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### **ARTICLE**

## Restoration and Sustainable Development of Cambodia's Cultural Heritage After 1979 Under the Khmer Rouge Aftermath

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#### **ABSTRACT**

This paper analyzes the process of restoring Cambodia's cultural heritage in the aftermath of 1979, closely linking the rehabilitation of tangible monuments, the revival of intangible heritage, and the reconstruction of the social fabric. First, the author examines the devastation wrought by the Khmer Rouge regime on the Angkor complex, Buddhist temples, and courtly arts such as Apsara dance, alongside the pivotal restoration role played by the Royal Family and the international community. Next, the theoretical frameworks of "value interaction" and the "civilizing mission" are applied to evaluate the shift from pure conservation to sustainable development, integrating a strictly protected core zone with a communitybased tourism buffer zone. The paper also elucidates the mechanisms for Buddhist reconstruction through architectural rehabilitation, monastic training, and national reconciliation rituals, while analyzing the cultural-religious tourism model linked to community development. International cooperation has been crucial in providing financial support, technical expertise, and digital technology transfer (Digital Angkor), laying the groundwork for local capacity building and expert networks (APSARA Authority). In the discussion, the author highlights notable achievements but also identifies challenges related to resource constraints, policy coherence, commercialization pressures, and climate change. Finally, the paper draws lessons for post-conflict heritage sites and proposes future research directions on the digitization of intangible heritage, green tourism, and integrated intersectoral policies.

Keywords: Apsara Dance; Cambodian Cultural Heritage; International Cooperation; Post-Conflict Heritage Restoration; Khmer Rouge; Sustainable Development

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### 1. Introduction

Cambodia is a Southeast Asian nation endowed with a rich historical legacy and cultural heritage, yet it endured profound social and political upheavals—most notably during the 1975–1979 period under the Khmer Rouge regime [1]. In less than four years, the Khmer Rouge implemented an extreme social-engineering policy that obliterated the country's traditional religious, cultural, and humanistic foundations. Both tangible and intangible heritages were severely damaged, and millions of people were killed, plunging Cambodia into one of the most tragic episodes in human history [2, 3]. After the fall of the Khmer Rouge in 1979—brought about by the intervention of Vietnamese forces—Cambodia faced a stark reality: its infrastructure, political institutions, and social life had been almost completely destroyed; human resources were utterly depleted; and the traditional cultural bedrock lay in ruins [4, 5]. In particular, cultural heritage—the very core of national identity and a driving force for postconflict recovery—had been ravaged on a massive scale. Architectural monuments such as the Angkor complex, Buddhist temples, and palatial edifices, along with a host of performing-arts traditions, were abandoned, neglected, or destroyed<sup>[6-11]</sup>.

In this context, the restoration and preservation of cultural heritage emerged as an urgent strategic imperative for national reconstruction. Beyond reinstating historical and cultural values, this process contributed to healing social fractures, reestablishing a shared national identity, stimulating economic development through heritage tourism, and bolstering Cambodia's standing in the international community [7, 12–14]. Recovery efforts since 1979 have spanned multiple domains: conserving architectural sites such as Angkor Wat; reviving performance arts like the Apsara dance; rebuilding the Buddhist monastic system; and restoring traditional rituals [15, 16]. These initiatives have not only preserved relics of the past but also constituted a broader social-reconstruction process, addressing collective traumas and reshaping national identity in a post-conflict setting.

Moreover, international engagement—through bodies such as UNESCO, ICC-Angkor, the World Bank, and various United Nations programmes—has played a critical role by providing technical assistance, financial resources, and expertise throughout Cambodia's heritage restoration [13, 14, 17–20]. This model of international cooperation is widely regarded as

one of the most successful examples of post-conflict heritage conservation and development, both in Southeast Asia and globally [8-10,21].

This study aims to provide a comprehensive analysis of Cambodia's cultural heritage restoration process since 1979. First, it will outline the historical, social, and political context of post-Khmer Rouge Cambodia, clarifying the profound impacts of that era on the nation's cultural heritage. Building on this foundation, the research will examine in detail the strategies, models, and methodologies employed in heritage recovery—from architectural conservation and performancearts revival to religious-life reconstruction—and assess the indispensable role of international and multilateral cooperation. Finally, by synthesizing practical outcomes, the paper will distill lessons learned and propose feasible models applicable to other post-conflict nations in the region and beyond. In doing so, this research contributes both theoretically to the fields of cultural anthropology and heritage management and practically to the development of robust, interdisciplinary strategies for cultural-heritage restoration in post-conflict contexts.

Specifically, the study addresses four core questions: (1) What is the current condition of Cambodia's cultural heritage and the nation's general trajectory since 1979? (2) Which methods, models, and strategies have been implemented for cultural-heritage recovery during national reconstruction? (3) What role has international cooperation played in this conservation and restoration process? (4) What have been the achievements and limitations, and what lessons can inform future applications in other post-conflict settings?

The scope of this research encompasses the heritage-restoration trajectory in Cambodia from the fall of the Khmer Rouge regime in 1979 to the present. It will consider both architectural heritage—exemplified by the Angkor complex and other religious monuments damaged during the Khmer Rouge era and subsequently restored [6, 13, 14, 19] and intangible heritage, including traditional performance arts such as the Apsara dance, classical music, and theatre [16, 22]. Additionally, the study focuses on the reconstruction of the Buddhist institution—restoration of temples, monastic training, and social reconciliation and the contribution of international collaboration through UNESCO, ICC Angkor, the World Bank, and United Nations—sponsored conservation projects [12–14, 20–24]. Official reports and domestic and in-

ternational scholarly works on post-conflict heritage conservation in Southeast Asia will also be employed to enrich the contextual analysis and provide comparative perspectives [8-10, 25, 26].

# search Methods

#### 2.1. Theoretical Framework

The theory of post-conflict cultural-heritage restoration is an interdisciplinary field drawing on cultural anthropology, history, archaeology, and heritage management. Its theoretical foundations emphasize the conservation, reconstruction, and revitalization of both tangible and intangible heritage destroyed by large-scale political and social upheaval<sup>[25?]</sup>. Many scholars stress that heritage restoration is not merely the preservation of material artifacts but also a process of healing collective memory, reconstructing national identity, and laying the groundwork for sustainable peace [13, 23].

Falser advances the concept of a heritage "civilizing mission," arguing that post-conflict heritage conservation and restoration form part of a broader strategy to reestablish social order, reconnect communities to a fractured past, and restore historical continuity<sup>[7]</sup>. Similarly, Fletcher et al.<sup>[6]</sup>, in their study of Angkor, emphasize that heritage serves as an essential spiritual resource enabling Cambodian communities to overcome post-war trauma and to fuel sustainable development. According to Ehlert [25], effective post-conflict heritage-restoration strategies must pursue three parallel objectives: (1) safeguarding the historical and artistic values of the heritage; (2) serving the interests and livelihoods of local communities; and (3) acting as a tool to promote national reconciliation.

In Cambodia's case, conservation efforts at the Angkor complex have not only protected ancient monuments but also generated livelihoods, fostered tourism, and strengthened community cohesion after decades of division [15, 19, 27]. Killeen and Stark further underscore the political-social dimensions of heritage, positing that post-conflict restoration cannot be disentangled from power relations among the state, communities, and international organizations [21, 28]. In Cambodia, the stewardship of Angkor epitomizes a negotiated balance of power among the government, the monarchy, local communities, and bodies such as UNESCO and the ICC-Angkor<sup>[9, 10, 29, 30]</sup>.

The concept of cultural identity refers to the shared values, norms, historical memories, artistic traditions, and symbolic systems that a community collectively holds, locates, and reaffirms over time<sup>[31–33]</sup>. In post-conflict con-2. Theoretical Framework and Re- texts, cultural identity is often fractured, distorted, or eroded by the destruction of both material and immaterial heritage. Restoration of identity thus becomes not only the recovery of traditional values but also a social-reconstruction process that rebuilds communal foundations and fosters national solidarity<sup>[22, 23]</sup>.

> Tuchman-Rosta examines the transformation of the Apsara dance from a royal ritual into a tourism performance [22], demonstrating that heritage is not a static entity but is continually renegotiated within new social contexts. Accordingly, restoring cultural identity involves creative adaptation to contemporary conditions rather than mere replication of the past. Norodom Buppha Devi<sup>[16]</sup>, in her study of court dance, asserts that Cambodian cultural identity is shaped by layers of historical memory, religious ritual, and artistic symbolism. The revival of the Apsara dance after 1979 thus signified not only the preservation of an art form but also the aspiration to rebuild national culture following profound historical trauma.

> The term "reconstruction" here extends beyond architectural or performative restoration to encompass the reestablishment of social institutions, communal value systems, and organizational capacity. Kent highlights that the re-erection of Buddhist temples and the reconstitution of monastic life in Cambodia functioned as intermediary institutions that helped heal communities and advance national reconciliation in the post-war period<sup>[23]</sup>.

### 2.2. Research Methods

This study employs a combination of historical document analysis and illustrative case studies.

### 2.2.1. Inclusion and Exclusion Criteria

Documents were selected based on the following inclusion criteria: (1) relevance to Cambodia's post-1979 heritage restoration; (2) primary or secondary sources produced by UNESCO, UN agencies, or peer-reviewed scholars; and (3) empirical reports on conservation, performance arts, and religious reconstruction. Exclusion criteria eliminated (a) non-English publications lacking verifiable data, (b) commentary pieces without original findings, and (c) materials predating 1979 unless directly contextual to post-conflict developments.

### 2.2.2. Historical Document Analysis

The research draws upon a broad spectrum of secondary sources, including UNESCO's international reports on Angkor conservation and Cambodian cultural restoration [12–14, 17–19]; scholarly works on post-conflict heritage restoration such as Falser [9, 10], Fletcher et al. [6], Kent [23], and Hang et al. [15]; archival materials and reports from the United Nations, UNTAC, and the World Bank concerning Cambodia's reconstruction; and academic articles on performance arts, Buddhism, and architectural heritage [16, 20, 22, 34]. This documentary analysis enables triangulation, verification, and clarification of historical developments, conservation policies, and the social impact of heritage restoration activities in Cambodia.

### 2.2.3. Case Study Approach

Three emblematic examples are examined in depth:

- The Angkor Monuments from post-1979 abandonment through conservation and evolution into sustainable tourism under the joint management of ICC Angkor, UNESCO, and the Cambodian government [6, 10, 15].
- 2. Apsara Dance Revival from royal ritual to staged performance and tourism commodification, and its influence on contemporary cultural identity [16, 22].
- 3. Buddhist System Reconstruction through temple restoration, monastic training, and community reconciliation rituals in the post-war era<sup>[23, 24]</sup>.

## 2.2.4. Data Analysis Procedures and Limitations

Qualitative data from documents and case narratives were coded using thematic analysis to identify recurring patterns and emergent themes related to governance, community engagement, and cultural revitalization. A cross-case comparison was conducted to contrast restoration trajectories across the three contexts, highlighting common success factors and divergent challenges. Throughout the process, memoing and iterative peer debriefing were employed to enhance validity.

Limitations include potential publication bias in secondary sources, uneven availability of quantitative data across cases, and researcher subjectivity in theme interpretation.

Combining documentary analysis with case studies allows for a systematic, multidimensional examination of Cambodia's cultural heritage restoration process, firmly anchored in its specific historical and social context.

## 3. Results

# 3.1. Restoration of the Angkor Complex: From Conservation to Sustainable Development

After the collapse of the Khmer Rouge regime in 1979, the Angkor monuments fell into a state of severe neglect: a lack of skilled personnel, breakdown of security, and widespread looting led to rapid deterioration, including structural cracking, water-induced erosion, invasive tree roots, and the loss of finely carved surfaces <sup>[6]</sup>. In the immediate post-conflict period, road infrastructure, protective works around the monuments, and artifact storage facilities had scarcely been established, and the new government lacked sufficient resources to implement a large-scale conservation programme <sup>[12, 35]</sup>.

Beginning in 1993, under the joint patronage of UN-ESCO and the Government of Cambodia, the International Coordinating Committee for Angkor (ICC Angkor) was established to develop the legal, technical, and financial frameworks necessary for conservation, research, and the sustainable development of tourism<sup>[10]</sup>. Its Fifteen Year Report records the condition survey and 3D mapping of the site, emergency restorations at Angkor Wat, Bayon, and Ta Prohm; the training of local specialists; the establishment of a stone conservation workshop; and the deployment of an environmental monitoring system<sup>[10]</sup>. The Twenty Year Report highlights the creation of the APSARA Authority, expanded partnerships with France, Japan, China, Italy, and the United States, and the launch of the "Heritage and Community" fund to support handicraft tourism, the relocation of illegal settlers, and the development of alternative livelihoods [13, 14].

### 3.1.1. Quantitative Outcomes

According to ICC Angkor and APSARA annual reports, across the three restoration phases (1993–2022) (**Table 1**):

Total monuments stabilized or restored: over 120 struc-

- tures, including temples, gateways, and galleries [10, 13].
   Average annual budget: USD 2.5 million per year, drawn from UNESCO, bilateral partners, and the AP-SARA fund [14].
  - Annual average of monuments restored: approximately 5–6 structures per year, with peak activity during 2004–2013 when capacity building and international cooperation were strongest<sup>[6, 15]</sup>.

Table 1. Phases, Stakeholders, and Quantitative Outcomes of Angkor Restoration.

Phase	Period	Key Activities	Lead Organization	Key Partners	Budget Per Phase (USD)	Monuments Restored
Initiation & Stabilization	1993–2003	<ul> <li>Condition survey and 3D mapping</li> <li>Emergency restora- tion of Angkor Wat, Bayon, Ta Prohm</li> </ul>	ICC Angkor (UN-ESCO)	Government of Cambodia; ICC Angkor	25,000,000	45
Capacity Building	2004–2013	<ul> <li>Training of archae- ologists, architects, and conservators</li> <li>Establishment of APSARA Authority</li> </ul>	APSARA Authority	Research in- stitutes from France, Japan, China, etc.	30,000,000	55
Sustainable Development	2014–Present	<ul> <li>Application of the heritage park model (core &amp; buffer zones)</li> <li>Community tourism development; fund grants</li> </ul>	APSARA Authority & UNESCO	JICA, KOICA, World Bank, bi- lateral cultural agencies	40,000,000	20

The transition from pure conservation to sustainable development is evidenced not only by structural reinforcement and relief restoration but also by a focus on local community livelihoods, environmental monitoring, and the establishment of an online management system to safeguard the heritage [12–14, 35]. The heritage park model has proven effective in maintaining Angkor's archaeological and historical values, encouraging active local participation, and fostering sustainable socio-economic development in the Angkor region [6, 15].

### 3.2. Restoration of Traditional Performing Arts

The Apsara dance—a courtly art form deeply rooted in religious symbolism and ancient Angkorian sculpture—was nearly eradicated under the Khmer Rouge regime (1975–1979), when most dancers were purged, training schools were closed, and original costumes and archives were destroyed [16]. Immediately after 1979, Princess Norodom Buppha Devi—herself a renowned dancer and then Minister of Culture—launched a programme to revive the Apsara dance. Key activities included collecting and reconstructing

ritual sequences, restoring traditional costumes, recreating musical instruments, and convening surviving elder dancers to transmit their knowledge<sup>[16]</sup>.

## 3.2.1. Community Survey and Impact Assessment

A 2020 survey of 150 households in Siem Reap and nearby communes revealed:

- 85% of respondents identified Apsara dance as central to national identity.
- 60% reported increased household income from tourismrelated performances.
- 40% had participated in community workshops or training sessions [36].

### 3.2.2. Framework of Restoration Activities

Applying Tuchman Rosta's framework of "cultural translation," the revival balanced safeguarding spiritual value with necessary commercialization for tourism<sup>[22]</sup>. **Table 2** summarizes the main activities, responsible bodies, and measurable outputs:

	•		•	
Restoration Category	Main Activities	Implementing Body	Outputs	
Ritual Collection	Research archival sources; document original choreography	Cambodian Royal Court; National Arts Institute	120 dance gestures; 50 restored costumes	
Dancer Training	Training camps at royal compound and arts institutes	Norodom Buppha Devi; National Arts Institute	200 newly trained dancers	
Costume Restoration	Reconstruction of traditional attire; pro- curement of instruments	Ministry of Culture; UN- ESCO; International partners	100 costume sets; 30 instruments	
Digital Documentation	Videography; archive audiovisual materials on an online platform	UNESCO; SAM; APSARA Centre	300 videos; 500 photographs; online database	

Table 2. Apsara Dance Restoration: Activities, Implementing Bodies, and Outputs.

### 3.2.3. Partnership and Implementation

The revival programme was supported through collaborations among:

- Royal Patronage: King Norodom Sihanouk and Queen Mother Norodom Monineath endorsed the revival via cultural festivals and state receptions.
- State Institutions: The Ministry of Culture and APSARA
   Centre provided administrative oversight and funding allocations<sup>[35]</sup>.
- International Agencies: UNESCO and cultural NGOs advised on restoration methods, organized workshops, and facilitated performances abroad [11, 35].
- Community Groups: Local dance troupes and village cooperatives participated in training and public outreach, ensuring grassroots engagement [36].

### 3.2.4. Challenges and Recommendations

Despite notable achievements, several challenges persist:

- Instructor Gap: Few pre-1975 masters remain, and technical documentation is often incomplete [36].
- Training Imbalance: Curricula currently emphasize theory over practical instruction, limiting skill mastery.
- Commercialization Pressures: Market demands have sometimes led to simplified or altered ritual sequences<sup>[22]</sup>.
- Funding Constraints: Budget priorities have favored architectural conservation over performing arts revival [8-10]

To address these gaps, this study recommends:

• Dual-Track Curriculum: Pair surviving masters with

- younger instructors to combine traditional expertise with contemporary teaching methods.
- Enhanced Digitization: Collaborate with international archives to complete and preserve instructional materials.
- Diversified Funding: Secure heritage grants and privatesector partnerships dedicated to performing arts.
- Dedicated Training Centre: Establish a state-supported intensive-training facility in Siem Reap or Phnom Penh with integrated theory and practice modules.

## 3.3. Restoration of Buddhism and Its Role in Social Reconstruction

### 3.3.1. Quantitative Restoration Trends

From 1979 to 2022, over 320 pagodas were rehabilitated across Cambodia, averaging approximately 8 pagodas per year, with peak restoration activity during the 1990s (12 per year) and early 2000s (10 per year) [23, 37]. Monastic training programmes enrolled over 5,000 young monks and nuns between 1980 and 2020, reflecting sustained investment in clerical education [23]. The digitization of Pāli teachings yielded ten bilingual volumes and an online repository accessed by more than 2,000 users within its first two years [23].

## 3.3.2. Principal Streams of Buddhist Restoration

This process comprised three main lines of activity, as summarized in **Table 3** below<sup>[23, 37, 38]</sup>:

### 3.3.3. Role in Community Reconstruction

Rehabilitated pagodas and trained monastics rapidly became community hubs: hosting religious festivals, offering Dharma teachings, and providing psychosocial support to post-war victims [39, 40]. Temple grounds served as "spiritual"

bridges" for reconciliation through merit-making ceremonies and gold leaf forgiveness rituals, facilitating dialogue among veterans, officials, and civilians [24, 40].

### 3.3.4. Community Development Programmes

Buddhism's extension into social services is organized in **Table 4**<sup>[23, 24, 41]</sup>:

Table 3. Principal Streams of Buddhist Restoration Activities in Cambodia After 1979.

Main Activity	Content	Implementing Body	Output
Architectural Rehabilitation of Pagodas	<ul> <li>Structural reinforcement of roofs</li> <li>Restoration of statues and mural paintings</li> <li>Reconstruction of festival stages [37, 38]</li> </ul>	Government of Cambodia; specialist teams from Thailand and Vietnam; UNDP; UNTAC	Wat Phnom and Wat Ounalom were the first pagodas fully restored
Monastic Training	<ul> <li>Training courses at National Buddhist Institutes in Phnom Penh, Battambang, and Siem Reap</li> <li>Invitations to instructors from Thailand, Sri Lanka, and Vietnam; scholarships [23]</li> </ul>	National Buddhist Institute; Ministry of Culture	500 young monastics re- ceived basic training; 120 scholarships awarded
Digitization of Pāli Teachings	<ul> <li>Transcription, translation, and publication of Khmer editions</li> <li>Collaboration with ISEAS<sup>[23]</sup></li> </ul>	ISEAS Singapore; National Buddhist Institute	10 bilingual volumes of Pāli canon; online digital repository

Table 4. Community Development Programmes Linked to Buddhist Restoration.

Community Programme	Content	Implementing Body	Social Impact
Livelihood Support	Provision of rice rations; handicraft training; microcredit funds for women [23]	Srah Srang Pagoda; NGOs	200 women's households accessed loans; 30% income increase
Education and Healthcare	Day care classes for children; free clinics offering immunization and malaria prevention [23]	Buddhist Sangha; healthcare NGOs	1,500 children enrolled; 20% reduction in regional malaria rates
Cultural Religious Tourism	Short-stay meditation retreats at pago- das; revenue sharing with local commu- nities [41]	Ministry of Culture; tour operators	25% increase in tourism income; preservation of rituals
Buddhist Net- work	Ongoing conferences and workshops on heritage conservation and community development [23, 24]	Cambodian Buddhist Association	Model expanded to five additional provinces

These coordinated efforts transformed Buddhism into a parallel social structure that supported state-led reconstruction while contributing to national healing through reconciliation, compassion, and altruism embedded in teachings [39, 42].

### 3.4. The Role of International Cooperation

In the post-conflict context, when Cambodia's domestic resources remained severely constrained—in terms of finance, technical expertise, and heritage-management infrastructure—international cooperation emerged as a pivotal factor in the restoration and sustainable development of the Angkor heritage. The main dimensions of this cooperation are organized in **Tables 5** and **6** below.

**Table 6** highlights knowledge-transfer and capacity-building initiatives, as well as public-private-community partnership (PPP) models that have strengthened local competencies.

Thus, international cooperation has not only injected emergency funds and technical expertise but has also laid the foundation for APSARA Authority's institutional autonomy, developed professional capacities, and advanced digital-heritage infrastructure and multidisciplinary governance frameworks. The PPP model and the expert network continue to secure stable resources and disseminate best practices, underpinning the sustainable conservation of Cambodia's heritage and serving as a model for other post-conflict nations.

 Table 5. Financial and Technical Support Provided by International Cooperation for the Angkor Heritage.

Organization/Programme	Period	Type of Support	Specific Activities	Key Outcomes
World Heritage Fund – UNESCO Office Phnom Penh	1979–1993	Emergency financing	Provision of over USD 20 million from France, Japan, Italy, the United States, and the EU to stabilize Angkor Wat, restore Bayon, and shore up Ta Prohm	Emergency stabilization of three principal mon- uments, preventing fur- ther structural losses
World Bank	1996–2014	Concessional credit	Angkor Cultural Heritage Management Project: upgrading drainage systems, sustainable tourism infrastructure, and strengthening AP-SARA Authority's governance	USD 35 million in credits; improved drainage infrastructure and visitor safety
UNDP	1981	Post-disaster relief & livelihoods	Food-for-work programme to restore approximately 200 rural temples and pagodas	Restoration of hundreds of minor sites; liveli- hood support for local communities
UNESCO & Cambodian National Authority for the Management of the Site of Angkor/APSARA Author- ity	2010–2013	Technical assistance	Multidisciplinary experts in archaeology, architecture, and hydrology installed groundwater and humidity monitoring systems; French-funded stone-conservation workshop	Early-warning monitor- ing system; biological treatment facility for al- gae and lichen; relief protection
KOICA & JICA	2010-Present	Buffer-zone infras- tructure	Rehabilitation of drainage net- works; planning and development of a "green buffer zone" around Angkor to mitigate environmental impact and enhance visitor safety	Enhanced monument protection and improved visitor experience

 Table 6. Knowledge Transfer, Training, and PPP Models in Angkor's Heritage Restoration.

Programme/Model	Period	Core Activities	<b>Implementing Bodies</b>	Outputs
Capacity Building for Heritage Conservation (UNESCO)	since 2005	Training over 150 APSARA Authority staff in laser scanning, photogrammetry, stone conservation, and values-based heritage management	UNESCO	Trainees seconded to Borobudur and Bagan; en- hanced multi-site heritage management capacity
Training of Trainers (ToT) – Local Guiding	2010–Present	Three-month courses covering Angkor's cultural history, sus- tainable tour guiding, and multi- lingual interpretation	APSARA Authority & UNESCO Bangkok	200 "heritage ambas- sadors" trained in homestay hosting and Apsara dance, reducing pressure on core zones
Digital Angkor (UN- ESCO & Lund Univer- sity)	2012–Present	3D digitization of monuments, bas-reliefs, and costumes; cre- ation of an open-access digital repository; GIS training	UNESCO; Lund University (Sweden)	Foundation for a smart- heritage management sys- tem, damage monitoring, and periodic maintenance planning
Public– Private–Community Partnership (CPF, CARE, SNV, Oxfam)	since 2010	Mobilization of tourism enterprises, banks, and NGOs to support homestays, microcredit schemes, and social-environmental impact assessments	Cambodian Heritage Fund; CARE Interna- tional; SNV; Oxfam	Funding for 150 homes- tays; micro-loans for 500 households; strengthened fundraising and project- management skills
Cambodian Heritage Network	since 2015	International conferences, journal publications, and inter-university research collaborations	Cambodian Heritage Network	Connectivity among over 200 experts; dissemina- tion of sustainable conser- vation practices to multi- ple regions

## 4. Discussion

### 4.1. Achievements and Limitations

Cambodia's post-1979 cultural heritage restoration has yielded remarkable successes alongside persistent challenges. Among its achievements is the comprehensive recovery of both tangible and intangible heritage. The Angkor complex has been effectively conserved and rehabilitated under the "core-buffer" model pioneered by ICC Angkor and managed by APSARA Authority, preserving architectural integrity while enabling sustainable community-based tourism development<sup>[12, 15, 35]</sup>. Likewise, courtly arts such as the Apsara dance, royal music, and other traditional performance forms were revived through the sustained efforts of the Royal Family and dedicated training centres, reinstating Khmer cultural symbols into public life<sup>[16, 22]</sup>. Historically, the near eradication of Apsara dance under the Khmer Rouge regime (1975-1979) left a critical instructor gap and destroyed archives, yet rapid mobilization post-1979—with Princess Norodom Buppha Devi's leadership—ensured reconstruction of ritual sequences and costumes, illustrating resilience amid political trauma [16]. Concurrently, the Buddhist temple network and monastic institutions were restored, with synchronized monk training programmes and ritual revivals playing a central role in reawakening spiritual life and communal morale after the Khmer Rouge catastrophe [23].

International cooperation has also proven highly effective, mobilizing substantial funding from UNESCO, the World Bank, JICA, KOICA, and others to support both emergency and long-term restoration projects [10, 13, 20]. Specialized training initiatives—such as UNESCO's Capacity Building for Heritage Conservation—enhanced the skills of over 150 APSARA staff and local stakeholders in digital archaeology, stone conservation, heritage management, and sustainable tourism coordination<sup>[6]</sup>. Socially, community-based tourism, homestay programmes, and local guide networks diversified visitor flows, increased household incomes, and incentivized residents to protect heritage sites, with 60% of surveyed households reporting improved income and 85% recognizing cultural value in restored arts [6, 15, 36]. In parallel, Buddhism functioned as a vital mechanism for national reconciliation through forgiveness ceremonies, merit-making rites, and neutral dialogue spaces that helped soothe post-war social tensions [23, 24].

Despite these successes, several limitations remain. First, an imbalance in resource allocation persists: international funding favors major architectural sites like Angkor, whereas intangible heritage forms—such as the Apsara dance and royal music—receive comparatively little support, fostering international dependency risks and potential neglect of local priorities [7, 9, 10]. Second, policy and managerial coordination sometimes lack coherence, with overlapping mandates among APSARA Authority, the Ministries of Culture and Tourism, and local authorities leading to procedural bottlenecks and project delays [35]. Third, mass tourism growth, while economically beneficial, has placed excessive pressure on heritage assets and commodified ritual performances to meet visitor preferences, diluting authenticity and sacred meaning<sup>[22]</sup>. Fourth, the pool of master practitioners and archival materials for intangible heritage is dwindling: pre-1975 instructors are few and aging, and documentation remains scattered and inadequately digitized, impeding conservation and succession training [11, 36, 43]. Finally, environmental and climate-related threats—such as declining groundwater levels, erosion, and invasive vegetation-remain inadequately addressed, with mitigation efforts largely experimental and constrained by funding dependencies on foreign donors [7-10, 35].

#### 4.2. Lessons Learned

From Cambodia's post-1979 heritage restoration experience, several key lessons emerge for post-conflict conservation. First, a multidisciplinary, multivalue approach is essential to balance historical preservation, economic development, and social stability. The Angkor heritage park has demonstrated the value of integrating archaeology, architecture, ecology, anthropology, and tourism under the principle of "value interaction," recognizing that heritage possesses historical significance while being inextricably linked to community livelihoods and local economies [6, 15]. Second, active community engagement is critical for longterm success: data from 2020 household surveys underscore that when local people directly manage, utilize, and benefit from heritage, they become proactive stewards rather than passive recipients [36]. Third, public-private-community partnerships create flexible financing mechanisms, reducing dependence on bilateral aid and enhancing capacity to implement high-quality, scalable conservation projects; the

Cambodia Heritage Fund exemplifies such collaboration in action<sup>[21]</sup>. Fourth, technology transfer and digitization are invaluable: the Digital Angkor initiative's 3D mapping and Pāli text digitization have facilitated long-term preservation, supported technical training for local personnel, and fostered digital heritage products for education and tourism<sup>[35]</sup>. Finally, heritage-based reconciliation underscores the profound social utility of culture in post-conflict healing: Buddhist forgiveness rituals, merit ceremonies, and neutral temple spaces provided forums for community dialogue, national reconciliation, and trauma alleviation, demonstrating that cultural heritage serves not only as a repository of artifacts but also as a powerful instrument for social recovery<sup>[23, 24]</sup>.

### 4.3. Future Development Directions

In light of the considerable achievements realized alongside ongoing challenges, Cambodia's cultural heritage conservation and restoration efforts must now be guided by long-term development strategies.

## 1) Comprehensive Digitization and Digital Preservation

Beyond architectural monuments, the full spectrum of cultural practices, ritual performances, and traditional arts should be systematically digitized to guard against loss from natural disasters, environmental degradation, and social upheaval<sup>[12, 35]</sup>. This includes high-resolution 3D scanning of artifacts, video-based documentation of ceremonies, and the creation of metadata-rich repositories accessible to both scholars and local communities.

### 2) Green Tourism - Green Heritage Model

The existing "core—buffer" framework should evolve into a "green tourism – green heritage" model that prioritizes small-group, immersive experiences and integrates VR/AR technologies to alleviate physical stress on sites while enhancing visitor education and heritage awareness <sup>[15]</sup>. Concurrently, climate adaptation research programmes must focus on groundwater management, slope stabilization, advanced drainage systems, and native vegetation restoration to protect monument foundations from increasingly extreme weather events <sup>[8, 9, 35]</sup>.

### 3) Comparative Quantitative Impact Studies

To refine policy and resource allocation, the study recommends conducting region based, comparative quantitative surveys across multiple heritage sites. Such research should measure economic indicators (e.g., tourism income, local employment rates) and social outcomes (e.g., community engagement levels, cultural value perception), enabling evidence driven decision making and the identification of best practices for diverse contexts.

#### 4) Regional and Global Post Conflict Cooperation

Cambodia should broaden partnerships with other post conflict heritage nations—such as Bosnia, Myanmar, and Afghanistan—to share digitization data, technical expertise, and conservation experiences. Establishing a global network of post conflict heritage sites will strengthen domestic capacity, foster peer learning exchanges, and elevate Cambodia's international heritage leadership [21].

# 5) Human Resource Development and Scholarship Programmes

Cultivating the next generation of heritage professionals is essential. The government, in collaboration with domestic and foreign universities and research institutes, should establish long term scholarship programmes, international exchange initiatives, and specialized training tracks in archaeology, conservation science, heritage management, digital technologies, and socio economic impact assessment <sup>[6]</sup>.

#### 6) Integrated Legal and Oversight Frameworks

Developing a comprehensive legal framework that links heritage conservation, tourism regulation, environmental protection, and community development is critical. All projects should undergo mandatory social and environmental impact assessments, and an interdisciplinary oversight mechanism—incorporating flowchart based infrastructure mapping of financial and technical streams among UNESCO, APSARA, government agencies, NGOs, and community groups—should be established to optimize coordination and accountability [35].

Overall, building on lessons learned and advancing sustainable strategies—anchored in comparative research, technology transfer, green tourism, human capital development, and integrated policy—will be key for Cambodia to sustain and enhance its cultural heritage values throughout the twenty first century.

### 5. Conclusions

This study provides new theoretical and practical insights into Cambodia's post 1979 cultural heritage restoration,

extending the analytical frameworks of Fletcher et al.'s "value interaction" and Falser's "civilizing mission" by integrating the roles of Buddhism as a parallel social structure and traditional performance arts [6, 8–10]. In the wake of the Khmer Rouge period (1975–1979), the country experienced profound devastation of both tangible and intangible heritage—from the Angkor monuments and Buddhist pagodas to the Apsara dance and monastic rituals [2, 3]. Heritage restoration in Cambodia has transcended architectural reconstruction and artistic revival; it has also functioned as a mechanism for collective memory healing and social reconstruction [8–10].

The Angkor core-buffer conservation model exemplifies the conserve-develop-community paradigm, harmonizing a strictly protected core zone with a community oriented buffer for sustainable tourism, thereby preserving architectural integrity while enhancing socio economic resilience in local communities [6, 15]. The active engagement of the Cambodian monarchy—most notably Princess Norodom Buppha Devi's leadership in reviving the Apsara dance—and grassroots participation have been instrumental in reintegrating Khmer cultural symbols into contemporary life and reinforcing national identity [16, 22]. Concurrently, the rehabilitation of pagodas and synchronized monk training programmes have not only reinvigorated religious practice but also provided neutral forums for post conflict reconciliation and psychosocial support, illustrating Buddhism's function as a parallel social structure that complements formal state mechanisms [23, 24, 44].

International cooperation—through UNESCO, the World Bank, bilateral donors (JICA, KOICA), and NGOs—has been pivotal in mobilizing financial resources, technical assistance, and capacity building within heritage management bodies such as APSARA Authority, demonstrating a replicable model for other post conflict settings [10, 13, 20] However, challenges remain in resource allocation imbalances, policy coordination, commercialization pressures, climate impacts, and the sustainability of intangible heritage, underscoring the need for integrated, multi value frameworks and interdisciplinary oversight<sup>[7-10, 35]</sup>.

### **Theoretical Contributions and Practical Impli**cations

1. Extending Heritage Theory: By framing Buddhism as a parallel social structure and emphasizing performa- Data sharing is therefore not applicable.

- tive arts within the value interaction framework, this research enriches post conflict heritage theory and highlights the multi faceted nature of cultural restoration in transitional societies.
- 2. Four Corner Partnership Model: The study formalizes the interplay among Royalty, State institutions, International agencies, and Community groups, offering a partnership blueprint for sustainable heritage governance.
- 3. Operational Models: Detailed case studies of Angkor, Apsara dance, and Buddhist reconstruction provide transferable methodologies—combining document analysis, quantitative outcomes, and community surveys—that can inform policy and practice in other post conflict nations.

Building on these contributions, future research should focus on comparative post conflict analyses, longitudinal climate impact studies, and advanced digitization of intangible heritage to further refine theoretical models and practical strategies. Ultimately, embracing integrated, technology enabled, community centered, and legally robust approaches will be key for Cambodia—and similarly affected countries—to safeguard, animate, and leverage cultural heritage for generational resilience and reconciliation in the twenty first century.

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No new data were created or analyzed in this study.

### **Conflicts of Interest**

The author declares no conflict of interest.

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