

TECHNICAL TOOLKIT FOR SAFEGUARDING

BAGAN



United Nations
Educational, Scientific and
Cultural Organization



Sustainable
Development
Goals

ESTABLISHING A GLOBAL-LEVEL FRAMEWORK FOR HERITAGE MANAGEMENT AT BAGAN

Bagan is an extensive landscape of monuments located on the Ayeyarwady River in the central dry zone of Myanmar. With over 3,500 stupas, temples and other religious structures, it provides exceptional and continuing testimony on an impressive and unprecedented scale of the tradition of Buddhist merit-making.

Since 2011, UNESCO has actively supported Myanmar in strengthening its capacity to manage the site in all dimensions, in cooperation with the world's leading experts on Bagan, universities, professional associations and NGOs. This *Technical Toolkit* provides an introduction and links to the various tools, platforms and guidelines for heritage management and conservation which have been developed for Bagan, in line with international and World Heritage principles.



STRENGTHENING SITE MANAGEMENT SYSTEMS

- Integrated Management System for Bagan;
- Auxiliary management plans / guidelines related to Disaster Risk Management Strategy (with World Bank), Tourism Management Strategy (with JICA), Regional Plan (with AMA), Heritage Impact Assessment;
- Establishment of BAGANCOM and coordination committees at regional / local levels;
- Expanded and re-organized DoA Bagan Branch Office.

BUILDING CAPACITY FOR HERITAGE PROFESSIONALS

Benefiting DoA, universities and professional associations

- GIS;
- Site management skills;
- Conservation of monuments and decorative works (condition assessment, emergency damage assessment, preventative conservation, emergency stabilization and restoration).

IMPROVING DOCUMENTATION AS THE BASIS FOR INFORMED SITE MANAGEMENT

- Up-to-date GIS inventory of all monuments on the site;
- Fully digitized version of the Pichard inventory;
- Comprehensive “OneMap” of Bagan of all heritage and non-heritage features;
- High-resolution maps of the entire Bagan heritage site;
- 3D laser scans of selected monuments.

HARMONIZING CONSERVATION IN LINE WITH GLOBAL AND WORLD HERITAGE STANDARDS

- Supported the establishment of the International Coordinating Committee for Bagan;
- Developed suite of technical conservation guidelines.

Download *Technical Toolkit for Safeguarding Bagan* (UNESCO 2018) by scanning QR code or following this link:

bit.do/eDHFy



TECHNICAL GUIDANCE FOR EMERGENCY RESPONSE / RECOVERY

Following the 24 August 2016 earthquake that affected Bagan, UNESCO worked closely with the Myanmar authorities, local people as well as national and international collaborators in responding to the emergency situation. A total of 389 monuments suffered damage, requiring rapid assessment, stabilisation and long-term rehabilitation.

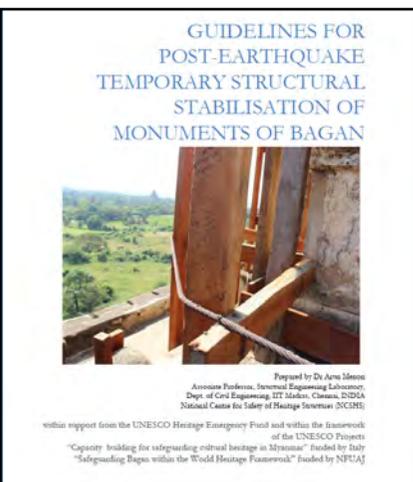
FORM FOR RAPID ASSESSMENT OF DAMAGE (E-CARD)

Used for assessing and recording damage to monuments using a red-yellow-green rating system. Available in English and Myanmar.

The form is titled 'Form for Rapid Assessment of Damage (E-Card)' and is in Burmese. It contains several sections for recording damage to monuments. The top section includes fields for the monument name, location, and date. Below this, there are sections for recording the type and extent of damage, and a section for recording the assessment results. The form also includes a section for recording the assessor's name and contact information. The form is designed to be used for rapid assessment and recording of damage to monuments.

GUIDELINES FOR POST-EARTHQUAKE TEMPORARY STRUCTURAL STABILISATION

Explains the mechanisms of post-earthquake safety evaluation and the identification of potential risks for partial/complete collapse through rapid visual surveys. Guides in the selection, design and execution of short-term counter measures for temporary stabilisation and strengthening.



TECHNICAL GUIDANCE FOR MONUMENT CONSERVATION



GUIDELINES FOR RECORDING MONUMENTS AT BAGAN



by Masao Santana Quattrocchi
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(Caleton Interactive Media Studio - Caleton University)

within the framework of the UNESCO Project
"Technical Assistance for the Conservation of Built Heritage in Bagan" funded by Japan

GUIDELINES FOR RECORDING MONUMENTS

Provides step-by-step specifications for recording the complex architectural features of Bagan built heritage, employing advanced tools and techniques to gain a high level of accuracy and detail.

GUIDELINES FOR CONDUCTING RAPID CONDITION ASSESSMENT OF BAGAN MONUMENTS



Prepared by Arashk Vafadari
within the framework of the
UNESCO Project "Technical Assistance for the Conservation of Built
Heritage in Bagan" funded by Japan

RAPID CONDITION ASSESSMENT OF MONUMENTS

Explains the procedure to undertake systematic rapid condition assessment using a standardized "Structure Rapid Condition Assessment Card" (called S-card) which has been developed to cover various types of monuments in Bagan.

GUIDELINES FOR IN-DEPTH CONDITION ASSESSMENT OF MONUMENTS AT BAGAN



by Mizuhiko Tomoda
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within the framework of the UNESCO Project
"Technical Assistance for the Conservation of Built Heritage in Bagan" funded by J-SPN
with technical support from
Tokyo National Research Institute for Cultural Properties

IN-DEPTH CONDITION ASSESSMENT OF MONUMENTS

Offers guiding principles and low-tech and high-tech options to undertake in-depth investigations of causes and mechanisms of degradation for planning further conservation interventions.

With technical support from National Research Institute for Cultural Properties Tokyo

GUIDANCE NOTE IN APPROACHES FOR CONSERVATION OF MURAL PAINTINGS AND ARCHITECTURAL DECORATIVE WORKS AT BAGAN



Prepared by Rodolfo Luis-Luisford
within the framework of the UNESCO Project

"Capacity building for safeguarding cultural heritage in Myanmar" funded by Italy
"Safeguarding Bagan within the World Heritage Framework" funded by NTFUJ

GUIDANCE NOTE IN APPROACHES FOR CONSERVATION OF MURAL PAINTINGS AND ARCHITECTURAL DECORATIVE WORKS

Explains the composition, behavior, vulnerabilities, main causes of deterioration, typical conservation problems and recommended conservation techniques. Introduces the rapid assessment card for mural paintings and decorated architectural surfaces (D-card).

MANUAL FOR THE CONSERVATION OF MONUMENTS AND HISTORIC BUILDINGS AT BAGAN



Prepared by CRECI within the framework of the
UNESCO Project "Safeguarding Bagan within the World Heritage
Framework" funded by NTFUJ

MANUAL FOR THE CONSERVATION OF MONUMENTS AND HISTORIC BUILDINGS

Provides guidance in conservation planning methodology (including research, survey, documentation, value assessment) and recommendations for conservation interventions (including preventative conservation, upgrading site conditions, cleaning, restoration and consolidation).

UNESCO COLLABORATION AT BAGAN

Financial support from

- Italy (2012-2018)
- Switzerland (2013-2014)
- Japan (2014-2016)
- National Federation of UNESCO Associations of Japan (2015-2018)
- Post-earthquake (2016-2017):
World Bank, Heritage Emergency Fund

In-kind collaboration from partners

- Leading national and international universities including Mandalay Technological University, Yangon Technical University, Carleton University
- Professional associations including Association of Myanmar Architects, Myanmar Engineering Society
- Heritage agencies and NGOs including ICCROM, National Research Institute for Cultural Properties Tokyo
- Development partners including JICA and the World Bank



Heritage
Emergency
Fund



From
the People
of Japan



National Federation of
UNESCO Associations in JAPAN



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra



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