Therefore, use your own knowledge of the property to complete this step.

x. Use column 3 of the worksheet to list the attributes of the property, in relation to the values that you identified in column 2. Remember that the same attribute might convey more than one value so in that case you need to repeat it for each related value. For instance, a volcano might convey both scientific value, owing to its contribution to scientific discoveries, and spiritual value, if the local community believes it embodies a living deity and considers it to be sacred.

xi. Repeat as much as possible the same approach for the other important values of the property based on other information sources available and your experience of the property.

Step 4 – List the information sources used for identifying the values and attributes

xii. It is very important that you list the information sources used to document the values and attributes of the property, including any oral sources you may have recorded, when you fill in the respective columns of the worksheet. This helps to understand if there is a good documentation of the values and attributes of the property.

xiii. This does not mean however that professional knowledge should not be respected and taken into consideration. On the contrary, it will be critical when it comes to the traditional knowledge of local communities or how they value the property; but if that is not documented and taken into consideration in existing management instruments, it can be overlooked or disregarded. For instance, imagine the case of a property that has been managed for many years by the same site management team, be it in a formal or traditional management system. Over the years, this team would have accumulated extensive knowledge about the property however if not documented, this knowledge may be lost if the team is replaced for some reason (including retirement, a new assignment for key team members or political changes).

Step 5 – Summarise and analyse findings and draw recommendations and follow-up actions

xiv. Use the final rows of the worksheet to summarise the key findings resulting from the discussions. Use the questions suggested for each step above as well the reflection questions below to help you draw conclusions, identify challenges and what could be done to address them. Make sure to spend enough time on these last discussions since the findings can potentially help you identify important research needs.

Reflection questions:

- What is the relationship between the other important values and the Outstanding Universal Value of the property?
- Are some of these values interdependent? How do they support each other? Are some of the values divergent or in conflict? If yes, why?
- Are there certain categories of values that have been overlooked or insufficiently recognised and documented or recorded, particularly if their level of importance

is mainly recognised as local and/or they are available only from oral sources? If yes, should more investigation and documentation take place and by whom?

- Have local communities been involved in the identification of the values of the property, particularly when the property was nominated to the World Heritage List?
- Are the attributes of the property clearly and sufficiently identified and documented?
- Have processes and associations as well as other intangible elements been considered as attributes or is the identification of attributes mainly limited to physical elements?
- Is the distinction between values and attributes in the information sources clear?

World Heritage Leadership

Interlinking research and practice for enhancing World Heritage site management

Heritage Place Lab

Pilot Phase 2021-2022
Assignment III: Mapping actors

Achieving effective and equitable governance and effective management requires coordination and collaboration among actors with responsibilities, rights and interests in and around the property. This will vary according to the mandate, rights, capacity and resources of those actors, if and how their role and responsibilities are recognised and respected as well as the availability of platforms and processes to facilitate exchange.

A deeper understanding of the main actors related to the World Heritage property and its management will offer a solid foundation to explore the priority themes that help structure the Heritage Place Lab initiative. Therefore, we request that you use a simplified version of Tool 4 of the Enhancing Our Heritage Toolkit to map those actors. This simplified version of Tool 4 is provided below. For the purpose of the assignment it is only **mandatory to complete worksheet 4a** on 'Identification of actors with recognised authority and responsibilities to manage the property or parts of it'. **Worksheet 4c is optional**; if you wish you can complete it as well and submit it as part of the assignment or use it later if you find it helpful.

To present the results of this work, we request that you send us the completed worksheet 4a and that you summarise the lessons learnt from using this worksheet in a PowerPoint presentation that responds to the following questions:

1. Is it clear who are the actors that can be considered as managers? If not, why not?
2. For each actor identified as having the role of manager, is it clear what instruments and powers grant them that role, either over the whole property, certain areas of the property or even just certain attributes?
3. When several managers exist, is it clear who holds the main responsibility for managing the World Heritage property from a heritage perspective?
4. Is the mandate of the manager recognised as holding the primary responsibility for the World Heritage property adequate to the role it has? Does that mandate and the instruments at its disposal grant it the necessary powers to effectively assume the primary responsibility for managing the property?
5. Are there any conflicts or overlaps between the responsibilities of different managers?
6. Is the governance structure deriving from the interaction between different managers clearly documented, transparent and accessible?
7. Is the governance structure in line with the values of the World Heritage property? Does this structure cover the whole range of attributes of the property?
8. With regards to research, with whom are you working with? All managers or certain managers? And how does this then shape the kind of research you undertake?

In preparing your presentation please:

- Answer one question per slide and ensure that slides are not too heavy in content;
- Ensure the presentation does not exceed 10 minutes;

Submit the PowerPoint and the filled worksheet 4a to the Heritage Place Lab Organising Team **by October 20, 2021** in the Google Drive folder assigned to your Team at the following link: https://drive.google.com/drive/folders/1phkP9tgPqzmesv_zI2rP7Qzvrdp-xdXf?usp=sharing. We look forward to receiving and then viewing your assignments.

TOOL 4: RELATIONSHIPS AMONG ACTORS (ADAPTED FROM DRAFT EOH 2.0)

This Tool assesses if the roles and responsibilities of different actors are clearly defined and understood, if there is effective coordination and collaboration between managers and what is the level of engagement and participation of rightsholders and stakeholders in the management of the property.

Specific objectives of the Tool:
To assess if there is a good understanding of the main actors with recognised responsibilities for managing the property (managers) as well as of other actors with rights (rightsholders) and interests or influence (stakeholders) over the property;
To understand if the roles and responsibilities of different managers are clearly defined and understood;
To review whether rightsholder and key stakeholder groups are adequately recognized;

- To consider whether there are issues of capacity that are influencing the ability of rightsholders and key stakeholders to participate in decision-making processes and their positive and/or negative influences on the property;
- To identify actions to improve governance at the property.

Definitions:

Actors: Refers broadly to all the people, and the institutions and groups they represent, involved directly and indirectly with a World Heritage property or heritage place. Three broad categories of actors are defined in relation to the management of a World Heritage property or heritage place: managers, rightsholders and stakeholders.

Managers: The institution(s) or other type(s) of entity(ies) and group(s), as well as the individuals working within them, with legal or customary authority or recognised responsibilities for managing the heritage in its entirety or parts of it. Rightsholders with recognised responsibilities for managing the property or heritage place or heritage resources within the place will be considered as managers.

For the purpose of the EoH 2.0, the term 'manager' is preferred to the term of 'site manager' for three reasons. First, because the term 'site manager' is often associated with a single person, frequently the head of an organisation or group, whereas managing a World Heritage property, independently of its complexity, always requires the involvement of many people and different organisations, at different administrative levels. Second, because that term is mainly associated with an actor who holds a mandate that is cultural or natural heritage specific. However, many aspects of the management of most World Heritage properties fall under the mandate of, or are influenced by, actors that work with other jurisdictional areas such as planning, forestry, agriculture, infrastructure, etc. The role and the responsibilities of these actors must therefore be recognised. Third, because the term 'site' is mainly perceived to refer to the World Heritage property and excludes the management of the buffer zone, which must equally be considered. Therefore, the term 'manager' offers a way to recognise a broader range of actors and their responsibilities.

Rightsholders: Actors socially endowed with legal or customary rights with respect to heritage resources.

Stakeholders: Actors who possess direct or indirect interests and concerns about heritage resources, but do not necessarily enjoy a legally or socially recognised entitlement to them.

Governance: The interactions among structures, processes and traditions that determine how power and responsibilities are exercised, how decisions are taken and how different actors have their say in relation to the identification, protection and management of the World Heritage property or other heritage place.

Background information:

A wide range of actors are involved with, have rights over and have responsibilities for managing a World Heritage property. Understanding the roles and relationships of these different actors in relation to the property is critical to establish equitable governance arrangements and effective management. This Tool is designed to help you analyse those relationships and responsibilities in detail.

First it is important to distinguish who has responsibilities for managing the property, in its entirety and parts of it, that is the managers. In some properties, it might be quite straightforward to identify the institution(s) or group(s) responsible for managing the property. However, for an increasing number of World Heritage properties, governance arrangements can be more complex, involving multiple agencies and groups, and it might not be as clear who holds authority and responsibility for managing the World Heritage property and any existing buffer zone(s).

Management decisions about different issues are made and influenced by different actors, which collectively feed into the management system of the property. This is particularly the case for serial properties, sometimes with a high number of components across vast geographical areas, and transboundary properties, where formal arrangement between different countries are needed. Similarly, cultural landscapes and urban settlements are often managed by multiple actors, requiring formal mechanisms of coordination. Managers are empowered by formal legislation or by cultural practices established over time, or a mix of the two.

Therefore, Tool 4 of the EoH 2.0 is composed three worksheets, although for the purpose of the exercise we will only be using two of them:

- Worksheet 4a helps to identify which actors can be considered managers and helps analysing, in a structured way, their specific role or mandate for managing the property and any existing buffer zone(s), what key instruments and powers grants them that mandate, and the extent and level of their involvement in decision-making processes. The institutional set-up resulting from the combinations of all these elements is often described as the institutional framework.

- Worksheet 4c assesses if there is a good understanding of who the rightsholders and stakeholders are, the nature of their relationship to the property and its values is, and what their level of engagement and participation in the management of the property is.

Completing worksheet 4a (mandatory)

Worksheet 4a: Identification of actors with recognised authority and responsibilities to manage the property or parts of it				
Group or institution recognised as managers	Attributes (or area) for which the group and institution is responsible for	Specific role, mandate and responsibilities to manage the property	Key instruments and powers at their disposal to implement mandate	Comments/ explanation
Analysis and conclusions				
Gaps and challenges				
Opportunities, recommendations and follow-up actions				

Step 1 – Identify all the actors with recognised responsibilities for managing the property

Key questions to consider:
What group(s) or institution(s) have recognised responsibilities for managing the of the property? What institutions, government agencies or other groups have a mandate, based on statutory or customary laws or norms, to make management decisions for the property? What other non-heritage specific heritage actors have responsibilities for managing parts (and sometimes even the entirety) of the property?

As mentioned before, for some properties identifying the managers will be simple if only one or a few institutions or groups have recognised responsibilities for managing the property. For other properties it might be a complex issue. While it is important to think beyond the most obvious actors, it is not necessary nor advisable to exhaustively identify all possible actors with recognised authority and responsibilities for managing the property, as in some properties this might result in a very long list. Instead, first consider all the actors with a recognised heritage mandate. For other types of mandates, consider only those actors with the most important responsibilities in relation to the values of the property.

i. First, consider managers with a clear mandate for heritage protection or for the traditional management of the property and whose responsibilities have been recognised within the management system. You can then list them directly in column 1 of the worksheet. You can add further rows to the worksheet as needed.

ii. Second, consider actors with other types of mandate (e.g. agricultural, forestry, infrastructure, urban planning, etc.) but directly linked to the management of the property.

iii. Consider also that while some of those actors might hold responsibilities over the entire area of the property, others might have a partial mandate over a certain spatial area (e.g. in the case of properties involving large areas, involving different municipalities for instance) or a specific type of resources (e.g. for listed buildings only or water resources). If a large number of actors are identified, you should focus the analysis on the most important ones.

Step 2 – List the attributes (or area) for which each actor is responsible for

If the actor is responsible for the totally of the property, simply list all attributes. If on the other hand, the actor is only responsible for specific attributes (e.g. the religious buildings or the rock art as in the case of mixed property of Maloti-Drakensberg presented in Workshop II) list the large categories of attributes. It is also possible that the mandate of the actor is linked to a territorial mandate (e.g. in the case there are different municipalities); in the case instead of the attributes you can list the area.

Step 3 – Describe the actors' role(s) and/or mandate(s)

Identify and describe the role, mandate and responsibilities of each manager in column 2. This should be a very short description focusing on the actor's specific mandate(s) in relation to the management of the property and not necessarily its broader mandate(s) as an agency or group.

Step 4 – Identify the key instruments that set out the actor's mandate and the powers they hold

Identify the instrument(s) that each actor uses to implement its mandate(s) and exercise its responsibilities to manage the property such as:

- national legislation, regulations, policies, strategies, guidelines and agreements;
- planning documents such as master plans, development plans, land-use plans;
- legally binding or formally approved management plans;
- customary rules, obligations and traditions;
- technical and other forms of advice; or
- legal contracts, financial resources and incentives.

List only the most relevant instruments.

Step 5 – Review key issues regarding each actor's role and responsibilities in managing the property

The final column of the worksheet provides space to record comments and explanations on the key issues regarding what is working well or what could be improved in relation to each manager's role(s), mandate(s) and responsibilities. For instance, a manager might have surveillance and law enforcement responsibilities but its staff might not have the necessary resources, technical capacity or authority to effectively implement them. Or, a manager might have been given the mandate of managing the World Heritage property, but this was not accompanied by supporting legal, administrative, financial and human resources to effectively implement that mandate.

Step 6 – Summarise and analyse findings and draw recommendations and follow-up actions

Consider the following questions to help you with this step:

1. Is it clear who are the actors that can be considered as managers? If not, why not?
2. Is each actor identified recognised as a manager by the other actors, particularly if that actor is only responsible for managing parts of the World Heritage property? If not, why not?
3. Is it clear what instruments and powers grant each actor identified the role of manager? How do those instruments and powers make them accountable to the other actors, and the public in general, for fulfilling certain responsibilities in managing the property?

4. When several managers exist, is it clear who holds the main responsibility for managing the World Heritage property from a heritage perspective?
5. Is the mandate of the manager recognised as holding the primary responsibility for the World Heritage property adequate to the role it has? Does that mandate and the instruments at its disposal grant it the necessary powers to effectively assume the primary responsibility for managing the property?
6. Are there any conflicts or overlaps between the responsibilities of different managers?
7. Are there situations where certain managers are unable or unwilling to exercise their responsibilities? If yes, why and what can be done to improve the situation?
8. Is the governance structure deriving from the interaction between different managers clearly documented, transparent and accessible?
9. Is the governance structure in line with the values of the World Heritage property? Does this structure cover the whole range of attributes of the property?

These questions form the basis for the presentation to be submitted as part of the assignment.

Completing worksheet 4c (optional but recommended)

Effective management requires active engagement of rightsholders and stakeholders in decision-making processes and other management processes. This worksheet is designed to help you analyse the relationships between managers and rightsholders and stakeholders. For the purpose of this assignment, if you decide to complete this worksheet, either before the next workshop or throughout the duration of the Heritage Place Lab, we kindly request that site management group (not the research group) fills in the worksheet because they will be the ones that will direct involvement with the rightsholder and stakeholder groups. Therefore, the practice group (site management) needs to use this worksheet to analyse the relationships with rightsholders and stakeholders from the perspective of the organization they represent.

Completing this worksheet requires an in-depth understanding of different groups of rightsholders and stakeholders, not just a general one. For instance, in a human settlement, rightsholders can be building owners and/or business owners and each group can have a different relationship with the property and different needs. You may also want to distinguish between different age groups. Similarly, stakeholders can be tourist operators or business companies that buy products produced within the property.

The worksheet is presented in the form of a matrix, with different rightsholders and stakeholder groups listed on the top of each column and rows containing a series of questions that need a different response for each group identified. Note all questions will be relevant for each of the rightsholder or the stakeholder groups identified, therefore in those cases, leave the spaces blank. Although this worksheet is structured as a questionnaire, since you need to answer the questions for different groups, it is critical that at the end you draw overall conclusions. You can use the following questions to help you with this:

1. Have the different rightsholders and stakeholders been sufficiently identified?
2. Do relationships with rightsholders and stakeholders in and around the property help facilitate effective management?
3. Are the needs of rightsholders and stakeholders addressed effectively within the management system for the property, without compromising its conservation? If yes, are benefits provided by the World Heritage property shared equitably with local people? If not, what are the main conflicts that need to be addressed?
4. Are the impacts of management on each rightsholder group positive or at least neutral?

World Heritage Leadership

Interlinking research and practice for enhancing World Heritage site management

Heritage Place Lab

Pilot Phase 2021-2022
Assignment IV: Factors Affecting the Property

World Heritage properties face many factors which can affect their state of conservation and consequently their values. These factors typically have a complex set of causes and impacts and require different types of management actions. A deep understanding of these factors, and of the management actions already in place to address them, will offer a solid foundation to explore and develop the priority themes that help structure the Heritage Place Lab initiative. Therefore, we request that you use Tool 2 of the Enhancing Our Heritage Toolkit to bring together knowledge about which factors are affecting the property, and how they are affecting the property. Tool 2 is provided below.

To present the results of this work, we request that you send us the completed worksheet 2 and that you summarise the lessons learnt from using this worksheet in a PowerPoint presentation that responds to the following questions:

1. Is the Periodic Reporting exercise prepared for the World Heritage property well-known to managers?
2. Are the factors affecting the World Heritage property identified in the Periodic Report also documented in other information sources used by managers? (For example, the management plan)
3. Is there a detailed understanding of the factors affecting the property and their underlying causes and impacts? Or, is knowledge limited mainly to a list of factors?
4. Have the factors (both existing and potential) originating within the buffer zone(s) and beyond it been identified?
5. Have actions for all factors with high and very high impacts been identified? Are these actions being implemented?
6. Are these management actions clearly documented? Is it clear who is responsible for their implementation?
7. What are the main challenges and shortcomings for addressing the most critical factors? How can they be better addressed in the future?

In preparing your presentation please:

- Answer one question per slide and ensure that slides are not too heavy in content;
- Ensure the presentation does not exceed 10 minutes.

Submit the PowerPoint and the worksheet 2 by uploading it to your Team's Google Drive folder at: https://drive.google.com/drive/folders/1phkP9tgPqzmesv_zI2rP7Qzvrdp-xdXf?usp=sharing to the Heritage Place Lab Organising Team by **November 10, 2021.** We look forward to receiving your assignments and viewing your presentations.

TOOL 2: FACTORS AFFECTING THE PROPERTY

This Tool assesses if factors that affect or could potentially affect the property are known, well understood and documented. Is also analyses the adequateness of managements actions to the identified factors.

Specific objectives of the Tool:

a. To identify if there is a good understanding and documentation of the factors affecting the property, both positively and negatively;
b. To review if the underlying causes of the factors have been identified;
c. To help understand the complexity and relationships between those factors, their causes and the impacts that they have on the attributes of the property and their state of conservation;
d. To assess if the actions and timeframes identified to address the factors are appropriate and if it is clear who is responsible for their implementation;
e. To identify challenges and ways to improve management actions.

Definitions:

Factors affecting the property: Everything that can affect, positively and negatively, the values and attributes of the World Heritage property and its state of conservation. Negative factors are usually called threats. How factors affect a property needs to be analysed through a series of parameters – namely the underlying causes that are the source of the factor, their origin (if originating within or outside the property), the current and potential impacts deriving from the factor and the extent and severity of the impacts on the attributes of the property.

Impacts: The effects or consequences derived from or produced by a factor affecting the attributes of the World Heritage property, both in terms of their state of conservation and ability to convey the values of the property. Impacts can be positive or negative, as well as direct or indirect.

Background information:

World Heritage properties face many factors which can affect their state of conservation and consequently their values. While there is a tendency to focus on negative factors, commonly referred to as threats, there are also factors that can have positive effects. An example is tourism. On the one hand, if managed properly and based on a sustainable approach, tourism can generate important benefits. On the other hand, mass tourism or unplanned and unregulated tourism activities can lead to the dislocation of local communities, loss of the sense of place, physical damage and reduced authenticity. Similarly, some factors may be perceived negatively by some actors but positively by others.

The factors affecting a property typically have a complex set of causes and impacts. This tool helps you understand the relationships between the causes and impacts of those factors and the extent and severity of current and potential impacts on the attributes of the property. It also helps you to assess if management actions that have been put in place are adequate and sufficient to prevent or minimise impacts.

Completing worksheet 2

Although this worksheet can look relatively simple at first, it can be quite complex to complete, especially where there is confusion between 'factors affecting the property', the 'causes of those factors' and their 'impact'. You might also need to go back and forth between the different columns when analysing each factor, rather than methodically filling each column from left to right.

The definitions and relationships between factors, causes, and impacts is outlined in the Box below. The step-by-step guidance also included below offers additional information to help you fill in each section of the worksheet. While some sections can be filled in using the professional and personal experiences of all those involved in the assessment (e.g. if the factor is currently affecting the property or could potentially affect it in the future), other sections are better identified by using data and detailed information sources rather than educated guesses (e.g. extent and severity of impacts).

Box 5.2 Distinguishing between factors, causes and impacts

Factors affecting the property – Everything that can affect, positively and negatively, the values and attributes of the World Heritage property and its state of conservation. Negative factors are usually called threats. How factors affect a property needs to be analysed through a series of parameters – namely the underlying causes that are the source of the factor, their origin (if originating within or outside the property), the current and potential impacts deriving from the factor and the extent and severity of the impacts on the attributes of the property.

Causes – the root or underlying reasons that are at the source of the factor.

Impacts – The effects or consequences derived from or produced by a factor affecting the attributes of the World Heritage property, both in terms of their state of conservation and ability to convey the values of the property. Impacts can be positive or negative as well as direct or indirect.

Example 1:
Factor - degradation of a coral reef;
Causes - ocean acidification and tourist over-use;
Impacts - loss of fish species.

Example 2:
Factor - loss of traditional agricultural practices;
Causes - population ageing and use of machinery;
Impacts - abandonment of agricultural fields or disappearance of local crop varieties.

Note that the distinction between these three concepts depends on what you define from the beginning as a factor. For example, if you start by listing ocean acidification as the factor, then one of the underlying causes would be too much carbon dioxide gas in the atmosphere dissolving in the ocean. However, when you come to the columns on impacts and management actions, it might be difficult for you to identify concrete and meaningful actions that can take deal with that factor at the site-level. Therefore, you want to start by listing factors which you can address with concrete actions.

Worksheet 2. Analysis of factors affecting the property											
Factor	Positive or negative	Current or potential	Origin: inside or outside	Causes	Attributes affected	Impact of factor		Management action			Comment/ explanation
						Extent	Severity	Action	Priority for action	Responsibility	
Analysis and conclusions											
Gaps and challenges											
Opportunities, recommendations and follow-up actions											

This is, for example, the case if, for Example 2 above, you were to start by identifying the use of machinery as the factor, then the underlying cause might be the high costs of labour or lack of skilled farm workers and the impact could then be defined as the loss of traditional practices.

Step 1 – Identify and analyse information about factors affecting the property in the information sources

Key questions to consider:
Which sources of information identify and document the factors affecting the property? Has a detailed assessment of the factors affecting the property been carried out? Are the information sources well known to managers?

i. You should start with the factors identified in the last cycle of World Heritage Periodic Reporting. However, this will not include an analysis of their underlying causes or their impacts. In addition, that list may not be complete or may be outdated depending how long ago the last Periodic Reporting exercise was done. Certain properties have just completed the third cycle of Periodic Reporting, in which case the list of factors should be comprehensible (if the process was done transparently and rigorously). Other properties will only go through this process in the coming years. It the latter applies to you, this assignment can be used to inform that future work.

If your property is currently or has previously been under Reactive Monitoring, you can also use the sources information related to this process to help you complete the assignment. Please access the following weblink to access such information: https://whc.unesco.org/en/soc/

For properties inscribed recently on the World Heritage List, consider information from the nomination file on factors affecting the property as well as from the Advisory Body evaluation(s).

Last, but not least, consider information included in the management plan, if available.

ii. Discuss if people are familiar with the information sources mentioned above.

Step 2 – List factors and identify if they are positive or negative, current or potential as well as their origin

Based on the information sources, list the most important factors (positive and negative) that are affecting or are likely to affect the attributes of the property and its authenticity and integrity in the future (column 1). Discuss if there are other important factors that are not mentioned in the information sources, particularly in the Periodic Reporting exercise, that should be considered and added to the list. This is of particular concern for factors identified by traditional/customary rightsholders. To help you identify factors, you can use the standard list of factors included at https://whc.unesco.org/en/soc/

iii. Next, identify whether the factor has a positive or negative effect on the property (column 2). Experience from testing the EoH 2.0 shows that people largely focus on negative factors or threats. However, it can be equally important to identify factors that influence the property positively, since they can help reinforce management actions. Moreover, consider if the same factor can have both positive and negative aspects, as in the case of tourism mentioned above. Or, if the factor is considered negatively by some actors but positively by others. For instance, an invasive species might be considered negatively by managers because it threatens the survival of an endemic species but might be considered positively by some actors as a resource for traditional medicine.

iv. Factors affecting the property can also be divided into current and potential (column 3). Potential factors are those that may affect the property in the future but are not currently having any impact. The likelihood of a factor occurring should be weighed against the need for management action, and only those factors that are most likely to happen and could have a significant impact should be listed. A clear identification of potential and current factors is particularly important when developing risk management plans.

v. Then identify the origin of the factor in column 4: if within the property, in its buffer zone or even beyond the buffer zone, in what is commonly termed the wider setting. For instance, the construction of wind mills, even if located far from the property, can still have negative effects on it, from a visual perspective. The same could be said for the construction of an airport that could potentially increase exponentially the number of visitors or for the construction of dams upstream that would significantly reduce the water flow to the property.

Step 3 – Identify the causes that are the origin of factors

Key questions to consider:
Is the identified factor the actual source (or cause) of the issue or is it a derivative (more like a symptom) of that cause? Have the causes leading to the factors been identified?

vi. For each factor, identify its underlying main cause(s) in column 5. However, be aware that some of these causes might not be obvious and dependent on how you formulated the factor; therefore, they may not help you much in identifying appropriate management actions. Note that the focus of the Tool 2 is mainly on

direct causes, which you can address yourself or in partnership with other actors, rather than indirect causes, such as poverty, climate change, inadequate political systems, inequitable economic growth, etc.

Separation of the causes and impacts of factors affecting the property is important because:

a. It allows the development of clear actions for addressing those factors by tackling the actual underlying causes. If the causes cannot be eliminated entirely, it may be possible to develop management actions that will help reduce their impacts; and
b. As factors affecting the property can create more than one impact, management actions can be prioritised according to the causes responsible for the most significant impacts on the attributes of the property.

Step 4 – Identify the attributes affected

Key questions to consider:
Is there a good understanding of how factors are affecting the different attributes of the property? Which factors affect in particularly the attributes that convey the Outstanding Universal Value of the property?

vii. The list of factors identified in column 1 needs to be considered in relation to the attributes identified in worksheet 1a associated with Tool 1. One factor might affect more than one attribute and can have different effects on each of those attributes. Or again, it might have a positive effect on one attribute but a negative one on a different attribute. For instance, fire can have a devastating effect on a wide range of attributes. However, undertaking fire management fuel-reduction burning can be an important cultural practice and can contribute to the regeneration of certain habitats, but the smoke deriving from the fires might negatively affect rock art sites located nearby.

viii. List the attributes that are affected by each factor in column 6. Consider in particular how each factor affects the state of conservation of the attributes, as later this will help to identify more clearly if management actions are adequate or not. You should use one row for each attribute (or type of attribute).

Step 5 – Analyse the impacts of factors

Key questions to consider:
Is there a good understanding of how factors are impacting the attributes of the property? Have those impacts been analysed in detail? Are there studies or monitoring programmes to identify the extent and severity of those factors on the attributes?

ix. The worksheet covers two key aspects of how the factor impacts on the attributes of the property: extent and severity (columns 7 and 8). You should analyse the impacts of each factor on each attribute (or type of attribute). This might require you to add additional rows to the worksheet. Providing descriptive text about those aspects in detail will result in a richer assessment. However, to facilitate the assignment, you may summarise the analysis against a set rating suggested below.

x. Analyse the extent to which the attributes are being or are likely to be impacted by the factor being assessed in column 7. If you have reliable data and are able to measure the impact in concrete terms, then it is better to do so. For instance, this may be measured as: the proportion of a particular habitat being impacted; the

proportion of a species' population being affected; the area of an historic centre that could potentially be flooded; the percentage of buildings used as hotels and other tourism accommodation; the area of abandoned agricultural fields. However, for many properties it may be difficult to objectively measure the extent of the impact. In addition, to facilitate the assignment, you can base the assessment on the following four-point scale:

a. **Low –** the factor does not affect an attribute of OUV or a low number of a type of attribute of another important value (e.g. only a few wooden buildings are affected by termites);

b. **Medium –** the factor is impacting an attribute of OUV, a key attribute of another important value or a considerable number of a type of attribute of another important value to a degree that starts raising concern (e.g. number of wooden buildings affected by termites is increasing but is still not problematic)

c. **High –** the factor is impacting the attribute to a large extent (e.g. a large proportion of wooden buildings are affected by termites)

d. **Very High** – the factor is critically affecting the state of conservation or even the survival of the attribute (e.g. most wooden buildings are affected by termites).

xi. Analyse the severity of the impact caused by the factor. Follow the same approach used to analyse the extent of the impact. Consider for example, if the factor will completely destroy the attribute or will it cause only minor changes? The following four-point rating scale could be used:

a. **Low –** the factor is having only a minor or barely detectable impact on the attribute and its ability to convey value(s);

b. **Medium –** the factor is having a detectable impact on the attribute but damage (or benefit, if the factor is positive) is not considered significant;

c. **High –** the factor can or will lead to a significant reduction (or improvement if the factor is positive) in the ability of attribute to convey the value;

d. **Very High –** the factor is likely to lead to the deterioration or destruction of the attribute to an extent that would compromise its ability to convey the value(s) in the foreseeable future if the factor is not addressed effectively.

Step 6 – Identify what actions are planned or being implemented to manage the factor

xii. Based on the analysis of the information sources such as the management plan, list the actions planned or already being implemented to address the factor being assessed (column 9). These actions can either be directed at eliminating, mitigating or enhancing the impacts of the factor and its underlying causes according to whether they are affecting the attribute positively or negatively.

xiii. Identify the degree of urgency of action needed in column 10. For example, is the impact of the factor likely to become irreversible or impossible to mitigate if not addressed soon? Verify first if the source used already includes information in this regard. If a rating is needed then the following four-point scale can be used:

e. **Low –** the management action is not urgent and if action is not taken the impact will not substantially increase in the short or medium-term;

f. **Medium –** the management action is not urgent but if action is not taken the situation will deteriorate or change in the short or medium-term;

g. **High –** action must be taken as soon as possible or the impact will increase in the short-term or medium-term;

h. **Very High –** immediate action is needed to avoid serious long-term or irreversible damage to the attribute and subsequently loss of value(s).

xiv. Identify who is responsible for implementing the actions listed in column 10. Some factors might originate within the wider setting of the property and therefore might fall outside the direct mandate of the managers. Even if the factor originates within the property's boundaries and buffer zone(s), the responsibility to address it might fall to a different organisation than the manager with directly responsibilities for managing the property from a heritage perspective, owing to legal constraints or governance arrangements. This is why it is important to identify who is responsible for addressing the factor and providing the actions needed. In some cases, partnerships between different actors are needed.

xiv. Use the last column to combine and analyse the information included in the previous columns in relation to each factor. This should help you gather an overview of how effectively each factor is being addressed and dealt with.

Step 7 – Summarise findings, draw conclusions and define follow-up actions

i. Use the rows at the end of the worksheet to summarise the key findings resulting from the analysis of the different factors. In particular, consider the relationships among the factors identified and their cumulative impacts. Consider the following questions to help you reach conclusions:

ii. There a detailed and inclusive understanding of the factors affecting the property, their underlying causes and impacts or is knowledge limited mainly to a list of factors?

iii. Is this understanding informed by comprehensive and inclusive studies and monitoring programmes? Are they sufficient?

iv. Are particular factors or sets of factors affecting the attributes of the property differently? Are these differences well understood?

v. Have the relationships between factors and their potential cumulative and multiplying impacts been considered?

vi. Has a clear and inclusive approach on how to respond to the factors been developed? Have adequate actions to all factors with high and very high impacts been identified and are they being implemented? Are these management actions clearly documented, including information on who is responsible for their implementation?

vii. What are the main challenges and shortcomings for addressing the most critical factors? How can they be addressed?

WORLD HERITAGE LEADERSHIP NETWORKS

Interlinking research and practice for enhancing World Heritage site management

Heritage Place Lab

Pilot Phase 2021-2022

Assignment V: Practice-led Research Agenda Outline

Based on the collaborative process developed during the incubator workshops of the Heritage Place Lab, including assignments, exercises, discussions and lessons learned, please develop the outline of the practice-led research agenda for your World Heritage property.

Please use the template hereby included and follow the indications for each item. The complete document, excluding references and annexes, should be around 10 pages long. We recommend that the Team revises and goes through the EOH 2.0 Tools 1, 2 and 4 again, using the feedback provided by the HPL Team, as well as incorporate findings from your presentations and discussions as well as team exercises held during the incubator workshops.

To present the results of your work, we request that you send us the complete document and that you summarise the process of development of the outline and the results in a Power Point presentation that responds the following questions:

1. What conclusions did you come to through the reflection process (section IV of the template) and what were their implications for defining the research priorities (section V of the template) for the World Heritage property? (max. 3 slides)
2. Briefly explain the research priorities presented in the practice-led research agenda outline and the most important research questions (max. 6 slides/2 slides per research priority).
3. Summarise the lessons learned from the process and your findings (max. 3 slides).

In preparing your presentation please:

- Ensure that slides are not too heavy in content;
- Ensure the presentation does not exceed 15 minutes.

Submit the document and PowerPoint by uploading it to your Team's Google Drive folder at: https://drive.google.com/drive/folders/1phkP9tgPqzmesv_zI2rP7Qzvrdp-xdXf?usp=sharing to the Heritage Place Lab Organising Team **by March 10, 2022**. We look forward to receiving your assignments and viewing your presentations

Heritage Place Lab

Collaborative Practice-led Research Agenda for

[World Heritage property official name]

Research-Practice Team

Research institution(s)] / [Site management institution(s)]

I. Background

1. Brief description of the World Heritage property - Maximum 750 words

-Short description of the property, including location and category
-Describe the Outstanding Universal Value (not a copy paste of the SOUV): reasons why this property is on the World Heritage List
-Other important values and designations

2. Three (3) key management issues (described by the site managers' group in Workshop I) - Maximum 500 words

3. Three (3) main research interests (described by the researchers' group in Workshop I) - Maximum 500 words

II. Collaborative process

Describe the process of collaborative work (i.e. working processes, methods used, benefits and challenges of collaborative work, etc.) developed by the Research-Practice Team based on the assignments done using of Tools 1, 2 and 4 from the Enhancing our Heritage Toolkit 2.0. - Maximum 1000 words

III. Key findings from the assignments

Explain the implications of the Team's key findings achieved through the collaborative process in relation to management issues and research priorities - Maximum 1000 words

IV. Reflection process

Compare and analyse the research priorities that the Research-Practice Team has identified by working collaboratively to the management issues and research interests presented in Workshop I.
What can the Team learn and conclude from this comparison? - Maximum 1000 words

V. Practice-led Research Agenda Outline

Describe the three (3) most important research priorities identified based on the collaborative process described above. If the Team has identified less than three (3), please report only those that were identified collectively, even if only one (1) priority or two (2) were identified. If the Team has to select from more research priorities identified, briefly summarise in a few sentences the other research priorities (based on areas of knowledge to explore) identified by the Team.
When describing the research priority, please relate to the concepts discussed during the incubator workshops I, II, III and IV: values, attributes, governance, factors affecting the property, actors, managers, communities, research needs, practice-led, impacts, knowledge, Indigenous and local, communities among others.

1. Research Priority 1 - Maximum 800 words
Before describing the research priority, explain the background to this priority: how did the Team concluded that this is the most important research priority?
What areas of knowledge/disciplines are required to develop this research priority?

Elaborate the research questions that need to be responded in order to address this priority.

2. Research Priority 2 - Maximum 800 words
Before describing the research priority, explain the background to this priority: how did the Team concluded that this is the second most important research priority?
What areas of knowledge/disciplines are required to develop this research priority?
Elaborate the research questions that need to be responded in order to address this priority.

3. Research Priority 3 - Maximum 800 words
Before describing the research priority, explain the background to this priority: how did the Team concluded that this is the third most important research priority?
What areas of knowledge/disciplines are required to develop this research priority?
Elaborate the research questions that need to be responded in order to address this priority.

VI. References

List only the resources that have been used to produce this document.
Citations using Harvard style (https://www.mendeley.com/guides/harvard-citation-guide/)

VII. Annexes

Annex the analysis, gaps and conclusions identified in using the Tools 1, 2 and 4 of the Enhancing our Heritage Toolkit 2.0. We suggest you to review and revise the assignments in line with the discussions held and feedback provided.

Other material produced (graphics, tables, completed worksheets) that are useful to understand the work process of the Research-Practice Team can be annexed here as well.

Annex 2:
Template for the journal article

Heritage Place Lab

Journal article template
(To be used in conjunction with the JCHMSD guidelines:
https://www.emeraldgrouppublishing.com/journal/jchmsd)

[World Heritage property official name]

Research-Practice Team:
Research institution(s)] / [Site management institution(s)]

I. Introduction

1. Brief description of the World Heritage property
   - Description, location, category
   - Outstanding Universal Value
   - Other important values and designations

2. Main management issues and challenges

3. Main research interests

II. Method (Collaborative process)

Describe the process of collaborative work developed by the Research-Practice Team based on the assignments (use of Tools 1, 2 and 4 from the Enhancing our Heritage Toolkit 2.0), including methods used. How did you apply the Heritage Place Lab methodology in your site with your Research Practice Team?

III. Results

1. Key Findings from the assignment

Describe the key findings you arrived to through the collaborative process.
What are the implications of these key findings in regards to the management issues and research priorities of the World Heritage property?

2. Concrete results of the process

Briefly outline the thematic lines of the practice-led research agenda.
Describe any change in perceptions/positions and partnerships, projects, collaborations stemming from the process.

IV. Discussion and analysis (Reflection process)

Compare and analyse the research priorities that the Research-Practice Team has identified by working collaboratively to the management issues and research interests presented in Workshop I.

What can the Team learn and conclude from this comparison?

V. Conclusions

Conclude on lessons learned and next steps

Annex 3:
Template for the practice-led research agenda

WORLD HERITAGE LEADERSHIP NETWORKS

Heritage Place Lab

Collaborative Research Agenda for [World Heritage property official name]

Research-Practice Team:

Research institution(s)] / [Site management institution(s)]

I. Background

1. Brief description of the World Heritage property - Maximum 750 words
Description, location, category
Outstanding Universal Value
Other important values and designations
(Include pictures and maps of the heritage place)

2. Main management issues
(Issues and challenges identified or reinforced through the Heritage Place Lab process. Differentiate those to be addressed by research)- Maximum 750 words

II. Research Agenda

1.Introduction - Maximum 500 words
Introduce this new agenda summarizing the main difference from existing research projects or research agendas.

2. Research priorities
Describe the three (3) most important research priorities identified based on the collaborative process described above. If the Team has identified less than three (3), please report only those that were identified collectively, even if only one (1) priority or two (2) were identified. If the Team has to select from more research priorities identified, please report briefly how many other research priorities (based on areas of knowledge to explore) were identified by the Team.

When describing the research priority, please relate to the concepts discussed during the incubator workshops I, II, III and IV: values, attributes, governance, factors affecting the property, actors, managers, communities, research needs, practice-led, impacts, knowledge, Indigenous and local, communities.

Research Priority 1 - Maximum 800 words
Describe the background to this priority: how did the Team concluded that this is the most important research priority?

Elaborate the research questions that need to be responded in order to address this priority.

Research Priority 2 - Maximum 800 words
Describe the background to this priority: how did the Team concluded that this is the second most important research priority?
Elaborate the research questions that need to be responded in order to address this priority.

Research Priority 3 - Maximum 800 words
Describe the background to this priority: how did the Team concluded that this is the third most important research priority?
Elaborate the research questions that need to be responded in order to address this priority.

More research priorities can be added...

III. Inputs needed and expected outputs

Describe inputs needed in terms of resources (including human, financial and infrastructural), for example disciplines that are not part of the research-practice team, type of funding needed. Also describe potential projects, partnerships, collaborations, events, etc. that stem from this process and that will/could support the achievement of the proposed research agenda.
(800-1000 words)

IV. Desired outcomes

State the tentative timeline to implement the research agenda and how it will contribute to the improvement of the management of the heritage place.
(800-1000 words)

V. References

List only the resources that has been used to produce this document.
Citations using Harvard style **(https://www.mendeley.com/guides/harvard-citation-guide/)**

VI. Illustrations

Use photos, maps, graphics and tables to illustrate the heritage place and the process

Annex 4:
Terms of Reference for Research-Practice Teams

World Heritage Leadership

Heritage Place Lab

Pilot Phase

Terms of Reference for Research-Practice Teams [World Heritage property official name]

All members of the Research-Practice Team [name of the WH site] will

- actively participate from the 6 online workshops to be held in the course of September 2021 and May 2022 and planned for the implementation of Heritage Place Lab pilot phase as follows:

    1. Workshop on Models of Research-Management Collaboration (September 13, 14, 15, 2021)
    2. Workshop on Knowledge Systems Dialogues (October 4, 6, 8, 2021)
    3. Workshop on Building Collaborative Research Agendas (October 25, 26, 27, 2021)
    4. Workshop on Partnering for Collaborative Research (November 15, 16, 17, 2021)
    5. Workshop on Building a Common Practice-Led Research Proposal (TBD 2022)
    6. Workshop on Publication and Heritage Place Lab Follow-up (TBD 2022)

    - will prepare for their participation by studying the relevant documents provided by the World Heritage Leadership and collecting relevant documents related to their specific World Heritage property (statements of Outstanding Universal Value, Management Plans, laws applying to the conservation of the WH property, relevant bibliography and scientific literature, etc);
- will work together and in a collaborative manner with the other Research-Practice members (and when relevant with members of other Research-Practice Teams) before, between and after the online workshops in order to deliver the assignments and reports that will advance the development of the HPL pilot phase;
- will engage in group work and discussions during the workshops and in between workshops;
- will contribute to the drafting of Research-Practice Team site-based research agenda;
- will engage and respond to the follow-up activities after the finalization of the online workshops (ie. publication, drafting reports, participate in events and conferences coordinated with the World Heritage Leadership, promoting there results of the HPL pilot phase as requested by the WHL, etc.)
- will provide relevant information for the drafting of the HPL report on what is relevant to the World Heritage property that the Research-Practice Team is working

on in coordination with the HPL project lead;
- will contribute to the common publication of the results and outcomes of the HPL pilot phase in coordination with the HPL project lead;
- will contribute to the drafting of a manuscript for a Special Issue in the Journal of Cultural Heritage Management and Sustainable Development;
- will contribute to the drafting of the common research proposal (s) relevant to the Research-Practice Team;
- will contribute and collaborate to the work of the Research-Practice Team in duly manner as requested and organize by the Research and Practice Leads.

Research Lead responsibilities

Within the framework of the Heritage Place Lab Pilot Phase of the World Heritage Leadership programme, the Research Lead will function as a the interface between the Heritage Place Lab project lead/WHL programme and the Research-Practice Team [name of the WH site], in coordination with the Practice Lead. The Research Lead will organize and coordinate the Research-Practice Team in cooperation with the Practice Lead. He or she commits to submit all documentation necessary to the development and completion of the Heritage Place Lab Pilot Phase including the assignments, WH property research agenda, and manuscripts for publication by ICCROM and/or in the Special Issue being prepared for the Journal of Cultural Heritage Management and Sustainable Development (**https://www.emerald.com/insight/publication/issn/2044-1266**). The Research Lead will ensure the scientific quality and the compliance to research ethics for all submissions of the Research-Practice Team in the context of the HPL Pilot Phase.

Practice Lead responsibilities

Within the framework of the Heritage Place Lab Pilot Phase of the World Heritage Leadership programme, the Practice Lead will function as the interface between the Heritage Place Lab project lead/WHL programme and the Research-Practice Team [name of the WH site], in coordination with the Research Lead. The Practice Lead will cooperate with the Research Lead in the coordination of the Research-Practice Team. The Practice Lead commits to closely collaborate with the Research Lead for the submission of all documentation necessary to the development and completion of the Heritage Place Lab Pilot Phase including the assignments, WH property research agenda, and manuscripts for publication by ICCROM and/or in the Special Issue being prepared for the Journal of Cultural Heritage Management and Sustainable Development (**https://www.emerald.com/insight/publication/issn/2044-1266**).

The Practice Lead will ensure that the Research-Practice Team members have access to the WH property in question and all relevant information and documentation for the development of the Heritage Place Lab Pilot Phase. The Practice Lead will ensure that the outcomes of the Heritage Place Lab Pilot Phase can be implemented at site-level after the completion of the Pilot Phase in coordination with the relevant management authorities and the Research Lead.

Annex 5:
PANORAMA snapshot solutions of HPL Research-Practice Teams

- **La Antigua Guatemala, Guatemala:** La Antigua Guatemala a living heritage: Integrating natural and intangible cultural heritage in the management and conservation of the city and its surroundings by Mario Ramirez - https://panorama.solutions/en/solution/la-antigua-guatemala-living-heritage-integrating-natural-and-intangible-cultural-heritage

- **Okavango Delta, Botswana:** Okavango Delta World Heritage Site Research and Practice Team Lab by Katlego Mwale - https://panorama.solutions/en/solution/okavango-delta-world-heritage-site-research-and-practice-team-lab

- **Jaipur City, Rajasthan, India:** Restoring Balance: Recognizing Nature and Knowledge in Jaipur's Heritage Through Research-Practice Collaboration by Anuranjan Roy - https://panorama.solutions/en/solution/restoring-balance-recognizing-nature-and-knowledge-jaipurs-heritage-through-research

- **La Quebrada de Humahuaca,** Argentina: Interlinking research and practice for improving the management of the Quebrada de Humahuaca, World Heritage cultural landscape, Argentina by Sebastian Pasin - https://panorama.solutions/es/solution/interlinking-research-and-practice-improving-management-quebrada-de-humahuaca-world

Annex 6: Incubator online workshops programmes

World Heritage Leadership

Heritage Place Lab

CInterlinking research and practice for enhancing World Heritage site management

Workshop I: Research-Practice Collaboration

Online | September 13-15, 2021 | 13.00-16.00 (CET)

Programme

Session 1: Monday, September 13, 2021

Moderators: Eugene Jo and Maya Ishizawa

13.00-13.05	**Opening remarks** Dr. Valerie Magar, Unit Manager, Programmes, ICCROM
13.05-13.20	**World Heritage Leadership programme** Ms. Eugene Jo, Programme Manager, ICCROM
13.20-13.30	**Heritage Place Lab pilot phase** Dr. Maya Ishizawa, Heritage Place Lab Project Lead, World Heritage Leadership
13.30-13.40	**Mentimeter interaction** Ms. Nicole Franceschini, Online Activities and Networking Coordinator, World Heritage Leadership
13.40- 13.50	**Heritage Place Lab Logistics** Ms. Nicole Franceschini, Online Activities and Networking Coordinator, World Heritage Leadership Ms. Supitcha Sutthanonkul, Project assistant, World Heritage Leadership
13.50- 14.00	Break
14.00-14.10	**Introduction to Research-Practice Teams and to Workshop I: Models of Research-Practice Collaboration** Dr. Maya Ishizawa, World Heritage Leadership

14.10-15.45	**Research-Practice Teams Presentations on Assignment Management Issues and Research Needs**
	Research-Practice Team **Asante Traditional Buildings**, Ghana University of Ghana & Ghana Museums and Monuments Board (GMMB)
	Research-Practice Team **Jaipur city, Rajasthan**, India Manipal University Jaipur, India, Category 2 Centre for World Natural Heritage Management and Training for Asia and the Pacific under the auspices of UNESCO, Wildlife Institute of India (WII-C2C) & Jaipur Municipal Corporation and Town Planning Department, Rajasthan, India
	Research-Practice Team **Antigua Guatemala**, Guatemala University of San Carlos of Guatemala (USAC) & Council for the Protection of la Antigua Guatemala (CNPAG)
	Open dialogue
15.45-16.00	Closure of session

Session 2: Tuesday, September 14, 2021

13.00-13.10	**Moderators:** Eugene Jo, Maya Ishizawa and Pascall Taruvinga
13.10-14.10	**The Heritage Place approach** Mr. Tim Badman, Director, IUCN World Heritage Programme
	Roundtable 1 on Research-Practice models Dr. Gamini Wijesuriya, Special Advisor to ICCROM Director General Dr. Xavier Forde, Ministry of Culture, New Zealand Dr. John Merson, Blue Mountains World Heritage Institute Dr. Nobuko Inaba, Special Advisor to ICCROM Director General
14.10-15.00	Open dialogue
	Roundtable 2 on Research-Practice models Dr. Bernard Baerends, Wadden Sea Secretariat Ms. Soledad Luna, Wadden Sea Secretariat Mr. Carlo Francini, UNESCO Office Municipality of Florence, Italy Ms. Alessia Montacchini, HeRe-Lab, University of Florence Dr. Francesca Giliberto, PRAXIS, University of Leeds
	Open dialogue
15.00-15.10	Break
15.10-15.55	**Research-Practice Teams Presentations on Assignment I on Management Issues and Research Needs**

Research-Practice Team **Rjukan-Notodden Industrial Heritage site, Norway**
University of Southeast-Norway & Vestfold and Telemark County and Notodden, Tinn and Vinje Municipalities

Research-Practice Team **Quebrada de Humahuaca**, Argentina
La Plata National University, University of Buenos Aires & Quebrada de Humahuaca Provincial Management Unit, Ministry of Culture and Tourism of the Province of Jujuy

Open dialogue

15.55-16.00 Closure of session

Session 3: Wednesday, September 15, 2021

Moderators: Maya Ishizawa and Pascall Taruvinga

13.00-13.10 Introduction to the session
Dr. Maya Ishizawa, World Heritage Leadership

13.10-13.20 **The Word Heritage system**
Ms. Eugene Jo, ICCROM

13.20-13.50

Protected areas databases: IUCN Outlook, IUCN Green List, Protected Planet
Mr. Matthew Emslie-Smith, IUCN

PANORAMA Nature-Culture Thematic Community
Ms. Nicole Franceschini, World Heritage Leadership

Q&A

13.50-14.00 Break

14.00-15.45 **Research-Practice Teams Presentations on Assignment I on Management Issues and Research Needs**

Research-Practice Team **Okavango Delta**, Botswana
UNESCO Chair on African Heritage and Sustainable Development, University of Botswana & Botswana National Museum (BNM)

Research-Practice Team **Machu Picchu**, Peru
UNESCO Chair on Anthropology of Health, Biosphere and curing systems, University of Genova, Italy, National Intercultural University of Quillabamba, Peru, National Service for Natural Protected Areas (SERNANP) & Archaeological Park of Machu Picchu

Research-Practice Team **Great Zimbabwe**, Zimbabwe
UNESCO Chair on African Heritage, Great Zimbabwe University (GZU) & National Museums and Monuments of Zimbabwe (NMMZ)

Open dialogue

15.45-15.55	**Introduction to the Assignment II on Values and attributes** Dr. Leticia Leitao, International cultural and natural heritage consultant
15.55-16.00	Wrap-up Workshop I and next steps

Workshop II: Knowledge systems dialogues

Online | October 4, 6 and 8, 2021 | 13.00-16.00 (CET)

Programme

13.00-13.05	**Session 1:** Monday, October 4, 2021 **Moderator:** Maya Ishizawa
13.05-14.05	**Introduction to Workshop II: Knowledge systems dialogues** Dr. Maya Ishizawa, World Heritage Leadership **UNESCO LINKS: Indigenous and Local Knowledge dialogues with the science community and policy makers** Dr. Nigel Crawhall, Dr. Peter Bates, Dr. Joseph Karanja, Dr.Yolanda Lopez-Maldonado
14.05-14.15	Q&A
14.15-14.35	Break
14.35- 14.55	**Budj Bim Cultural Landscape: A case study of Indigenous knowledge and science as 'two-way learning'** Dr. Steve Brown, Heritage researcher and practitioner Q&A
14.55-15.55	**PLENARY DIALOGUE on Values, Attributes and Knowledge** Dr. Leticia Leitao, International cultural and natural heritage consultant Open dialogue **Report by Research-Practice Teams on Assignment II – Mapping values and attributes**
15.55-16.00	Presentations and questions. Each Team is allocated 15-minutes (7-minute presentation followed by 8-minutes of Q&A) Teams: Antigua Guatemala, Asante Traditional Buildings, Great Zimbabwe, Machu Picchu. Closure of session

Session 2: Wednesday, October 6, 2021

Moderators: Maya Ishizawa and Pascall Taruvinga

13.00-13.10	Introduction to the session Dr. Maya Ishizawa, World Heritage Leadership
13.10-14.10	**Report by Research-Practice Teams on Assignment II – Mapping values and attributes** Presentations and questions. Each Team is allocated 15-minutes (7-minute presentation followed by 8-minutes of Q&A) Teams: Jaipur city, Okavango Delta, Quebrada de Humahuaca, Rjukan-Notodden Industrial Heritage site.
14.10-14.30	**Interconnections between values** Dr. Leticia Leitao, International cultural and natural heritage consultant
14.30-14.50	**PLENARY DIALOGUE on interdisciplinarity and transdisciplinarity**
14.50-15.05	**Mural exercise: What knowledge do we need?**
15.05-15.30	Break
15.30-15.55	**Intangible cultural heritage and the World Heritage Convention: looking at possible synergies** Dr. Susan Keitumetse, UNESCO Chair on African Heritage, University of Botswana Q&A
15.55-16.00	**Archiving and accessibility of information: Budj Bim** Dr. Steve Brown, Heritage researcher and practitioner Open dialogue Closure of session

Session 3: Friday, October 8, 2021

Moderators: Maya Ishizawa and Pascall Taruvinga

13.00-13.05	**Introduction to the session** Dr. Maya Ishizawa, World Heritage Leadership
13.05- 14.35	**Mural exercise: Research-Practice Teams Lessons learned** Open dialogue
14.35-14.50	Break
14.50-15.15	**Budj Bim Cultural Landscape: Governance in practice** Dr. Steve Brown, Heritage researcher and practitioner Q&A

15.15-15.45	**Mural exercise:** **Who holds the power, who should hold the power?** **PLENARY DIALOGUE on Mapping actors in World Heritage places** Open dialogue
15.45-15.55	Introduction to the **Assignment III: Mapping Actors** Dr. Leticia Leitao, International cultural and natural heritage consultant
15.55-16.00	Wrap-up Workshop II and next steps

Workshop III: Building Collaborative Research Agendas

Online | October 25-27 2021 | 13.00-16.00 (CET)

Programme

Session 1: Monday, October 25, 2021

Moderators: Maya Ishizawa, Leticia Leitao and Pascall Taruvinga

13.00-13.10	Introduction to Workshop III: Building Collaborative Research Agendas Dr. Maya Ishizawa, World Heritage Leadership
13.10-14.30	**Report by Research-Practice Teams on Assignment III on Mapping actors** Presentations and questions. Each Team is allocated 20-minutes (10-minute presentation followed by 10-minutes of Q&A) Teams: Jaipur city, Asante Traditional Buildings, Great Zimbabwe, Antigua Guatemala
14.30-14.35	Break
14.35-15.55	**Report by Research-Practice Teams on Assignment III on Mapping actors** Presentations and questions. Each Team is allocated 20-minutes (10-minute presentation followed by 10-minutes of Q&A) Teams: Rjukan-Notodden Industrial, Quebrada de Humahuaca, Machu Picchu, Okavango Delta
15.55-16.00	Closure of session

Session 2: Wednesday, October 26, 2021

Moderator: Maya Ishizawa

13.00-13:05	Introduction to the session Dr. Maya Ishizawa, World Heritage Leadership
13.05-13.25	**Linking Values and Knowledge to World Heritage Governance and Management systems** Dr. Leticia Leitao, Independent heritage consultant
13.25-13.45	**Plenary dialogue**
14.05-14.20	**Structuring Research Needs** Dr. Maya Ishizawa, World Heritage Leadership Dr. Steve Brown, Heritage researcher and practitioner
	Break
14.20-15.00	**Starting a Practice-led Research Agenda** Research-Practice Teams in breakout rooms
15.25-15.55	**Towards a research agenda for Heritage Planning** Dr. Loes Veldpaus, Newcastle University
	Open dialogue
15.55-16.00	Closure of session

Session 3: Friday, October 27, 2021

Moderators: Pascall Taruvinga and Maya Ishizawa

13.00-13.05	Introduction to the session Dr. Pascall Taruvinga, heritage researcher and practitioner
13.05-14.05	**Research-Practice Teams Lessons learned**
14.05-14.25	**Dialogue in break out rooms**
14.25-14.45	**Plenary report from breakout rooms**
14.45-15.00	Break
15.00-15.20	**Analysis of Factors affecting the property** Ms. Eugene Jo, World Heritage Leadership
	Open dialogue
15.20-15.45	**Mural team work**

15.45-15.55	Introduction to the **Assignment IV on Factors affecting the property** Dr. Leticia Leitao, Independent heritage consultant
15.55-16.00	Wrap-up Workshop III and next steps

Workshop IV: Partnering for Collaborative Research

Online | November 15-17 2021 | 13.00-16.00 (CET)

Programme

Session 1: Monday, November 15, 2021

Moderator: Maya Ishizawa

13.00-13.10	Introduction to Workshop IV: Partnering for Collaborative Research Dr. Maya Ishizawa, World Heritage Leadership
13.10-14.30	**Shaping international research-practice partnerships** Professor Michael Turner, Bezalel Academy of Arts and Design Professor Shadreck Chirikure, University of Cape Town Open dialogue
14.25-14.40	Break
14.40-15.40	**Research Partners and Research Funds** Ms. Barbara Engels, Federal Agency for Nature Conservation, Germany Professor Sophia Labadi, University of Kent Dr. Pascall Taruvinga, Heritage researcher and practitioner Open dialogue
15.40-15.55	**Mural exercise: Research Partnerships and Funding** Open dialogue
15.55-16.00	Closure of session

Session 2: Tuesday, November 16, 2021

13.00-13.05	**Moderators:** Pascall Taruvinga and Eugene Jo
13.05-14.25	Introduction to the session Dr. Pascall Taruvinga, heritage researcher and practitioner
14.25-14.35	**Reporting of Mural exercise Research Partnerships and Funding**
14.35-15.35	Break
	Regional research partnerships and global research grants Dr. Albino Jopela, Africa World Heritage Fund (AWHF), South Africa Mr. José Francisco Román Gutiérrez, Regional World Heritage Institute in Zacatecas (RIWHIZ), Mexico Dr. Silke Bertram, Volkswagen Foundation
15.35-15.55	Dr. Stephanie Grant, British Council
15.55-16.00	Open dialogue Closure of session

Session 3: Wednesday, November 17, 2021

	Moderator: Maya Ishizawa
13.00-13.05	Introduction to the session Dr. Maya Ishizawa, World Heritage Leadership
13.05-14.20	Report by Research-Practice Teams on Assignment IV on **Factors affecting the Property** Jaipur city, Antigua Guatemala, Great Zimbabwe, Quebrada de Humahuaca
14.20-14.30	Break
14.30-15.45	Report by Research-Practice Teams on Assignment IV on **Factors affecting the Property** Machu Picchu, Okavango Delta, Rjukan-Notodden, Asante Traditional Buildings
15.45-15.55	Introduction to Assignment V: **Outline of the Practice-led Research Agenda**
15.55-16.00	Wrap-up Workshop IV and next steps

Workshop V: Building Common Practice-led Research Proposals and Projects

Online | March 16-18 2022 | 13.00-16.00 (CET)

Programme

Session 1: Wednesday, March 16, 2022

Moderators: Maya Ishizawa and Pascall Taruvinga

13.00-13.10	Introduction to Workshop V: Building Common Practice-led Research Proposals and Projects Dr. Maya Ishizawa, World Heritage Leadership
13.10-14.40	**Presentations of Research Agendas Outline** Research-Practice Teams: Machu Picchu, Okavango Delta and Rjukan-Notodden Industrial heritage site
14.40-14.55	Break
14.55-15.55	**Presentations of Research Agendas Outline** Research-Practice Teams: Antigua Guatemala and Jaipur City
15.55-16.00	Closure of session

Session 2: Thursday, March 17, 2022

Moderators: Maya Ishizawa and Eugene Jo

13.00-13.10	Introduction to the session Ms. Eugene Jo, ICCROM
13.10-14.40	**Presentations of Research Agendas Outline** Research-Practice Teams: Asante Traditional Buildings, Quebrada de Humahuaca and Great Zimbabwe
14.40-14.55	Break
14.55- 15.10	**Climate Change and heritage research** Dr. Scott Orr, University College London
15.10- 15.55	Open dialogue
15.55-16.00	Closure of session

Session 3: Friday, March 18, 2022

Moderator: Maya Ishizawa and Pascall Taruvinga

13.00-13.05	Introduction to the session Dr. Maya Ishizawa, World Heritage Leadership
13.05-13.35	**World Heritage: Common challenges and opportunities** Ms. Kristal Buckley, Deakin University Open dialogue
13.35-14.20	**Common trends** Breakout rooms on common issues/research questions
14.20-14.35	Break
14.35-15.35	**Common trends** Presentation of results of discussions in breakout rooms
15.35-15.55	**Introduction to Assignment VI & next steps: Practice-led Research Agenda and Journal of Cultural Heritage Management and Sustainable Development (JCHMSD) Special Issue - Initial guidance** Dr. Maya Ishizawa, World Heritage Leadership Dr. Ona Vielikies, University College London and Co-editor of the JCHMSD
15.55-16.00	Wrap-up Workshop V and next steps

Workshop VI: Publications and next steps

Online | March 30- April 1 2022 | 13.00-16.00 (CET)

Programme

Session 1: Wednesday, March 30, 2022

Moderator: Maya Ishizawa

13.00-13.10	Introduction to Workshop VI: Publications and next steps Dr. Maya Ishizawa, World Heritage Leadership
13.10-13.40	**World Heritage: Interlinkages between policy, practice and research** Dr. Mechtild Rössler, Centre national de la recherche scientifique
13.40-14.40	**Steps for publishing the Research Agendas** Proposal + Work in breakout rooms+ Discussion
14.40-14.55	Break

14.55-1 .55	**Steps for publishing PANORAMA Case-Studies** Proposal + Work in break out rooms
15.55-16.00	Closure of the session

Session 2: Thursday, March 31, 2022

	Moderators: Maya Ishizawa and Eugene Jo
13.00-13.10	Introduction to the session Ms. Eugene Jo, ICCROM
13.10-13.40	**ICCROM Foresight Initiative: Horizon Scan Study** Dr. Alison Heritage, ICCROM
	Open dialogue
13.40-14.10	**Potential Common Practice-led Research proposals and projects** Work in breakout rooms
14.10-14.40	**Potential Common Practice-led Research proposals and projects** Initial proposals + Discussion
14.40-14.55	Break
14.55-15.55	**Steps for publishing Articles in the Journal of Cultural Heritage Management and Sustainable Development (JCHMSD) Special Issue** Proposal + Work in breakout rooms+ Discussion
15.55-16.00	Closure of session

Session 3: Friday, April 1, 2022

	Moderators: Maya Ishizawa, Eugene Jo and Pascall Taruvinga
13.00-13.05	Introduction to the session Dr. Maya Ishizawa, World Heritage Leadership
13.05-13.35	**Steps for publishing PANORAMA Case-Studies** Discussion
13.35-14.35	Feedback and lessons learned by Research-Practice Teams
14.35-14.45	Break

14.45-15.05	HPL Summary and Follow-up
15.05-15.35	**Closing addresses** Dr. Webber Ndoro, ICCROM Mr. Tim Badman, IUCN Dr. Valerie Magar, ICCROM
15.35-16.00	Wrap-up Workshop VI and Closure of HPL Incubator Workshops

Annex 7:
HPL online exercises

World Heritage Leadership learning Networks

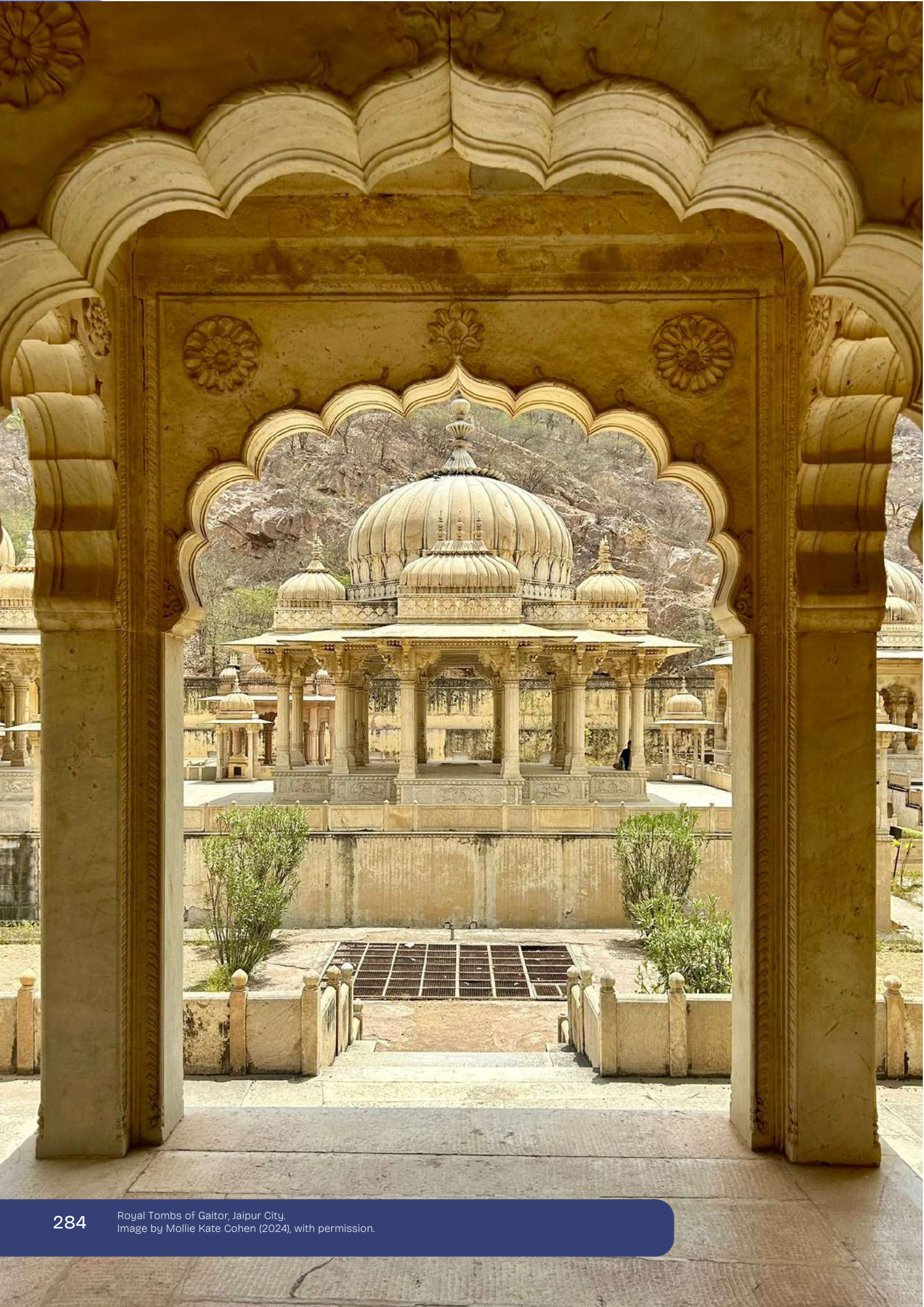
Interactive Tool/ Method	Questions	Workshop: Session
Mentimeter	**Initial** What is your disciplinary background? What are your expectations of the Heritage place lab? If there is one word to describe your most important project at the moment, what would it be? (Keywords)	I: Session 1
	Research-Practice models What research-practice model can you relate to according to your situation?	I: Session 2
	Data sources What are the sources of data that you use the most? SOC, PR, Outlook, PANORAMA, Policy Compendium, OGs, WHCOM Decisions, Wikipedia, Others	I: Session 3
	Partners and funding 1. Have you applied to external funds for research (categories: government funds, regional, international organisations' grants, private donors, Scientific Council, Research organisation, foundation) 2. Do you have any experience on international consortia? (YES/NO) 3. Have you worked with interdisciplinary and/or transdisciplinary approaches? (Interdisciplinary - Transdisciplinary - No) 3. Do you work on fundamental research or applied research? (Fundamental - Applied) 4. If you work on applied research: what was the field of application (keyword)? (Word cloud)	IV: Session 1
	Factors affecting the property What are the main factors affecting your WH property? What do you think are the underlying causes of those factors?	IV: Session 3
	Final feedback What did you find useful? Which topics would you like to explore in the future? Heritage Place Lab in one word	VI: Session 3

Mural	**Mural on What research-practice model can you relate to according to your situation?**	I: Session 2
	Mural on What knowledge do we need? - Place the disciplines/knowledge you have already - Place those that you are missing	II: Session 2
	Mural on Lessons learned 1. Report Mural of what knowledge do we need? (from session 2) 2. Work on Mural of what we learned from assignment II Connections between values, attributes and knowledge Each member to reflect on what surprised them to learn from the assignment on values, something new they learn	II: Session 3
	Mural on World Heritage actors • Who are the more powerful actors in the management of your site? (two answers per person) • Who do you think should be the most powerful actor(s) at your site? (one answer)	II: Session 3
	Mural on structuring research needs Box: Values (different levels) + Attributes Box: Governance (within the box decision making, instruments) Box: Research Questions	III: Session 2
	Mural teamwork on Linking factors with attributes - 2 factors per Team and what attributes are being impacted by those factors (not two factors that impact all attributes equally) - How is impacting and is it impacting them equally?	III: Session 3
	Mural exercise on Research Partnerships and Funding -One Mural per Team -One research project (research institutions) -One project with research component (site management) -Who are your research partners?	IV: Session 1

Breakout rooms	**Starting a Practice-led Research Agenda (**+Mural) One room for each Research-Practice Team	III: Session 2
	Lessons learned (Research Agendas) 2 rooms (Spanish and English)	III: Session 3
	Based on the lessons learned from previous exercise, what are the main challenges in creating a practice-led research agenda? 3 main challenges per room 4 rooms (1 rapporteur per room): -Room of Professors -Room of Site managers -Room of young researchers -Room of young managers	III: Session 3
	Partnering and funding - Where is your funding coming from (different Ministries, Agencies, Governments, National fund schemes - which governmental fund)? - Do you have a regular budget for research at your site? - Who is funding your research/research projects? - What extra budgetary funding do you work with to do research at your site?	IV: Session 2
	Climate change and research Each Research-Practice in a room discussed on the questions: 1. What is the state of knowledge and evidence on hazards, vulnerability, and exposure? Centring the exposure on OUV, what priorities for research can be identified with respect to hazards and vulnerability? 2. Which communities and stakeholders can be engaged to holistically consider the impacts of climate change? What ecological and socioeconomic impacts, and losses, need to be prioritised? 3. What methods would enable the above two questions to be tackled?	V: Session 2
	Potential common issues and common research questions 5 break out rooms on: -Governance -Local values (x2) -Climate change -Services and benefits	V: Session 3
	Potential common research proposal and projects (Pitch) 5 break out rooms on: -Governance -Local values (x2) -Climate change -Services and benefits	VI: Session 2
	Publications One room per Research-Practice Team Practice-led research agenda PANORAMA solution Journal article	VI: Session 1 VI: Session 1 VI: Session 2

Plenary dialogues	- What research-practice model can you relate to according to your situation?	I: Session 2
	- In your view, what are the links between values, attributes and knowledge?	II: Session 1
	- How to adjust power arrangements? Commenting on the Mural	II: Session 3
	- Linking Values and Knowledge to World Heritage Governance and Management systems	III: Session 2
	- Plenary report (+Mural+Breakout rooms): Present one research question you developed How does it link to the mapping exercises?	III: Session 2
	- Plenary report (Breakout rooms): Based on the lessons learned from previous exercise, what are the main challenges in creating a practice-led research agenda? 3 main challenges per room	III: Session 3
	- Plenary report (Breakout rooms): Partnering and funding	IV: Session 2
	- Plenary report (Breakout rooms): Climate change and heritage research	V: Session 2
	- Plenary report (Breakout rooms): Common issues and common research questions	V: Session 3
	- Plenary report (Breakout rooms): Potential common practice-led research proposals and projects (Pitch)	VI: Session 2
	- Plenary report (Breakout rooms): PANORAMA snapshot solutions	VI: Session 3
	- Feedback and lessons learned by Research-Practice Teams	VI: Session 3

Table 1: Interactive work developed in the online workshops, supported with online tools



Royal Tombs of Gaitor, Jaipur City.
Image by Mollie Kate Cohen (2024), with permission.

The Heritage Place Lab is a research network serving as an incubator of research agendas for specific World Heritage properties across the world. This publication brings together the research conducted by World Heritage practitioners, site managers and researchers working to protect properties across Ghana, Guatemala, Zimbabwe, India, Botswana, Argentina and Norway between 2021-2023 as part of a pilot initiative. The results will inform future guidance development of practice-led research agendas for World Heritage properties elsewhere.

Via di San Michele 13
00153 Rome, Italy

Telephone: +39-06585531
iccrom@iccrom.org
www.iccrom.org

ISBN 978-92-9077-345-0

ICCROM

NORWEGIAN MINISTRY OF CLIMATE AND ENVIRONMENT

IUCN