



Universiteit  
Leiden  
The Netherlands

**The dynamics of heritage within Himalayan landscapes: An analysis of the effects of the mixed World Heritage Listing of Khangchendzonga National Park, Sikkim, India**

Kenny, Ella

**Citation**

Kenny, E. (2023). *The dynamics of heritage within Himalayan landscapes: An analysis of the effects of the mixed World Heritage Listing of Khangchendzonga National Park, Sikkim, India.*

Version: Not Applicable (or Unknown)

License: [License to inclusion and publication of a Bachelor or Master Thesis, 2023](#)

Downloaded from: <https://hdl.handle.net/1887/3636728>

**Note:** To cite this publication please use the final published version (if applicable).

# The dynamics of heritage within Himalayan landscapes

*An analysis of the effects of the mixed World Heritage Listing of  
Khangchendzonga National Park, Sikkim, India*

Ella Kenny



Front

page:

View of Khangchendzonga from Singhik Viewpoint November 1, 2009

By Kelly Cheng

Source: Cheng, K. (2010). View of Khangchendzonga from Singhik Viewpoint.

<https://www.flickr.com/photos/kellyphotos/4431653624/in/album-72157623239379027/> ,

accessed on 1 May 2023.

**The dynamics of heritage within Himalayan landscapes:  
An analysis of the effects of the mixed World Heritage  
Listing of Khangchendzonga National Park, Sikkim, India**

Ella Kenny

MA Archaeology: Heritage and Museum Studies Thesis

Supervisors: Dr. I. Lilley & Dr. M. van Den Dries

Leiden University, Faculty of Archaeology

Leiden, 15<sup>th</sup> June 2023



## Contents

<b>1. Introduction.....</b>	<b>Page 4</b>
1.1. Introduction	
1.2. Research justification	
1.3. Methodology	
1.4. Reading Guide	
<b>2. Contextualising Northwest Sikkim .....</b>	<b>Page 15</b>
2.1. Introduction	
2.2. Environment	
2.3. Early Sikkim	
2.4. Buddhism in Sikkim	
2.5. British influence in Sikkim	
2.6. Sikkim today	
2.7. Conclusion	
<b>3. Heritage Protection in Northwest Sikkim .....</b>	<b>Page 26</b>
3.1. Introduction	
3.2. Built cultural heritage	
3.3. Natural heritage	
3.4. Sacred natural sites	
3.5. Intangible heritage	
3.6. Conclusion	
<b>4. Khangchendzonga National Park World Heritage Site .....</b>	<b>Page 31</b>
4.1. Introduction	
4.2. Creation of Khangchendzonga National Park	
4.3. World Heritage	
4.4. Management	
4.5. Community involvement	
4.6. Conclusion	
<b>5. Implications for Religious Heritage .....</b>	<b>Page 42</b>
5.1. Introduction	
5.2. Built religious heritage	
5.3. New religious heritage developments	
5.4. Non-built religious heritage	
5.5. Religious festivals as heritage	
5.6. Conclusion	

## 6. Implications for traditional knowledge and material culture practices ... Page 58

- 6.1. Introduction
- 6.2. Herding and nomadism
- 6.3. Medicinal plants
- 6.4. Craft practices
- 6.5. Ecotourism and homestays
- 6.6. Conclusion

## 7. Conclusion ..... Page 71

### Figures

Figure. 1. Representation of *beyul* in the Himalayas. From (Garrett et al., 2020)

Figure 2. KNP World Heritage Nominated area including revised Buffer Zone and Transition Zone (Government of Sikkim, 2016)

Figure 3. Data visualisation of domestic and foreign arrivals in Sikkim 2010-2021. Adapted from Table 1.

Figure 4. Map of hydroelectric projects in Sikkim around the KNP (From: T. Lepcha et al, 2018: 56).

### tables

Table 1. Distribution of religious identity in Sikkim by district. Data adapted from (Directorate of Census Operations (Sikkim), 2014)

Table 2. Annual domestic and foreign arrivals in Sikkim 2010-2021. Data adapted from CEIC Data on resident visits: <https://www.ceicdata.com/en/india/resident-visits-by-states/visitor-arrivals-local-Sikkim> and non-resident visits: <https://www.ceicdata.com/en/india/non-resident-visits-by-states/visitor-arrivals-foreigner-Sikkim>

Table 3. *Religious identity and recognised places of worship in Sikkim. Data adapted from the Indian Census 2011 (Directorate of Census Operations (Sikkim), 2014) and website of the Ecclesiastical Affairs Department, Government of Sikkim: <http://sikkimeccl.gov.in/Documents/ReligiousInstitutionsList.aspx>*

Table 4.. *Festivals of the 2023 Sikkim Tourism Calendar. Adapted from: Tourism Department, 2023, <https://www.sikkimtourism.gov.in/Public/TravellerEssentials/CallenderView>*

Figure 5. Sources of Livelihood/ Income for the People of Sikkim (n =300). Source: Based on Primary Survey 2018 (Kumar & Rai, 2021, p. 8)

### Appendices

#### Appendix 1: Criteria for the assessment of Outstanding Universal Value

**Appendix 2- Cultural Map of the KNP from the Nomination file .with summary table to include the Buffer Zone extension.**

**Appendix 3: Action Plan of the Cultural Management Plan for the KNP in the Nomination Documentation (Government of Sikkim, 2016, p. 1043)**

**Appendix 4: Vegetation, agriculture, and key livelihoods by Agro-Climatic Zones (R. Pandey & Malhotra, 2021, p. 32)**

**Appendix 5: Mapping research summary of initiatives led by the Government of Sikkim**

## **1. Introduction**

This thesis will explore the nomination process and impacts of mixed natural and cultural criteria World Heritage listing, using the example of Khangchendzonga National Park (KNP). The KNP was inscribed to the World Heritage list in 2016 representing the first mixed natural and cultural heritage listing in South Asia bracket comprising Afghanistan Pakistan India Nepal Bangladesh the Maldives and Sri Lanka). The KNP Is located in in the Indian state of Sikkim in the eastern Himalayas. The National Park hosts an exceptional range of environments including glaciers, lakes, cold desert, grassland, and tropical rainforest resulting an extremely diverse flora and fauna within these habitats. This landscape is integral to belief, identity, and knowledge systems of both local and international communities. However, the processes to preserve the past often reflect the social, political, economic and spiritual needs and agendas of the present (Meskell, 2020, p. 50).

### **1.1. Nature and culture within World Heritage**

In 1972, UNESCO established the World Heritage Convention to identify, protect, and preserve heritage of 'outstanding universal value' (OUV) to humanity. The Convention introduced a set of natural and cultural criteria for assessing the OUV of heritage assets which for inclusion in the World Heritage List. The World Heritage Committee, comprising representatives from 21 elected Member States, was established to review and assess nominations for listing, alongside monitoring the state of conservation of existing listed properties in line with The Operational Guidelines for the Implementation of the World Heritage Convention (hereafter 'The Operational Guidelines'). However, Meskell (2020, p. 37). notes a shift from heritage specialists to ambassadors or politicians serving as representatives without heritage specialisation. State parties are responsible for submitting nominations to the World Heritage committee, and nominations cannot be made by any organisation or individual other than a state party. Nominations are assessed by the independent Advisory Bodies, IUCN, ICOMOS and ICCROM, who report assessments to the Committee. The World Heritage Centre (WHC) serves as the secretariat and coordinator for all matters related to the convention including organising World Heritage Committee sessions, the World Heritage Fund, and condition reporting.

Since its establishment the convention has faced widespread criticism, highlighting the western-centric bias in language and values, a focus on monumentality and physicality, and the top-down approach to management and listing based on the principles of authenticity (e.g. De Cesari & Herzfeld, 2015; Harrison, 2012; Meskell, 2018; Smith, 2006). In demonstrating the western-centric values of the convention, it was initially drafted to focus solely on cultural

heritage preservation, and natural heritage was excluded until the USA pushed for its inclusion based on their lack of 'grand monuments' (Rajangam & Sundar, 2021, p. 11). This demonstrates a profound disconnect from conception, which was reinforced by the separation of natural and cultural criteria reflecting a Western understanding of heritage. Even the language used within international heritage discourses reflects a Western, monotheistic worldview, through enforcing and linguistic separation between nature and culture, even though many global societies, like the Inuktitut spoken by the Inuit arctic communities, do not separate words for nature and culture instead placing people within nature, not against it or set apart (ICOMOS, 2021). This language is then translated into the ways which 'natural' and 'cultural' space are separated and managed in colonial and post-colonial contexts.

Exploring this divide between natural and cultural heritage is central to this thesis. The idea of a divide between these spheres of nature and culture occurs through a range of theoretical shifts and power dynamics. During the Renaissance the emergence of natural science led to the endeavour to classify the world into distinct categories, which eventually resulted in an overarching categorisation of natural and cultural elements, supported by the Cartesian concept of mind versus matter (Byrne & Ween, 2015). Emphasis was placed on reason, progress and control of nature, with humans perceived as superior to the natural world, which gave way to increased division between nature and culture in the Industrial Revolution. This reflects the idea of Promethianism where the earth is perceived as a resource designed to serve the requirements of humans who can harness these properties through technological innovation (Dryzek, 1997). This approach is reflected in our concept of human progress, with human development defined by the control of different natural resources in Stone, Bronze, and Iron Ages, alongside revolutions in the Neolithic and Industrial periods. In the 18<sup>th</sup> century this Western European approach to viewing land and natural resources as a commodity which can be brought, sold, and owned, was exported to colonial territories viewed by the colonisers as an asset which could be controlled and civilised for their own gain (Tamang, 2022). Indigenous relationships with nature in these colonies were perceived as 'uncivilised' reflecting Hobbes view of humans in nature as competitive, violent, and wild, and that only through the role of (Western) culture can they become peaceful and civilised (Hobbes, 1651). Subsequently in the 19<sup>th</sup> and 20<sup>th</sup> centuries conservation movements emerged which further reinforced a separation between nature and culture, often aiming to preserve one over the other, and perceiving them to be in conflict, a view that still persists and remains entrenched in international heritage discourses and management (Byrne & Ween, 2015).

As a result, mixed natural and cultural listings, like the KNP, are rare within the World Heritage List. Out of 1157 World Heritage Sites only 39 (3.37%) have been inscribed with mixed natural

and cultural values demonstrates how rare mixed listing is (UNESCO WHC, n.d.-b). Each global regions percentage of mixed criteria listed sites with is as follows: Latin America and the Caribbean (5.48% or 8/146 properties), Europe and North America (2.01% or 11/546 properties), Asia and the Pacific (4.33% or 12/277 properties), Arab States (3.33% or 3/90 properties), and Africa (5.1% or 5/98 properties) (UNESCO WHC, n.d.-b). Europe and North America, have the lowest number of mixed sites reflecting the entrenched division between these criteria in practice, compared to the higher percentages in other global regions. The reasons behind and manifestations of this disconnect will be explored throughout this thesis.

The more popular category of 'cultural landscape' was introduced in 1992, following protest around the separation of nature and culture in the proposed purely natural listing of Uluru-Kata Tjuta, to represent the 'combined work of nature and man' (UNESCO WHC, 2021, p. 22). This was part of a wider strategy to acknowledge some of the shortcomings of the World Heritage Centre, address some biases in the World Heritage list, and begin exploring ways to increase representation and implement more flexible and contextual models of heritage (Harrison, 2012). Since then, 121 properties have been listed as 'cultural landscape's demonstrating their popularity in comparison to mixed listing. However, only 11 properties have been inscribed as 'cultural landscapes' under mixed natural and cultural criteria, with all other 'cultural landscapes' only listed under cultural criteria (i) to (vi). It is worth noting that research on "cultural landscapes" and the introduction of this category has been more extensive than the research conducted on the management of mixed natural and cultural World Heritage listings (e.g. Akagawa & Sirisrisak, 2008; Jones, 2022; Krishna Kumar, 2017; Taylor & Altenburg, 2006). Concurrently within nature conservation, the term 'sacred natural site' has gained popularity to represent similar values to cultural landscapes (Verschuuren et al., 2021). This thesis will use 'sacred natural sites' as it combines the two values more clearly than culture first 'cultural landscapes' however, Byrne (2013) critiques the simplistic view of religion often incorporated into the 'sacred natural sites' definition in conservation biology, which tends to promote religious aspects only when they can serve conservation outcomes, overlooking the wider connections and values. Tensions can arise between scientific rationality and values associated with the supernatural or mythological, leading scientific frameworks to attempt to rationalise and domesticate these values, making them more tangible and compatible with Western paradigms. While these categories represent progress, they still present nature and culture in parallel to one another, not fully integrated.

## **1.2. Additional considerations in World Heritage systems**

Among other issues to highlight, Byrne (1991) demonstrates that the concept of OUV assumes a universal interest in the past and a concern for conservation of heritage across borders,



which may not necessarily hold true in diverse cultural contexts. Alongside critique of OUV, the concept of 'authenticity' has been highly contentious, as a determining factor of OUV that is reliant on a dominant power legitimising heritage as 'authentic' (Smith, 2006). The Nara Document on Authenticity (ICOMOS, 1994) reasserted the central role of authenticity, but also acknowledged in paragraph 11 that understanding 'may differ from culture to culture, and even within the same culture. It is thus not possible to base judgements of values and authenticity within fixed criteria'. Additional criteria of 'spirit and feeling' were added, however the Operational Guidelines recognise that 'spirit and feeling do not lend themselves easily to practical applications only conditions authenticity' (UNESCO WHC, 2021, p. 31) but limited guidance in applying these categories has been produced. A shift away from monumentalism led to the incorporation of intangible heritage through the 2003 Convention for the Safeguarding of the Intangible Heritage, supporting nomination inherited traditions including festivals, food, and crafts (UNESCO, 2003). The concept of authenticity was also removed from the 2003 Convention, and followed by the Yamato Declaration on Integrated Approaches for Safeguarding Tangible and Intangible Heritage which asserted that authenticity is 'not relevant when identifying and safeguarding intangible cultural heritage' (UNESCO WHC, 2004, p. 4). Although introducing the idea of 'intangible' heritage into international heritage frameworks has meant that other forms of heritage have since been recognised, celebrated, and protected, which is a significant improvement on earlier categorisations, we are now at a stage where this idea of some customs or manifestations of culture being 'intangible' or without physical presence is inappropriate, through implying that these forms of heritage do not have tangible manifestations (Herzfeld, 2014).

These initiatives demonstrate a movement towards incorporating more diverse values and perspectives in international heritage, and with this comes increased emphasis on community involvement as an ethical obligation in heritage practice, which is reflected by the inclusion of this area throughout the Operational Guidelines including sections 119 and 123 (UNESCO WHC, 2021). This thesis will use the broad term 'local communities' or local stakeholders for inhabitants of the KNP's Buffer, Tentative, and periphery areas, but proceeds with the caveat that communities cannot be considered homogeneous, and an awareness that the complexity of viewpoints within these groups cannot be fully accounted for within this research, particularly without having conducted direct research with these groups. When conducted properly stakeholder participation and engaging local communities, indigenous groups, and relevant stakeholders in the decision-making processes, has many benefits including developing a sense of ownership, enhancing local knowledge, and contributing to the long-term sustainability of the site, resulting in positive outcomes for people and heritage, both in the present and the future (e.g. Berger et al., 2020; Coningham & Lewer, 2019; Olivieri, 2018;

Smith & Waterton, 2009). This has been extended to include ideas of co-creation and co-design within participatory practice, whereby communities become equal partners in the delivery of work, with their unique knowledge and values embedded in the project (Bollwerk et al., 2015). Rights-based approaches have also been slowly integrated into World Heritage nominations, particularly in Australia in regard to Aboriginal rights, but the acknowledgement of the rights of indigenous people as more than an equal stakeholder as a researcher or NGO is still limited (Larsen, 2018). Throughout the heritage sector ambivalence or caution persists towards some local stakeholders stemming from perceptions of 'non-expert' stakeholders as a threat to heritage, reluctance to share knowledge and implement bottom-up strategies, alongside considering OUV as separate to local community interests, leading to separation between academic and expert understanding, and the local lived experience. This disconnect often leads to tokenistic or ineffective engagement, that neglects stakeholder values and indigenous rights, resulting in further marginalisation of affected communities (Coningham & Lewer, 2019). Some local and indigenous communities even campaign for the withdrawal of UNESCO status, owing to exclusions and restrictions they face within top-down implementation of the Convention (Meskell, 2020, p. 50). Alternative strategies to heritage management and engagement are being developed by civil society, non-governmental and non-profit organisations working at local levels, and these will be explored in the KNP in Chapters 5 and 6.

In addition to community engagement, sustainability has become an integral part of the World Heritage process. With the adoption of Agenda 21 for Culture in 1992, culture was recognised as a crucial element for sustainable development (Labadi & Gould, 2015, p. 254). This emphasis on sustainability has been further reinforced by the introduction of the UN Sustainable Development Goals (SDGs), which support social, economic, and environmental sustainability to achieve "peace and prosperity for people and the planet, now and into the future" (UN General Assembly, 2015). Heritage has emerged as the fourth pillar of sustainability, with the recognition that heritage can serve as a catalyst for achieving multiple SDGs (Keitsch, 2020). While progress has been made in promoting the integration of sustainability principles, there is still a need for more concrete guidelines and actionable strategies to effectively manage the complex interactions between heritage, sustainability, and local stakeholders.

### **1.3. Justification of research and case study**

This issue with the juxtaposition of nature and culture as a product of western processes is especially relevant in South Asian contexts where profound interactions and interconnections

exist between people and nature (Brancaccio, 2020, p. 111). Ray (2020) explains that heritage within South Asian contexts also reflects multicultural histories and traditions, whereby many archaeological sites represent layering of different cultures, religions, and histories, that come to be represented across landscapes and not only connected to an isolated structure or monument.

The KNP is justified as the central case study in which to explore this issue owing to its status as the first and only mixed world heritage site that has been inscribed in India, and more broadly in South Asia. This provides an opportunity to explore how mixed World Heritage listings are managed in a non-western context, through the western-centric influences of the World Heritage system. India currently has three further mixed criteria sites on its Tentative List: Kiebul Lamjao National Park added 2016 under criteria (v) (vii) (ix) (x), Garo Hills Conservation Area added 2016 under criteria (v) (vi) (viii) (x), and Cold Desert Cultural Landscape added 2015 under criteria (iii) (v) (vi) (x) (UNESCO WHC, n.d.-a) (see Appendix 1 for OUV criteria). Therefore, exploring the successes and challenges of mixed listing at the KNP can provide recommendations and learning for these potential future mixed listings. additionally The case has also been made for existing World Heritage Sites to be re-listed under mixed criteria including the Nanda Devi and Flowers World Heritage Site which is only inscribed in the natural criteria despite representing complex and significant pilgrimage networks, and the cave sites of Ellora and Ajanta which are only inscribed under cultural criteria which ignores the significance of the natural landscape in the conception and imagination of the site (Brancaccio, 2020). Furthermore, on a global scale only Mount Wuyi (China) and the Tasmanian Wilderness (Australia) have been inscribed with the same criteria as the KNP. This provides an opportunity to expand research into sites with these specific overlapping values and the considerations in their management. Jaeger states that the KNP 'could mark the beginning of a more in-depth consideration of the linkages between nature and culture in the region' (Jaeger, 2021, p. 23). This thesis will explore how far this is already the case.

Additionally, compared to other areas in India, research into the archaeology and heritage of Sikkim and the Eastern Himalayas has been limited due to various factors including historical neglect, bureaucratic complexities, scarce resources, and lack of research institutions. This is exemplified by the fact that there has been only one archaeological publication concerning the archaeology of Sikkim (Mishra, 2008). However, there is a growing recognition of the region's significance, and efforts are underway to overcome these limitations and expand research in archaeology and heritage management in this culturally rich area as shown through recent publications including the *Cultural Heritage of Sikkim* (Chaudhuri et al., 2020), *Communities,*

*Institutions and Histories of India's Northeast* (Lepcha, & Lal, 2021), and *Environmental Humanities in the New Himalayas* (Yu & Maaker, 2021). Many of these studies approach the issue from an anthropological perspective and have been led by researchers with lived experience of these regions. A significant body of research concerns the protest movements by the Lepcha against the hydropower projects being enacted on their sacred rivers (Batabyal & Das, 2020; Dukpa et al., 2018; R. Lepcha, 2021; Little, 2013; McDuire-Ra, 2011). Another research focus area concerns Himalayan environmentalism and conservation often explicitly exploring the preservation of nature, with human experiences with nature as secondary priorities (Banerjee et al., 2019; Mehta et al., 2021; L. K. Rai et al., 2000). Only two small papers deal specifically with the combination of nature and culture in the KNP as a World Heritage Site, and these papers by T Lepcha et al (2018) and Wagh (2017), alongside an investigative journalism piece by Brar (2017), demonstrated the need for a study which explores the wider context and processes being conducted within the KNP as a mixed World Heritage Site.

#### **1.4. Research statement**

As a result of these considerations, the main research question explored in this thesis will be:

**How has the mixed World Heritage listing of the Khangchendzonga National Park effected the management of the different forms of heritage found in this Himalayan landscape?**

This question will be divided into several sub questions including:

- How has the heritage of Sikkim influenced and been integrated into the present context?
- What provisions are in place at state, national, and international levels to protect the identified forms of heritage identified in the KNP?
- How well do the legislation and management mechanisms integrate and complement the protection of the identified forms of heritage in the KNP?
- What were the successes and limitations of the KNP's World Heritage nomination process?
- To what extent has the integration of natural and cultural heritage values been observed in the KNP's management and its associated heritage?
- What effects have been observed regarding the relationship between natural and cultural heritage in the KNP's management and its associated heritage?

- In the absence of integrated support from statutory organisations, which other organisations have been involved and what initiatives have been established?

By addressing these sub-questions, this thesis will draw conclusions regarding the key processes and outcomes of the mixed World Heritage listing and its role in the heritage dynamics of the state of Sikkim.

### **1.5. Methodology**

As Sørensen and Carman (2009) highlight, heritage is an interdisciplinary field which can (and should) combine theory and research approaches from across disciplines. The main methodology for this thesis is grounded in the analysis of primary and secondary literature. Through applying a literature-based methodology this thesis aims to collect a wide range of literature for the purposes of summarising and synthesising it to achieve a new perspective on this context. Primary literature will include reports, management plans, budgets, policies, and other relevant documentation from local organisations, statutory bodies, governments, international non-governmental organisations (NGOs), intergovernmental organisations, and international governmental organisations. Secondary academic publications from disciplines including heritage studies (e.g. Ray, 2020), archaeology (e.g. Coningham & Lewer, 2019), environmental science (e.g. Dorji et al., 2019), anthropology (e.g. Bentley, 2007), and development studies (e.g. McDuie-Ra & Chettri, 2018) will also be utilized to support analysis and introduce theoretical perspectives, alongside paying attention to postcolonial and decolonial perspectives throughout (e.g. Chalana & Krishna, 2020). Comparative case studies will be used throughout to conduct comparative analysis with other heritage sites or protected areas to support the conclusions and recommendations made in this thesis.

A baseline understanding of the social, economic, political, and geographic context past, and present of Sikkim, followed by an examination of the national and state level statutory heritage legislation and management practice in India will be established through secondary literature to support the analysis of the primary literature. The primary documentation related to the World Heritage nomination and listing process will then be analysed to determine the specific forms of heritage included, how they were chosen, the proposals for their protection and management within the World Heritage framework, and the relationship of this process to the contextual understanding. The Operational Guidelines for the Implementation of the World Heritage Convention (hereafter 'The Operational Guidelines') as compiled by UNESCO, will serve as a reference, with the 2015 version used to align with the context of the successful inscription, and the most recent 2021 version for analysis of the current context. A stakeholder analysis is also included in this section (TBC).

Two categories of heritage were then chosen from this analysis, through representing a combination of the natural and cultural values represented in the inscription criteria. The first category focuses on religious heritage, emphasising places of worship, associated events, and religious expressions. In Sikkim these spiritual values are deeply intertwined with the natural environment and incorporate elements of natural heritage values. The second category encompasses traditional knowledge and associated material culture, highlighting practices that are often perceived to serve practical purposes, and are connected to identities of specific groups. These categories will be assessed based on the effectiveness of state and national conservation and management initiatives, identifying successes and gaps alongside interventions by other organisations. The methodology involves systematically examining primary literature and documentation to identify initiatives supporting the preservation, enhancement, or promotion of these forms of heritage, with data presented in appendix X. Following this collection and analysis of project data, conclusions could be made through application of multi-disciplinary theories and comparative case studies to determine effects of mixed World Heritage Listing on the KNP. Some recommendations for specific policies or initiatives may be made but this is not the primary purpose of this thesis.

It is important to acknowledge that the methodology of this study is limited by constraints in time and resources. The ideal scenario would have incorporated on-site research in Sikkim, allowing for stakeholder interviews and surveys, site assessments, mapping, and additional data collection. This would have reduced reliance on public documentation and allowed for increased representation of wider stakeholder perspectives. A comprehensive archaeological landscape survey, like the methodology used by Shaw (2007) in the Sanchi Survey Project to reconceptualise conventional survey methods to incorporate local historical, geographical and cultural conditions, could add a more nuanced understanding of human interactions and interventions with this landscape over time. Additionally, while a significant amount of information including reports and policies are available from the Government of Sikkim and Government of India websites, there are gaps in the available publications, like missing annual reviews or outdated strategy documents. Attempts to access additional documentation from State officials have been unsuccessful and submitted requests have unfortunately received no response to date. The KNP's World Heritage nomination file is publicly unavailable, a rare occurrence in the World Heritage system, but I was able to source this through an anonymous contact. This was instrumental in shaping my methodology and I am indebted to this individual. Additionally, while English serves as one of the official working languages of the Government of India, providing access to a wide range of sources, it is important to recognise the limitations posed by my basic level of Hindi and the lack of proficiency in Nepali, Sikkimese (Bhuita), and



Lepcha languages. Consequently, it is possible that some relevant sources in these languages may have been inadvertently overlooked or not fully incorporated in the research. This also meant that incorporating social media commentary to move away from academic publications was challenging, with alternative views generally coming from journalists.

It is also important to note that while this thesis explores heritage practice beyond binary categorisation, categories will still be used to connect the case study with international/national frameworks that still operate using these categories. This includes designating elements of heritage in categories of natural or cultural, tangible or intangible, sacred or secular. These categories will be used for examples that values defined by international heritage discourse but acknowledges that forms of heritage discussed here will either exist on a spectrum within these binaries or exhibit multiple elements from across them. This is particularly a consideration in the category of religious heritage which does not assume clear boundaries between sacred and secular within this discussion.

### **Reading Guide**

This thesis will first establish in Chapter 2 an understanding of how Sikkim has developed as a state and how the legacies of the past contexts have shaped and been integrated into the present. In Chapter 3 the discussion will then turn to the forms of Sikkim's heritage and outline the state, national and international protection mechanisms which support these forms of heritage. Following this Chapter 4 will focus on the main case study of the KNP. This chapter will explore the KNP's creation, its World Heritage nomination and inscription, and management strategy. The goal in this chapter is to establish how integrated the natural and cultural values of the site are, and the successes or limitations of the nomination and management processes. Following this the discussion divides to focus on two categories of heritage: religious heritage in Chapter 5 and traditional knowledge in Chapter 6. These sections explore how these categories have been affected by the World Heritage inscription through highlighting the current state of protection and developments in State policy and associated initiatives to support the management plans. Where gaps are identified in the State response to these forms of heritage the discussion turns to identifying other organisations or initiatives which are filling the gap in provision left by the State management plans. The conclusions from this analysis will then be drawn together in Chapter 7 to answer the central research question.

## **2. Contextualising Sikkim**

### **2.1. Introduction**

As established in Chapter 1, heritage process and management practices cannot be understood in isolation from their associated social, political, economic, and historical contexts. Therefore, it is essential to develop a comprehensive understanding of the past, present, and potential future contexts in which these processes and initiatives operate. The Independent Kingdom of Sikkim joined the Indian Union in 1975, following the abolition of the monarchy (Government of India, 1975). With an area of 7096km<sup>2</sup>, Sikkim is the second smallest land area of the Indian states and is also the least populous, with a recorded population of 610,577 residents in the 2011 census (Directorate of Census Operations (Sikkim), 2014, p. x). Situated in the Eastern Himalayas, present-day Sikkim borders the Federal Democratic Republic of Nepal (hereafter Nepal) to the west, the Tibet Autonomous Region of China (hereafter Tibet) to the north, the Kingdom of Bhutan (hereafter Bhutan) to the east, and the Indian state of West Bengal to the south. Understanding Sikkim's wider context is vital for understanding the challenges and opportunities within the protection and management of its heritage which will be discussed in subsequent chapters.

### **2.2. Environment**

Sikkim's elevation spans from 300m to 8586m above sea level (a.s.l), representing a vast altitudinal range that encompasses tropical, sub-tropical, temperate, alpine and cold desert regions, and includes the world's third highest mountain, Khangchendzonga (also spelt Kanchenjunga) (FEWMD, 2012, p. 7). These diverse environments provide habitats for a remarkable array of flora and fauna, including nearly half of India's bird species, over 1500 plant species, and endangered animals like the Red Panda (Endangered- EN), Tibetan wolf (Critically Endangered- CR), and Snow Leopard (EN) (IUCN, 2016, p. 126). Sikkim's landscape shapes and is shaped by the communities that live within it, resulting in distinctive environmental and societal contexts both in the state, and in surrounding areas. For example, the glaciers in Northwest Sikkim serve as the source of several rivers, including the vital Teesta River, which sustains life and livelihoods along its course through West Bengal, Bangladesh, and into the Bay of Bengal. Sikkim experiences high precipitation, with annual rainfall from 2,000 to 5,000mm and an average humidity of 70 percent contributing to an abundance of water resources (S. Chakrabarty, 2020, p. 325). However, it also renders this region highly susceptible to vulnerabilities like landslides during the monsoon season. Sikkim also lies on the convergent boundary of the Indian and Eurasian tectonic plates, making it prone to earthquakes, evidenced by a 6.9 magnitude earthquake which struck in 2011 with its epicentre in the Khangchendzonga National Park (Government of Sikkim, 2016, p. 148).

Climate change also poses a significant threat to the region, as the melting snows and glaciers increase the risks of flooding and landslides, alongside placing ecosystems under strain. These natural hazards highlight the fragility and vulnerability of the Himalayan region, necessitating effective mitigation and preparedness measures to safeguard livelihoods and unique biodiversity.

### **2.3. Early Sikkim**

This section will outline the past context of Sikkim however the narrative of Sikkim's history has predominantly been shaped by State Government discourse. It is important to acknowledge that finding balanced accounts of the region's past is challenging owing to the prevalence of this official narrative. Therefore, this section may lean more towards the state narrative, given the limited availability of alternative perspectives.

As outlined in Chapter 1 very little archaeological excavation and survey has been conducted in Sikkim. The earliest human settlement on the nearby Tibetan Plateau has been dated to 5200 BP (Chen et al., 2015), while in eastern Nepal, stone tools made from a cobble industry have been radiocarbon dated to c. 7000 BP (Darnal, 2016). These studies point to the likelihood of early habitation in Sikkim, but without adequate survey and excavation, understanding these early societies relies heavily on oral histories and folklore. However, the Pre-History Branch of the Archaeological Survey of India (ASI) did conduct two survey expeditions in Sikkim, one in 1980 led by K. D. Banerjee, and a second between 2002-2004 led by P. K. Mishra (Mishra, 2008, p. 11). These expeditions identified numerous stone tools from across the North and West of the state, although they remain undated. According to beliefs in the modern Nepali and Bhutia communities, these stones were thought to have fallen from heaven during thunderstorms and are referred to as *chatang ka dunga* and *vajra dunga* (Thapa, 2019). The widespread presence and quantity of these tools demonstrates significant potential for archaeological exploration and excavation in this region. Further research could establish an archaeological sequence for this State, uncovering additional information about the societies which inhabited the area preceding the 14<sup>th</sup> Century CE.

Beginning with the name of the state, 'Sikkim' is thought to originate from the Limbu *su him* meaning 'new palace' (Bandyopadhyay, 2020, p. 369). However, different communities know the region by other names, as the Lepcha call the land *Nye-mayel-lyang* or 'sacred land inhabited by honourable and honest people', while the Tibetan Bhutia know it as *Beyul Demazong* or 'hidden valley of rice' (Sundas, 2020, p. 58). Oral accounts and the State narrative suggest that the Lepcha were early inhabitants of the region, but how and when they migrated to Sikkim has been subjected to ongoing debate without resolution, with proposed

dates ranging from 300 BCE to the 6<sup>th</sup> century CE (e.g., Rai & Gurung, 2020, p. 71; Sharma, 2013, p. 1). Presently, the Lepcha predominantly inhabit the North and West of Sikkim, and areas in East Nepal, Bhutan, and West Bengal. The Limbu and Magar people were also early inhabitants of Sikkim, although they were, and continue to be, more concentrated in the southern lowlands of the State. The traditional religion of the Lepcha is Mun, an animist and polytheistic belief system which is deeply connected to the environment of Sikkim (R. Rai & Gurung, 2020, p. 71). Within Mun, the area around Mt Khangchendzonga is conceptualised as *Mayel Lyang* or a 'hidden paradise' which exists alongside the visible world, that is home to both benevolent and malevolent spirits who influence the fortunes of the mortals who reside alongside it. The *Mayel Lyang* does not have any clearly defined boundaries, but at the heart of this landscape sits the god Kongchen on Mt. Khangchendzonga as the protector deity of the Lepcha and the source of peace, prosperity and fertility of the land (ICOMOS, 2016, p. 49). Kongchen and the other spirits who inhabit the *Mayel Lyang* require ritual offerings and placation to avoid their wrath and ensure good fortune for the community (Wagh, 2017, p. 71).

Although there is no codified hierarchy in Mun, Bungthings (ritual specialists) and humans believed to be possessed by spirits play important roles in carrying out ceremonies and providing religious guidance (K. C. Bhutia, 2020, p. 218). Religious knowledge and stories are transmitted orally via these individuals and these roles are inherited within families or *putso* (clans) (Sharma, 2013, p. 50). The origin story of the Lepcha describes how the Mother Goddess Itbu-mu created the mountain of Khangchendzonga, and from its snows created the first Lepcha people called Fadongthing and Nuzaongnyoo (Little, 2013, p. 56). This story establishes a kinship between the Lepcha, the natural world, and non-human spirits, as relations created by the same goddess, with Kongchen (manifested as Mt Khangchendzonga), acting simultaneously as father and brother (K. C. Bhutia, 2020, p. 214). This lineage is further reinforced as every Lepcha clan name is connected to a sacred mountain or lake within their territory as their ancestral site, which is honoured in ceremonies like the *chu rumfát* (Little, 2018). The Lepcha's conception of the afterlife is a heaven called *rumlyang*, with the souls of the dead carried along the streams and rivers to reach the ancestral peaks and enter the afterlife (Little, 2018).

The Lepcha were originally nomadic, practicing herding and shifting cultivation but over time, they became increasingly sedentary, replacing shifting cultivation with a mixed mountain garden-based farming system that combines agriculture, forestry and livestock rearing (Wagh, 2017, p. 71). Despite these changes in lifestyle, many practices have endured. This includes material-based traditional knowledge like medicinal knowledge held by healers (*moan-dok*) who are believed to use nearly 400 species of plants, animals and fungi in their treatments.

Craft practices including the Lepcha hat (*muuk thYaktak*), nettle fibre woven clothing and the bamboo flute, alongside unique architectural practices are still tied to their identity (Sharma, 2013).

#### **2.4. Buddhism in Sikkim**

Buddhism is believed to have entered Sikkim from Tibet around the 5<sup>th</sup> century CE (Bandyopadhyay, 2020, p. 377). According to legend, Guru Padmasambhava (also called Guru Rinpoche) a highly venerated Buddhist master in Tibetan Buddhism, visited Sikkim in the 8<sup>th</sup> century from Tibet. It is believed that Padmasambhava sanctified the region as *Beyul Demazong* or a sacred 'hidden land' (Government of Sikkim, 2016, p. 1070). In Tibetan Buddhism *beyul* are conceived throughout the Himalayas, with other *beyul* found at Khemnalung near Mt. Everest and Pemakod in Arunachal Pradesh (Fig X). However the *Beyul Demazong* around Khangchendzonga is considered the largest and one of the most sacred as shown in Fig.X (Garrett et al., 2020).

Padmasambhava is said to have exorcised the evil spirits from the *Beyul Demazong*, converting them into benevolent Buddhist guardian deities, and prophesying that the hidden land would open as a safe refuge ruled by the descendants of the King of Tibet (R. Rai & Gurung, 2020, p. 73). This follows the widespread tradition in South Asia of the pacification of local 'fierce' or wild deities through conversion into a more dominant religious framework as exemplified by the ideas of Brahmanisation and Sanskritisation (see. Srinivas, 1952). In contrast to the Lepcha concept of *Mayel Lyang* mainly concentrated around Khangchendzonga, the *Beyul* covers the whole of Sikkim, with Mt. Khanchendzonga as the home of the deity Dzonga who presides over and protects the land and defends *dharma* (divine law) (ICOMOS, 2016, p. 49). Conceptually, *beyul* exist on three levels: the outer level comprising the physical landscape which can be seen and experienced by anyone; the inner level which can only be experienced through meditation and spiritual practice; and the secret level which transforms the physical world into the celestial dimension and can only be witnessed by enlightened spiritual practitioners (Government of Sikkim, 2016, p. 1057). These levels overlay each other, existing in the same space, but at varying degrees of visibility depending on the levels of devotion and enlightenment of the observer.

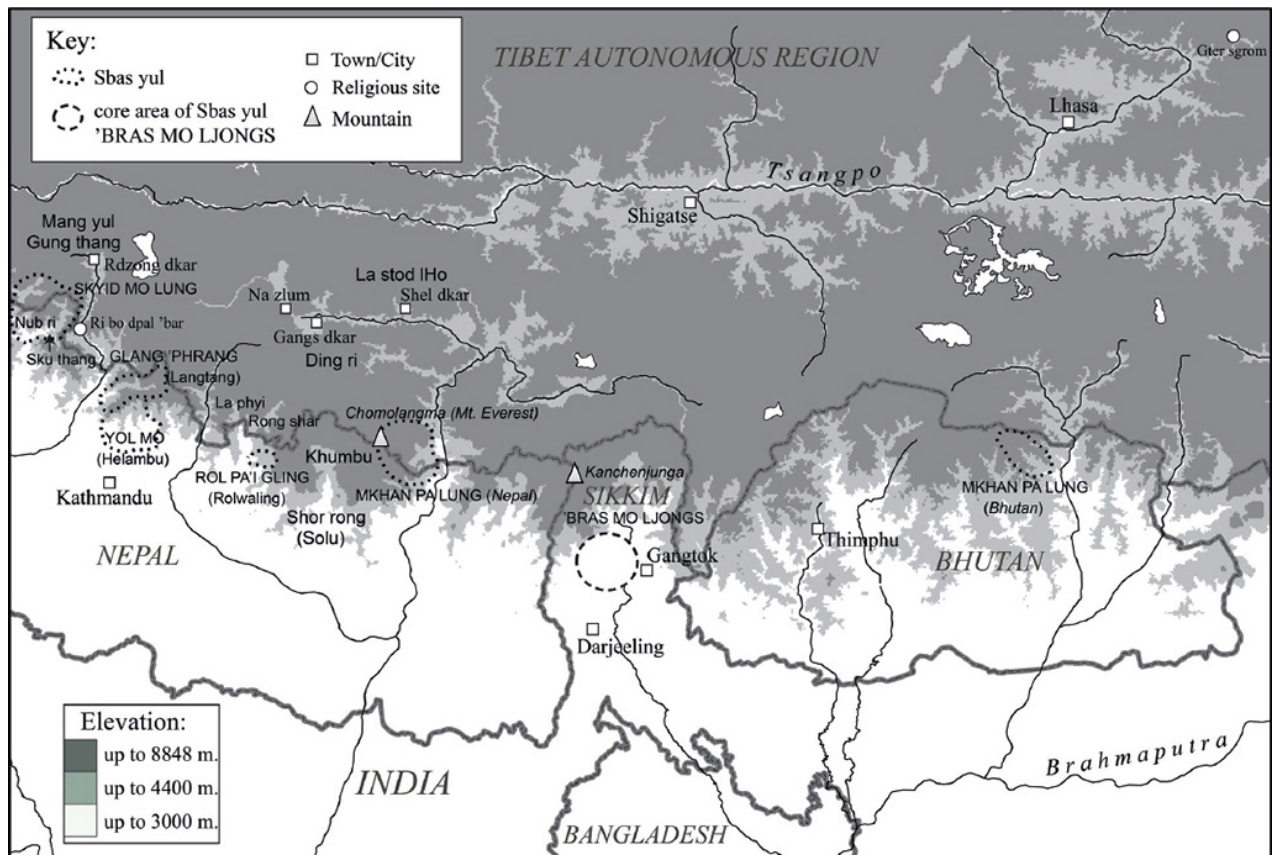


Figure. 1. Representation of *beyul* in the Himalayas. From (Garrett et al., 2020)

The name Khanchendzonga in Buddhist scripture refers to the repository of five sacred treasures: salt; gold and turquoise; Buddhist scriptures; weapons; and medicines and seeds (Government of Sikkim, 2016, p. 80). These sacred treasures are believed to correspond to the five peaks that make up the Khangchendzonga massif (ICOMOS, 2016, p. 51). Multiple sacred texts provide further detail on the *beyul*, including a 14<sup>th</sup> century text by Lama Gongdu which first described the *Beyul Demazong*, and led to the 17<sup>th</sup> century text *Nay-Sol*, which outlines the ritual processes to deities in the *beyul*, including Dzonga (ICOMOS, 2016, p. 51). A copy of the *Nay-Sol* is held in every *gompa* (monastery) in Sikkim to guide devotees to the most auspicious locations within the *beyul* (Balicki, 2008). This text also includes an apology to the land which states: 'All our actions that are contradictory to the body, speech and mind of gods, such as burning of meat in the hearth, cutting down trees that are the abode of deities, polluting lakes and destroying hills, rocks and cliffs- please forgive us for doing such things out of ignorance' (translation from Balicki, 2008, p. 93). The later *Nay-Yig/ Nay-Yik* text (or 'guide to sacred places of the hidden land of rice') describes how Sikkim was first blessed by Buddhist deities Avalokiteshvara (principal deity of Tibet and Bodhisattva of Compassion), Tara (Goddess of Mercy) and Indra (Ruler of Heaven and Lord of the Devas), adding a Buddhist origin story and legitimising the Buddhist claim to the land, and providing a guide to



the sacred sites and the locations of treasures (*ters*) within the *beyul* (Balikci, 2008). These elements contribute to the special significance of Mt. Khangchendzonga and *Beyul Demazong*, not only to local Buddhists, but also Buddhists globally, especially those who follow the *Nyingmapa* school of Buddhism.

Between the 9<sup>th</sup>- 16<sup>th</sup> centuries large numbers of the Tibetan-Buddhist Bhutia people migrated to Sikkim, seeking refuge from conflict (Sundas, 2020, p. 59). Aim to establish the Buddhist Kingdom prophesied by Guru Padmasambhava, three Tibetan Nyingma *Lamas* established, crowned the Bhutia King Phuntsog Namgyal as the first king of the Chogyal Dynasty on the Norgobang Throne, at Yuksum in 1642 CE (R. Rai & Gurung, 2020, p. 72). Sikkimese Buddhism subsequently developed into different sects, including the *Nyingmapa* (unreformed), *Kargyupa* (semi-reformed) and *Gelukpa* (reformed sect). Monasteries (*gompas*) were established across the country with the first monastery believed to have been constructed at Dubdi (Bandyopadhyay, 2020, p. 369). Since the 18th century, the *Nyingmapa* sect has been the main Buddhist sect, receiving royal patronage (R. Rai & Gurung, 2020, p. 75). During this transition of power, the Lepcha also came under the influence of Buddhism, but owing to the polytheistic nature of their belief system, other deities including Buddha (and more recently Jesus) could also become incorporated into it, allowing some elements to survive religious conversion ((Government of Sikkim, 2016, p. 1067). The Buddhist concept of *beyul* was combined with the Lepcha belief in *Mayel Lyang* to form the core of conversion and this unique manifestation of Buddhism.

The past and present state narrative of Bhutia relationships with the other Sikkimese communities revolves around the story of a blood brotherhood pact made at Kabi Lungchok in Sikkim between the new Bhutia rulers and the Lepcha, and Limbu communities, to unify the tribes of the tribes under Bhutia rule. However, other evidence including account of 800 Lepcha and Limbu seeking refuge in Nepal in order to escape from the Bhutia, suggests that there was actually constant tension between these groups (R. Rai & Gurung, 2020, p. 76). Nevertheless, in the interests of state-building, the narrative of brotherhood and peaceful cooperation has become dominant in the official retellings of Sikkim's past. This is most clearly highlighted in the annual festival of Pang Lhabso that culminates at Pemayangtse *gumpa* to thank Khangchendzonga and the other guardian deities for the peace and prosperity of Sikkim and apologise for any harm caused to the environment (K. D. Bhutia, 2022). A pilgrimage trail is undertaken between Buddhist monasteries and natural sacred sites in the vicinity of Kanchenjunga, while Lepcha *bungthings* carry out simultaneous supporting rituals in their territories, reinforcing the values of the blood brotherhood (Government of Sikkim, 2016, p. 97). This festival also highlights the view in Mun and Buddhism that pollution or defilement of

the sacred landscape will lead to the wrath of local deities, further reinforcing the spiritual governance of these resident spirits (Wagh, 2017, p. 58).

## **2.5. British Influence**

The Chogyal Dynasty continued to rule Sikkim, navigating challenges including invasions from Bhutan and Nepal, and periods of control by the Chinese Qing dynasty . During the British occupation of India in the 19<sup>th</sup> century, the Kingdom of Sikkim supported the British in the Anglo-Gorkha war (1814-16) to regain of lost territory and establish an alliance against the expanding Gorkha Kingdom of Nepal (R. Rai & Gurung, 2020, p. 79). Through this alliance the British sought to establish Sikkim as a loyal Buffer Zone between Nepal and British India, initiating the gradual loss of the Kingdom's independence through its role as a colonial periphery state (Chettri, 2022, p. 5). Although Sikkim was never officially colonised, it remained a protectorate and the British exerted control through establishing financial and material dependencies (Chettri, 2022, p. 5). This included the creation of an administrative council which promoted the erasure of pro-Tibetan practices which were deemed uncivilised and reflected Chinese/Tibetan influence, alongside promoting the English education system to shape future generations to be pro-British generation and anti-Chinese (R. Rai & Gurung, 2020, p. 82).

The British also engaged in a massive transformation of the landscape and demographic composition of the State. They viewed the region as a commercial resource and initiated in tea and forestry industries as 'civilising' capitalist initiatives, leading J.C White to oversee the relocation of new labourers into the region, predominantly from Nepal, to support these initiatives (Tamang, 2022, p. 5). This marginalised the Lepcha as they did not have status as landowners or intensive cultivators (McDuie-Ra, 2011, p. 84). These transformations profoundly impacted the population dynamics of Sikkim, resulting in a Nepali majority ruled by minority Bhutia, and further marginalisation of the Lepcha, alongside a new relationship with the natural environment.

Following Indian independence in 1945, Sikkim remained as a protectorate under the Union of India from 1947 and then also under the Republic of India from 1950 (Hiltz, 2003). In the 1960s ruler Chosrgyal Palden Thondup Namgyal aimed to create a distinct Sikkimese identity as a reaction against increasing Indian influence (Chettri, 2015, p. 563). This identity was rooted in the ruling Bhutia culture, which maintained links to Tibetan culture despite the British endeavours to suppress it. However, by the 1960s, the Bhutia had become minority in a state where 75% of the population was Nepali ,and Hinduism the most popular religion, resulting in attempts to create a uniquely Sikkimese Buddhist identity being disconnected from the

demographic reality (T. Lepcha, 2020, p. 111). Following anti-royalist riots believed to be motivated by the new ethno-political context of a local minority vs a non-local majority, the Indian Army took over the capital city of Gangtok and a referendum led to the deposition of the monarchy and Sikkim's official merger as India's xxx State in 1975 (Hiltz, 2003, p. 82)

## **2.6. Sikkim Today**

Sikkim today is a product of the historical dynamics described above. As the State increases development dependence on the Government of India for funding and investment continues. Notably, different forms of governance have been adopted within communities, including the use of the *Gram Panchayat* system, mirroring the previously-practiced concept of councils of like the Lepcha *Lyang-gambu* (village elders) (Sharma, 2013, p. 21).

The population continues to comprise a majority of Nepali heritage, alongside migrants from surrounding states like West Bengal, and Hinduism is now the majority religion (57%) (Directorate of Census Operations (Sikkim), 2014). There are still minority populations of indigenous ethnic communities in Sikkim, including the Lepcha, Bhutia and Limbu, which continue to practice a mixture of Buddhism, Bon, Mun and Yumanism. Additionally, the influence of Christian missionary projects during the British era established a significant Christian community in Sikkim (Directorate of Census Operations (Sikkim), 2014).. These demographic shifts have contributed to the emergence of local vs. non-local, Sikkimese vs. non-Sikkimese divisions within society, with the 'local' minority becoming increasingly protective of its rights and culture, which are viewed as under threat from outsiders (Dukpa et al., 2018). In the Indian census, only major religions (Buddhism, Hinduism, Christianity, Islam, Sikhism, Jainism) are included to address religious belief in the wider population, with religions including Mun combined in the 'other' category. This creates issues when exploring religious belief based on census data for this region.

Northwest Sikkim has a large Lepcha population owing to the establishment of the Dzongu Reserve Zone in 1965 following Notification 3069 to provide a protected area for the Lepcha community.. Dzongu has a population of 7000 and the land is exclusively owned by Lepcha community members and cannot be given permanently to any non-Dzongu resident, with work-permits for outsiders only issued by permission from Dzongu residents for a maximum of one year (McDuie-Ra, 2011, p. 85). There is also a community of Nepali migrants working mainly in the cardamom industry, but they are not allowed to own land or property in the reserve zone due to its special provisions (T. Lepcha, 2020, p. 112). Transhumant groups of herders, including the Dopka and Lachenpa, also occupy this region, although this traditional way of life has been severely restricted by the establishment of protected areas which ban

grazing, like the KNP, and military controlled areas along international borders (Dorji et al., 2019).

Sikkim's social categorisation reflects the wider Indian procedure based on the establishment of the Socially and Economically Backward Classes Commission (SEBC) in 1979 (or Mandal Commission). Sikkim divides these into Scheduled Castes, Other Backwards Castes, Most Backwards Classes, Scheduled Tribes (Limbu and Tamang), and the unique Bhutia-Lepcha (BL) category (Chettri, 2015, p. 566). Initially, the BL category aimed to combine these groups into one, contrasting with the other ethnic groups designated as 'Nepali' (McDuaie-Ra, 2011, p. 84). However, in 2005, Sikkim introduced a new category of 'Most Primitive Tribal Group' for the Lepcha to 'protect and safeguard this vanishing tribe and to uplift their socio-economic, educational, political status and to give them a distinct identity' (GoS, No.3(54) PA/518/2006). There are significant issues with the caste system in India, which unfortunately this thesis does not have the space to fully give attention to, but reaction to this designation was generally positive, with other groups advocating for their inclusion too based on the increased reservations they could access.

In 2019 Sikkim's GDP was the fifth smallest in India, but also one of the fastest growing. Historically, Sikkim's economy was predominantly agricultural owing to challenging terrain and lack of infrastructure to support large-scale industrial activity (Kaewkhunok, 2018). Only 16% the land is suitable for cultivation but two-thirds of the state's workforce depends on agriculture, contributing to 40 per cent of the state's GDP (S. Chakrabarty, 2020, p. 322). Economic development initiatives are shifting towards the sectors like tourism, industrial growth (mainly pharmaceuticals and hydropower), and supporting infrastructure (Chettri, 2022, p. 5). The State is heavily investing in hydropower owing to the mountainous landscape and numerous rivers in the region, which present a strong potential source of income. As Appendix 5 demonstrates, there are already numerous projects in place. However, the Lepcha community opposes these hydropower projects, as they believe that disrupting the river flow blocks the souls from returning to their ancestral lands in the KNP's mountains. This opposition has led to significant protest movements against proposed hydropower developments, which will be further discussed in Chapter 6.

Tourism, and especially ecotourism, is currently Sikkim's fastest growing industry. Organisations like Lonely Planet consistently recommend Sikkim as an unspoilt, ancient, mystical, and sacred 'Shangri-la', with a strong emphasis on its Buddhist heritage (Chettri, 2022). As tourism has become an increasingly significant element of India's economy this has expanded, establishing tourism as a driver of development, however Sikkim's tourism industry

developed slowly compared to other Indian States, mainly owing previously restricted access to tourists or insufficient infrastructure (Batabyal & Das, 2022). In 1988, Sikkim decided to allow tourists to visit the Tsomgo Lake and since this initial opening tourism has undergone significant growth, with increased focus on the cultivation and promotion of religious tourism and ecotourism experiences (Government of Sikkim, 2018, p. 19). The **Human Development Report** for Sikkim 2014 states that Sikkim has an advantage in tourism based on landscape, nature, and culture, alongside political stability, high literacy rate and green policies. However, its weaknesses continue in infrastructure, especially limited road connectivity, and poor mobile and internet connectivity (Government of Sikkim, 2015a). The Tourism and Civil Aviation Department (hereafter 'Tourism Department') of Sikkim stated a target of 5 million tourists to the state per annum by 2020, with almost 1.5 million tourists visiting the state in 2018, representing more than double the local population (Chettri, 2022, p. 3). Over 90 per cent of tourists visiting Sikkim are domestic (Indian), with few foreign tourists, and most visitors travel as part of package tours can limit the benefits of tourism for the wider population of Sikkim, as visitors are guided to pre-selected businesses and services (Batabyal & Das, 2020, p. 304). Chettri (2022) notes, the tourism industry could continue to function without the participation of locals, because of the prevalence of package tours and dominance by non-Sikkimese hotel owners in the tourism sector. Nonetheless, locals are finding alternative ways to engage tourists and present the heritage of Sikkim and approximately one third of the Sikkimese population still engages directly or indirectly with tourism (Datta 2020).

## 2.7. Conclusion

In conclusion, this chapter has provided an overview of the historical context of Sikkim and the significance of this heritage in shaping the present and future of the State. Sikkim's unique location, bordering four different territories, has contributed to the influx of diverse cultures and religions through inward and outward migration. However, owing to the limited archaeological research conducted in the region, a comprehensive understanding of Sikkim's deep history remains elusive. Advocating increased future archaeological research is a key recommendation in thesis. The narrative presented by the state begins with the Lepcha people, who conceive the land as *mayel lyang*, followed by the arrival of the Bhutia community who established the Namgyal monarchy and introduced Buddhism, combining the hidden land concepts of *beyul* and *mayel lyang*. British influence in the 19<sup>th</sup> century initiated the commercialisation of the landscape and significantly altered the demographics of the state through the introduction of Nepali laborers. This led to a protective State position towards the Buddhist heritage of the region, which continued after becoming an Indian State in 1975. As a result of these processes, Sikkim today finds itself in a complex context of being a multicultural society, facing pressures to develop and diversify its sources of income, while

maintaining a narrative of Sikkim as a sacred Buddhist land with a rich environment. The relationship between these aspects will be further explored in the subsequent chapters of this thesis, shedding light on the intricate dynamics at play in Sikkim's heritage and development.

### **3. Heritage Protection/ Management in Northwest Sikkim**

#### **3.1. Introduction**

This chapter aims to explore the forms of legal heritage protection and management in Northwest Sikkim, considering the rich diversity of heritage which has been shaped by the various communities that have inhabited the region, within the context of its exceptional natural heritage. The heritage in this area encompasses both the legacies of Buddhist and indigenous traditions, associated with early inhabitants of Sikkim, alongside more recent heritage linked to the Nepali Hindu community. This section will not deal with the charters, documents and guidelines established within the World Heritage Convention, as though India is a signatory to many of these, they are not legally enforceable beyond delisting sites (ref). This chapter will deal with categories which are widely used in global heritage management discourses including natural and cultural, and tangible and intangible. Chapter 1 highlighted some of the critiques of dividing heritage into these categories, but they are still widely used and reflect how heritage is currently officially conceptualised globally, and in Sikkim, so will be used in this section to demonstrate how heritage is classified in this state.

#### **3.2. Built Heritage**

The built or 'tangible' heritage of Sikkim comprises human constructions including religious buildings like *gompa*, ruined palaces, and other structures/ monuments. Officially recognised archaeological sites and monuments in India are protected by under the Ancient Monuments and Archaeological Sites and Remains Act 1958 (Government of India, 2010) which originated as the Ancient Monuments Preservation Act 1904 under British India. Sutton (2013) notes the 1904 Act imposed an extreme degree of conservation to the Indian context, which was not replicated in the similar acts within Great Britain that were instead subject to numerous caveats. The Archaeological Survey of India (ASI) is responsible for implementing the 1958 Act and conducting archaeological research and preservation across India. The ASI was established as a government sponsored archaeological body in 1861 during the colonial period, when research prioritised specific moments in history and forms of heritage, mainly focusing elite heritage, and sites which could be corroborated with textual sources, peripheral areas in India remain poorly understood (Svvrathan, 2020, p. 91). Following Independence in 1947, the ASI maintained this monument centred approach which reflects its colonial origins (Meskell, 2020, p. 41).

In Sikkim three sites protected by the ASI under the 1958 Act. These 17<sup>th</sup> century sites are the Norgobang Coronation Throne (the site of the coronation of the first Chogyal of Sikkim), Dubdi Monastery (claimed to be Sikkim's earliest *gompa*) and the ruins of Rabdentse Palace (the

former capital of Sikkim) (ASI Kolkata Circle, 2007). All three sites are in Northwest Sikkim and are managed by Sikkim's Culture Department. The ASI operates through a series of regional branches which forward issues to the central body. However, Sikkim does not have a dedicated ASI circle, so archaeological activity and requests for the State go through the Kolkata Circle instead (ASI Kolkata Circle, 2007). In 2010, the 1904 Act was amended to establish a "prohibited area" of at least 100 meters around protected monuments where construction is not permitted, with an additional "regulated area" of 200 meters was also designated (Government of India, 2010). The amendments also removed local power to influence the sites protection, placing power firmly with the ASI and Central Government (Menon & Varma, 2019, p. 5). The ASI has previously conducted repairs at these sites, removing modern concrete additions, reassembling rubble, and structural strengthening (ASI Kolkata Circle, 2007). It is important to note that other non-elite, non-Buddhist archaeological sites do not receive the same level of protection, as evidenced by recent campaigns to grant heritage status to Pandam Dee, a hill fort of the famous Lepcha King Punu Gaeboo Achyok, in order to prevent its destruction (Sikkim Express, 2020). This contrasts to neighbouring West Bengal, where two forts associated with King Achyok were recently granted heritage status (Statesman News Service, 2018). However, it is important to acknowledge that the ASI lacks adequate resources and funding as Meskell (2020, p. 30) highlights that many sites remain unlisted and unprotected by the ASI, through using the example of Delhi, where 147 sites are included in the national heritage list, compared to 1200 informal sites locally identified sites. Insufficient resources and funding hinder the ASI's ability to comprehensively address the preservation needs of the diverse cultural heritage across the country.

Sikkim's religious buildings are granted additional protection under the Government of India's Places of Worship (Special Provisions) Act (1991), which sets out to 'prohibit conversion of any place of worship and to provide for the maintenance of the religious character of any place of worship as it existed on the 15th day of August 1947' (Government of India, 1991). This means that any place of worship in India must be preserved as it existed at the point of independence, regardless of its religious affiliation. As an Indian State, Sikkim has also adopted this Act. The Department for Ecclesiastical Affairs (hereafter Ecclesiastical Department) primarily manages Sikkim's religious heritage, with support from the Culture Department and the Tourism and Civil Aviation Department (hereafter Tourism Department) (Ecclesiastical Affairs Department, n.d.a). The religious institutions defined and protected by the Ecclesiastical Department include Buddhist institutions (Nyingmapa Monasteries, Kagyupa Monasteries, *Manilakhangs*, *Lhakhang/ Gylkhang*, *Tsamkhang/ Dubkhang*, Gelukpa & Sakyapa Monasteries), Bon *Gompa*, Hindu and Sai Mandirs and Ashrams, Christian Churches, Islamic Masjid and Sikh Gurudwaras (Ecclesiastical Affairs Department, n.d.b). The



Ecclesiastical Department distributes grants to some of these religious institutions to support their maintenance and the dissemination of religious knowledge. The grants from the Ecclesiastical Department are supplemented by various projects conducted by the Culture and Tourism Departments, which will be further explored in Chapter 5.

### **3.3. Natural Heritage**

Management of Sikkim's natural heritage primarily falls under the purview of the Forests, Environment and Wildlife Management Department (FEWMD) with limited involvement from other government departments. Owing to the unique and diverse environments outlined in Chapter 2, national parks and other protected areas comprise nearly 34 per cent of the state's total area (Batabyal & Das, 2020, p. 304). In India, the protection of natural heritage is supported by national legislation including the Wildlife (Protection) Act (Government of India, 1972), the Forest Conservation Act (Government of India, 1980), and the Indian Forest Act (Government of India, 1927) which are administered by the Ministry of Environment, Forest and Climate Change. These acts have faced criticism of establishing top-down approaches that neglect the needs of local stakeholders through prohibiting access and use. Despite claims of positive environmental conservation outcomes, these practices still follow the 'fortress' approach of conservation that views humans, particularly local inhabitants, as a threat to nature. Additionally, the Government of India can intervene in the work of the State Government through the civil service, leading to potential conflicts in areas like the management of natural resources and environmental issues shared between the two government levels. It is important to critically examine and address these challenges in the conservation and management of Sikkim's natural heritage and the broader South Asian region. Balancing conservation goals with the rights and needs of local stakeholders is crucial for achieving sustainable and inclusive approaches to natural resource management and environmental protection.

### **3.4. Sacred Natural Sites**

The Places of Worship Act (Government of India, 1991) defines places of worship as 'a temple, mosque, gurudwara, church, monastery, or any other place of public religious worship'. In Sikkim, the entire state is conceived as a sacred landscape in the *beyul*, but within this context, certain locations are regarded as particularly auspicious through association with specific events and mythology. As a result, Sikkim's 'sacred natural sites' (to use the IUCN category) often fall into a legislative area between cultural heritage and natural heritage, sometimes combining elements of legislation. This means that tension can arise between conservation objectives and the rights and needs of local communities, and in some cases the management of responsible pilgrimage from external visitors. However, some sacred natural sites in Sikkim

have been granted unique protection by the State through Notification no.70/HOME/2001 which identifies key natural sites of spiritual significance and prohibits their destruction or conversion (Government of Sikkim, 2001b).

This notification covers lakes (*tso*), mountain peaks, natural rocks (*Tsho*), manmade rocks (*nyado* and *chorten*) and caves (*phug*). For example, Khacheodpalri Lake in west Sikkim is covered by this notification, as this sacred site is associated with Tsomen Pemache, a protective nymph, and the Goddess Tara, whose footprint is manifested in a sacred rock (Government of Sikkim, 2016, p. 93).. Additionally, a monastery was established at this site in 1760, which also features the *Beyul chorten*, a replica of the Boudha *stupa* in Nepal, constructed by Lama Dorje Gyaltsen to provide a pilgrimage site for those unable to travel to Nepal (Government of Sikkim, 2016, p. 93). Buddhist *gompa* also protect the sacred groves surrounding the monastery through the system of *gya-ra* and *gya-nak* (Government of Sikkim, 2016, p. 1012). The *gya-ra* is the immediate area around the *gompa*, designated as sacred space and subject to strict regulations that prohibit any harm to the environment, and the *gya-nak* represents an outer zone from which the *gompa* can gather resources like fuel (ICOMOS, 2016, p. 54). The 2001 Notification builds on Notification no.59/HOME/98, which prohibits the climbing Sikkim's sacred peaks, including Khangchendzonga, which still remains officially unsummitted from the Indian side (Government of Sikkim, 1998). However, the legislation neglects non-Buddhist places of worship and heritage, including sacred rivers, non-Buddhist groves, and 'intangible' heritage like traditional knowledge and rituals.

### **3.5. 'Intangible' Heritage**

On a national level, many elements of intangible heritage associated with crafts, religious, and artistic expression fall under the Ministry of Culture, but the majority of support is delivered through the Indian National Trust for Art and Cultural Heritage (INTACH), an non-governmental organisation to established to support heritage conservation (Chalana & Krishna, 2020, p. 4). INTACH has developed significant influence despite lacking jurisdictional powers and has been involved in the recording and conservation of numerous examples of built, natural, and intangible heritage. However, INTACH has been largely inactive in Sikkim, with most support limited to commissioning research like Sharma's (2013) publication on the Lepcha of Dzongu. Sikkim's Culture Department supports performance arts, religious festivals like the annual Pang Lhabsol, and initiatives including the Directorate of Handicraft and Handloom's craft courses, alongside community-based organisations like the Lepcha Cultural Association (ref).

However, traditional knowledge and practices linked to natural resources are also part of intangible heritage (UNESCO, 2003), and have tangible manifestations in material culture and landscape adaptation. Previously, livelihoods focused on small-scale pastoralism and transhumance, but the establishment of protected areas and development pressures posed a threat traditional ways of life, leading communities to seek alternative forms of income (Singh et al., 2021). The Biological Diversity Act (2002), which was created in response to the UN Convention on Biological Diversity, sought to introduce guidelines for the sustainable utilisation of resources and includes provisions for the protection of traditional knowledge related to biodiversity (Government of India, 2002). In Sikkim, the 2002 Act resulted in the establishment of the State Biodiversity Board, tasked with maintaining a database of biological resources and traditional knowledge through People's Biodiversity Registers. These registers help determine access to and sharing of land and are administered by the FEWMD. Communities belonging to the Scheduled Tribes, BL, and most primitive tribal group categories have received additional protection and benefits, including higher quotas for reservation in employment and education through affirmative action policies, additional funding for development projects, and greater safeguards for their way of life (Chettri, 2015, p. 566). For example, the Lepcha language is protected as an official state language, with government-issued newspapers, radio broadcasts, and its inclusion in the school curriculum. Traditional knowledge sometimes forms an element of sustainable development projects and sustainable tourism as a form of skill and income development, with initiatives delivered by the FEWMD or the Tourism Department. These initiatives will be discussed further in Chapter 6.

### **3.6. Conclusion**

This Chapter demonstrates that legal protection and statutory management of cultural and natural heritage remains extremely divided, reinforcing a rigid separation between the two spheres, alongside other dichotomies including tangible vs intangible, or sacred vs secular. Elements of heritage that represent values at both ends of these binaries are in danger of becoming neglected or divided along rudimentary lines as is the case with 'intangible' heritage's division between creative/ spiritual manifestations, and practical applications linked to natural resources. This can be linked to the dominance of European ideas of a divide between nature and culture which was reinforced during the colonial period and has left a legacy in postcolonial states like India, as shown in the case of the ASI and the nature conservation approaches. There is further separation along religious lines, as while the heritage of Northwest Sikkim is multifaceted, there is a notable emphasis on the Buddhist religious buildings and sacred natural sites. This emphasis can be linked to the initiative of Chosrgyal Palden Thondup Namgyal, who sought to create a distinct Sikkimese identity based

on the ruling Bhutia/Tibetan-influenced culture, which despite changing contexts has persisted as outlined in Chapter 2. This narrative continues to be widely promoted by the state, playing a central role in identity formation and serving as a cornerstone of the Sikkimese tourism industry. It is important to recognise and address these gaps in legislation to ensure the comprehensive protection and preservation of all forms of Sikkim's heritage, considering the diverse religious and cultural traditions present in the state.

## **4. Khangchendzonga National Park**

### **4.1. Introduction**

Northwest Sikkim is dominated by Khangchendzonga National Park (KNP), which covers a vast area of 1,784 km<sup>2</sup> or 25% of the total area of Sikkim, falling across the administrative areas of Chungthang, Dzongu and Yuksom (Government of Sikkim, 2016, p. 16). The National Park part of a continuous international landscape with the protected areas of Kanchenjunga Conservation Area (KCA) in Nepal and Qomolangma National Nature Preserve (QNNP) in Tibet. This chapter will explore the origins of KNP, its listing as a UNESCO World Heritage site, and the various measures applied to its management and preservation.

### **4.2. Creation of the KNP**

The KNP was established in 1977 following notification No.43(9)Home/77, using the powers of the Wild Life Protection Act 1972, to '*protect, preserve and encourage breeding of rich flora and fauna in this part of Sikkim which is of great importance from ecological, geomorphological and biological significance*' (Government of Sikkim, 1977). The central justification for creating this protected area lies in the presence of Mt. Khangchendzonga, which stands as the third highest mountain in the world, reaching an elevation of 8,586 meters a.s.l, surpassed only by Mt. Everest and K2 (Government of Sikkim, 2016, p. 16). The Khangchendzonga massif comprises five peaks, and there are 20 other peaks in the KNP above 6000m a.s.l. reflecting its location on the convergent tectonic boundary in the Himalayas. Spanning an elevation range of 1,220 to 8,586 meters a.s.l. within a 40-kilometer area, the KNP contains a remarkable array of environments, including subtropical, temperate, subalpine, and alpine zones (IUCN, 2016, p. 124). The KNP is home to over 1500 species of plants (representing 1/3 of India's flowering plant species) and including 22 IUCN red listed species of flora (IUCN, 2016, p. 124). Additionally, the KNP hosts 213 bird species, nearly half of India's avian diversity, with 127 classified as of conservation concern, and is home to important migratory stops and breeding grounds like the Lhonak Valley breeding site of the Black-necked Crane (vulnerable- VU)(IUCN, 2016, p. 125). The park also supports a rich mammalian fauna, with 45 species recorded, including the Asiatic Wild Dog (EN), Tibetan Wolf (CR), Snow Leopard (EN), Red Panda (EN) (IUCN, 2016, p. 125). The UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) as places the KNP in the top 0.7-1.2% of all assessed protected areas worldwide for species conservation significance, further justifying its national and international protection (IUCN, 2016, p. 126).

Initially covering an area of 850 km<sup>2</sup>, the KNP was expanded to its current size of 1,784 km<sup>2</sup> in 1997. Subsequently, it became a part of the larger Khangchendzonga Biosphere Reserve

(KBR), which was established in 2000, as declared in Notification No. J-22016/76/91-BR (Government of Sikkim, 2000). In 2009, a Transition Zone was designated through Notification No.204/KNP-KBR/WL/Forests/2009, including habitation areas that have 'direct or indirect dependency on the adjoining Buffer Zones' which amounted to a population of 35,757 people in the 2001 census (FEWMD, 2008). This established a Core Zone (KNP) of 1784km<sup>2</sup>, a Buffer Zone of 835.92km<sup>2</sup>, and a Transition Zone of 311.20km<sup>2</sup>, and the total KBR area of 2,931.12km<sup>2</sup> (Government of Sikkim, 2009). The Buffer Zone of the Khangchendzonga Biosphere Reserve (KBR) has Reserve Forest Status under the Indian Forest Act 1927, alongside specific areas that have been demarcated for specific resource use, with *Khasmal* for wood collection and *Goucharan* for grazing (Government of Sikkim, 2016, p. 1129). In 1998 a grazing ban was introduced in the Core Zone of the protected area, followed by mass evictions of pastoralists between 2000-2002 (Singh et al., 2021, p. 2). Consequently, the Core Zone has no permanent occupants, aligning it with the IUCN's "Category II protected area," where temporary human visitation is managed and restricted, although still permitted, unlike Category 1a (strict nature reserve) and Category 1b (wilderness area) where human access is tightly restricted (Dudley, 2008). Access to the KNP is granted through permits, presenting a significant barrier to continued use and connection for previous land users. There are still some temporary, seasonal inhabitants of the Core Zone at some of the monasteries within the park, but the permanent human inhabitants are now only found in the Buffer and Transition Zones. Displaced Core Zone residents were relocated to settlements on the periphery of the protected area in the Buffer and Transition Zones, including the Thomopas residents of Tshoka village who were relocated to concrete houses left over from the scrapped Rathong Chu hydropower project and provided small pieces of land (Government of Sikkim, 2016, p. 615). The Government of Sikkim states villages in the east of the KNP including Beh, Sakyong and Pentong are mainly inhabited by Lepcha communities, while villages to the North including Chungthang, Lachen, and Munsithang are predominantly Bhutia, with a few Nepalese families and Dopka herders (Government of Sikkim, 2016, p. 542). To the KNP's southwest are the predominately Nepalese communities at settlements like Yaksom, Kongri and Labdang, reflecting the proximity to the Nepali border (Government of Sikkim, 2016, p. 542). The nuances of these categories are not encompassed by the Government of Sikkim, but it demonstrates some of the key communities located in and around the KNP, and the altitudes and environments they are associated with.

### **4.3. World Heritage**

In 2016, the Khangchendzonga National Park (KNP) became the first mixed cultural and natural World Heritage Site in South Asia, following its official inscription during the 40th session of the World Heritage Committee. As outlined in Chapter 1, a limitation of the World

Heritage process is that properties can only be proposed for listing through the State Party. While UNESCO recommends involving a wide range of stakeholders in the nomination process, it cannot be enforced (UNESCO WHC, 2015, p. 14). Consequently, a top-down approach often prevails, leading to the nomination of properties that support the official heritage discourse and values of the State. India ratified the World Heritage Convention in 1997 and has served on the World Heritage Committee three times (Meskell, 2020, p. 37). As part of the BRICS group, India has challenged Western notions of expertise, emphasising local knowledge and living heritage, but simultaneously has prioritised political alliances affecting heritage protection, as seen in India's support for South Africa's coal mine proposal at the Mapungubwe Cultural Landscape and Bolgar Historical and Archaeological Complex, demonstrating conflicting values in the preservation of heritage (Meskell, 2020, p. 38).

The inscription of the property followed a lengthy nomination process which began when the KNP was first added to the Tentative List of the State Party of India in 2006 (Wagh, 2017). Initially, the KNP was nominated solely under two "natural" criteria for Outstanding Universal Value (OUV): Criterion (vii) and Criterion (x) (Wagh, 2017) (see Appendix 1). Criterion (vii) was justified owing to the scale and natural beauty of the site, with its unique environments connected to the third highest mountain in the world (Government of Sikkim, 2016, p. 128). Criterion (x) was included based on the high species diversity of flora and fauna, with its unique elevation providing habitats for threatened species including the snow leopard and the red panda (Government of Sikkim, 2016, p. 129). However, as highlighted in Chapter 2, the KNP holds not only natural importance, but also significant value for several local and international communities as the location of the hidden lands of *beyul* and *Mayel Lyang*, and home to a deity manifested as Mt Khangchendzonga. These values are most easily encompassed in the 'cultural' criteria developed by UNESCO to demonstrate Outstanding Universal Value (OUV) but also reflect a deep relationship with the natural criteria. It was only during a stakeholder consultation workshop in 2012 that community members were able to advocate for the inclusion of cultural criterion (iii) in the nomination to reflect this relationship (T. Lepcha et al., 2018, p. 54) (see Appendix 1). Following this consultation, the State Party amended the nomination to propose a mixed category nomination (T. Lepcha et al., 2018, p. 54). Criterion (iii) was justified as it focused on the concept of *beyul*, as an internationally important and unique concept in Buddhism, alongside the incorporation of the Lepcha belief in *Mayel Lyang* into the Buddhist conception of the landscape as a multi-layered 'hidden land' (Government of Sikkim, 2016, p. 126).

Following the KNP's inclusion on India's World Heritage Tentative List, the International Council on Monuments and Sites (ICOMOS) and International Union for Conservation of

Nature (IUCN), the statutory independent World Heritage Advisory Bodies to UNESCO, then assessed the site and the nomination. As the KNP was nominated based on natural and cultural criteria, both ICOMOS and IUCN were required to assess the site, meet stakeholders, and provide a report to the World Heritage Committee (WHC). The ICOMOS Advisory Body Report (2016, p. 52) recommended the additional inclusion of Cultural Criterion (vi) (see Appendix 1) in the nomination, to reflect the KNP's cultural associations, portraying Khangchendzonga as the centre of socio-religious order, unity, and solidarity between the diverse ethnic communities of Sikkim (ICOMOS, 2016, p. 52). Ritual practice and indigenous knowledge are also covered by this criterion, including resource use reflecting that 'the kinship between the human communities and the mountainous environment has nurtured the elaboration of a profound and well-developed traditional knowledge of the natural resources... which deserves to be safeguarded and continued' (ICOMOS, 2016, p. 53). It is rare for Advisory Bodies to recommend additional criteria, highlighting the shortcomings of the nomination that they felt they should intervene. The State Party accepted this additional criterion and included it in the final nomination. ICOMOS further recommended extending the Buffer Zone to include the Transitional Zones of the KBR to protect cultural sites like the Norbugang Coronation Throne and Dubdi Monastery at Yuksom, and the Dzongu Reserve (ICOMOS, 2016, p. 54). While the State Party agreed to increase the Buffer Zone to include the settlement area of Yuksom, no changes were made to the Buffer and Transitional Zones in other areas of the north and east of the KNP, which in some cases remained less than 750 m wide as shown in figure 2 (Government of Sikkim, 2016, p. 1122). The State Party outlined that a community consultation had taken place, which resulted in the decision to extend the Buffer Zone in some areas, but not to the extent originally recommended by the Advisory Bodies (T. Lepcha et al., 2018). The ICOMOS report clearly encouraged the State Party to continue the dialogue with local communities to increase the Buffer Zone and recommended the protection of additional culturally significant sites including the Dzongu Valley and Tashiding Monastery (ICOMOS, 2016, p. 55). India has previously permitted and applied for the World Heritage Committee's permission to extend the borders of the Nanda Devi and Flowers World Heritage site, 17 years after the initial inscription, demonstrating the State Party is not against revisiting inscriptions for extension (Jaeger, 2021, p. 21). Following the limited extension of the KNP's Buffer Zone the number of cultural sites identified by the State in each Zone are as follows: 31 Core Zone sites, 11 Buffer Zone sites, 20 Transition Zone sites, and 12 sites outside the KNP in the periphery areas (See Appendix 3).



ANNEXURE - "Y"

CULTURAL MAP: EXTENDED BUFFER ZONE BOUNDARY OF THE PROPOSED PROPERTY FOR INSCRIPTION INTO WORLD HERITAGE SITE

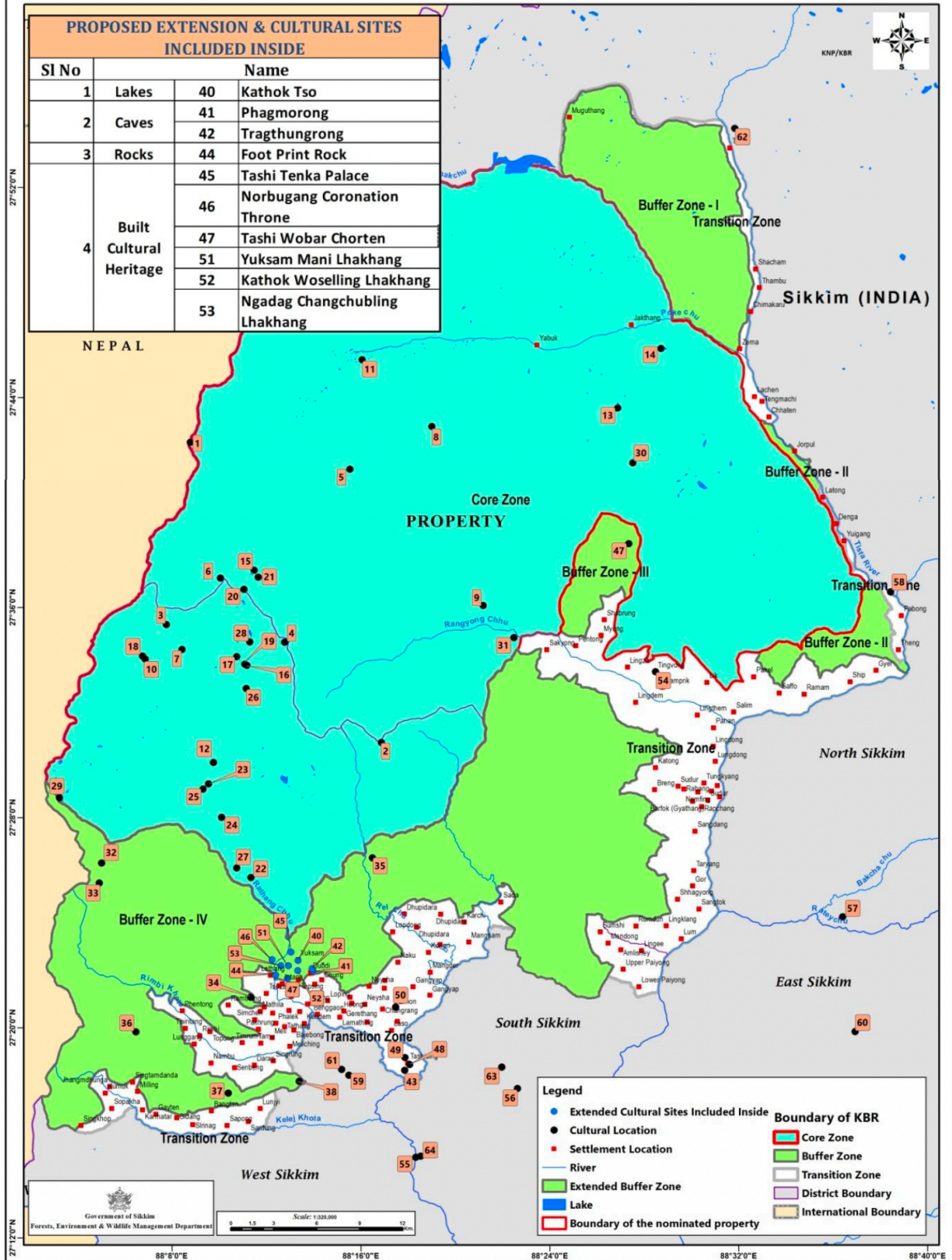


Figure 2. KNP World Heritage Nominated area including revised Buffer Zone and Transition Zone (Government of Sikkim, 2016)

#### **4.4. Management of KNP**

UNESCO's Operational Guidelines clearly state that 'each nominated property should have an appropriate management plan or other documented management system which much specify how the outstanding universal value of a property should be preserved, preferably through participatory means' (UNESCO WHC, 2015, p. 21) . The State Party provided a management plan in the KNP's World Heritage nomination documents. Prior to the listing, the KNP was primarily under the jurisdiction of the FEWMD as a National Park, with limited involvement from the Ecclesiastical Department, Culture Department, and Tourism Department. The FEWMD was also the primary department involved in producing the Nomination documentation therefore the management plan will be assessed for the inclusion of cultural values. The KNP Management Plan 2008-2018 (FEWMD, 2008) is now out of date, but no updated version is available in the public documents of FEWMD. Analysis of the 2008-2018 Plan reveals that it mainly focuses on the conservation and monitoring of natural heritage elements, while largely ignoring elements traditionally classified as 'cultural' (FEWMD, 2008). It includes mention of traditional forms of livelihood, an inventory of medicinal plants developed by Pradhan and Badola (2008), and the role of bamboo based products and also proposes to allow 'controlled use of the Park and its resources by local people for supporting their traditional livelihoods and other sustainable resource collection by ensuring that such uses are in balance with the regenerative capacity of the environment' (FEWMD, 2008, p. 69). Further explanation of how controlled use will be implemented was not included. The Plan further states that 'securing support for protection of wildlife and regulating forest laws, rules and regulation has become relatively easy because the local traditions of conserving forest and wildlife already was part of the culture of the Sikkimese people' (FEWMD, 2008, p. 49) despite the Plan and associated legislation restricting the involvement of local people in the conservation. This demonstrates the approach critiqued by Byrne (2013) in Chapter 1.

The inclusion of 'culture' comes through most strongly in the development of an interpretation strategy to appeal to tourists and influence visitor behaviour (FEWMD, 2008, p. 102). 'Culture' is also included in a section on ecotourism (7.2) which states an aim is to 'guide management and development of village settlements and cultural sites by local people in a way that will retain traditional character and architectural style to conserve indigenous architecture and culture; and to preserve other social and cultural activities as they see fit' (FEWMD, 2008, p. 93). This demonstrates a deeper consideration of self-determination around heritage for local communities, but it still appears that including 'culture' is primarily focused on enhancing the KNP as a tourist product, rather than recognising the intrinsic value of these cultural attributes.

Applying an approach similar to the integration of Cherokee traditions into the interpretation of the Great Smoky Mountains National Park, USA, where Cherokee members worked with the National Park staff to create wayside integrate their heritage into the interpretation (Bernbaum, 2017) Overall, the Management Plan reinforces earlier views of people (and culture) was mainly perceived as a threat to conservation instead of an important component of the heritage and values of the site, and their participation is only authorised with permission from 'experts'.

During the World Heritage nomination process in September 2015, both Advisory Bodies expressed concerns about the prioritisation of natural heritage over cultural heritage in the nomination dossier, requesting further information largely concerning the integration and consideration of cultural aspects (ICOMOS, 2016, p. 48). In response, the State Party submitted a new Cultural Heritage Management Plan 2015-2020 to the Advisory Bodies (Government of Sikkim, 2016). This Plan is not available publicly but is included in the nomination files that were sourced through an anonymous contact for this thesis. This Plan revolved around the creation of a new Cultural Advisory Body, which was only officially formed by notification No.GOS/FEWMD/PR.SECY-cum-PCCD/446 (Government of Sikkim, 2015b) which was only constituted in November 2015, three months after the Advisory Body request. This demonstrates that it was not part of any initial management considerations. The members of the Cultural Advisory Body were to include the Chief Secretary of Sikkim as Chairman, alongside representation from the FEWMD, the Culture Department, the Ecclesiastical Department, the Finance and Revenue Department, and the Development, Planning, Economic Reports and North Eastern Council Department, alongside the Director of the Namgyal Institute of Tibetology (ICOMOS, 2016, p. 56). However, a group that meets only once a year has limited influence and is unable to respond to changing situations, conflicts, and priorities at regular intervals. An Executive Body sits underneath the Advisory Body, and is responsible for carrying out and monitoring the Action Plan but is only composed of staff members from the FEWMD, lacking integration with other departments or organisations (Government of Sikkim, 2016, p. 1050). The Action Plan laid out for 2015-2020 consisted of only ten points of action which are outlined in Appendix. 3. As a property where the 'cultural' values are supposedly balanced with 'natural' values, a ten-point action plan appears very limited. The Plan also focuses mainly on conservation of built heritage, with no acknowledgement of other forms of culturally connected heritage, despite mentions of festivals and crafts within the descriptive section of the Plan. It is unclear whether these actions have been successfully implemented, but as an initial indication, the public-facing website proposed in the Plan has not been launched even after nearly six years beyond the proposed timeframe (see Appendix 3).

#### 4.5. Community involvement in KNP

The UNESCO Operational Guidelines also highlight the importance of participatory planning and stakeholder consultation processes in management plans (UNESCO WHC, 2015, p. 21). However, sub-section 4.3 of this thesis revealed significantly lacking participatory processes and stakeholder engagement during the nomination process. In terms of integrating participatory approaches into the management of the site, a key element of the KNP's management as outlined in the nomination file and the 2008 Management Plan is the creation of Eco-development Committees (EDCs).

In response to the Wildlife Protection Act 1972 (Government of India, 1972) and the Indian Forest Act 1927 (Government of India, 1927), EDCs were introduced into the management of Sikkim's protected areas in 2002 (Government of Sikkim, 2002). The original purpose of the EDCs as laid out in notification No.1/WL/F/76/204 was to support the FEWMD in the protection of natural environments, resources and supporting infrastructure (e.g., roads and fences) by reporting any misuse, encroachment, or harm to the protected areas, alongside managing ecotourism activity within their area (Government of Sikkim, 2002). EDCs consist of residents associated with protected areas and there currently are 23 EDCs connected to the KNP (Government of Sikkim, 2016, p. 1030). This demonstrates progress in integrating communities into management processes, and signs of movement away from top-down dominated management approaches. The EDC committee members must reflect specific quotas: four representatives elected by members of the area (two must be female), two representatives elected by community members who are landless/ *adhidars* or *kuthiadars* (one must be a woman), a *Panchayat* president or representative, one NGO representative (preferably from nature conservation), one village elder, and the Block Officer or Range Officer (Government of Sikkim, 2002). These quotas aim to promote a more representative and equitable membership.

The proposal in the Cultural Heritage Management Plan was for the existing EDCs to support the delivery of the Action Plan, including the repair of historic buildings within their area, and that they would receive training in the 'fundamentals of preservation of cultural values' to enable them to support this (Government of Sikkim, 2016). While the integration of cultural heritage management responsibilities into the roles of EDCs can be viewed as a positive step, through creating a joint community organisation for natural and cultural heritage promotion, the extent to which these proposed trainings have been conducted and the degree of success in integrating cultural heritage management issues into their roles remains unclear due to the lack of available online information and State officials for comment. In further criticism Oli et

al. (2013) suggest that in practice EDCs are not really considered partners in management which remains a top-down process, with their analysis of management effectiveness in KNP in 2013 scored at 42.82% owing to exclusion of local people, lack of compensation and support for herders, increased human-wildlife conflict (Oli et al., 2013, p. 28). In comparison, the Kanchenjunga Conservation Area (KCA) in Nepal, which employs a fully community-managed approach and a resource compensation policy, scored 64.82% due to its integration of local values and cooperation (Oli et al., 2013, p. 29). The Cultural Management Plan states that 'integration is essential so that we leave no scope for conflict and ensure communal harmony' (Government of Sikkim, 2016, p. 1028). However, despite the steps towards integration listed above, the current management approach is still extremely dualist, with separation between management plans reinforcing the illusion of separation between these values in the landscape. Greater integration and meaningful participation of stakeholders in the KNP's management is still needed, to ensure the successful management of the unique forms of heritage represented in this region. This has also been achieved at other World Heritage Sites including the Tasmanian Wilderness World Heritage Area, which became jointly managed by indigenous people to address previous neglect for their sacred and spiritual values in this site, through establishing resolutions regarding resource use, establishing a formal management role and increasing the budget allocated to cultural management (Lee, 2016). The success of an integrated and participatory approach is demonstrated in the KCA, which was able to preserve the holistic value of the site and ensure that both natural and cultural heritage were adequately protected and promoted.

There is substantial evidence of communities feeling marginalised in both the establishment and management of the World Heritage Site. The UNESCO Advisory Bodies stated that their missions met with a 'wide range of representatives from National, State, District, and village level governments, site management staff, NGOs, and communities including representatives of the indigenous Dokpa [herders] people' (IUCN, 2016, p. 123). Prior to nomination and inscription, Tseten Lepcha and Gyatso Lepcha from the Affected Citizens of Teesta (ACT), state that the Lepcha community: 'welcomed the nomination since we believed that the inscription would empower local communities in the region, provide international acknowledgement and recognition to our sacred landscape and cultural practices, strengthen our rights over forests and landscapes that we inhabit, prevent destructive development activity and the ongoing desecration of our sacred sites' (T. Lepcha et al., 2018, p. 52).

Unfortunately, for some communities, this anticipated empowerment has not materialised, as the existing management structures have largely neglected community voices. Beyond the limited power of the EDCs there is no other integration of communities into the KNP's

management. The IUCN's 2020 Conservation Outlook Assessment grants the KNP 'good' conservation status, from an environmental conservation perspective (IUCN, 2020). However, within the assessment IUCN clearly reiterates concerns present in the Advisory Body Report (IUCN, 2016) regarding the 'longstanding exclusion of local communities from resource use and decision making' (IUCN, 2020, p. 1) as a key risk in the current management.

Furthermore, an anonymous Lepcha resident of Dzongu stated that 'it seems as though stories of our cultural practices, myths and folklore have simply been mentioned in the dossier to ensure KNP's eligibility and to fulfil certain criteria for designation under the Mixed category. This does nothing to ensure the protection of critical or vulnerable landscapes and sacred sites that lay beyond its boundaries' (T. Lepcha et al., 2018, p. 54). This quote clearly highlights the perception that the values emphasised for granting mixed World Heritage listing, amounted to nothing more than a superficial and tokenistic gesture in the eyes of some community members. This is in contrast to the approach used in the exploration of a World Heritage Listing connected to Mt Kailash, as part of the ICIMOD transboundary conservation initiatives, where the ICIMOD is conducting extensive research with stakeholders to establish if they support World Heritage status and include them in the nomination process (Verschuuren et al., 2021, p. 32).

On this topic Brar (2017) interviewed Kai Weise, the ICOMOS officer who conducted the Advisory Body site visit, who stated that they 'were there to just tick off the evaluation list' and even though they were aware of 'major issues that exist with the UNESCO designation for KNP' there was little they could do owing to the structural constraints of UNESCO. Despite this damning admission, IUCN views the KNP nomination process as an example of best practice and a 'constructive learning process', primarily owing to the Advisory Body intervention increasing the cultural significance through the addition of criteria (vi) and the consultation of a broad range of actors (IUCN, 2020, p. 12). The endorsement of the nomination as best practice, despite acknowledging major flaws, raises concerns and highlights the challenges and shortcomings in the confirmation of World Heritage nominations.

#### **4.6. Conclusion**

The case study of the Kanchenjunga National Park (KNP) as the first mixed natural and cultural World Heritage listing in India and South Asia reveals significant challenges in integrating these values within the nomination process and subsequent management framework. The nomination process demonstrated a clear division between natural and cultural spheres, evidenced by the late inclusion of cultural criteria and values in response to community and UNESCO Advisory Body pressure. This lack of integration was further

highlighted by the evaluation of the natural and cultural heritage management plans, which highlighted concerns shortcomings in both aspects.

Community involvement, a crucial element in the integration of heritage management and incorporation of diverse values, was primarily facilitated through the Eco-development Committees (EDCs). However, the EDCs were found to have limited power and influence, primarily serving as conduits for implementing top-down policies without meaningful community participation. This limited involvement not only undermined the potential benefits of community participation, but also marginalised some stakeholders whose lived heritage formed the basis of the nomination.

This chapter highlights the importance of recognising and addressing the challenges of integrating natural and cultural heritage in all stages of the establishment and management of World Heritage sites. It calls for a more holistic and inclusive approach that goes beyond tokenistic gestures, empowering local communities, valuing their traditional knowledge, and fostering genuine collaboration between stakeholders. By embracing a more integrated and participatory approach, future heritage nominations can better honour the interconnections between natural and cultural values, ensuring the long-term sustainability and inclusivity of these unique sites.

## **5. Religious Heritage**

### **5.1. Introduction**

This thesis has highlighted the importance of religious and spiritual values in the KNP's World Heritage Listing. Therefore, this chapter will specifically discuss the implications of the World Heritage inscription on religious heritage in this region. Religious heritage has been chosen as a focus area because the religious and spiritual values and assets of the property were represented in criterion (ii) and criterion (vi) of the World Heritage listing. I wish to acknowledge again that there are significant issues with suggesting a Durkheimian separation between 'sacred' and 'secular' heritage, particularly in a South Asian context where these spheres are far more integrated than in the Christian monotheistic context from which international heritage management practices are inherited. In the case of Sikkim, where the entire state is considered sacred space, the divisions between secular and sacred spaces become more complex and challenging to define and enforce within a heritage management context. However, through exploring the forms of heritage which represent spiritual or religious values in the western definition, this provides a clear category to conduct targeted analysis within. It is crucial to note that this approach is not meant to be exhaustive, but rather serves to emphasise examples of value association within this specific category.

To understand the implications of religious heritage in the region, it is necessary to revisit the religious context of Sikkim. As outlined in Chapter 2 the establishment of a state identity centered around the promotion of Buddhist and Tibetan heritage to counterbalance the increasing Nepali and Hindu majority population. Religion has often been utilised as a unifying tool to shape a national narrative and create a sense of unity within a country (Anderson, 1991). According to the 2011 census results (Directorate of Census Operations (Sikkim), 2014), which are synthesised in Table 1, Hinduism is the most popular religious identity in the South, East, and West districts, representing over 50% of the population, Buddhism is the predominant religion only in North Sikkim, where it represents 53% of the population, and Christianity forms the third largest religious identity across all districts, with the largest concentration in the South, reflecting the locations of Christian missionaries during the British period. The population of Muslims and Sikhs remains relatively low in all districts. Additionally, the category of 'Other Religions' which includes indigenous religions like Lepcha and Limbo, is highest in West Sikkim, representing 2.67% of the total population in the state or 16302.41 people (Table 1). As discussed in Chapter 2, religious identity in Sikkim should not be assumed to be clearly defined as these categories fail to capture the fluid and interconnected nature of religion in the Himalayan region where significant figures including Jesus, Buddha and Guru Nanak can be respected and revered by individuals from across religious groups, transcending the religious divides often enforced in Western society.



Religion	EAST DISTRICT		NORTH DISTRICT		SOUTH DISTRICT		WEST DISTRICT		TOTAL	
	Number	Percent (%)	Number	Percent (%)	Number	Percent (%)	Number	Percent (%)	Number	Percent (%)
Hindu	177919.97	62.74	14882.91	34.05	84585.60	57.6	75284.83	55.18	352669.28	57.76%
Buddhist	72455.46	25.55	<b>23318.75</b>	<b>53.35</b>	35053.10	23.87	36387.21	26.67	167237.04	27.39%
Christian	23395.60	8.25	2661.88	6.09	21454.79	14.61	13002.26	9.53	60508.18	9.91%
Muslim	6210.47	2.19	812.99	1.86	1894.37	1.29	968.69	0.71	9891.35	1.62%
Sikh	85074.90	0.3	817.36	1.87	146.85	0.1	40.93	0.03	1892.79	0.31%
Jain	226.87	0.08	34.97	0.08	44.06	0.03	13.64	0.01	305.29	0.05%
Other Religions	1729.86	0.61	922.26	2.11	3171.96	2.16	10478.21	7.68	16302.41	2.67%
Not stated	822.39	0.29	262.25	0.6	484.61	0.33	259.23	0.19	1831.73	0.30%

Table 1. Distribution of religious identity in Sikkim by district. Data adapted from (Directorate of Census Operations (Sikkim), 2014)

The religious (Buddhist) heritage forms a key element of Sikkim's tourism offer. Sikkim's tourism sector has experienced significant growth, particularly in domestic tourism, as evident in Table 2 and visualised in Figure X (excluding the period of the COVID-19 pandemic) with a dramatic increase of 75% in domestic (Indian) tourism into the State in 2016 and 2017. This is significant as the KNP received World Heritage status in 2016. Although other factors may have contributed to this quick growth, the World Heritage listing could be viewed as the culmination of successive policies and initiatives to increase the profile of Sikkim's tourism with heritage assets as a unique selling point. The role of religious heritage in the marketing of the State and promotion to outsiders leads heavily into discourse about tourism and commodification of culture which will feature frequently in this discussion.

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Domestic Arrivals	700011	552453	558538	576749	562418	705023	747343	1375854	1426127	1421823	316408	511669
Foreign Arrivals	20757	23602	26489	31698	49175	38479	66012	49111	71172	133388	19935	11508
Total Visitors	720768	576055	585027	608447	611593	743502	813355	1424965	1497299	1555211	336343	523177
Percentage Change	-	-20.08%	1.56%	4.00%	0.52%	21.57%	9.40%	75.20%	5.08%	3.87%	-78.37%	55.55%

Table 2. Annual domestic and foreign arrivals in Sikkim 2010-2021. Data adapted from CEIC Data on resident visits: <https://www.ceicdata.com/en/india/resident-visits-by-states/visitor-arrivals-local-Sikkim> and non-resident visits: <https://www.ceicdata.com/en/india/non-resident-visits-by-states/visitor-arrivals-foreigner-Sikkim>

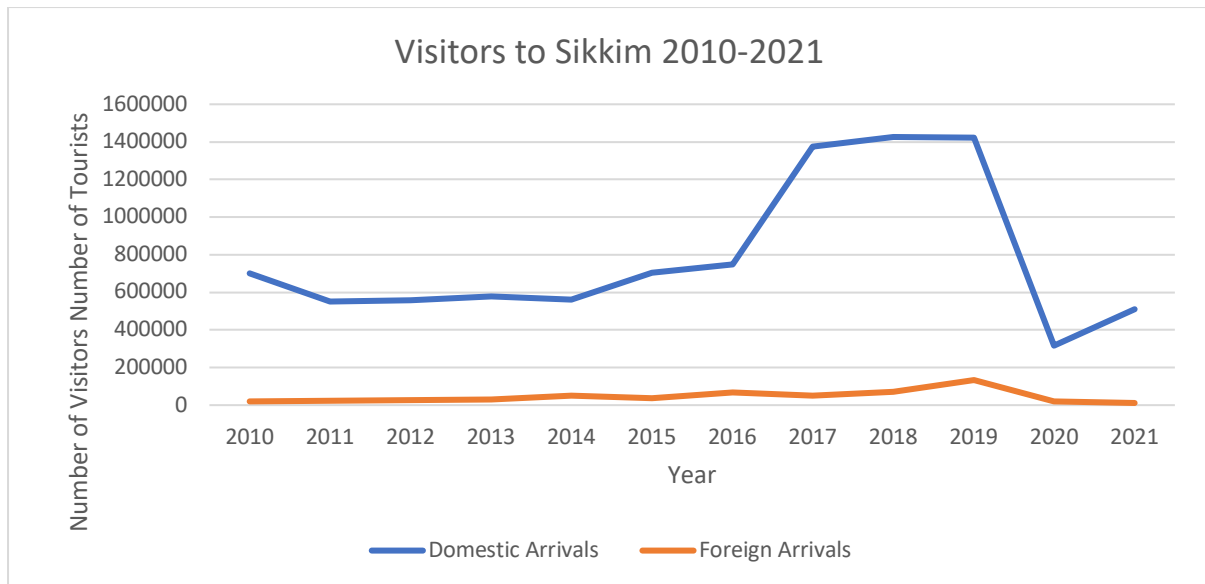


Figure 3. Data visualisation of domestic and foreign arrivals in Sikkim 2010-2021. Adapted from Table 1.

Building upon Bourdieu's (1986) framework of 'cultural capital', Kearns and Philo (1993) applied this concept to the marketing and mobilisation of cultural resources in the 'selling' of places. Several issues arise in relation to cultural capital, including the commoditisation, which occurs when reproduction and accessibility alters the original uniqueness of a product like craft objects. Another aspect is commodification, where something that was previously non-commercial becomes a product with economic value, like the staging of traditional dances for tourists (Cohen, 1998). Harrison (2012, p. 137) argues that the inclusion of intangible heritage in the World Heritage Operational Guidelines facilitates the commodification of these practices, as the nomination process defines a space and product that can be marketed to external audiences. The term 'heritagisation', developed by Walsh (1992), refers to this process of transforming functional objects and places into objects for display, utilising museology methodology outside of traditional museum settings. This process led to the development of a heritage industry where World Heritage sites and other heritage assets are marketed as brands, offering multi-sensory experiences of the past. Dicks (2003:119) argues heritage is no longer just about conserving the past but also about developing a visitable experiences, and the establishment of the 'experience economy' (Pine & Gilmore, 1998) Religious heritage frequently serves as a vital element in these heritage products, reflecting the significant role religious identity often plays in defining a community. The inclusion of religious heritage in the broader heritage industry highlights its appeal and marketability, as it resonates with the spiritual and cultural values of visitors. With this comes significant ethical

risks and socio-economic implications which will be explored in the following sections in relation to the treatment of natural and cultural values in religious heritage.

## 5.2. Built Religious Heritage

The religious institutions defined and protected by the Ecclesiastical Department include Buddhist institutions (Nyingmapa Monasteries, Kagyupa Monasteries, *Manilakhangs*, *Lhakhang/ Gylkhang*, *Tsamkhang/ Dubkhang*, Gelukpa & Sakyapa Monasteries), Bon *Gompa*, Hindu and Sai Mandirs and Ashrams, Christian Churches, Islamic Masjid and Sikh Gurudwaras. Like many global contexts, small shrines, or places of worship without formal buildings are not granted the same levels of protection and State recognition. As shown in Fig.2 (and appendix 2) many religious heritage sites fall in the KNP's Core, Buffer, and Tentative Zones with clear spiritual connections to the landscape around them.

When comparing the 2011 census religious identity statistics to the number of religious institutions recognised by the Ecclesiastical Department in Table 3, certain discrepancies arise between the number of religious spaces and the number of followers for each religion. While Hinduism represents the largest category in both cases, the emphasis on preserving Buddhist heritage results in the number of Hindu Mandirs/Ashrams being almost equal to the number of Buddhist places of worship, despite the number of Buddhists being less than half the number of Hindus. Similarly, the number of Christian churches is far greater than the number of adherents reflecting the impact of the colonial heritage. The 'other religions' section is challenging as this focuses on built structures and does not include sites where temporary outdoors altars may be constructed or there might be no visible construction which are more integrated into the natural environment. This further reinforces the disconnect of a Buddhist state strategy with the lived experiences of its population.

Religious Group	2011 Census Results		Places of Worship under the Ecclesiastical Department	
	Number	Percentage	Number	Percentage
Hindu	352669.28	57.76%	360	40.27%
Buddhist	167237.04	27.39%	334	37.87%
Christian	60508.18	9.91%	168	19.05%
Muslim	9891.35	1.62%	7	0.79%
Sikh	1892.79	0.31%	2	0.23%
Jain	305.29	0.05%	0	0.00%
Other Religions	16302.41	2.67%	23	2.57%
Not stated	1831.73	0.30%	0	0.00%

*Table 3. Religious identity and recognised places of worship in Sikkim. Data adapted from the Indian Census 2011 (Directorate of Census Operations (Sikkim), 2014) and website of the Ecclesiastical Affairs Department, Government of Sikkim: <http://sikkimeccl.gov.in/Documents/ReligiousInstitutionsList.aspx>*

Alongside the Ecclesiastical Department, the Tourism Department and Culture Department are also involved in the conservation and construction projects relating to religious buildings (Appendix 5). Several Hindu sites have been supported by the Tourism Department as shown in Appendix 5, potentially reflecting increased numbers of Hindu tourists in the domestic tourism to Sikkim from wider India. The Culture Department has supported smaller Buddhist sites like *malikhangs*, as well Lepcha and Limboo religious sites, suggesting a more internal motivation to their work. Alongside this several Government of India funding schemes have supported the conservation of ancient monasteries and heritage buildings across India. For example, the Financial Assistance for Development of Buddhist/ Tibetan Culture under the Scheme of Financial Assistance for the Promotion of Art and Culture awarded 19 grants for construction and repair at monasteries across Sikkim from 2016-2022 (Ministry of Culture, 2022a). However, it is worth noting that national initiatives which include Sikkim appear to prioritise Buddhist heritage as the most widely promoted and externally visible form of religious heritage, neglecting smaller or impermanent sites.

As outlined in Chapter 3, only three built heritage sites in Sikkim receive national protection through the ASI. The Dubdi *gompa* now falls inside the KNP's Buffer Zone and the jurisdiction of both the Ecclesiastical Department and the ASI. The ASI has previously worked to re-stabilise the structure, alongside removal and repair of previous incorrect State-led repairs using modern concrete (Mishra, 2008). However, in 2012, prior to the KNP's formal listing but during its time on the Tentative List of India, the monks of Dubdi submitted a formal request to the Government of India, calling for the removal of Dubdi from ASI protection (Sikkim Now!, 2012). They stated that the extended radius of the 2010 amendment to the 1958 Ancient Monuments Act meant that the ASI was 'disturbing the performance of our age old and daily religious activities which frequently requires ASI's permission' including the Tordhog annual ceremony (Sikkim Now!, 2012). The monks also expressed disapproval of the ASI's involvement in repairing and stabilising Dubdi and the nearby Norgobang Coronation Throne, stating that as a secular organisation, the ASI is not equipped to take care of sacred sites (Sikkim Now!, 2012). Since 2012, no further comments have been issued by either party, but Dubdi remains under the jurisdiction of the ASI, suggesting perhaps an agreement was reached.

This incident raises several interesting debates within conservation of heritage sites with contemporary importance and continued use. Firstly, there is often resistance from communities against the classification of space conceived as 'living heritage' owing to the connotations of heritage as 'dead' space, which results in a separation between 'dead monuments' and living religious practice in line with the residual views of the colonial state, which Lazzaretti (2021, p. 1091) highlights in the example of heritage mobilisation at Varanasi. Consequently, communities may be hesitant to engage in heritage dialogues, fearing that it may pose a threat to their cultural context, which is already at risk. This means that stakeholder engagement in defining the values and forms of management at sites like this, where traditional custodians still exist, is incredibly important to avoid conflict.

Secondly, as highlighted in Chapter 3, the ASI continues to operate under inherited processes and legislation from the British occupation, reflecting colonial legacies. The limitations on community involvement in the management of ASI-protected sites are prevalent across the country, as it largely operates under a top-down management framework. However, alternative approaches exist, including the community-integrated methodology employed in the restoration project of Humayun's Tomb World Heritage Site led by the Aga Khan Trust for Culture which offers a departure from the entrenched top-down approach in South Asia (Meskell, 2020, p. 49). Unfortunately, public archaeology and community engagement within archaeological sites are still relatively underdeveloped methodologies within India facing significant challenges in their establishment, with most successful projects conducted within schools, such as the Speaking Archaeologically project. If more archaeological work were undertaken in Sikkim, as a state with considerable unexplored archaeological potential, it would be interesting to see if these approaches to public participation could be integrated and effectively implemented.

### **5.3. New Religious Heritage Developments**

There is evidence that fascination with and a desire to visit Sikkim has existed since at least the 8th century, as supported by the inclusion of this region in the travel logs of historical Chinese pilgrims Faxian, Xuanzang, and Yijing (Chaudhuri et al., 2020). While existing built religious heritage sites are significant tourist destinations, new religious heritage sites are being constructed to further emphasise the sacred landscape of Sikkim, evidencing a desire to expand and increase the profile of the heritage celebrated in the KNP. For example, in 2013 the Dalai Lama inaugurated a Buddha Park in Rabong, South Sikkim to commemorate the 2550th anniversary of the birth of the Buddha, which was constructed with the aim of boosting pilgrimage and religious tourism to support growth and development (McDuie-Ra & Chettri, 2018). Prior to this, other projects had also been initiated including the construction of 'world's

largest' statue of Padmasambhava which was erected in 2004 in a new Buddhist complex at Samdruptse just outside Namchi in the south of Sikkim (Mitra et al., 2015). This site contains hotels, a ropeway and cable cars, creating a tourist attraction and new pilgrimage site. It is a contradictory site, as although emphasising the Padmasambhava's role in sanctifying of the *beyul* and Sikkim as a natural paradise, it introduces capitalist experiences which do not embody these values of ecological consciousness.

Hindu sites are also being constructed including a reconstruction of the sites in the *Char Dham* pilgrimage network which opened at Siddhesvara Dham in 2011, reflecting the growth of Hinduism in the State (Mitra et al., 2015). This site, just like other replica pilgrimage sites across India (e.g., the Ambaji Teerthdham replicas of 51 *Śakti Pīṭhas*, Gujarat) was constructed with the intention of providing pilgrims who are unable to undertake the journey to the original pilgrimage sites with an alternative way of participating in this pilgrimage and attaining *moksha* (salvation). McDuire Ra and Chettri (2018, p. 1483) observe that the site also includes a replica *mankhim* (Limboo temple) and a statue of Lord Kirateshwar, a local manifestation of Siva, alongside 'inexplicable statues of aboriginal peoples of no defined origin... free yoga classes... a flight simulator and racing car simulator', representing a palimpsest of local and pan-Indian identities, alongside combining religion with recreation. McDuire Ra and Chettri (2018, p. 1483) argue that this site represents a shift away from the narrative of Buddhist Sikkim, towards Hindu cultural spheres occurring in local politics, and Sikkim's relationship with the Indian Nation State. Appendix 5 identified two further Hindu monuments began construction in 2018 dedicated to Asta Chiranjivi and Lord Parshuram, providing further evidence of this development. Although sites like the Buddha Park and Siddhesvara Dham were initiated before the KNP's inscription, this was still contemporary with the first tentative listing in 2006, within the movement to develop Sikkim as a religious tourism destination. These new sites are often constructed on hilltops, visually connected to the sacred landscape of Sikkim, even if some of the values displayed in them are contradictory. The KNP can therefore be viewed as part of this movement with the focus on religious significance clearly embedded into the inscription criteria,

Another religious construction project is being completed that is specifically linked to Lepcha mythology is the *Swarga Janae Seeri* (stairway to heaven) reconstruction in Daramdin, West Sikkim ((Bonta, 2018)). This story, similar to the Tower of Babel, where the construction of a ceramic tower heaven, eventually leading to its collapsed owing to the corruption of communication between builders (Bonta, 2018). Ceramic sherds and blocks have been frequently found in this region, which are possibly archaeological in nature and requiring dedicated study, that are perceived by locals as proof of the story (Bonta, 2018). This

construction project was inaugurated in 1995 by the Chief Minister of Sikkim, but construction has been halted and revived several times since then, and the project still remains uncompleted (Bonta, 2018). In 2021 works have recommenced as evidenced by a visit from State officials (Government of Sikkim, 2021) but the exceptional 28 yearlong delay highlights the prioritisation of the construction and promotion of specific heritages and communities, raising important questions about the State's prioritisation and allocation of resources. Significantly, the largest Lepcha heritage centre is located in Kalimpong in West Bengal, not Sikkim as the designated heartland of the Lepcha.

This shows the significance of new heritage projects in the heritage narratives being established by the State, and the continued prioritisation of religious/cultural heritage promotion as a form of soft power both internally and externally. A new State museum, currently under construction, may either reinforce the narratives outlined above, or adopt a more inclusive presentation, as the proposed layout comprises a floor exploring the Namgyal dynasty, a floor for ethnic communities including a section on shamanism, and a third 'Gallery of Holy places of Sikkim' (Culture Department, n.d.). Potential environmental impacts of these large construction projects should also be considered, particularly when associated with Sikkim's sacred landscape and the religious endeavour of reducing pollution and harm to the environment. While the State has not outlined the environmental implications of these projects, conflicting values may arise when constructing sites that are intended to uphold Sikkim's sacredness while simultaneously contributing to potential environmental degradation. **more positive approaches could explore establishing a survey project to understand how a wider range of stakeholders, both the earlier groups like the Lepcha and Bhutia but also the more recent arrivals from neighbouring regions, a more holistic understanding of the significance and relationship with this landscape and its cultural and natural values could be achieved and determine new religious heritage sites based on this. An example of this is a research project undertaken by the New South Wales National Parks and Wildlife Service to understand how migrant communities connect their inherited cultural values to new protected areas (Byrne & Goodall, 2013). A like this could provide the first incorporation of a more plural understanding of changing spiritual values in these places.**

#### **5.4. Non-built Religious Heritage/ Sacred Natural Sites**

As outlined in Chapter 3 there is specific legislation in Sikkim that protects some sacred natural sites in the State. However, in contrast to a religious building, the conservation and

management of these sites often neglects their religious significance in favour of either preserving the ecological elements or exploiting the value of these sites for other gain.

In Sikkim, many sacred natural sites are also part of the tourism offer. Tourism was a key motivation for World Heritage inscription, with the State setting a target of 5 million tourists to the State per annum by 2020 (Government of Sikkim, 2016, p. 149). In 2018 almost 1.5 million tourists visited the State in 2018, more than double the local population (Chettri, 2022, p. 3). With tourism, comes increased pressure exerted by pilgrimage and visitation on the natural environment. This can create tension between preservation sacred natural features and the visitors spiritual needs. The sacred lake at Khacheodpalri, as discussed in Chapter 3, has experienced significant environmental degradation from pilgrim and tourist visitation. This case was brought before an apex court of the judiciary in 2020 by devotees who were concerned the levels of pollution at the site may cause the lake's sacred properties to move to a new location (P. Chakrabarty & Sadhukhan, 2020, p. 3).

To address such challenges, the designation of specific sites as Biodiversity Heritage Sites (BHS) has been proposed. This concept was conceived within the Biological Diversity Act (2002) to provide protection for sites which are not part of Core Zones of Protected Areas (Government of India, 2002). In 2022, the Tungkyong Dho (lake) in Hee-Gyathang, Dzongu was declared Sikkim's first BHS (FEWMD, 2022) (Also Appendix 1). This site sits in the KNP's Buffer Zone, and the lake believed to be the Hee Gyathang Clan's origin place. The designation was achieved through collaboration between the Hee Gyathang Gram Panchayat and FEWMD through the SECURE Himalaya Project with UNDP, WWF and GB Pant Institute (FEWMD, 2022). Local inhabitants have been working to preserve the memories and oral tales associated with the site, including local activist Mayalmit Lepcha who in collaboration with a Lepcha storyteller from Darjeeling has been running intergenerational storytelling and oral history workshops in the village, that also facilitate discussions about environmental conservation (Varadarajan, 2023). This model highlights the potential of this community-centered approach and holds interesting potential for further roll out in the state for smaller sites like lakes, caves, or sacred groves where boundaries can be more clearly defined. The Ashoka Trust for Research in Ecology, in partnership with the Environment Alliance of Religions and Conservation, has been developing a model to assess the impacts of religious tourism in tiger reserves in India, alongside facilitating reconciliation between environmental management, religious representatives, and public stakeholders (Elkin et al., 2018). The development of a similar approach in Sikkim could support BHS listings, and the management of popular sacred sites like Khacheodpalri.



The Sikkim Tourism Policy 2018, also highlighted adventure tourism as a key potential area for growth and investment (Government of Sikkim, 2018). The Himalayas attract adventure enthusiasts due to their challenging summits, and while Khangchendzonga can be claimed from the Nepali side, national and international mountaineering groups have sought permission to scale it from the Indian side which culminated on 13<sup>th</sup> August 2019 this culminated in restrictions on climbing Khangchendzonga being lifted by the Government of India's Ministry of Home Affairs (MHA) (Notification No.25022/33/2014-F. I, Government of India, Ministry of Home Affairs). However, following significant protest from Sikkimese communities, the wider Indian public, and the Chief Minister of Sikkim, the decision was unanimously withdrawn at a meeting chaired by the Home Secretary on the 30<sup>th</sup> August 2019 (Webdesk, 2019). This clearly shows the depth of connection associated with the sacred natural sites of Sikkim. Alongside Khangchendzonga, 13 further peaks were removed from the proposal, but as a compromise requested by the Indian Mountaineering Federation ten peaks in Sikkim remained and were opened for mountaineering and trekking (Webdesk, 2019). While mountaineering is limited compared to Himalayan national parks like Sagarmatha (home of Mt Everest), it is steadily increasing and will provide new challenges and decisions for the KNP's management. The pressure from the Government of India for new tourism opportunities increases, and associated communities reduce in number there is a significant risk that more of these mountains will be opened, placing both the environment and the local beliefs at risk.

However, tourism is not the only pressure facing Sikkim's sacred landscape. As mentioned in Chapter 2, hydropower development has become a key State focus, conflicting with the notions of *mayel lyang* and *beyul* by causing harm to the natural world. This Chapter 3 listed the ways some sacred natural heritage has been protected in Sikkim, but these notifications exclude rivers as a legal part of the sacred landscape. Since the 1990s, hydropower development has been increasing on all of Sikkim's rivers and Fig.4 demonstrates how many projects are already in place (T. Lepcha et al., 2018). This figure shows that the KNP's boundaries, Buffer Zone, and Sikkim's other protected areas, exclude most of the significant river areas, allowing for the construction of hydropower projects. The IUCN conservation outlook report acknowledges that hydropower development is an explicit objective of Sikkim, and that the pressure to tap into this resource is likely to increase (IUCN, 2020, p. 6).

However, as mentioned previously, the Lepcha believe their souls enter the afterlife by following the rivers, and disruptions to their flow will block their souls from entering the ancestral lands, leaving them forced to wander the world (Little, 2013). Initiatives surrounding resistance to hydroelectric developments have been almost entirely community driven by

Lepcha communities in Sikkim and West Bengal. Anthropologists and other researchers have produced numerous studies since the beginning of the protest movement in the late 1990s (e.g. Baruah, 2017; K. Lepcha, 2020; Little, 2013; McDuie-Ra, 2011). The intention of this thesis is to contribute new perspectives to World Heritage Listing so will not focus on the early protest movement or wider considerations. Gyatso Lepcha is General Secretary of the Affected Citizens of Teesta (ACT), which campaigns against the threats of development to Sikkim's indigenous communities (T. Lepcha & Lepcha, 2019). Lepcha stated to Brar (2017) that most World Heritage consultations occurred in west Sikkim with substantial Buffer and Tentative Zones, but neglected Lepcha living North Sikkim. The IUCN (2016) and ICOMOS (2016) reports briefly mention threats from hydroelectric projects but present limited discussion of rivers as part of the sacred landscape. Tseten Lepcha et al. (2018, p. 56) (2018, p. 56) call the inscription as 'meaningless' owing to the exclusion and marginalisation of indigenous cultures, and claim that 'the State Party is deliberately undermining critical tangible and intangible values of the landscape in order to suit its own developmental agenda'. The *Heritage Dammed* report (Rivers without Boundaries & World Heritage Watch, 2019) found that 41 World Heritage Sites were at risk from hydropower developments. This reflects the lack of legal reinforcement in the Convention, with delisting the only sanction available to UNESCO in extreme circumstances. The ACT's current focus is to protect the last 11 km free flowing section of the Teesta in Dzongu as a river sanctuary to prevent the construction of any further dams in this region (Dhungel, 2021). This situation is acknowledged by Jaeger (Jaeger, 2021, p. vi) who in an IUCN publication on Hindu-Kush Himalayan World Heritage recommends filling the gap in protecting the last remaining free-flowing river sections as a gap in Himalayan heritage protection, although not referring specifically to the Teesta. ACT are also calling more broadly for the establishment of an Eco-Sensitive Zone around the park of at least 10km to incorporate indigenous lands (T. Lepcha & Lepcha, 2019). Eco-Sensitive Zones are supported by the Environment (Protection) Act 1986. Unfortunately, limited resolution has been found to this situation. ACT is also working to present alternative income strategies to hydropower, through emphasising the income generating possibilities of homestay ecotourism, to reasserting control over their community heritage (R. Lepcha, 2021). Alongside damaging community values hydropower developments also place the natural environment under significant pressure, increasing siltation, flood risk, and adjusting the speed of the flow, so balancing the costs and benefits of renewable energy generation is a key area of research that should be considered in the case of the Teesta, alongside the perceived economic benefits. The issue of hydropower clearly demonstrates the failures of the nomination process and continued management to cohesively acknowledge significant forms of heritage and the substantial threats they face. It is interesting to note that the Tasmanian Wilderness



Figure 4. Map of hydroelectric projects in Sikkim around the KNP (From: T. Lepcha et al, 2018: 56).

### 5.5. Festivals

Ironically, within tourism, the term 'heritage' is often applied more loosely than in official heritage discourses. It can encompass a wide range of elements, including landscapes, nature, buildings, artifacts, crafts, and cultural traditions, all perceived as being passed down through generations, that can be 'experienced'. The official tourism calendar of the State has been carefully planned to highlight tangible and intangible heritage within a yearlong tourism package (Tourism Department, 2023). When this calendar is analysed based on broad religious categories assigned by the State, as shown in Table. 4 it is still clear that Buddhist religious events continue to dominate the tourism calendar. Hindu festivals also hold

prominence, reflecting the significant population of Nepali heritage in the region and the increasing influx of Hindu individuals from other Indian states. While three Lepcha religious festivals are included, it should be noted that out of these three, two are connected to the Buddhist community. Notably, the Sakewa festival stands as the sole minority religious event on the calendar, without representation from other groups like the Limbu community. However, this could also be attributed to the private nature of other religious festivals, with communities choosing not to promote this aspect of their heritage to outsiders.

<b>Buddhist</b>	<b>Hindu</b>
Bumchu	Maghe Mela
Saga Dawa	Indrajatra
Drukpa Tshechi	Dasai
Guru Rinpoche's Thrunkar Tshechu	Tihar (Deepawali)
Pang Lhabsol *	
Lhabab Duechen	<b>Lepcha</b>
Loosong/Namsoong *	Tendong Lho rum Faat
Tamu Lochar	Pang Lhabsol *
Kagyed dance	Loosong/Namsoong *
<b>Kirat</b>	<b>Non-religious</b>
Sakewa	Cherry tree festival
	Pelling Winter Tourism Festival

Table 4.. Festivals of the 2023 Sikkim Tourism Calendar. Adapted from: Tourism Department, 2023, <https://www.sikkimtourism.gov.in/Public/TravellerEssentials/CallenderView>

\*shared festivals

The Government of India has provided some support for religious festivals and the associated 'intangible heritage,' including crafts and music. For example, between 2013-2017 The Government of India awarded 10 grants to festivals and events in Sikkim through the Cultural Function and Production Grant (Ministry of Culture, 2017) This included an annual Himalayan Mahotsav led by the Himalayan Heritage Research and Development Society, and other festivals including a folk-dance festival, the Rungneet festival at the confluence of the Teesta and Rangeet rivers, and a Lepcha theatre workshop. The Financial Assistance for Preservation and Development of Cultural Heritage of the Himalayas scheme, also led by the Government of India, awarded 13 grants to projects involving Sikkim between 2015-2022 (Ministry of Culture, 2022b). These projects focused on documenting cultural activities like

music and dance, alongside the preservation of manuscripts and crafts. Some of these projects were initiated by organisations based in West Bengal or Assam. This indicates that there is interest from the central government in the 'intangible' cultural and religious traditions of this region, but it still remains limited compared with large investments in other regions of India, particularly the Gangetic Valley.

As outlined by Das (2019) a significant element of the State tourism marketing strategy is to rebrand religious fairs (*mela*) which occur in villages as tourism festivals. Das (2019) examined the tourism events in Okhrey, a Sherpa majority village in West Sikkim from 2015-2016. The first festival was organised with the Sikkim Biodiversity Conservation and Forest Management Project (SBFP) to coincide with a local religious holiday but resulted in conflict between the SBFP and the village representatives due to poor state management and promotion, resulting in financial loss and shame for local community members. Comaroff and Comaroff (2009) refer to this as 'ethnoproneurialism' where cultures become 'ethno-comodities' through tourism or the packaging of indigenous knowledge as a way of establishing economic sovereignty by communities, creating alternative forms of pluri-nationalism to the nation-state (Comaroff & Comaroff, 2009, p. 52). However, critics argue that this process can lead to the loss of 'authenticity' as cultural traditions are repackaged for the tourist consumer, as seen in Besky's (2013) study of tea plantations in Darjeeling or West's (2006) study of the political ecology of Crater Mountain Wildlife Management Area in Papua New Guinea.

The concepts of heritagisation and authenticity of religious festivals become central issues when they are transformed into tourist products. As outlined in Chapter 1, the legitimisation of heritage as 'authentic' enables its promotion as a valuable product, but simultaneously can place this label of 'authenticity' at risk. This is particularly evident in the case of the *cham* dance at Pang Lhabso, a highlights of Sikkim's religious and tourist calendar (Table 4). During the *cham* dancers traditionally wore wooden masks and silk costumes to embody specific deities of the *beyul* (K. D. Bhutia, 2022, p. 46). The British referred to *cham* as 'devil dances' and collected masks widely to promote Orientalist ideas of an esoteric and mystical Shangri-La in the Himalayas (K. D. Bhutia, 2022, p. 46). The exoticisation of these dances and construction an externally perceived 'Himalayan identity' which incorporates *cham* as a central signifier making it increasingly popular events among tourists. This popularity led to new performance contexts, pressures, and issues, including the need for larger performances, additional infrastructure, and increased state involvement in event management and publicity. Bhutia (2022) outlines that historically the masks were made of wood and carved by specialist craftspeople who passed this knowledge down through generations. However, recently the wood has been replaced by fibreglass. As Chapter 2 outlines, Pang Lhabso is connected to

remedying the pollution and damage caused to the land by the humans that inhabit it, asking the spirits of the land for forgiveness, prosperity, and protection in the new year. The introduction of a polluting material into this ritual process presents an intriguing dichotomy between the different purposes the performance now serves and demonstrates that all practices evolve and even when preserved cannot be considered static or unchanging. Additionally, Bhutia notes that many wooden masks were removed from service due to concerns about their aging appearance and the risk of damage, as organisers wanted to conserve them for the future (K. D. Bhutia, 2022, p. 53). This can also demonstrate Western ideas of conservation and control of decay entering a space where the process of decay and impermanence in a natural material holds significant ritual significance. This illustrates the complex interplay between heritagisation, the desire to preserve, and the unintended consequences of altering the use and significance of cultural artifacts.

## **5.6. Conclusion**

This chapter has aimed to analyse and discuss the current conservation condition, impacts of the world heritage listing, and associated supporting initiatives for the elements of religious heritage included in the World Heritage Nomination. From the outset, one of the main influences in the management of religious heritage is the role of tourism. With dramatically increased numbers of tourists, new opportunities and threats are created. The role of new religious heritage sites in promoting different narratives of religious identity within the state is clearly embraced by the Government of Sikkim, with numerous new construction projects. These include Hindu heritage, which was largely excluded from the nomination so marks a positive improvement in the representation of religious identity in Sikkim. However, the contrasting treatment of Lepcha heritage in comparison to the Buddhist heritage is striking, and something that is repeated throughout this section. Tourism has provided significant pressures to sacred natural sites, as exemplified in the case balancing pilgrimage and conservation needs, which appear to be moving towards integrated management through the creation of BHS. But this is also demonstrated in the vulnerability of sacred site protection to the desires of external tourists to climb sacred peaks for the sake of recreation. The issue of heritagisation comes through in the management of religious festivals, which have been turned into heritage 'products' for non-Sikkimese consumption, leading to conflicting values around pollution and conservation, in contrast to the integrated values expressed in the nomination.

The treatment of built religious heritage highlights further tensions between secular and religious organisations in the management of sacred space, an issue which has not been addressed in the management plan, which remains led overall by an environmental body, and

again the dominance of Buddhist heritage despite more plural realities. However, one of the most profound failures of the nomination and management, demonstrating extreme disconnect between the natural and cultural values, is the case of sacred rivers. The exclusion of a fundamental element of the conception of the sacred landscape within one of the key belief systems used to justify the nomination clearly highlights that in this regard the World Heritage system was ineffective enabling integrated natural and cultural values, in the face of developmental drives which constitute a significant threat.

## **6. Traditional Knowledge and Material Culture**

### **6.1. Introduction**

This discussion chapter will focus on the state of preservation and promotion of the forms of traditional knowledge and material culture within the KNP's World Heritage Listing. As discussed in Chapter 2, the KNP is home to a diverse range of communities that have thrived in its unique and ecologically rich landscape. Interactions between these communities and their environment have established specific traditional knowledge and material practices that are intricately tied to this landscape and not found elsewhere. Natural resources form a significant part of their identity and material culture. However, Chapter 4 demonstrated that the KNP's management strategies prioritise the natural values in criterion (vii) and criterion (x), over criterion (vi) despite the intrinsic connection of criterion (vi) to the natural phenomena and biodiversity of the property. The landscape represents a cumulation of layers of interaction with and shaping of nature by communities inhabiting the region which Wagh (2017, p. 58) refers to as a 'repository of bio-cultural diversity'. However, as discussed in Chapter 4, human activities within the KNP have been significantly restricted following the removal of settlements and the prohibition of resource consumption, including grazing, timber harvesting, and other practices. These restrictions alongside recent deaths of community elders, poses a significant risk to the continuation of this knowledge (B. K. Pradhan & Badola, 2008). This discussion section will cover the forms of knowledge which are meant to be safeguarded within the World Heritage listing and intersect with the protected area.

As already explored the KNP reflects the fortress conservation approach prevalent in post-colonial states owing to inherited policy legacies from the colonial period, viewing humans as a threat to fragile environments that can only be protected by excluding human presence and entrusting the land to external experts (Menon & Varma, 2019, p. 7). Chakraborty et al. (2021) critique the Theory of Himalayan Environmental Degradation which presents the Himalayas as 'exceptionally precarious' as this 'ignores how climatic transformations, both material and discursive, remain embedded within historic relationships of power' (Chakraborty et al., 2021, p. 42). The 'fragile Himalayas' concept reinforces climate reductionist theories when discussing Himalayan communities and ecologies, leading to policies that do not adequately include local stakeholders, leading to negative outcomes for ecology and people (Chakraborty et al., 2021). These outcomes include increasing human/animal conflict in Buffer and Tentative Zones, environmental changes resulting from the abandonment of shifting practices like agriculture and grazing, and an elevated black-market value for unique specimens found in these areas, alongside diminished connection to the land and the loss of traditional knowledge associated with these landscapes in affected communities (Singh et al., 2021). Larsen (2018) notes a continuing perception that IUCN Category II protected areas are the preferred



management model for World Heritage Sites, despite widespread criticism of 'fortress' approaches and relocation as having negative social impacts but also neglecting longstanding relationships of humans with landscapes and the development of a symbiotic relationship.

In Sikkim boundaries exist within the state through the creation of strict protected areas, but also through the creation of hard international borders between nations. The Himalayan region has witnessed frequent shifts in political boundaries among territories, including the expansion and contraction of Himalayan states, resulting in the dispersal of populations across multiple areas. The Lepcha community serves as an example, with Lepcha communities now found in Nepal, Bhutan, West Bengal, and Sikkim (Little, 2013). This reflects the changing territories and the porous nature of boundaries, where communities were previously able to move more freely between territories. However, the colonial period in South Asia introduced official borders, similar to other colonial contexts like Africa, a process that has been referred to by de Maaker (2022, p. 2) as the 'partitioning' of the Himalayas, through dividing the environment, its people, knowledge, and spiritual spaces.

The motivations behind many of the programs and projects discussed in this section are multifaceted, however many are sustainable development led initiatives aimed at increasing livelihood opportunities and income generation in a developing state. At the time of World Heritage 2016 inscription, 75% of the KNP's Buffer Zone households were considered at subsistence level, depending on the KNP for their livelihood (Government of Sikkim, 2016, p. 542). Based on surveys conducted by Kumar and Rai (2021, p. 8) Figure. 5. illustrates the distribution of livelihood sources in villages across Sikkim. The research clearly demonstrates that agriculture, livestock, forest products, and tourism play crucial roles in generating livelihoods across all regions. The growing emphasis on tourism shown in all regions aligns with the State's policy of promoting tourism as a development strategy. Appendix. 6 provides additional data on livelihoods and natural resources based on altitude throughout the state, clearly showing the range of resource-based practices included in livelihood practice in Sikkim. Appendix 6 and Figure X show the upper North district primarily focuses on herding and pastoralism, while agriculture and horticulture become more prominent at lower altitudes reflecting the rapidly changing elevation. Specific resource practices such as medicinal plants, herding and crafts were clearly highlighted in the KNP's nomination and form a cornerstone for justifying criterion (vi) in this property listing. ICOMOS (2016, p. 6) recommended this criterion on the basis that 'the kinship between the human communities and the mountainous environment has nurtured the elaboration of a profound and well-developed traditional knowledge of the natural resources and of their medicinal properties, particularly within the

Lepcha community, which deserves to be safeguarded and continued'. Similarly, the

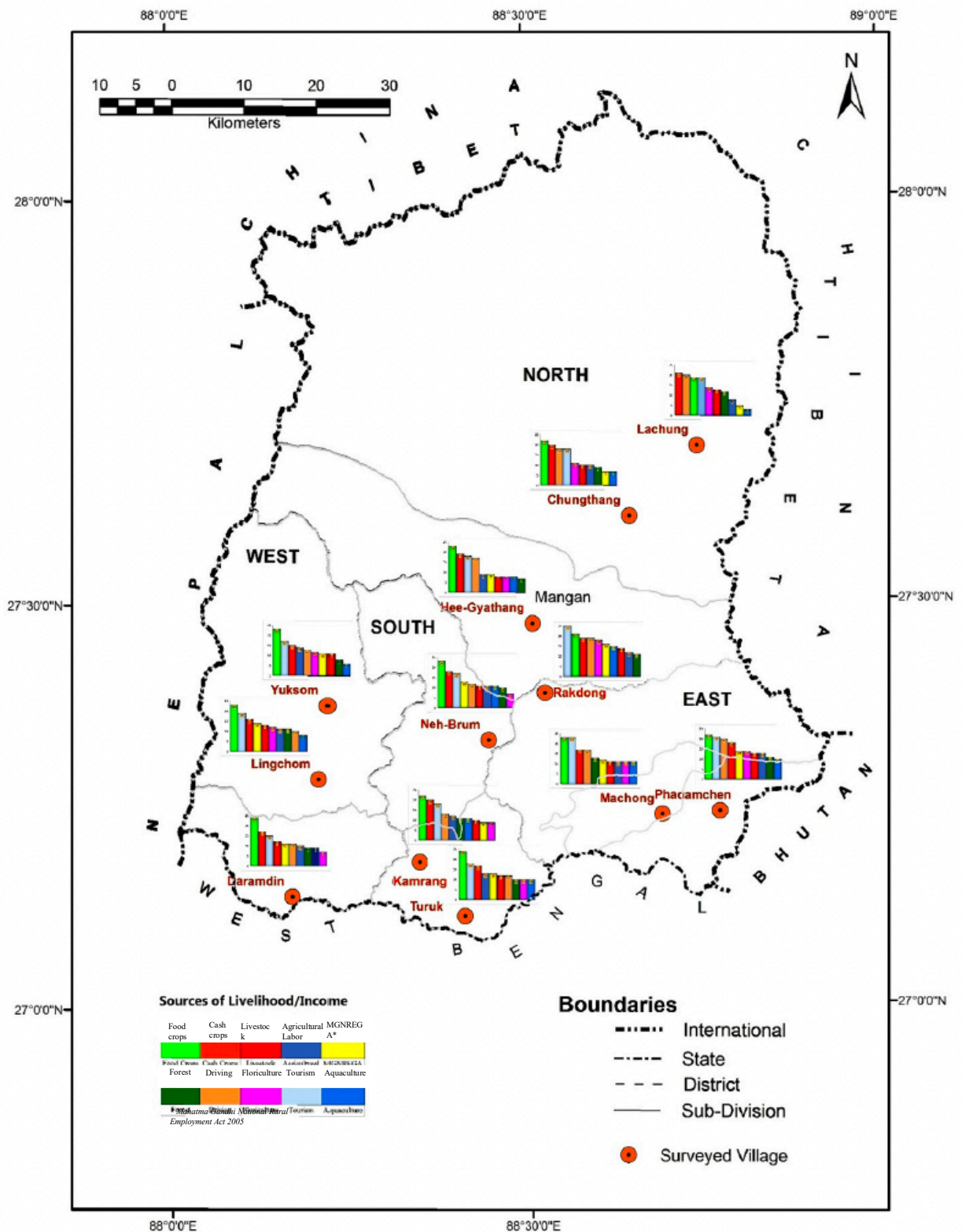


Figure 5. Sources of Livelihood/ Income for the People of Sikkim (n =300). Source: Based on Primary Survey 2018 (Kumar & Rai, 2021, p. 8)

Operational Guidelines (UNESCO WHC, 2015) stated that to ensure the integrity of the property (and linked to criteria (iii) and (vi) in the case of KNP) the 'relationships and dynamic functions present in cultural landscapes, historic towns or other living properties essential to their distinctive character should also be maintained'. Furthermore, in the cases of natural criteria (vii) and (x) also inscribed in the KNP UNESCO states that 'human activities, including those of traditional societies and local communities... may be consistent with the Outstanding Universal Value of the area where they are ecologically sustainable' (UNESCO WHC, 2015, p. 18), and therefore do not necessarily need to be prohibited. However, this factor also sits within a wider context of debates and legislation which often under-privileges 'traditional' approaches to heritage and bio-cultural knowledge, especially forms of heritage which do not represent elite practices but are more focused on everyday life.

## **6.2. Herding**

Within the KNP's heritage management, the grazing ban and eviction of pastoralists initiated between 1998-2002 significantly affected local communities and their associated knowledge-based heritage. Despite widespread evidence that herding is deeply rooted in the historical landscapes of rangelands, the management of the property has remained unchanged, disregarding the fact that removing this practice would drastically alter the landscape (Dorji et al., 2019). The KNP Management Plan reinforces this view stating that 'grazing poses the greatest threat to this habitat' (FEWMD, 2008, p. 89). Herding communities traditionally moved between the KNP and the wider Tibetan Plateau, and the culture that developed around herding networks in the Himalayas has connected people across vast areas for centuries, significant impacting the culture and environment of this region (Darnal, 2016). Historically, along with the long range herders from the Tibetan Plateau, seasonal sheep grazing was a common localised herding activity in the KNP, with a small local Yak population introduced and owned by the King for ritual purposes (Singh et al., 2021, p. 4). Buffalo, cattle and *dzo* (hybrid Yak and cattle) were only introduced in the 20<sup>th</sup> century, but along with sheep herding are now the most widely used livestock in Sikkim (Dorji et al., 2019). Presently herding communities either move in a very localised space, or between altitudes, spending the summer at high altitudes before returning to lower altitudes during the winter, as dictated by the *Dzumsa* system of governance in the Lachenpa Valley (KNP Buffer Zone) (Islam & Sarkar, 2020). This reduced spatial range is a result of the grazing ban in the KNP's Core Zone, which has severely limited herding areas. Consequently, some former herders have diversified their practices and begun rearing *dzo* and horses as pack animals for tourist expeditions into the KNP, neither of which are historical species within the park, leading to overgrazing in tourist camp areas, contrasting with the banned seasonal rotational grazing (Dorji et al., 2018). According to a survey conducted by Singh et al. (2021, p. 6), ex-herding communities around

the KNP and found that the two most significant impacts these communities felt from the grazing ban and evictions was the loss of culture (22.34%) and economic loss (18.43%) alongside ex-herders turning to cash crop agriculture, and an increase in human-wildlife conflict in the Buffer Zone. This demonstrates that the herding ban has had negative impacts on both the natural and cultural elements of heritage within the KNP's listing. Ex-herders have been included in the *Himal Rakshak* (Honorary Mountain Guardians) programme since 2006, a scheme which recruited local people as volunteers to patrol the KNP and monitor illegal resource use, but this created conflict within the ex-herding and Buffer Zone communities, in some cases leading to the ostracisation of *Himal Rakshak's* (R. Pandey & Malhotra, 2021; Singh, 2020). The EDCs which form part of the participatory initiatives in KNP management include these ex-herding communities, such as the Muguthang EDC, but as EDCs were established after the bans were introduced, they have limited power to make significant changes.

However, one group still practices herding in the KNP's northern Buffer Zone. The Dokpa are long distance nomadic sheep and Yak herders who traditionally moved across the Himalayas and the Tibetan Plateau for centuries, until they were cut off following the closure of international borders following the Indian-Sino war in 1962 and the increasing militarisation of the border between Sikkim and China (S. M. Pradhan et al., 2023). The Dokpa still enter the KNP's northern Buffer Zone, temporarily inhabiting the Tso Lhamo plateau and the Lhonak Valley (Government of Sikkim, 2016, p. 1129). As of 2020, this community comprises 24 households who are responsible for 90% of Sikkim's Yak population (Luxom et al., 2022, p. 4). The Dokpa face additional threats including minefields in grazing pastures, feral dogs preying livestock, and limited autonomy or influence in the *Dzumsa* system of governance based on their previous status as non-permanent residents of Sikkim, as well as outmigration of younger generations (Luxom et al., 2022). The Yak population has also been declining owing to inbreeding because of the border closures, as historically this issue would have been avoided through regular festivals allowing the trading of Yak and the diversification of their bloodlines (Dorji et al., 2019). Consequently, the knowledge and crafts associated with herding like wool and cheese production, and also opportunities for trade, marriage, knowledge exchange, are severely at risk (Subba, 2009, p. 88). KNP Management Plan established a new commission to research the conservation of semi-wild Yak in the KNP, but the outputs and operation of this group are unclear (FEWMD, 2008, p. 79).

As a consequence of the restrictions placed on these communities and the lack of government support, former herders and younger generations of active herding families are turning to alternative forms of income, putting the knowledge and crafts related to herding at risk of being

lost. Despite the lack of support from the State, several projects aim to address some of these issues. The International Centre for Integrated Mountain Development (ICIMOD) works across the Himalayas to increase international cooperation in the management of Himalayan landscapes and manages the Kangchenjunga Landscape Conservation and Development Initiative (KLCDI) as transboundary landscapes, covering an area of 25,080.8 km<sup>2</sup> including eastern Nepal, the Indian states of Sikkim and West Bengal and southwest Bhutan (23%) (Jaeger, 2021). A KLCDI programme is working with international governments to revive herding festivals, where previously connected communities can reconnect and share knowledge and resources, alongside strengthening of the Yak gene pool which has become weak because of inbreeding caused by the hard international borders (Ning et al., 2016). Increased communication between herding communities has also been facilitated by a GB Pant Institute initiative with the formation of the Yak Association of Kangchenjunga (YAK) which is led by herders and has resulted in the formation of an informal WhatsApp group (Dorji et al., 2018). The GB Pant programme also facilitated gift from Bhutan of two breeding bulls to Nepal and one to Sikkim in 2020 to further enrich the Yak gene pool (A. Pandey et al., 2022, p. 17).

In addition to these initiatives, the United Nations Development Programme (UNDP) commissioned the Biodiversity Strategy and Action Plan (BSAP) of Sikkim and the Resource Mobilisation Strategy for implementing the BSAP with focus on Khangchendzonga – Upper Teesta Valley’ as part of the SECURE Himalaya (Securing livelihoods, conservation, sustainable use, and restoration of high range Himalayan ecosystems) programme, The BSAP clearly outlines the need for the grazing ban to be reviewed and advocates for a ‘more nuanced grazing policy’ that permits grazing in designated zones instead of implementing a complete ban, which would also integrate the traditional knowledge and experience of herder’s conservation interventions (R. Pandey & Malhotra, 2021, p. 64). Other World Heritage Sites have successfully re-integrated traditional knowledge practices like the example of Nuwu/ Nuwuvi territory which includes protected and restricted areas across four US states that had previously prohibited indigenous intervention, but moved to a co-stewardship model that re-integrated connection to ancestral territories and supported knowledge transmission (Barcalow & Spoon, 2018). Similarly learnings from the example of Agusan Marsh Ramsar Site in the Philippines can also be applied to the KNP, where management and protection acknowledged the role of ‘Ancestral Domains’, integrated customary laws and conflict resolution systems into the Management Plan for the site, with additional creation of a Committee of Indigenous People under the Management Board (Denyer et al., 2018). Furthermore, ensuring the management authority staff have a clear understanding of how cultural and spiritual significance interacts with nature and are aware of the benefits of

integrating traditional knowledge to protect it in a sustainable way would also add value to the management traditional knowlee . The learning and networks from IUCN & ICOMOS project 'Connecting Practice' or associated models could be engaged with by State staff, as global training programme to develop awareness among heritage management staff about the relationship between nature and culture, and explore solutions for management in these settings (Leitao, 2017).

### **6.3. Medicinal plants**

In addition to herding, other traditional knowledge has been placed at risk owing to the restrictions on resource use in and around the KNP. Non-timber forest products (NTFPs) encompass everything other than wood and within this a key category is flora and fauna with healing properties by the communities that inhabit the area. More than 100 species of medicinal plants have been identified in the KNP and the areas surrounding it (Government of Sikkim, 2016, p. 74). This represents a valuable repository of unique traditional knowledge associated with this heritage landscape. The Lepcha are the most widely studied, with an understanding of illness is based on ideas of malevolent spirits and spirit possession, leading to a wide range of cures and treatments administered by *moan-dok* (Mohan & Lepcha, 2020, p. 39). However, other communities have also developed extensive knowledge of medicinal treatments which are administered by specialists called *Paow* and *Nejum* in the Bhutia community, and *Dhami*, *Jhakri*, *Phendangba* and *Bombo* in the Nepali community (Mohan & Lepcha, 2020, p. 39). Many of these treatments form key elements of rituals, and rites of passage, as well as having healing properties, but similarly to herding a declining population of healing specialists, community fragmentation, and restrictions on resource use within the KNP has endangered this valuable knowledge (B. K. Pradhan & Badola, 2008).

Sikkim introduced a ban on the commercial exploitation of medicinal and aromatic plants 2001 to address issues of over exploitation of these plants (Government of Sikkim, 2001a). However, owing to a lack of community consultation and increasing external demand, this legislation has proven ineffective. In 2002, the State established a State Medicinal Plants Board (SMPB) under the FEWMD to guide policies and schemes related to the use of medicinal plants (FEWMD, 2015, p. 116). However, Very few projects have been initiated by the State, and the legalisation or regulation of harvesting has been challenging owing to market instability and the informal nature of cultivation (Limbu, 2022). For example, the Satuwa (*Paris Polyphylla*), or Love Apple, is extensively used in traditional Chinese medicine for a wide range of treatments, making it highly sought after as a 'cure all,' but is now classed as Vulnerable on the IUCN Red List owing to threats including illegal collection, poor forest and trade management, climate change, infrastructure projects and natural hazards (A.

Pandey et al., 2022, p. 27). The GB Pant Institute recently worked with ten farmers in Dzongu to train them in the management and harvesting of Satuwa, in collaboration with local organisations STDMC and Muntachi Al Shezum (A. Pandey et al., 2022, p. 27). However, while this is a good start, other species have not received the same investment, like the Himalayan Trillium (EN) which was only collected on a small scale before 2010 but has recently become one of the most important commercially traded plants in the Himalayas owing to its potential uses in cancer treatment and steroids (Chauhan & Bisht, 2020). This species has not yet been formally cultivated by pharmaceutical companies, so harvesting relies on wild populations, resulting in decentralised and often illegal trade with high demand and increasing profit margins (Chauhan & Bisht, 2020).. Other plants like *yartsa gunbu* (caterpillar fungus- *Ophiocordyceps sinensis*) (VU) are primarily found in the KNP but are sold on the international market at high prices, which creates an incentive to commercialise traditional resource use despite the ban (Singh et al., 2021, p. 5)

Medicinal plants also highlight the issue of patenting and profit from traditional knowledge. The World Heritage listing identifies this knowledge of medicinal plants and their uses as unique to this region, and as researchers engage with these communities more properties of these plants is being shared publicly. However, within this 'ownership' of knowledge is questions as pharmaceutical companies and other stakeholders exploit and profit from this form of 'intangible' heritage. The World Intellectual Property Organisation (WIPO) uses the term 'traditional knowledge' to refer to a wide range of practices which includes bio-resource and medicinal plant knowledge (WIPO, 2010). Mayank (2020) argues that as traditional knowledge protection falls within the realm of protecting the cultural heritage of communities, and should be safeguarded to prevent its misappropriation. This can be achieved through Defensive Protection by preventing the patenting of traditional knowledge, establishing databases or collections, or Positive Protection by classifying traditional knowledge as "prior art," making it ineligible for patents and granting legal recognition to communities (Mayank, 2020). ). Since medicinal plant knowledge is considered a significant element of criterion (vi), ensuring its protection, transmission, and preventing its exploitation in ways that harm both the environment and communities should be a key focus of the management of this World Heritage Site. **An interesting approach that could be replicated is the initiative in the Cold Desert region in Australia to produce a digital archive with varying levels of public access dictated by the indigenous community, allowing them to control how their traditional knowledge is presented, and to whom, through either promotion or restriction (Director of National Parks, 2010). This could also be integrated with the use of handheld, portable Cybertracker technology, to geolocate spaces connected to traditional resources and monitor their uses, allowing real time condition updates**

**alongside continued permitting use and developing understanding of natural resources use, which has been applied in settings including the Bwabwata National Park in Namibia, and the Dhimurru Indigenous Protected Area, Australia (Verschuuren et al., 2021, p. 44). However, ethical considerations would need to be made about monitoring, and the costs associated may make this an inadequate solution for the KNP.**

#### **6.4. Crafts**

The preservation and promotion of traditional crafts play a significant role in incorporating issues of access and decisions regarding which elements of heritage to preserve. Sikkim boasts several unique craft practices that have contributed to the development of a distinct material culture within the region. While numerous craft practices exist, this discussion will focus on a few in-depth examples: nettle fibre material, the Lepcha hat, the mountain paper industry, and beekeeping/alcohol production (ref). To support the preservation and promotion of these crafts, the State established the Directorate of Handicrafts and Handloom (DHH) in 1957 which now has 31 branches teaching craft techniques and supporting the sale of craft creations, alongside several branches outside the state to raise awareness of Sikkimese products (Directorate of Handicrafts and Handloom, n.d.). The DHH lists its focus areas as weaving (carpet, handloom, and blankets), wood carving, *tangka* painting, mask making and painting, however many of these crafts are associated with elite practices and monastic institutions.

Wool, bamboo, and wood are the raw materials with most commonly used in craft practice (A. Pandey et al., 2022). Cane and bamboo are a particularly important craft specialisation, with items like the Lepcha Hat demonstrating the unique material knowledge of Sikkim. Bamboo holds cultural significance, as it is essential for various rites of passage from birth to death (A. Pandey et al., 2022, p. 9). The promotion of Sikkim's bamboo crafts has been supported by the National Bamboo Mission which promotes the management and use of bamboo, cane, and other NTFP's, particularly as a construction material. Increased interest is evidenced in the State projects outlined in Appendix X, particularly relating to bamboo practices in line with the National Bamboo Mission. However, Pandey and Malhotra note that cooperation between the Department of Tourism and Rural Development and small-scale and micro-enterprises is crucial (R. Pandey & Malhotra, 2021, p. 93). A joint initiative between the KLCDI of the ICIMOD and MLAS trained 6 local artisans in traditional bamboo crafts and expanded into commercial products like lampshades and tea boxes, and installed bamboo-made trash bins on the Lingdem-Songbing trekking route (ICIMOD, 2019). This demonstrates simultaneous revival and reinvention while maintaining the essence of the craft techniques and supporting its dissemination.



Another notable example is the nettle fibre industry which was previously widely used to create clothing and other objects that reflect Sikkimese heritage and identity. The strong and silky fibre of the nettle stem can be processed and used to making fabrics, robes and twine, (A. Pandey et al., 2022, p. 11). Until 2018, only a few craftspeople in Dzongu possessed the skill to process and weave nettle fibre (Kandel, 2019). To address this, ICIMOD, through the KLCDI program in partnership with MLAS, conducted educational activities to increase knowledge about nettle fibre production and use (Kandel, 2019). The training programme initially involved 15 women from self-help groups within Dzongu but as of 2022 80 local women have now been trained in the craft and sell their products across Sikkim, representing a successful dissemination of this craft practice (A. Pandey et al., 2022, p. 12). One of the key motivations for preserving these crafts is the potential to market them as products that can support the local tourism industry, as they can be marketed to visitors to engage with the traditional heritage of the region. However, a challenge that arises with scaling up production to increase profit is the potential impact on the authenticity and value of the crafts. Mechanisation of production, although not yet widespread, has been mentioned in development plans including the SECURE Himalaya, which indicates a desire for mechanisation (SECURE Himalaya, 2020). The introduction of mechanisation may lead to the loss or transformation of traditional knowledge and skills, transforming unique handmade items into commodities and reducing the value of individual pieces. In this instance research that captures the composition and development of craft practices can also be an important tool in supporting changes while also conserving preceding knowledge. To navigate these challenges, it is important to strike a balance between preserving traditional craftsmanship and exploring opportunities for economic growth. This can be achieved through sustainable practices, empowering local communities, and involving them in decision-making processes. A good example in India **of integrating craft practices beyond the elite practices within a business model, has been the heritage walks led by CURE in Agra, which connect the monumental sites like the Taj Mahal to workshops throughout the city, with proceeds from tour ticket sales going towards community development projects** (Meskell, 2020, p. 50). By prioritising the preservation of traditional knowledge, maintaining a connection to cultural heritage, and ensuring the sustainable use of resources, Sikkim can continue to nurture its traditional crafts while adapting to changing economic demands.

### **6.5. Ecotourism & homestay**

Ecotourism has emerged as a prominent solution advocated by the Government of Sikkim for the preservation and promotion of traditional knowledge and material culture within sustainable development frameworks. Sikkim has gained recognition as one of the major

ecotourism destinations in India and to support this developed an Ecotourism Policy to regulate this form of tourism and ensure quality delivery (FEWMD, 2011). Ecotourism has gained increased popularity since the 2016 inscription as part of the previously outlined increased tourism to the state. The Policy included establishment of an independent Sikkim Ecotourism Council with a community subcommittee to guide policy creation, alongside an Ecotourism Directorate which sits under the FEWMD and brings these policies into practice (FEWMD, 2011). Kaewkhunok (2018) argued this policy was a paradigm shift in the approach of the State to the involvement of communities in ecotourism design and decision making, through the creation of an independent organisation with a community subcommittee.

In Sikkim, particular emphasis has been placed on establishing homestays that showcase the region's vernacular architecture traditions. The vernacular architectural traditions again reflect the role of traditional environmental knowledge in the manifestation of material culture. For example bamboo is widely used for constructing homes in the Ekra style which generally consist of wood-framed walls with an infill of cross-woven bamboo matting or wooden plank construction, called 'Shee Khim' (Rihal et al., 2018, p. 97). The State announced a 'Mega Homestay Project' in 2022, aiming to construct 1000 new homestays using traditional techniques (Gurung, 2021). The Homestay Association of Sikkim expressed gratitude for the initiative but stressed the importance of incorporating marketing support and promotion into the new scheme to address the challenges faced by the previous one (Gurung, 2021) This is particularly an issue as homestay tourism primarily attracts foreign tourists. Research has shown that the majority of domestic tourists (75%) prefer to stay in three-star and above accommodations, while 42% of foreign tourists choose homestay accommodation instead of other options (P. Pradhan, 2016, p. 107). By prioritising traditional vernacular architecture and construction methods, this project could help support the protection and dissemination of heritage craft practices and associated knowledge, ensuring the continuation of this form of material engagement. In addition to government initiatives, various international organisations and NGOs have supported the establishment of Sikkim's ecotourism and homestay industries. UNESCO, from 2003 to 2011, implemented the Sikkim Himalayan Homestay project as part of a wider initiative for the Development of Cultural Tourism and Ecotourism in the Mountainous Region of Central and South Asia, resulting in the establishment of nine homestay locations (Yadav, Gupta, and Lama 2018).

Thomas (2022) conducted a study on the role of ecotourism in the villages of Aritar in East Sikkim and Darap in West Sikkim, providing a generally positive evaluation of its impact on income generation, community involvement, and infrastructure development (e.g., schools, internet cafes, roads). However, Thomas identified several areas for improvement including

increased training programs/guidance for hosts and communities, greater involvement of women's self-help groups, the creation of local committees to promote local crafts and knowledge, carrying capacity assessments in certain areas to minimise environmental impacts, increased public-private sector partnerships, and greater government investment in tourism infrastructure (e.g., roads, toilets, transportation) (Thomas, 2022). In contrast Singh et al. (2021, p. 2) view the current Himalayan conservation model of restrictive conservation, pastoral eviction, and ecotourism as 'neither an inclusive model of development nor is it embedded in the local socio-ecological needs for conservation' highlighting the 'massive social cost' associated with it. Singh et al. (2021, p. 8) argue that increased local engagement could have provided more opportunities beyond porters and guides to integrate community values, and prevent the monopoly of external tourism operators who entered the region owing to the lack of local initiatives. A more participatory approach could have resulted in better resource management, livelihood opportunities and conservation outcomes. However, another alternative view comes from Reshma Lepcha (2021) who reframes the elements of the homestay movement in Dzongu as a form of protest, citing the establishment of the successful Mayal Lang Homestay by Gyatso Lepcha, a prominent anti-dam activist. Lepcha views the homestay as reasserting control over their community heritage and as a way to present a successful alternative form of development to dams (R. Lepcha, 2021). This range of perspectives highlights how a development initiative can be seen as empowering or disempowering depending on the initiator, a trend been evidenced worldwide, and which makes the case for community agency and co-designed work within development projects.

## **6.6. Conclusion**

This discussion has demonstrated that management of traditional knowledge and material culture within the context of managing natural and cultural heritage in the Khangchendzonga National Park (KNP) in Sikkim has presented both opportunities and challenges. The increased recognition of traditional knowledge and its acceptance for inclusion by the State Party in the World Heritage Nomination, represents the first success. To have moved from a purely natural listing to a balanced natural and cultural listing is a considerable journey, and could have been refused. As demonstrated in this chapter, Sikkim has generally had a positive approach to traditional craft practices, as shown through the continued role of the DHH, and the support of traditional vernacular architecture in ecotourism initiatives. These approaches have ensured the promotion and survival of these forms of traditional knowledge. Support has been provided in these elements by other organisations such as ICIMOD, but this has complimented, rather than been in conflict with the State approach to traditional crafts. Although issues around heritagisation continue in this topic, the integration of natural and cultural values in these aspects is positive.

However, other forms of traditional knowledge have not been afforded the same level of integrated support. The consequences of the management of the KNP on the herding communities of Sikkim has been drastic, restricting and dismantling a way of life developed over centuries, that is intimately connected to the natural landscape. Despite acknowledging the role of herding in the cumulative development of the landscape, no revision or meaningful discussion about adapting the herding restrictions has been undertaken by the Government of Sikkim. It is only through the interventions of external organisations such as the GB Pant Institute, that herding traditions are being supported. Without this support the traditional knowledge and heritage of these communities would be at risk of completely dying out, representing a huge loss for the heritage of Sikkim. Similarly, lack of support regarding traditional knowledge associated with NFTP's is also clear, despite this again being included in the World Heritage Nomination. Using the example of medicinal plants, a blanket ban has been shown to be ineffective in the face of huge external demand for these products. Through failing to engage fully with this issue and regulate existing harvest of wild stocks or replace this with cultivated stocks, these resources are being overexploited and many plants are at risk of being lost. Increased engagement in documenting and patenting traditional knowledge related to these resources would create beneficial outcomes for both natural and cultural values, instead of an approach which maintains exclusion while ignoring a context of exploitation of both people and natural resources.

## **7. Final discussion/ Conclusion**

To return to the main research question this thesis has sought to establish how the mixed World Heritage listing of the Khangchendzonga National Park effected the management of the different forms of heritage found in this Himalayan landscape.

Through exploring the nomination process it was clear that integration of natural and cultural heritage was never the original vision for the KNP. Only through external pressure from stakeholders and UNESCO Advisory Bodies were these values included. While it is commendable that the State Party accepted these additions, their responses were inadequate, as demonstrated through the short and insufficient Cultural Management Plan that continues to enforce a separation from the main natural heritage focused KNP Management Plan.

Within the nomination and management, several other themes emerged. Firstly the nomination emphasised Buddhist and other indigenous belief systems, in the double conception of sacred hidden lands. However, as has been shown through focusing mainly on Buddhism elite religious practice which contains built heritage and recognisable artistic expressions, as is shown in the case of conservation of places of worship privileging built Buddhist heritage, and the state generally supporting elite craft practices. This also reinforces a separation between 'non-Sikkimese' vs Sikkimese heritage, which is at odds with the current demographic composition of the state. New religious heritage monuments are beginning to address this, but fail to explore 'new' communities relationships with the sacred land.

Within intangible practices such as festivals, crafts, and other traditional knowledge there are clear themes. A strong prioritisation of state support is afforded to intangible practices which can be packaged to external audiences, as demonstrated in the case of Pang Lhabso's reconceptualisation as a major tourist event, as well as the State support of vernacular craft practices alongside elite and Buddhist crafts, when they can be combined into ecotourism initiatives or sold as souvenirs.

This emphasis on profit outweighing integrated management is most evident in the case of sacred natural sites, where profit making opportunities either in adventure tourism or hydropower, are clearly practised over the joint cultural and natural values associated with these sites. The extreme case of sacred rivers demonstrates that this viewpoint was held during the nomination process, as shown by their exclusion from the nomination and the

position of boundaries of the KNP running along the rivers to leave them open for hydropower development. The case of medicinal plants, although it could present a profit-making opportunity, would require significant investment in a hard to regulate market, leading to lack of intervention on a state level.

Restricted access and resource use provides yet another disconnect between natural and cultural values, through the persisting view of local stakeholders as a threat to nature conservation values. This is shown through the case of herders, whose historic relationship with the environment has been denied on the outdated grounds of conservation purposes, nearly leading to extinction of this way of life. The survival of these groups is only due to external intervention.

Underpinning the disconnect between natural and cultural heritage in the examples discussed is a persistent lack of community engagement, resulting in the neglect of local values, in favour of the western centric values of the World heritage system, and the inherited colonial conservation values of the Indian heritage system. World Heritage listing is considered a significant validation of authenticity, but through recognising that society evolves alongside heritage it is important to ensure community stakeholders are involved in defining their own heritage. To achieve a more balanced and inclusive approach, it is crucial to empower local communities, document and safeguard traditional knowledge, and foster collaborative management strategies that integrate ecological sustainability and cultural preservation. Co-designing and co-delivering conservation initiatives with local communities is necessary to address their concerns effectively. This can lead to more meaningful opportunities for a wider range of stakeholders and better conservation outcomes for both natural and cultural heritage. By embracing a holistic approach to nature and culture with communities at its core the KNP can become a more inclusive, sustainable, and culturally sensitive endeavour. and within future mixed world heritage sites, then a meaningful integration of natural and cultural values could be achieved.

Therefore while the KNP represents progress in many ways as India's first mixed heritage site, among a limited number of successfully listed global mixed heritage sites, it has some significant shortcomings in its integration of these values. Significant learning can be gathered from this case study to apply to future mixed world heritage sites. The endeavour to better integrate natural and cultural values, particularly in non-western contexts, should be applauded, and to have ended with a mixed listing instead of a purely natural listing represents progress, which will hopefully be replicated in future World Heritage Listings from India.

## Bibliography

- Akagawa, N., & Sirisrisak, T. (2008). Cultural Landscapes in Asia and the Pacific: Implications of the World Heritage Convention. *International Journal of Heritage Studies*, 14(2), 176–191. <https://doi.org/10.1080/13527250701853408>
- Anderson, B. R. O. (1991). *Imagined Communities: Reflections on the Origin and Spread of Nationalism*. Verso.
- ASI Kolkata Circle. (2007). *Heritage of Sikkim*. Archaeological Survey of India Kolkata Circle.
- Balikci, A. (2008). *Lamas, Shamans and Ancestors*. Brill.
- Bandyopadhyay, S. (2020). Role of monastery and craft centre in the perpetuation of ethnic craft in Sikkim: Issues of tradition and change. In *The Cultural Heritage of Sikkim* (pp. 369–386). Routledge.
- Banerjee, A., Chakraborty, P., & Bandopadhyay, R. (2019). Urgent conservation needs in the Sikkim Himalaya biodiversity hotspot. *Biodiversity*, 20(2–3), 88–97. <https://doi.org/10.1080/14888386.2019.1656547>
- Barcalow, K. M., & Spoon, J. (2018). Traditional Cultural Properties or Places, Consultation, and the Restoration of Native American Relationships with Aboriginal Lands in the Western United States. *Human Organization*, 77(4), 291–301. <https://doi.org/10.17730/0018-7259.77.4.291>
- Baruah, S. (2017). Whose river is it, anyway?: The political economy of hydropower in the Eastern Himalayas. In *Water Conflicts in Northeast India*. Routledge India.
- Batabyal, D., & Das, D. K. (2020). Infrastructure development: Strategy for inclusive and sustainable heritage tourism in Sikkim. In S. K. Chaudhuri, S. Maiti, & C. K. Lepcha (Eds.), *The Cultural Heritage of Sikkim* (pp. 303–320). Routledge.

- Batabyal, D., & Das, D. K. (2022). Socio-economic development through tourism: An investigative study for the himalayan state Sikkim, India. In N. C. Jana, A. Singh, & R. B. Singh (Eds.), *Livelihood Enhancement Through Agriculture, Tourism and Health* (pp. 237–246). Springer Nature. [https://doi.org/10.1007/978-981-16-7310-8\\_12](https://doi.org/10.1007/978-981-16-7310-8_12)
- Bentley, J. (2007). Vanishing Lepcha: Change and culture revival in a mountain community in Sikkim. *Bulletin of Tibetology*, 43(1/2), 59–80.
- Berger, S., Dicks, B., & Fontaine, M. (2020). ‘Community’: A useful concept in Heritage Studies? *International Journal of Heritage Studies*, 26(4), 325–351. <https://doi.org/10.1080/13527258.2019.1630662>
- Bernbaum, E. (2017). The Spiritual and Cultural Significance of Nature: Inspiring Connections between People and Parks. In S. R. Beissinger, D. D. Ackerly, & H. Doremus (Eds.), *Science, Conservation and Parks* (pp. 294–311). University of Chicago Press.
- Besky, S. (2013). *The Darjeeling distinction: Labor and justice on fair-trade tea plantations in India*. University of California Press.
- Bhutia, K. C. (2020). Geographical features and religion: Buddhism among the Lhopos. In *The Cultural Heritage of Sikkim* (pp. 213–222). Routledge.
- Bhutia, K. D. (2022). Can pollution bring balance to the hidden land? *The Copenhagen Journal of Asian Studies*, 40(1), Article 1. <https://doi.org/10.22439/cjas.v40i1.6558>
- Bollwerk, E., Connolly, R., & McDavid, C. (2015). Co-Creation and Public Archaeology. *Advances in Archaeological Practice*, 3(3), 178–187. <https://doi.org/10.7183/2326-3768.3.3.178>



- Bonta, B. (2018, June 14). Slight progress on the stairway to heaven. *Peaceful Societies*.  
<https://peacefulsocieties.uncg.edu/2018/06/14/slight-progress-on-the-stairway-to-heaven/>
- Bourdieu, P. (1986). The forms of capital. In J. Richardson (Ed.), *Handbook of Theory and Research for the Sociology of Education* (pp. 241–258). Greenwood.
- Brancaccio, P. (2020). Monumentality, nature and World Heritage monuments: The rock-cut sites of Ajanta, Ellora and Elephanta in Maharashtra. In H. P. Ray (Ed.), *Decolonising Heritage in South Asia: The Global, the National and the Transnational* (pp. 111–126). Routledge India.
- Brar, A. (2017, December 4). In India, not all are pleased by a national park's World Heritage status. *Devex*. <https://www.devex.com/news/sponsored/in-india-not-all-are-pleased-by-a-national-park-s-world-heritage-status-91139>
- Byrne, D. (1991). Western Hegemony in Archaeological Heritage Management. *History and Archaeology*, 5, 269–276.
- Byrne, D. (2013). The WCPA's natural sacred sites taskforce: A critique of conservation biology's view of popular religion. In S. Brockwell, S. O'Connor, & D. Byrne (Eds.), *Transcending the Culture-Nature Divide in Cultural Heritage: Views from the Asia-Pacific Region* (pp. 157–169).  
<https://researchdirect.westernsydney.edu.au/islandora/object/uws%3A20605/>
- Byrne, D., & Goodall, H. (2013). Place-making and transnationalism: Recent migrants and a National Park in Sydney, Australia. *PARKS*, 19(1), 64–72.
- Byrne, D., & Ween, G. B. (2015). Briding Cultural and Natural Heritage. In L. Meskell (Ed.), *Global Heritage: A reader*. John Wiley & Sons.
- Chakrabarty, P., & Sadhukhan, S. (2020). Buddhist monastic trek circuit amidst of a geotourism landscape: A study in the vicinity of Khangchendzonga National Park in

India. *Geojournal of Tourism and Geosites*.

<https://www.semanticscholar.org/paper/BUDDHIST-MONASTIC-TREK-CIRCUIT-AMIDST-OF-A-A-STUDY-Chakrabarty->

[Sadhukhan/3822b55ee0bec5da7c6602625a34c1322ea60e30](https://www.semanticscholar.org/paper/BUDDHIST-MONASTIC-TREK-CIRCUIT-AMIDST-OF-A-A-STUDY-Chakrabarty-Sadhukhan/3822b55ee0bec5da7c6602625a34c1322ea60e30)

Chakrabarty, S. (2020). Maize cultivation in Sikkim: Food security and strategy. In *The Cultural Heritage of Sikkim* (pp. 321–340). Routledge.

Chakraborty, R., Gergan, M. D., Sherpa, P. Y., & Rampini, C. (2021). A plural climate studies framework for the Himalayas. *Current Opinion in Environmental Sustainability*, 51, 42–54. <https://doi.org/10.1016/j.cosust.2021.02.005>

Chalana, M., & Krishna, A. (2020). *Heritage conservation in postcolonial India: Approaches and challenges*. Routledge. <https://doi.org/10.4324/9781003109426>

Chaudhuri, S. K., Maiti, S., & Lepcha, C. K. (Eds.). (2020). *The Cultural Heritage of Sikkim*. Routledge. <https://doi.org/10.4324/9781003052487>

Chauhan, H. K., & Bisht, A. K. (2020). *Trillium govaniatum*. *The IUCN Red List of Threatened Species 2020: E.T175804005A176257695*. IUCN.

<https://dx.doi.org/10.2305/IUCN.UK.2020-3.RLTS.T175804005A176257695.en>

Chen, F. H., Dong, G. H., Zhang, D. J., Liu, X. Y., Jia, X., & An, C. B. (2015). Agriculture facilitated permanent human occupation of the Tibetan Plateau after 3600 B.P. *Science* 345, 6219, 248.

Chettri, M. (2015). Engaging the State: Ethnic Patronage and Cultural Politics in the Eastern Himalayan Borderland. *South Asia: Journal of South Asian Studies*, 38(4), 558–573.

<https://doi.org/10.1080/00856401.2015.1070236>

Chettri, M. (2022). Emptying the Landscape: Outsider Place-Making, Tourism and Migration in Sikkim, India. *Landscape Research*, 0(0), 1–12.

<https://doi.org/10.1080/01426397.2022.2134560>

- Cohen, E. (1998). Authenticity and commodification in tourism. *Annals of Tourism Research, 15*(3), 371–386.
- Comaroff, J. L., & Comaroff, J. (2009). *Ethnicity, Inc.* University of Chicago Press.
- Coningham, R., & Lewer, N. (2019). *Archaeology, Cultural Heritage Protection and Community Engagement in South Asia.* Palgrave Macmillan.
- Culture Department. (n.d.). *Sikkim State Museum.* Culture Department Government of Sikkim. Retrieved 15 June 2023, from <https://culture.sikkim.gov.in/visitor/museum>
- Darnal, P. (2016). Archaeology of Nepal. In G. R. Schug & S. R. Walimbe (Eds.), *A companion to South Asia in the past* (Vol. 31). WILEY.  
<https://doi.org/10.1002/9781119055280>
- Das, S. (2019). *Assembling Diversity: Conservation, Ethnopolitics and Bio-Cultural Recognition on the Himalayan Frontier* [The University of Chicago].  
<https://doi.org/10.6082/uchicago.2101>
- De Cesari, C., & Herzfeld, M. (2015). Urban Heritage and Social Movements. In L. Meskell (Ed.), *Global Heritage: An Anthropological Reader* (pp. 171–195). Blackwell.
- de Maaker, E. (2022). Reimagining spaces, species and societies in the Himalayas. *European Bulletin of Himalayan Research, 58*, Article 58. <https://doi.org/10.4000/ebhr.541>
- Denyer, K., Akoiljam, Y. M., Kenza Ali, M., Khurelbaatar, S., Oviedo, G., & Young, L. (2018). *Learning from Experience: How indigenous peoples and local communities contribute to wetland conservation in Asia and Oceania.* Ramsar Convention Secretariat.
- Dhungel, P. (2021, October 10). Sikkim: Why Dzongu residents continue to defy dams on Teesta river. *EastMojo.* <http://www.eastmojo.com/sikkim/2021/10/10/sikkim-why-dzongu-residents-continue-to-defy-dams-on-teesta-river/>

- Director of National Parks. (2010). *Uluru-Kata Tjuta National Park: Management Plan 2010-2020, Tjukurpa Katutja Ngarantja*. Department of the Environment, Water, Heritage and the Arts, Uluru-Kata Tjuta Board of Management.
- Directorate of Census Operations (Sikkim). (2014). *Census of India 2011—Sikkim—Series 36—Part XII B - District Census Handbook, Sikkim*. Office of the Registrar General and Census Commissioner, India (ORGI).
- Directorate of Handicrafts and Handloom. (n.d.). *Directorate of Handicrafts and Handloom (DHH)*. Directorate of Handicrafts and Handloom, Government of Sikkim. Retrieved 15 June 2023, from <https://sikkimcrafts.gov.in/>
- Dorji, T., Chettri, N., Pandey, A., & Gaira, K. S. (2018, December 14). *Preserving Traditions and Strengthening Livelihoods through Transboundary Yak Conservation*. Global Transboundary Conservation Network. <https://www.tbpa.net/news.php?ndx=38>
- Dorji, T., Gaira, K. S., Rabgay, T., Pandey, A., Pant, B., & Chettri, N. (2019). Protecting a Himalayan icon: The need for transboundary cooperation to secure the future of yak in the Kangchenjunga. *ICIMOD*.
- Dryzek, J. (1997). *The Politics of the Earth: Environmental Discourses*. Oxford University Press.
- Dudley, N. (2008). *Guidelines for Applying Protected Area Management Categories*. IUCN.
- Dukpa, R. D., Joshi, D., & Boelens, R. (2018). Hydropower development and the meaning of place. Multi-ethnic hydropower struggles in Sikkim, India. *Geoforum*, 89, 60–72. <https://doi.org/10.1016/j.geoforum.2018.01.006>
- Ecclesiastical Affairs Department. (n.d.a). *About Us*. Official Website of the Ecclesiastical Affairs Department. <http://sikkimeccl.gov.in/>

- Ecclesiastical Affairs Department. (n.d.b). *Lists of Religious Institutions in Sikkim*. Official Website of the Ecclesiastical Affairs Department.  
<http://sikkimeccl.gov.in/Documents/ReligiousInstitutionsList.aspx>
- Elkin, C., Rattan, S., Devy, S., & Thyagarajan, G. (2018). Managing Religious Pilgrimage to Sacred Sites in Indian Protected Areas. In B. Verschuuren & S. Brown (Eds.), *Cultural and Spiritual Significance of Nature in Protected Areas: Governance, Management and Policy* (pp. 208–222). Routledge.
- FEWMD. (2008). *Management Plan of the Khangchendzonga National Park 2008-2018 (Updated during 2014)*. Forest & Environment Department, Government of Sikkim.
- FEWMD. (2011). *Sikkim Ecotourism Policy* (Sikkim Biodiversity Conservation and Forest Management Project (SBFP)). Department of Forest, Environment and Wildlife Management, Government of Sikkim.
- FEWMD. (2012). *Sikkim Biodiversity Action Plan* (Sikkim Biodiversity Conservation and Forest Management Project (SBFP)). Department of Forest, Environment and Wildlife Management, Government of Sikkim.
- FEWMD. (2015). *Forestry and Environment Mission 2015*. Forest & Environment Department, Government of Sikkim.
- FEWMD. (2022). *Tungkyong Dho (Lake): A Biodiversity Heritage Site in Hee-Gyathang, Dzongu, North Sikkim*. Forest & Environment Department, Government of Sikkim.
- Garrett, F., McDougal, E., & Samuel, G. (2020). *Hidden Lands in Himalayan Myth and History: Transformations of sbas yul through Time*. Brill.  
<https://brill.com/display/title/58433>
- Government of India. (1927). *Indian Forest Act*. Government of India.
- Government of India. (1972). *Wildlife (Protection) Act*. Government of India.

- Government of India. (1975). *The Constitution (Thirty-sixth Amendment) Act, 1975*.
- Government of India.
- Government of India. (1980). *Forest Conservation Act*. Government of India.
- Government of India. (1991). *Places of Worship Special Provisions Act of 1991*. Government of India.
- <http://www.sikkimeccl.gov.in/Documents/Notifications/Notification9Law92No207.pdf>
- Government of India. (2002). *Biological Diversity Act*. Government of India.
- Government of India. (2010). *The Ancient Monuments and Archaeological Sites and Remains Act, 1958 (Amendment and Validation)*. Government of India.
- Government of Sikkim. (1977). *Notification of Khangchendzonga National Park: Notification No.43(9)Home/77*.
- Government of Sikkim. (1998). *Notification prohibiting conversion of sacred sites and scaling of sacred peaks: Notification No.59/HOME/98*.
- Government of Sikkim. (2000). *Notification of Khangchendzonga Biosphere Reserve. Notification No. J-22016/76/91-BR*.
- Government of Sikkim. (2001a). *No.13/Forest, Environment and Wildlife of 6th September 2001*. Government of Sikkim.
- Government of Sikkim. (2001b). *Notification identifying sacred peaks, caves, rocks, lakes, stupa and hot-springs: Notification No.70/HOME/2001*.
- Government of Sikkim. (2002). *Notification to constitute Eco-development Committee (EDC): Notification No.1/WL/F/76/204*.
- Government of Sikkim. (2009). *Notification of Transition Zone of Khangchendzonga Biosphere Reserve. No.204/KNP-KBR/WL/Forests/2009*.
- Government of Sikkim. (2015a). *Human Development Report 2014*. Routledge.

- Government of Sikkim. (2015b). *Notification of State Cultural Advisory Body for the KNP. No. GOS/FEWMD/PR.SECY-cum-PCCF/446.*
- Government of Sikkim. (2016). *Nomination of Khangchendzonga National Park for inscription on the World Heritage List.* Government of Sikkim.
- Government of Sikkim. (2018). *State Tourism Policy 2018.* Department of Tourism and Civil Aviation.
- Government of Sikkim. (2021, November 1). *News & Announcement: Site Inspection of Stairway to Heaven.* <https://sikkim.gov.in/media/news-announcement/news-info?name=Site+Inspection+of+Stairway+to+Heaven>
- Gurung, I. (2021). *HAS welcomes mega homestay project of State government.* Sikkimexpress. <https://www.sikkimexpress.com/has-welcomes-mega-homestay-project-of-state-government>
- Harrison, R. (2012). *Heritage: Critical Approaches.* Routledge. <https://doi.org/10.4324/9780203108857>
- Herzfeld, M. (2014). Intangible Delicacies: Production and Embarrassment in International Settings. *Ethnologies*, 36(1–2), 47–62. <https://doi.org/10.7202/1037599ar>
- Hiltz, J. (2003). Constructing Sikkimese national identity in the 1960s and 1970s. *Bulletin of Tibetology*, 39(2). <https://lib.icimod.org/record/11236>
- Hobbes, T. (1651). *Leviathan.* Courier Corporation.
- ICIMOD. (2019). *Bamboo Crafts—Strength & Opportunity in Dzongu, a pilot site of KLCDI-India.* International Centre for Integrated Mountain Development (ICIMOD). <https://lib.icimod.org/record/34495>
- ICOMOS. (1994). *Nara Document on Authenticity.* ICOMOS- International Council on Monuments and Sites.
- ICOMOS. (2016). *Advisory Body Evaluation Khangchendzonga National Park.* UNESCO.

- ICOMOS. (2021). *Connecting Practice: A commentary on nature-culture keywords*.  
ICOMOS International Secretariat. <https://openarchive.icomos.org/id/eprint/2555/>
- Islam, N., & Sarkar, B. (2020). Transhumance to Home Stay Tourism: A Transformation of Cultural and Economic Activities at Lachen Valley, Sikkim. In S. K. Chaudhuri, S. Maiti, & C. K. Lepcha (Eds.), *The Cultural Heritage of Sikkim* (pp. 225–272). Routledge.
- IUCN. (2016). *Advisory Body Evaluation Khangchendzonga National Park*. UNESCO.
- IUCN. (2020). *Khanchendzonga National Park 2020 Conservation Outlook Assessment*.
- Jaeger, T. (2021). *Leveraging the World Heritage Convention for conservation in the Hindu Kush Himalaya* [Resource]. IUCN.  
<https://www.iucn.org/resources/publication/leveraging-world-heritage-convention-conservation-hindu-kush-himalaya>
- Jones, K. D. S., Ken Taylor, David S. (Ed.). (2022). *The Routledge Handbook of Cultural Landscape Heritage in The Asia-Pacific*. Routledge.  
<https://doi.org/10.4324/9781003099994>
- Kaewkhunok, S. (2018). Public Participation and Ecotourism: The role and the right of people in Sikkim. *SADF Focus*, 37, 1–12. <https://doi.org/10.11588/xarep.00004518>
- Kandel, P. (2019, January 7). *How a cross-border exchange helped revive a traditional craft*. Global Transboundary Conservation Network.  
<https://www.tbpa.net/news.php?ndx=39>
- Kearns, G., & Philo, C. (1993). *Selling Places: The City as Cultural Capital, Past and Present*. Pergamon Press.
- Keitsch, M. M. (2020). Heritage, Conservation, and Development. In W. Leal Filho, A. Marisa Azul, L. Brandli, P. Gökçin Özuyar, & T. Wall (Eds.), *Sustainable Cities and*



- Communities* (pp. 246–255). Springer International Publishing.  
[https://doi.org/10.1007/978-3-319-95717-3\\_5](https://doi.org/10.1007/978-3-319-95717-3_5)
- Krishna Kumar, V. (2017). Cultural landscapes of South Asia: Studies in heritage conservation and management (Routledge research in landscape and environmental design). *International Journal of Heritage Studies*, 23(9), 908–910.  
<https://doi.org/10.1080/13527258.2017.1333523>
- Kumar, P., & Rai, S. C. (2021). An overview of exiting contours for promoting different strategies for livelihood security in Sikkim Himalaya. *Current Research in Environmental Sustainability*, 3, 100034. <https://doi.org/10.1016/j.crsust.2021.100034>
- Labadi, S., & Gould, P. (2015). Sustainable Development: Heritage, Community, Economics. In L. Meskell (Ed.), *Global Heritage: A Reader* (pp. 196–216). Wiley-Blackwell.  
<https://www.wiley.com/en-gb/Global+Heritage%3A+A+Reader-p-9781118769102>
- Larsen, P. B. (2018). *World Heritage and Human Rights*. Routledge.
- Lazzaretti, V. (2021). New Monuments for the New India: Heritage-Making in a ‘Timeless City’. *International Journal of Heritage Studies : IJHS*, 27(11), 1085–1100.  
<https://doi.org/10.1080/13527258.2021.1954055>
- Lee, E. (2016). Protected Areas, Country and Value: The Nature–Culture Tyranny of the IUCN’s Protected Area Guidelines for Indigenous Australians. *Antipode*, 48(2), 355–374. <https://doi.org/10.1111/anti.12180>
- Leitao, L. (2017). Bridging the Divide Between Nature and Culture in the World Heritage Convention: An Idea Long Overdue? *The George Wright Forum*, 34(2).  
<https://www.proquest.com/docview/2007429960>
- Lepcha, C. K., & Lal, U. (Eds.). (2021). *Communities, Institutions and Histories of India’s Northeast*. Routledge. <https://doi.org/10.4324/9781003245865>

- Lepcha, K. (2020). *The Teesta Hydro Power Projects: A Historical Analysis of the Protest Movement in North Sikkim (1964-2011)* [Thesis, Sikkim University].  
<http://dspace.cus.ac.in/jspui/handle/1/6963>
- Lepcha, R. (2021). Hydro Power Projects Induced Conflict: A Study of Lepcha Community of Dzongu. *International Journal of Research in Engineering, Science and Management*, 4(1), Article 1. <https://doi.org/10.47607/ijresm.2021.469>
- Lepcha, T. (2020). Traditional Healing Practices and the Role of Traditional Health Practitioners in Primary Health Care: A Medical Heritage of Sikkim. In *The Cultural Heritage of Sikkim* (pp. 109–126). Routledge.
- Lepcha, T., & Lepcha, G. (2019). Sikkim's vanishing rivers: Ongoing destruction and impending threats. In Rivers without Boundaries & World Heritage Watch (Eds.), *Heritage Dammed: Water Infrastructure Impacts on World Heritage Sites and Free Flowing Rivers*. Rivers without Boundaries and World Heritage Watch. <https://world-heritage-watch.org/content/dammed-heritage-report/>
- Lepcha, T., Lepcha, G., & Wagh, S. (2018). Undermining Cultural Values: An Indigenous Perspective on the Khangchendzonga Nomination. *World Heritage Watch Report 2018*, 52–56.
- Limbu, N. (2022). *Protection of Medicinal Biodiversity in North Eastern Region of India with Special Reference to the Convention on Biological Diversity 1992 and Trade Related Aspects of Intellectual Property Rights 1994* [Thesis, Sikkim University].  
<http://dspace.cus.ac.in/jspui/handle/1/7676>
- Little, K. J. (2013). *Stories of the Lepcha: Narratives from a contested land* [Thesis, University of Technology Sydney]. <https://opus.lib.uts.edu.au/handle/10453/24114>
- Luxom, N. M., Singh, R., Theengh, L., Shrestha, P., & Sharma, R. K. (2022). Pastoral practices, pressures, and human-wildlife relations in high altitude rangelands of

- eastern Himalaya: A case study of the Dokpa pastoralists of North Sikkim. *Pastoralism*, 12(1), 37. <https://doi.org/10.1186/s13570-022-00252-6>
- Mayank, V. (2020). Protection of Traditional Cultural Expressions of Indigenous Communities in Sikkim: Contextualization within the Institutional Framework for Protection of Traditional Knowledge in India. In *The Cultural Heritage of Sikkim*. Routledge.
- McDuie-Ra, D. (2011). The dilemmas of pro-development actors: Viewing state–ethnic minority relations and intra-ethnic dynamics through contentious development projects. *Asian Ethnicity*, 12(1), 77–100. <https://doi.org/10.1080/14631369.2011.538220>
- McDuie-Ra, D., & Chettri, M. (2018). Himalayan Boom Town: Rural–Urban Transformations in Namchi, Sikkim. *Development and Change*, 49(6), 1471–1494. <https://doi.org/10.1111/dech.12450>
- Mehta, P., Bisht, K., & Sekar, K. C. (2021). Diversity of threatened medicinal plants of Indian Himalayan Region. *Plant Biosystems - An International Journal Dealing with All Aspects of Plant Biology*, 155(6), 1121–1132. <https://doi.org/10.1080/11263504.2020.1837278>
- Menon, J., & Varma, S. (2019). Archaeological places: Negotiations between local communities, archaeologists and the state in India. *Journal of Social Archaeology*, 19(2), 141–161. <https://doi.org/10.1177/1469605319845437>
- Meskell, L. (2018). *A Future in Ruins: UNESCO, World Heritage, and the Dream of Peace*. Oxford University Press.
- Meskell, L. (2020). One world, two missions: UNESCO World Heritage in the making. In H. P. Ray (Ed.), *Decolonising Heritage in South Asia: The Global, the National and the Transnational*. Routledge.

- Ministry of Culture. (2017). *Cultural Function and Production Grant(CFPG) | Ministry of Culture, Government of India*. Ministry of Culture, Government of India. <https://indiaculture.gov.in/cultural-function-and-production-grantcfpg>
- Ministry of Culture. (2022a). *Financial Assistance for Development of Buddhist/Tibetan Arts and Culture | Ministry of Culture, Government of India*. Ministry of Culture, Government of India. <https://indiaculture.gov.in/financial-assistance-development-buddhisttibetan-arts-and-culture>
- Ministry of Culture. (2022b). *Financial Assistance for Preservation and Development of Cultural Heriatge of the Himalayas | Ministry of Culture, Government of India*. Ministry of Culture, Government of India. <https://indiaculture.gov.in/financial-assistance-preservation-and-development-cultural-heriatge-himalayas>
- Mishra, P. K. (2008). *Archaeological Exploration in Sikkim*. Sundeep Prakashan.
- Mitra, S., Roy, S., & Kumar De, S. (2015). Tourism Industry of Namchi, South Sikkim: An Overview. *The Geographical Society of India*, 77(2), 170–181.
- Mohan, K. R. R., & Lepcha, T. Z. (2020). Medical Ecology among Lepchas of Sikkim Himalayas. *Man, Environment and Society*, 1(1), 37–49.
- Ning, W., Shaoliang, Y., Joshi, S., & Bisht, N. (2016). *Yak on the Move; Transboundary Challenges and Opportunities for Yak Raising in a Changing Hindu Kush Himalayan Region | HimalDoc*. International Institute for Integrated Mountain Development (ICIMOD). <https://lib.icimod.org/record/31938>
- Oli, K. P., Chaudhary, S., & Sharma, U. R. (2013). Are governance and management effective within protected areas of the Kanchenjunga Landscape (Bhutan, India and Nepal)? *PARKS*, 19(1), 25–36.
- Olivieri, L. M. (2018). Archaeology from Below in Swat, Pakistan: Heritage and Social Mobilisation in a Post-Conflict Reality. In P. Newson & R. Young (Eds.), *Post-*

- Conflict Archaeology and Cultural Heritage- Rebuilding Knowledge, Memory and Community from War-Damaged Material Culture* (pp. 217–238). Routledge.
- Pandey, A., Gaira, K. S., & Joshi, R. (2022). *Innovative interventions and inspiring stories from the Khangchendzonga Landscape*. GB Pant National Institute of Himalayan Environment.
- Pandey, R., & Malhotra, P. A. (2021). *Biodiversity Strategy and Action Plan (BSAP) of Sikkim and the Resource Mobilisation Strategy for implementing the BSAP with focus on Khangchendzonga – Upper Teesta Valley*. National Institute of Public Finance and Policy.
- Pine, B., & Gilmore, J. (1998). Welcome to the experience economy. *Harvard Business Review*, 76(4), 97–105.
- Pradhan, B. K., & Badola, H. K. (2008). Ethnomedicinal plant use by Lepcha tribe of Dzongu valley, bordering Khangchendzonga Biosphere Reserve, in North Sikkim, India. *Journal of Ethnobiology and Ethnomedicine*, 4(1), 22. <https://doi.org/10.1186/1746-4269-4-22>
- Pradhan, P. (2016). *Culture and Tourism: A Study of Sikkim*. [Thesis, Sikkim University]. <http://dspace.cus.ac.in/jspui/handle/1/4572>
- Pradhan, S. M., Choudhury, S., & Chakraborty, A. S. (2023). COVID-19 Pandemic and its Impact on Yak Economy of Sikkim. *Research Ethics: Journal of Multidisciplinary Research*, 1(1).
- Rai, L. K., Prasad, P., & Sharma, E. (2000). Conservation threats to some important medicinal plants of the Sikkim Himalaya. *Biological Conservation*, 93(1), 27–33. [https://doi.org/10.1016/S0006-3207\(99\)00116-0](https://doi.org/10.1016/S0006-3207(99)00116-0)

- Rai, R., & Gurung, M. P. (2020). Changing Dynamics of Traditional Culture of Sikkim in Different Times: From the Lepcha Era to the Modern Period. In *The Cultural Heritage of Sikkim* (pp. 71–88). Routledge.
- Rajangam, K., & Sundar, A. (2021). Reading the Entanglements of Nature-culture Conservation and Development in Contemporary India. *Journal of South Asian Development*, 16(1), 7–32. <https://doi.org/10.1177/09731741211013676>
- Ray, H. P. (2020). *Decolonising Heritage in South Asia: The Global, the National and the Transnational*. Routledge.
- Rihal, S., Shah, V., & Mistry, A. (2018, July 10). Seismic Performance of the Vernacular Heritage of Sikkim, India. *Proceedings of the Inter-ISC'19: Anti-Seismic Vernacular Heritage of Anatolia and Beyond*. ICOMOS Inter-ISC Meeting and Colloquium: Anti-Seismic Vernacular Heritage of Anatolia and Beyond, Kastamonu, Turkey.
- Rivers without Boundaries, & World Heritage Watch. (2019). *Heritage Dammed: Water Infrastructure Impacts on World Heritage Sites and Free Flowing Rivers*. Rivers without Boundaries and World Heritage Watch. <https://world-heritage-watch.org/content/dammed-heritage-report/>
- SECURE Himalaya. (2020). *Five year strategy document for Financial Inclusion in SECURE Himalaya project landscapes in selected districts of Sikkim*. SECURE Himalaya.
- Sharma, A. (2013). *The Lepchas of Dzongu Region in Sikkim: A Narrative of Cultural Heritage and Folklore*. Indian National Trust for Art and Cultural Heritage (INTACH).
- Shaw, J. (2007). The Sanchi Survey Project: Research Design and Field Methodology. In *Buddhist Landscapes in Central India*. Routledge.
- Sikkim Express. (2020, December 22). SLYA seek heritage status and preservation of Lepcha fort under threat from nearby constructions. *Sikkim Express*.

<https://www.sikkimexpress.com/slya-see-heritage-status-and-preservation-of-lepcha-fort-under-threat-from-nearby-constructions>

Sikkim Now! (2012, June 19). Sikkim NOW!: Dubdi monks demand monastery's removal from ASI jurisdiction. *Sikkim NOW!* <http://sikkimnow.blogspot.com/2012/06/dubdi-monks-demand-monasterys-removal.html>

Singh, R. (2020). Himal Rakshaks of Sikkim: The Burden of Being the Flag-bearers of Community-based Conservation. *Ecology, Economy and Society- the INSEE Journal*, 3(2), 179–183.

Singh, R., Sharma, R. K., Bhutia, T. U., Bhutia, K., & Babu, S. (2021). Conservation policies, eco-tourism, and end of pastoralism in Indian Himalaya? *Frontiers in Sustainable Food Systems*, 5. <https://doi.org/doi: 10.3389/fsufs.2021.613998>

Smith, L. (2006). *Uses of Heritage*. Routledge.

Smith, L., & Waterton, E. (2009). *Heritage, Communities and Archaeology*. Bloomsbury Publishing.

Sørensen, M. L. S., & Carman, J. (2009). *Heritage studies: Methods and approaches*. Routledge.

Statesman News Service. (2018, April 6). Four K'pong sites get heritage tag. *The Statesman*. <https://www.thestatesman.com/cities/four-kpong-sites-get-heritage-tag-1502618625.html>

Subba, J. R. (2009). Ingenious Agricultural Heritage Systems and Sustainable Agricultural Ecosystems Management in Sikkim. In A. Jha, S. Jha, & S. Munjal (Eds.), *Bio-Cultural Diversity & Sustainable Development In North East India: Status, Vision & Challenges*. Readworthy.

- Sundas, B. (2020). The Process of State Formation and its Impact on Social Formation in Eastern Nepal and Sikkim, Sixteenth-Nineteenth Centuries. In *The Cultural Heritage of Sikkim* (pp. 51–70). Routledge.
- Sutton, D. (2013). Devotion, Antiquity, and Colonial Custody of the Hindu Temple in British India. *Modern Asian Studies*, 47, 135–166.
- Svvrathan, U. (2020). The multivalence of landscapes: Archaeology and heritage. In H. P. Ray (Ed.), *Decolonising Heritage in South Asia: The Global, the National and the Transnational*. Routledge.
- Tamang, S. (2022). Environmentalism in the Darjeeling hills: An inquiry. *European Bulletin of Himalayan Research*, 58, Article 58. <https://doi.org/10.4000/ebhr.516>
- Taylor, K., & Altenburg, K. (2006). Cultural Landscapes in Asia-Pacific: Potential for Filling World Heritage Gaps. *International Journal of Heritage Studies*, 12(3), 267–282. <https://doi.org/10.1080/13527250600604555>
- Thapa, S. (2019). Sadaer Long (Thunder Stone) Its Bearing on the Ethnography of the Lepchas of Kalimpong District. *IJRAR*, 6(2), 730–737.
- Thomas, B. (2022). *Ecotourism: A Sustainable Development Connect to Nature and A Strategy for Balancing Economic Growth, Socio-Cultural Development and Conservation* (SSRN Scholarly Paper No. 4078092). <https://papers.ssrn.com/abstract=4078092>
- Tourism Department. (2023). *Tourism Calendar*. Tourism and Civil Aviation Department, Government of Sikkim. <https://www.sikkimtourism.gov.in/Public/TravellerEssentials/CallenderView>
- UN General Assembly. (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*. United Nations General Assembly.



- UNESCO. (2003). *Convention for the Safeguarding of the Intangible Cultural Heritage*. UNESCO World Heritage Centre.
- UNESCO WHC. (n.d.-a). *UNESCO World Heritage Centre—Tentative Lists*. UNESCO World Heritage Centre. Retrieved 14 June 2023, from <https://whc.unesco.org/en/tentativelists/?action=listtentative&state=in&order=states>
- UNESCO WHC. (n.d.-b). *UNESCO World Heritage Centre—World Heritage List Statistics*. UNESCO World Heritage Centre. Retrieved 12 June 2023, from <https://whc.unesco.org/en/list/stat/>
- UNESCO WHC. (2004). *Yamato Declaration on Integrated Approaches for Safeguarding Tangible and Intangible Heritage*. UNESCO World Heritage Centre.
- UNESCO WHC. (2015). *Operational Guidelines for the Implementation of the World Heritage Convention (2015 Version)*. UNESCO World Heritage Centre.
- UNESCO WHC. (2021). *Operational Guidelines for the Implementation of the World Heritage Convention (2021 Version)*. UNESCO World Heritage Centre.
- Varadarajan, V. (2023, April 7). In search of Mayal Lyang: Harnessing the power of stories through community-led research to.... *International Accountability Project- Medium*. <https://accountability.medium.com/in-search-of-mayal-lyang-harnessing-the-power-of-stories-through-community-led-research-to-ef84a9336224>
- Verschuuren, B., Mallarach, J.-M., Bernbaum, E., Spoon, J., Brown, S., Borde, R., Brown, J., Calamia, M., Mitchell, N., Infield, M., & Lee, E. (2021). *Cultural and Spiritual Significance of Nature: Guidance for Protected and Conserved Area Governance and Management*. IUCN. <https://doi.org/10.2305/IUCN.CH.2021.PAG.32.en>
- Wagh S. (2017). The Kanchendzonga Sacred Landscape: Nature-Culture Linkages and Local Associations with Place. *Journal of World Heritage Studies, Special Issue*, 56–61.

- Walsh, K. (1992). *The Representation of the Past: Museums and Heritage in the Post-modern World*. Routledge.
- Webdesk, T. (2019, September 1). Sikkim's 'Holy Peak' Mt Kanchenjunga Not To Open For Trekking. *TIME8*. <https://www.time8.in/sikkims-holy-peak-mt-kanchenjunga-not-to-open-for-trekking/>
- West, P. (2006). *Conservation is Our Government Now: The Politics of Ecology in Papua New Guinea*. Duke University Press.
- WIPO. (2010). *List and Brief Technical Explanation of Various Forms in which Traditional Knowledge May be Found*. World Intellectual Property Organisation.
- Yu, D. S., & Maaker, E. de. (2021). *Environmental Humanities in the New Himalayas: Symbiotic Indigeneity, Commoning, Sustainability*. Routledge.

## Appendix 1: Criteria for the assessment of Outstanding Universal Value

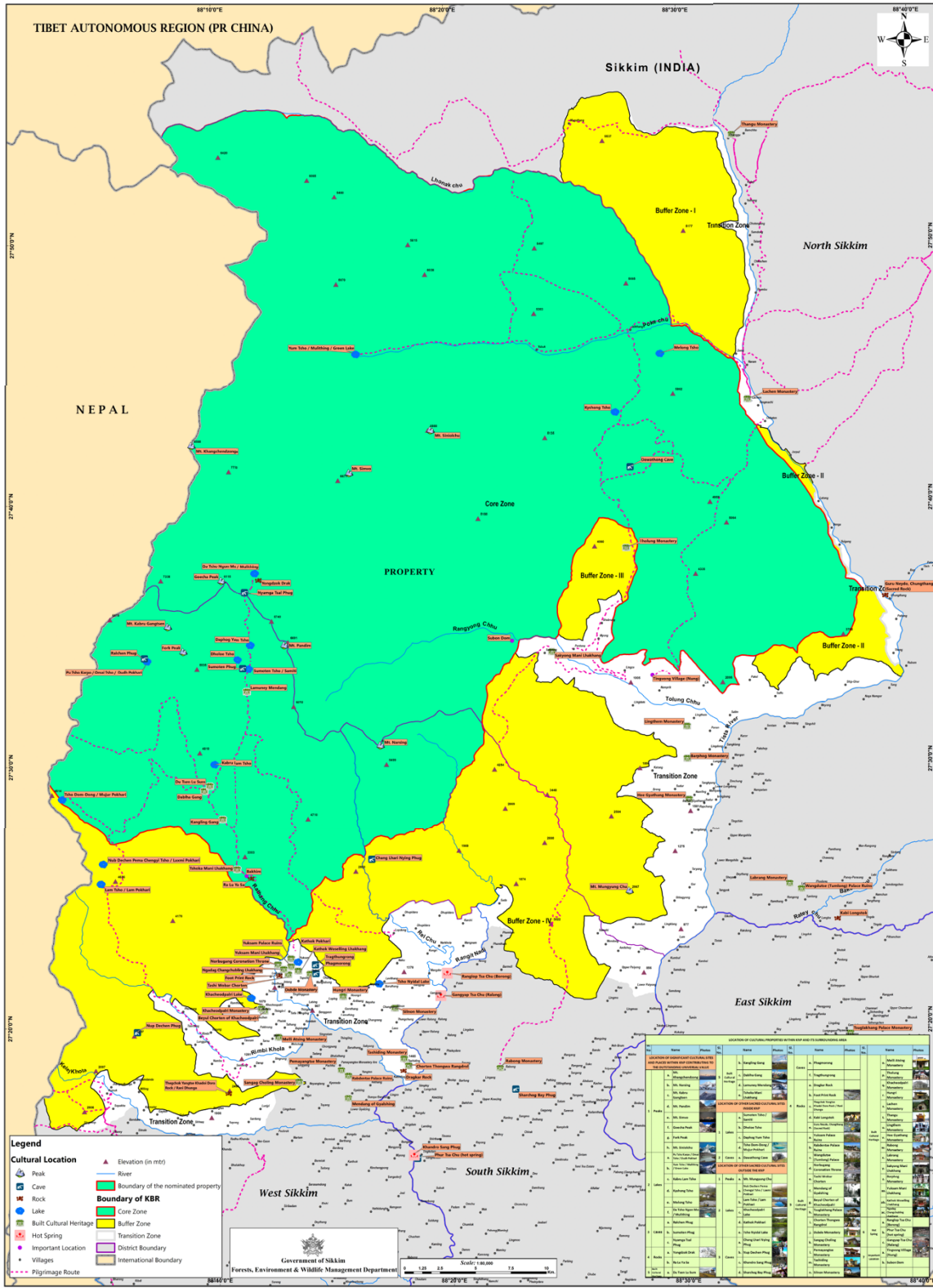
77. The Committee considers a property as having Outstanding Universal Value (see paragraphs 49-53) if the property meets one or more of the following criteria. Nominated properties shall therefore:

- (i) represent a masterpiece of human creative genius;
- (ii) exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;
- (iii) bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;**
- (iv) be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;
- (v) be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;
- (vi) be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance. (The Committee considers that this criterion should preferably be used in conjunction with other criteria);**
- (vii) contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance;**
- (viii) be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features;
- (ix) be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals;
- (x) contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of Outstanding Universal Value from the point of view of science or conservation.**



**Appendix 2- Cultural Map of the KNP from the Nomination file .with summary table to include the Buffer Zone extension.**

**CULTURAL MAP: LOCATION OF CULTURAL PROPERTIES WITHIN KNP AND ITS SURROUNDING AREA**



Summary table of cultural sites identified in the KNP				
Type of Heritage	Core Zone	Buffer Zone	Transition Zone	Periphery
<b>Built heritage</b>	Lamuney Mendang Du Tsen Lu Sum Dablha Gang Kangling Gang Tshoka Mani Lhakhang	Tholung Monastery Sangag Choling Monastery Khacheodpalri Monastery Beyul Chorten of Khacheodpalri Tashi Tenka Palace* Norbugang Coronation Throne * Dubde ( <i>Dubdi</i> ) Monastery Tashi Wobar Chorten* Yuksam Mani Lhakhang* Kathok Woselling Lhakhang* Ngadag Changchubling Lhakhang	Lachen Monastery Sakyong Mani Lhakhang Lingthem Monastery Barphog Monastery Hee Gyathang Monastery Silnon Monastery Hungri Monastery Tashiding Monastery Chorten Thongwa Rangdrol Melli Atsing Monastery	Pemayangtse Monastery Rabdentse Palace Ruins Mendang of Gyalshing Rabong Monastery Labrang Monastery Wangdutse (Tumlong) Palace Ruins Thangu Monastery
<b>Cave</b>	Ralchen Phug Nyamga Tsal Phug Sumoten Phug Dawathong Cave	Chang Lhari Nying Phug Nup Dechen Phug Phagmorong * Tragthungrong *		Khandro Sang Phug Sharchoy Bay Phug
<b>Peak</b>	Kabru Gangtsen Fork Peak Goecha Peak Pandim Narsing Khangchendzonga Simvo Siniolchu	Mungung Chu		
<b>Lake</b>	Pu Tsho Karpo/ Omai Tsho/ Dudh Pokhari Da Tsho Ngon Mo/ Mulithing Dholoe Tsho Sumoten Tsho/ Samiti Kabru Lam Tsho Tsho Dom-Dong/ Mujur Pokhari Yum Tsho/ Mulithing/ Green Lake Kyshong Tsho Melong Tsho	Nub Dechen Pema Chengyi Tsho/ Laxmi Pokhari Lam Tsho/ Lam Pokhari Khacheodpalri Lake Kathock Tso *	Tsho Nyidal Lake	
<b>Rock</b>	Yongdzock Drak Ra Lu Ya Sa	Thegchock Yangtse Khadoi Dora Rock/ Rani Dhunga Footprint rock *	Gutu Neydo, Chungthang (Sacred Rock) Dragkar Rock	Kabi Longstok
<b>Other</b>	Bakhim Subon Dom		Tingvong Village (Nung)	
<b>Hot spring</b>			Ranglop Tsa Chu (Borong) Gangyap Tsa Chu (Ralang)	Phur Tsa Chu (Hot spring)

\*Sites included in the extended Buffer Zone

**Appendix 3: Action Plan of the Cultural Management Plan for the KNP in the Nomination Documentation (Government of Sikkim, 2016, p. 1043)**

<b>Aspect of Management Plan</b>	<b>Sub section</b>	<b>Time frame</b>
Conservation plan	Repair of the damaged Lhatey Lhakhang the prayer hall below Du Tsen Lu Sum Chortens	2015-2016
	Tshoka Mani Lhakhang basic maintenance repair	2015-2017
	Laumuney Mendang basic maintenance repair	2015-2017
	Repair of inspection trails and inspection huts	2015-2018
Maintenance and management	Comprehensive maintenance plan	2015-2017
Development plan of the Buffer zone	Buffer management would involve management of cultural sites inside Buffer Zone, tourist circuits etc.	2015-2017 with review every 5 years
User visitor and tourist management	Develop camping sites, signages at appropriate location, garbage management.	2015-2016 with review every one year
Risk management	Disaster mitigation and management and risk preparedness	2015-2017 with review every three years
Interpretation, education, and outreach	Dedicated website for the property to generate awareness towards its interpretation and to enhance visitation at the local, national, and global level	2015-2016 with review and update every year and uploading of the annual activity plan of the property
Financial management	Financial plan for implementation and sustenance of the management plan to be drafted as a consultative process with various agencies/ government departments involved with the management of the property	<ul style="list-style-type: none"> <li>- annual plan of action to be prepared.</li> <li>- special funding may accrue post inscription.</li> <li>- annual review</li> <li>- other external funding</li> </ul>

**Appendix 4: Vegetation, agriculture, and key livelihoods by Agro-Climatic Zones (R. Pandey & Malhotra, 2021, p. 32)**

Site No.	Climate/ Agro-climatic/ Eco-region type	Altitude (mt.)	Districts/ Important areas	Vegetation	Agriculture	Economic base/ Livelihood
1	Snow peak type Trans Himalaya or Alpine	>4000*	North district	Herbs or medicinal plants Precipitation is mostly snowfall	Mostly rangeland use. Potato, cereal, and other vegetables	Pastoral based economy, Yak herding. Lachen, Thangu, Muguthang and Lachung Valley: Handicrafts, horticulture Dzongu: Apiary, Nettle, Dairy
2	densely forested hill type or Alpine	2701-4000	North and East districts	dense vegetation: tall trees and variety of rhododendron and primula flowers	potato, cabbage, and other vegetables	tourism, agriculture, horticulture, pastoral based economy, Yak herding
3	very high hill type or temperate	1701-2701	North and East districts	this climate is suitable for growing potato	Barley, maize, apple, plum, large cardamom, cabbage, peas, radish	traditional agriculture, tourism, horticulture, animal husbandry. There is some seasonal nomadism or transhumance
4	High hill type or sub-tropical	1501-1700	North, West, and East districts	This is essentially a large cardamom growing belt	Maize, wheat paddy, millets, peas, potato, oranges, vegetables	Traditional farming, horticulture, livestock
5	Mid hill type or subtropical	881-1500	West and South districts	this is essentially an orange belt most suited for cultivation of orange	maize, wheat Paddy, oilseeds, pulses, large cardamom, ginger, plum, peach, pear, and vegetables	Traditional farming, horticulture, livestock, MFPs
6	Low hill type or tropical	300-880	West and South Districts	Suitable for cultivation of subtropical fruits such as banana, guava, lemon, and lime	Paddy cultivation. maize, pulses, oilseeds, ginger, and vegetables	Horticulture, livestock, traditional farming systems



## Appendix 5: Mapping research summary of initiatives led by the Government of Sikkim

Project Name/ Focus	GoS Department	Year	Lead or Support	Category of Heritage	Type	Source
sikkim akademi	Culture Department	2002	Lead	traditional knowledge	cultural centre	Demand for Grants No.5 Culture 2023-24
Construction of Chenreji Statue	Culture Department	2009	Lead	religious	monument	chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/http://www.sikkimfred.gov.in/Budget_2023-24/Documents/DemandForGrants2023-24/pdf/5.%20Dem5.pdf
development of pilgrimage heritage centres at thingchen lake, laingzah dzongu and tholung in north sikkim	Tourism and Civil Aviation Department	2014	Lead	religious	pilgrimage	Demand for Grants No.40 Tourism and Civil Aviation 2017-18
development of buddhist circuit at tashiding in west sikkim	Tourism and Civil Aviation Department	2014	Lead	religious	pilgrimage	Demand for Grants No.40 Tourism and Civil Aviation 2017-18
construciton of religious circuit development programme in soreng, west sikkim	Tourism and Civil Aviation Department	2014	Lead	religious	pilgrimage	Demand for Grants No.40 Tourism and Civil Aviation 2017-18
construction of hertiage centre at Marchak and Beyong	Tourism and Civil Aviation Department	2014	Lead	heritage	cultural centre	Demand for Grants No.40 Tourism and Civil Aviation 2017-18
Setting up of a Food Craft Institute of Kichudumia, Namchi in South (Central Share)	Tourism and Civil Aviation Department	2014	Lead	traditional knowledge	food	Demand for Grants No.40 Tourism and Civil Aviation 2017-18
Superlatives Sinages and hordings	Tourism and Civil Aviation Department	2014	Lead	traditional knowledge	tourism	Demand for Grants No.40 Tourism and Civil Aviation 2016-17
Tourist circuit development along Sleeping buddha site at singhik	Tourism and Civil Aviation Department	2014	Lead	religious	tourism	Demand for Grants No.40 Tourism and Civil Aviation 2016-17
Statue of Puno Mun Solong at Passingdang	Culture Department	2015	Lead	religious	monument	Demand for Grants No.5 Culture 2016-17
Prayer Tower	Culture Department	2015	Lead	religious	construction	Demand for Grants No.5 Culture 2016-17
integrated development of pilgrimage tourism and other infrastructure at Sang in East Sikkim	Tourism and Civil Aviation Department	2015	Lead	religious	pilgrimage	Demand for Grants No.40 Tourism and Civil Aviation 2017-18
cultural village Yangyang	Culture Department	2015	Lead	traditional knowledge	cultural centre	Demand for Grants No.5 Culture 2016-17
Construction of Tourist Heritage Centre at Tek, South Sikkim (100% CSS)	Tourism and Civil Aviation Department	2015	Lead	traditional knowledge	tourism	Demand for Grants No.40 Tourism and Civil Aviation 2016-17
Sikkim Forest (Preservation, Protection and Declaration) of Heritage Tree Rules, 2016	FEWMD	2016	Lead	religious	notification	FEWMD Annual Administrative Report 2016-17
state of environment report sikkim 2016	FEWMD	2016	Lead	traditional knowledge	report	<a href="http://sikenvis.nic.in/PublicationDetails.aspx?SubLinkId=349&amp;LinkId=2662&amp;Year=2020">http://sikenvis.nic.in/PublicationDetails.aspx?SubLinkId=349&amp;LinkId=2662&amp;Year=2020</a>
organisational manual for ecotourism directorate	FEWMD	2016	Lead	traditional knowledge	Guidance	<a href="http://sikenvis.nic.in/WriteReadData/UserFiles/file/Organizational%20Manual%20(Draft)%20of%20Sikkim%20Ecotourism%20Directorate.pdf">http://sikenvis.nic.in/WriteReadData/UserFiles/file/Organizational%20Manual%20(Draft)%20of%20Sikkim%20Ecotourism%20Directorate.pdf</a>
Trek Route Development in Sikkim	FEWMD	2016	Lead	traditional knowledge	Guidance	<a href="http://sikenvis.nic.in/PublicationArchiveDetails.aspx?SubLinkId=292&amp;LinkId=2662&amp;Year=2016">http://sikenvis.nic.in/PublicationArchiveDetails.aspx?SubLinkId=292&amp;LinkId=2662&amp;Year=2016</a>
Construction of Staircase to Heaven (SPA)	Culture Department	2016	Lead	religious	monument	Demand for Grants No.5 Culture 2016-17
Statues Carved on Rocks	Culture Department	2016	Lead	religious	monument	Demand for Grants No.5 Culture 2016-17
Conservation of Heritage and Culture (State Specific Grant under 13th Finance Commission)	Culture Department	2016	Support	traditional knowledge	project	Demand for Grants No.5 Culture 2016-17
Grants for creation of capital assets	Ecclesiastical Department	2016	Lead	religious	religious building	Demand for Grants No.6 Ecclesiastical 2016-17

The Cultural Politics of Sacred Groves: A case Study of Devithans in Sikkim, India	Rurual Management and Development Department	2017	Support	religious	research	
Construction of Limboo Traditional House at Ramidham, West Sikkim	Culture Department	2017	Lead	traditional knowledge	cultural centre	Culture department annual report 2019-20
Construction of Limboo traditional house at Darap	Culture Department	2017	Lead	heritage	cultural centre	Demand for Grants No.5 Culture 2023-24
Construction of Srijunga Statue in West Sikkim	Culture Department	2017	Lead	religious	monument	chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/http://www.sikkimfred.gov.in/Budget_2023-24/Documents/DemandForGrants2023-24/pdf/5.%20Dem5.pdf
construction of cultural centre at Meyong	Culture Department	2017		heritage	cultural centre	Demand for Grants No.5 Culture 2017-18
Kailash Manasarovar Yatra	Tourism and Civil Aviation Department	2017	Lead	religious	pilgrimage	Demand for Grants No.40 Tourism and Civil Aviation 2017-18
Siddeshwara Dham, Namchi	Tourism and Civil Aviation Department	2017	Lead	religious	religious building	Demand for Grants No.40 Tourism and Civil Aviation 2017-18
Development of Village Tourism	Tourism and Civil Aviation Department	2017	Lead	traditional knowledge	ecotourism	Demand for Grants No.40 Tourism and Civil Aviation 2017-18
Construction of Cultural Village at Tharpu, West Sikkim (Central Share)	Tourism and Civil Aviation Department	2017	Lead	traditional knowledge	cultural centre	Demand for Grants No.40 Tourism and Civil Aviation 2017-18
development of Budang Gadi (Fort) at Central Pandam	Tourism and Civil Aviation Department	2017	Lead	heritage	archaeological site	Demand for Grants No.40 Tourism and Civil Aviation 2017-18
Developemnt of Buddhist Circuit from Rabdentse to Geyzing connecting Ranidhunga & Phodong to Lachen in Sikkim	Tourism and Civil Aviation Department	2017	Lead	religious	pilgrimage	Demand for Grants No.40 Tourism and Civil Aviation 2017-18
Development of Pilgrimage Circuit at Rorathang, Reshi & Rhenock in East Sikkim (Central Share)	Tourism and Civil Aviation Department	2017	Lead	religious	pilgrimage	Demand for Grants No.40 Tourism and Civil Aviation 2017-18
Construction of Astachirinjivi Pilgrimage Tourist Centre at Namthang, South Sikkim	Tourism and Civil Aviation Department	2017	Lead	religious	pilgrimage	Demand for Grants No.40 Tourism and Civil Aviation 2017-18
Construction of Dome and Allied Works at Statue of Unity	Tourism and Civil Aviation Department	2017	Lead	religious	statue	Demand for Grants No.40 Tourism and Civil Aviation 2018-19
South Asia Tourism Infrastructure Development Project to Sub-Regional Tourism Development in Sikkim (ADB Projects)	Tourism and Civil Aviation Department	2017	Lead	traditional knowledge	tourism	Demand for Grants No.40 Tourism and Civil Aviation 2018-19
Kalden Singhi Bhutia Documentary	North Wildlife Division (FEWMD)	2018	Support	traditional knowledge	documentary	FEWMD newsletter Vol 11 Issue 1 2018-2019
Documentation of Ethnoveterinary practices in Sikkim, India	FEWMD	2018	Support	traditional knowledge	research	FEWMD newsletter Vol 11 Issue 1 2018-2019
Green Skills Development Course (GSDP) on 'Nature Conservation and Livelihood: Ecotourism'	FEWMD	2018	Support	traditional knowledge	training	FEWMD newsletter Vol 11 Issue 2 2018-2019
Community Driven Environmentally Sustainable Village Programme	FEWMD	2018	?	traditional knowledge	project	FEWMD newsletter Vol 11 Issue 2 2018-2019
SECURE Himalaya	FEWMD	2018	Support	traditional knowledge	project	FEWMD Annual Administrative Report 2018-19
Sikkim Biodiversity Conservation and Forest Management Project (SBFP)	FEWMD	2018	Support	traditional knowledge	project	FEWMD Annual Administrative Report 2018-19
Preparation of land use maps, vegetation cover and biodiversity status report of Upper Teesta – Khangchendzonga Landscape, Sikkim		2018	Support	traditional knowledge	Strategy	IORA ECOLOGICAL SOLUTIONS PRIVATE LIMITED
Construction of Lepcha Primitive Tribal Tourist Centre at Dzongu	Culture Department	2018	Lead	heritage	cultural centre	chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/http://www

						w.sikkimfred.gov.in/Budget_2023-24/Documents/DemandForGrants2023-24/pdf/5.%20Dem5.pdf
Statue of Unity at Rinchenpong, West Sikkim	Tourism and Civil Aviation Department	2018	Lead	religious	monument	notification No.45/Home/2018
Statue of Asta Chiranjivi at Nagi Dara, Namthang, South Sikkim	Tourism and Civil Aviation Department	2018	Lead	religious	monument	notification no.44/Home/2018
Statue of Three Lamas at Dubdi, Yuksom, West Sikkim	Tourism and Civil Aviation Department	2018	Lead	religious	monument	No.43/Home/2018
Statue of Lord Parshuram at Ramayan Village, Tumin Lingee constituency	Tourism and Civil Aviation Department	2018	Lead	religious	monument	No.42/Home/2018
Challenges for Biodiversity Conservation and human-wildlife conflict (National Workshop)	FEWMD	2019	?	traditional knowledge	workshop	FEWMD newsletter Vol 12 Issue 3 2019-2020
Mapping the ecological community of Domung-Gora-la Complex	FEWMD	2019	Lead	traditional knowledge	research	FEWMD newsletter Vol 12 Issue 2 2019-2020
rapid biodiversity assessment of green lake trekking route sampling path in KNP	FEWMD	2019	Lead	traditional knowledge	research	FEWMD newsletter Vol 12 Issue 2 2019-2020
Local Health Traditions/ Ethnomedical Practices of Sikkim: A Survey Report	FEWMD	2019	Support	traditional knowledge	research	DOI: 10.5005/jp-journals-10059-0047
Sherpa Study Centre	Culture Department	2019	Lead	traditional knowledge	cultural centre	Demand for Grants No.5 Culture 2019-20
Heritage Protection Scheme	Culture Department	2019	Lead	heritage	heritage	Demand for Grants No.5 Culture 2019-20
Tamang Study Centre	Culture Department	2019	Lead	heritage	cultural centre	Demand for Grants No.5 Culture 2019-20
Shakti Sthal at Mungrong	Culture Department	2019	Lead	religious	religious building	Demand for Grants No.5 Culture 2019-20
Construction of Ngadag Sempa Chenpo Statue at Yuksam	Culture Department	2019	Lead	religious	monument	Demand for Grants No.5 Culture 2019-20
Ecotourism Festival Dzongu	FEWMD	2020	Support	traditional knowledge	festival	
Livelihood Strategy and Implementation Plan	FEWMD	2020	Support	traditional knowledge	project	<a href="http://sikenvis.nic.in/PublicationDetails.aspx?SubLinkId=1520&amp;LinkId=2663&amp;Year=2023">http://sikenvis.nic.in/PublicationDetails.aspx?SubLinkId=1520&amp;LinkId=2663&amp;Year=2023</a>
Sikkim Culture Heritage and Harmony Board	Culture Department	2020	Lead	religious	Government Board	Notification.80/Home/2020
Khangchendzonga Buddhist University		2020	Lead	religious	university	<a href="https://sikkim.gov.in/uploads/Gazette/G_NO_233_ACT_NO_15_20201021.pdf">https://sikkim.gov.in/uploads/Gazette/G_NO_233_ACT_NO_15_20201021.pdf</a>
Eco-tourism Pilgrimage Complex at Dodak, West Sikkim	Tourism and Civil Aviation Department	2020	Lead	religious	building	Demand for Grants No.40 Tourism and Civil Aviation 2023-24
Community perceptions associated with ecosystem services in the socio-ecological landscapes of Sikkim Himalayas	FEWMD	2021	Support	traditional knowledge	research	Sikkim PANDA Vol. 13 Issue 4 2021
Beyond protected areas: a perspective for conservation of mammals in darjeeling-sikkim himalaya	FEWMD	2021	Support	traditional knowledge	research	Sikkim PANDA Vol. 13 Issue 4 2021
agricultural systems are not just systems for production of food crops but are important habitats for range of biodiversity components	FEWMD	2021	Support	traditional knowledge	research	Ashoka Trust (ATREE)
the socio-ecological and cultural significance of livestock grazing in the Hindu Kush Himalayan Region with a special focus on Sikkim	FEWMD	2021	Support	traditional knowledge	research	The Mountain Institute
Distribution, Harvesting and Trade of Yartsa Gunbu (Ophiocordyceps sinensis) in the Sikkim Himalaya, India	FEWMD	2021	Support	traditional knowledge	research	<a href="https://doi.org/10.1659/MRD-JOURNAL-D-19-00039.1">https://doi.org/10.1659/MRD-JOURNAL-D-19-00039.1</a>
Forest Resource Use Pattern in Fringe Villages of Barsey Rhododendron Sanctuary and Singalila National Park of Khangchendzonga Landscape, India	FEWMD	2021	Support	traditional knowledge	research	<a href="https://doi.org/10.1155/2021/8856988">https://doi.org/10.1155/2021/8856988</a>
Gurudongmar Wetland Complex - An Integrated Management Plan for Conservation and Wise-use	FEWMD	2021	Support	traditional knowledge	Management Plan	Gurudongmar Wetland Complex - An Integrated Management Plan for Conservation and Wise-use

Herbal Medicine and Spiritual Healing Tourism Complex at Nandugoan	Tourism and Civil Aviation Department	2021	Lead	heritage	cultural centre	Demand for Grants No.40 Tourism and Civil Aviation 2023-24
Construction of Mangarjong	Tourism and Civil Aviation Department	2021	Lead	religious	religious building	Demand for Grants No.40 Tourism and Civil Aviation 2023-24
development of Karmapa Park at Sang, Gangtok	Tourism and Civil Aviation Department	2021	Lead	religious	religious building	Demand for Grants No.40 Tourism and Civil Aviation 2023-24
state level worksop for the integrated development of sericulture in sikkim under silk samagra 2	FEWMD	2022	Lead	traditional knowledge	workshop	Sikkim State ENVIS quarterly newsletter 2022-23 vol.15 issue 3
GDSP-ENVIS Outlet store Gangtok	FEWMD	2022	Lead	traditional knowledge	store/ training	Sikkim State ENVIS quarterly newsletter 2022-23 vol.15 issue 4
State Board of Indigenous Languages		2022	Lead	traditional knowledge	Government Board	<a href="https://sikkim.gov.in/uploads/Gazette/G_NO_165_SIKKIM_BOARD_OF_INDIGENOUS_LANGUAGES_(SBIL)_SIKKIM_ACT_2022_20220502.pdf">https://sikkim.gov.in/uploads/Gazette/G_NO_165_SIKKIM_BOARD_OF_INDIGENOUS_LANGUAGES_(SBIL)_SIKKIM_ACT_2022_20220502.pdf</a>
River front development and Heritage Park at Legship	Tourism and Civil Aviation Department	2022	Lead	heritage	building	Demand for Grants No.40 Tourism and Civil Aviation 2023-24
Development of Regional Kirat Rai Linguistic and Cultural Research Centre, Kirat Rai Manakamana at Paeng Gaon, Soreng	Tourism and Civil Aviation Department	2022	Lead	heritage	cultural centre	Demand for Grants No.40 Tourism and Civil Aviation 2023-24
Development of Ravindra Nath Tagore Pakr and Cultural Centre at Megi Dara, Richenpong	Tourism and Civil Aviation Department	2022	Lead	religious	cultural centre	Demand for Grants No.40 Tourism and Civil Aviation 2023-24
khas bhawan	Culture Department	2022	Lead	traditional knowledge	religious building	Demand for Grants No.5 Culture 2023-24
Seminar on Ecological Traditions of Sikim	FEWMD	2023	Lead	traditional knowledge	workshop	<a href="http://sikenvis.nic.in/ViewPastEvent.aspx?Id=9939&amp;Year=2023">http://sikenvis.nic.in/ViewPastEvent.aspx?Id=9939&amp;Year=2023</a>
Development of Fambong Lho Heritage Park	Tourism and Civil Aviation Department	2023	Lead	traditional knowledge	building	Demand for Grants No.40 Tourism and Civil Aviation 2023-24
Improvement of walkways around Khecheperi Lake	Tourism and Civil Aviation Department	2023	Lead	religious	building	Demand for Grants No.40 Tourism and Civil Aviation 2023-24
Construction and Beautification of Rolo Mandir, South Sikkim	Tourism and Civil Aviation Department	2023	Lead	religious	religious building	Demand for Grants No.40 Tourism and Civil Aviation 2023-24
Construction of Cultural Heritage Centre at Central Pandam	Tourism and Civil Aviation Department	2023	Lead	heritage	cultural centre	Demand for Grants No.40 Tourism and Civil Aviation 2023-24
Ugen Lhundup Che Gumpa at Singling, Soreng	Tourism and Civil Aviation Department	2023	Lead	religious	religious building	Demand for Grants No.40 Tourism and Civil Aviation 2023-24
Development and beautification of lake at Perbing	Tourism and Civil Aviation Department	2023	Lead	religious	building	Demand for Grants No.40 Tourism and Civil Aviation 2023-24
Repair and renovation of char dham	Tourism and Civil Aviation Department	2023	Lead	religious	religious building	Demand for Grants No.40 Tourism and Civil Aviation 2023-24
construction of home stays	Tourism and Civil Aviation Department	2023	Lead	traditional knowledge	building	Demand for Grants No.40 Tourism and Civil Aviation 2023-24
construction of main gate at Maa Durga Mandir, Tadong	Tourism and Civil Aviation Department	2023	Lead	religious	religious building	Demand for Grants No.40 Tourism and Civil Aviation 2023-24
Maintenance of Sai Mandir at Assangthang, Namchi	Tourism and Civil Aviation Department	2023	Lead	religious	religious building	Demand for Grants No.40 Tourism and Civil Aviation 2023-24
Construction of Guptareshwar Sham at Kokoley, Tumin	Tourism and Civil Aviation Department	2023	Lead	religious	religious building	Demand for Grants No.40 Tourism and Civil Aviation 2023-24
Trekking trail to KNP Gate at Yuksom	Tourism and Civil Aviation Department	2023	Lead	traditional knowledge	building	Demand for Grants No.40 Tourism and Civil Aviation 2023-24
grants in aid to selected places of worship	Ecclesiastical Department	2023		religious	religious building	Demand for Grants No.6 Ecclesiastical 2023-24
Sikkim song and dance competition	Culture Department	2023	Lead	traditional knowledge	festival	Demand for Grants No.5 Culture 2023-24
cultural exchange programme under song and drama unit	Culture Department	2023	Lead	traditional knowledge	festival	Demand for Grants No.5 Culture 2023-24

Limboo Bhawan at DPH	Culture Department	2023	Lead	heritage	building	Demand for Grants No.5 Culture 2023-24
Construction of Sirijunga Phase II	Culture Department	2023	Lead	heritage	religious building	Demand for Grants No.5 Culture 2023-24
Construction Lasangem Mudhingum Lekwahang Manghena Yok at Rimbik	Culture Department	2023	Lead	religious	religious building	Demand for Grants No.5 Culture 2023-24
Thu-Lung-Trul-Sum at Thangu	Culture Department	2023	Lead	religious	religious building	Demand for Grants No.5 Culture 2023-24
Construction of Boomtar Gumpa at Namchi	Culture Department	2023	Lead	religious	religious building	Demand for Grants No.5 Culture 2023-24
Construction of Gnagyur Thekchup Choshuling Gumpa, Upper Sumin, Namchebong	Culture Department	2023	Lead	religious	religious building	Demand for Grants No.5 Culture 2023-24
Construction of Limboo Bhawan at Assam Lingzey	Culture Department	2023	Lead	religious	religious building	Demand for Grants No.5 Culture 2023-24
Development of Srijunga Cultural Centre at Tharu	Culture Department	2023	Lead	religious	religious building	Demand for Grants No.5 Culture 2023-24
Construction of Libumba Pungwa Ning Yukham at Darap	Culture Department	2023	Lead	religious	religious building	Demand for Grants No.5 Culture 2023-24
Setting up Sikkim State Museum	Culture Department	2023	Lead	heritage	cultural centre	Demand for Grants No.5 Culture 2023-24
Repair and renovation of Bhutia Lepcha House, Gangtok	Culture Department	2023	Lead	traditional knowledge	cultural centre	Demand for Grants No.5 Culture 2023-24
construction of Mangkhim at Yuksom	Culture Department	2023	Lead	religious	religious building	Demand for Grants No.5 Culture 2023-24
construction of limboo cultural heritage centre cum mangkhim at Lower Rangang	Culture Department	2023	Lead	heritage	cultural centre	Demand for Grants No.5 Culture 2023-24
New gurung gumpa at upper yangang	Culture Department	2023	Lead	religious	religious building	Demand for Grants No.5 Culture 2023-24
mangkhim at dangla, Satam, Niya Broom	Culture Department	2023	Lead	religious	religious building	Demand for Grants No.5 Culture 2023-24
construction of mandir (Singa Devi at Dalep, Hanuman at Namchi,	Building and Housing Department	2023	Lead	religious	religious building	Demand for Grants No.3 Building and Housing 2023-24
Four Patron Saints at Gyalshing	Tourism and Civil Aviation Department	2023	Lead	religious	monument	Demand for Grants No.40 Tourism and Civil Aviation 2023-24
tribal research institute	Culture Department	2023	Lead	traditional knowledge	building	Estimate of Reciepts 2023-24
institutional support for development and marketing of tribal products/ produce	Culture Department	2023	Lead	traditional knowledge	project	Estimate of Reciepts 2023-24
Design and development of Gyalwa Latsun Chenpo Cengre at Simik- Lingzey Rapen and Badong for Sikkim Buddhism and Buddhist Craft	Culture Department	2023	Lead	religious	cultural centre	Demand for Grants No.5 Culture 2023-24
Designing a Comprehensive Human-Wildlife Conflict (HWC) Management Strategy in select districts/landscapes of Sikkim		2929	Support	traditional knowledge	research	ATREE
Construction of Stairway to Heaven, West Sikkim	Culture Department	?	Lead	religious	building	Demand for Grants No.5 Culture 2019-20
Grants in aid to Pemayangtse Monastery, Tashiding Monastery, Rumteck Monastery, Phensong Monastery, Phodong Monastery	Ecclesiastical Department	2014-2016	Lead	religious	religious building	Demand for Grants No.6 Ecclesiastical 2016-17
Construction of Rai Khim, Lumsey, Tadong	Culture Department	2019 (uncomp leted)	Lead	heritage	religious building	Culture department annual report 2019-20
Construction of Newar Bhawan, Gangtok	Culture Department	2019 (uncomp leted)	Lead	heritage	religious building	Culture department annual report 2019-20

Construction of Lepcha Primitive Tribal Tourist Centre at Lingthem, North Sikkim	Culture Department	2019 (uncompleted)	Lead	traditional knowledge	cultural centre	Demand for Grants No.5 Culture 2023-24
Construction of Imam Singh Chemjong Memorial Hall at Tikjek, West Sikkim	Culture Department	2019 (uncompleted)	Lead	traditional knowledge	religious building	Culture department annual report 2019-20
Sikkim State Museum	Culture Department	uncomplete	Lead	heritage	museum	<a href="https://culture.sikkim.gov.in/visitor/museum">https://culture.sikkim.gov.in/visitor/museum</a>
Tungkyong Dho (Lake): A Biodiversity Heritage Site in Hee-Gyythang, Dzongu, North Sikkim	FEWMD	2022	Support	religious	protected area	Sikkim PANDA Vol. 14 Issue 4 2022
National Bamboo Mission	FEWMD	Ongoing	Support	traditional knowledge	project	Government of India National Bamboo Mission