

# Exploring the Evolution of Traditional Wood Crafts: Himachal Pradesh as a Case Study



**Pratham Patel, Laura Pellowski, Cameron Wian**

**Mandi, India Project Center**

# Exploring the Evolution of Traditional Wood Crafts: Himachal Pradesh as a Case Study

An Interactive Qualifying Project

Submitted to the Faculty of

WORCESTER POLYTECHNIC INSTITUTE

in partial fulfillment of the

requirements for the degree of

Bachelor of Science

by

Pratham K. Patel

Laura Pellowski

Cameron Wian

on

1 May 2024

Report submitted to:

Professors Uma Kumar and Alex Sphar (Worcester Polytechnic Institute)

Professor Arti Kashyap (Indian Institute of Technology, Mandi)



*This report represents the work of one or more WPI undergraduate students submitted to the faculty as evidence of completion of a degree requirement. WPI routinely publishes these reports on its site without editorial or peer review.*

## Abstract

Wood carving is a traditional practice of Himachal Pradesh, utilized in temple and home architecture, religious artifacts, and furniture making. However, with contemporary changes in tastes and demands as well as globalization, the craft and its artisans face many challenges. We interviewed local artisans and experts in the field to understand the history and current state of wood carving in terms of challenges faced and current market contexts. Based on this information, we designed a product that could potentially be marketable, and then sought professional feedback on this product. We recommend continuing work on developing a marketable product, emphasizing the value of wood craft through marketing, and supporting organizations who work towards promoting wood carvers.

## Acknowledgements

*We would like to sincerely thank Professor Uma Kumar and Professor Alex Sphar from WPI for their dedication and aid to the development and fruition of this project.*

*We thank our IIT Mentor Dr. Arti Kashyap for her project involvement as well as our IIT group members for their cooperation in the project.*

*We would like to acknowledge Dr. Rinki Sarkar for her immense planning, coordination, and engagement in the project.*

*We appreciate the time and thought presented by Dr. Hari Chauhan of the Himachal State Museum and Rahul Bhushan of NORTH.*

*Finally, we extend our gratitude to the gracious and welcoming community members who we met and interviewed for the scope of our research.*

# Authorship

All WPI team members contributed equally to the research, writing, and editing of the project, and is therefore a completely collaborative effort. Fieldwork research and results were developed in collaboration with two partner IIT teams who explored marketing (Ankit Kumar, Nikita Lakha, Priyanshu Raj, Rachita Sood) and product development (Kumar Love, Prateek Patel, Ayush Singh, Srijan Sood), but ultimately authored by WPI team members in this report.

## Meet The Team



### Pratham Patel (WPI)

Hi! My name is Pratham Patel, known by most as Pratt. I am currently a junior studying Architectural Engineering at WPI. I have always enjoyed arts and crafts as a child and was highly interested in being able to study such practices from a historical context. Coming from an architectural background it was intriguing to learn of the connections between traditions, culture, craft; and building structure, form, and function. Engaging with the locals, artisans, and experts was an informative and welcoming experience which brought me out of my normal comfort zone. I thoroughly enjoyed this IQP experience and working alongside great teammates and mentors!

### Laura Pellowski (WPI)

Hello! My name is Laura Pellowski and I am currently a junior studying computer science at WPI. I really love knitting, crocheting, and crafting in general, so I was super excited to learn about wood crafts through this project. I enjoyed the insightful discussions we had with locals, artisans, and experts because they allowed me to draw connections between wood crafts and fiber arts, as they are both becoming less relevant due to modernization and mass production. I am grateful for this IQP experience because it challenged me to get out of my comfort zone and see the world through a new lens. I am going to miss the beautiful mountains and dogs of Himachal Pradesh.





### **Cameron Wian (WPI)**

Hi, I'm Cameron Wian, a junior studying Robotics Engineering and Computer Science. I enjoy working with my hands and was thrilled to be able to explore a profession built around this. I found the IQP experience powerful in that it showed me how easy it was to go out and interact with a community, and I hope to be more involved in my own when I return home. I also enjoyed the chance to work with a team from diverse backgrounds, from field of study to childhood home.

### **Kumar Love (IIT – Product Team)**

Hello, I'm Kumar Love, an enthusiastic student pursuing Electrical Engineering at IIT Mandi. Being able to participate in the ISTP alongside WPI students was a fulfilling experience. We toured temples, conducted talks with the people, and developed a product that brought these experiences together over the course of a month-long visit. I gained invaluable cooperation and fieldwork skills throughout the ISTP, which will certainly help me in my future tasks.





### **Prateek Patel (IIT – Product Team)**

Myself Prateek, I am currently third year at IIT Mandi. I love exploring new ideas and approaches to challenges. I thrive in collaborative environments and enjoy exploring innovative solutions to complex challenges.

### **Ayush Singh (IIT – Product Team)**

Namaste! My name is Ayush Kumar Singh and I'm from Uttar Pradesh, India. Currently I'm pursuing Mechanical Engineering from IIT Mandi. During the interactive social practicum project, I had the opportunity to collaborate with three students from WPI on my project team. Together we went into a few field visits, exploring nearby locations and conducting surveys. We met with local people and got to know their traditions and culture. It was a great experience meeting the WPI students, working alongside them enriched my knowledge about different cultures and developed my social skills, I feel I gained a lot from this experience and it was an excellent opportunity to learn from people around the world.







### **Srijan Sood (IIT – Product Team)**

Namaste! I'm Srijan Sood, an enthusiastic Electrical Engineering major student at IIT Mandi from Bangalore. Participating in the ISTP with WPI students was an enriching experience. Working alongside them allowed me to glean insights from their expertise and diverse perspectives. Our activities included a month-long expedition where we surveyed villagers, explored temples, and designed a product integrating these experiences. Throughout the ISTP, I cultivated essential teamwork and fieldwork skills that

I foresee greatly benefiting my future endeavors.

### **Ankit Kumar (IIT – Marketing Team)**

Hi! I am Ankit Kumar, from Delhi, India. Currently I am a junior here at IIT Mandi, majoring in Mechanical Engineering. I had a chance to collaborate with multiple WPI students, for our collaborative ISTP project. I had a great time having interesting discussions about the traditions of Himachal Pradesh and helping each other come up with suggestions to help the local talent of woodcarvers here. Having people from such different backgrounds in our team, made me gain a very valuable experience. Overall, I learned a lot from this collaboration, gained interesting insights about Himalayan art and met some great people in the process.





**Nikita Lakha (IIT – Marketing Team)**



**Priyanshu Raj (IIT – Marketing Team)**



### **Rachita Sood (IIT – Marketing Team)**

Hi, I am Rachita and I am from Pune, Maharashtra. I am currently in my 3rd year of BTech in Electrical Engineering at IIT Mandi. Through WPI, I got the opportunity to work on a very interesting project and collaborate with 2 teams, one from IIT Mandi itself, and the WPI team. We talked to various people including tourists and woodcarvers in and around Mandi region which helped us gain insights into the rich cultural heritage of Himachal Pradesh and understand the product demands by consumers.

Overall I had a great time working with everyone and learnt a whole bunch of new things.

# Table of Contents

Abstract.....	iii
Acknowledgements .....	iv
Authorship .....	v
Meet The Team .....	vi
Table of Contents .....	xii
List of Figures & Tables .....	xiv
Glossary .....	xv
Executive Summary .....	xvi
Chapter 1 - Introduction .....	1
Chapter 2 – Background .....	3
The Broad Issue.....	3
Glimpse into Global Solutions and Recommendations .....	4
Himachal Pradesh as a Case Study .....	7
Investigating Solutions for Himachal Pradesh .....	11
Chapter 3 - Methodology .....	13
Objective 1: Investigating Traditions .....	14
Objective 2: Contextualizing Current Markets.....	15
Objective 3: Innovating as Means of Preservation.....	15
Objective 4: Guidance for the Future .....	15
Technology.....	16
Chapter 4 – Results.....	17
Practice and Craft .....	19
Materials and Supplies.....	23

Spread of Knowledge.....	26
Marketing and Economics .....	27
Product Design .....	28
Guidance for the Future.....	29
Chapter 5 - Discussion.....	30
Chapter 6 - Recommendations & Conclusions.....	33
Recommendation 1: Conveying the Value of Wood Carving.....	33
Recommendation 2: Support and Promote Existing Organizations.....	34
Recommendation 3: Continuing Product Development .....	35
Conclusions.....	36
References .....	38
Appendices .....	41
Appendix A: Consent Form for Interviews.....	41
Appendix B: General Interview Format with Artisans.....	41
Appendix C: Survey for IIT Students .....	44
Appendix D: Pamphlet for Template (Hadimba Version).....	46
Appendix E: Findings Summary Matrix .....	48

## List of Figures & Tables

Figure 1: Newly constructed temple in Kataula, Mandi. ....	1
Figure 2: ICH knowledge database for TWC. ....	5
Figure 3: A map of Himachal Pradesh (H.P.).....	7
Figure 4: Traditional Kath Kuni construction method.....	8
Figure 5: Parashar Rishi Temple at Parashar Lake. ....	9
Figure 6: Hadimba Devi Temple in Manali.....	10
Figure 7: Bhimakali Temple in Shimla. ....	10
Figure 8: Flowchart outline for project goal, objectives, and methodology.....	13
Figure 9: Development methods for designing a wood carved product.....	16
Figure 10: Map of field visit sites in the districts of Mandi, Kullu, and Shimla.....	17
Figure 11: "UMA-MAHESHWAR" (11th Century C.E. Shimla, H.P.) .....	19
Figure 12: Image of an exterior façade to the Tara Devi Temple in Shimla .....	20
Figure 13: Wood carved box at the Museum of Himachal Culture and Folk Art.....	21
Figure 14: Wood carved container at the Museum of Himachal Culture and Folk Art.....	21
Figure 15: Wooden spinning wheel at the Museum of Himachal Culture and Folk Art.....	22
Figure 16: Representation of wood usage changes.....	23
Figure 17: Example of a painted temple at Jakhu Hill, Shimla .....	24
Figure 18: Contemporary tools from wood carvers of the Thayi caste in Somgad .....	25
Figure 19: Tripura Sundari Temple in Naggar. ....	26
Figure 20: Mockup of the cuckoo clock product.....	28
Figure 21: The Dhajji cabin designed and constructed by NORTH in Naggar .....	30
Table 1: Breakdown of technology utilized .....	16
Table 2: Breakdown of interviews and site visits .....	18

## Glossary

Term	Definition
Brahmanic	In reference to the Hindu divine trinity of Brahma, Vishnu, and Shiva.
Deodar	“Divine” wood native to the Himalayas; part of the Cedar family; it has characteristically good balance of density and ductility, with natural water and insect repellent oils. (referred to as Devdar in Hindi)
Dhajji Dewari	Traditional style of architecture found in the northwestern Himalayas; consists of wood forming an X shape with stones layered with mud within the voids.
Kath Kuni	Traditional style of architecture prevalent in Himachal Pradesh; consists of alternating layers of wood and stone in dry construction.
Koti Banal	Architectural form similar in construction to Kath Kuni, but with the addition of lentil-based mortar with stone masonry.
Loha Caste	Caste who specializes in metal working.
Ornamentation	Embellishment such as on moldings and columns, derived from nature, religious, or geometric depictions.
Taq	Building form of the Himalayas comprised of brick pier and masonry construction with mud mortar and a grid of organized, wood framed windows.
Thayi Caste	Caste who specializes in wood carving on an architectural scale.
Vernacular	Construction form and practices based on regional terrain and climate utilizing natural, native materials and resources.

# Executive Summary

## Background

Himachal Pradesh is a North Indian state rich in indigenous culture and tradition. Surrounded by the magnificent Himalayas, its people have maintained practices with little outside influence for centuries. The music, rituals, and handicrafts, shaped by the mountains they were born in, have ties to the region which is home to diverse heritage and practices. Among these various practices, the craft of wood carving is an integral part of the region's history and architecture. Part of temple and home construction, woodenwares and furniture, and religious artifacts, wood carving in Himachal Pradesh has existed since at least the seventh century in many forms. However, the traditional craft has faced many challenges due to globalization and changing contemporary values and trends. This project aims to study Himachali wood carving and develop means of preserving the art which is culturally and historically valuable to the region and its people.

## Methodology

### *Objective 1: Investigating Traditions*

Firstly, we conducted interviews with artisans in the field of wood carving and wood craft, as well as archeological experts and contemporary architects. By incorporating different professionals into our research, we hoped to learn from a range of perspectives on: “what is the current state of wood carving in Himachal Pradesh in terms of the practice, supplies, knowledge, and market.”

### *Objective 2: Contextualizing Current Markets*

Secondly, we worked to contextualize the challenges faced in the craft of wood carving in current markets. We were aided in research by the Marketing IIT team for market interviews with smaller scale artisans and vendors in wood craft goods.

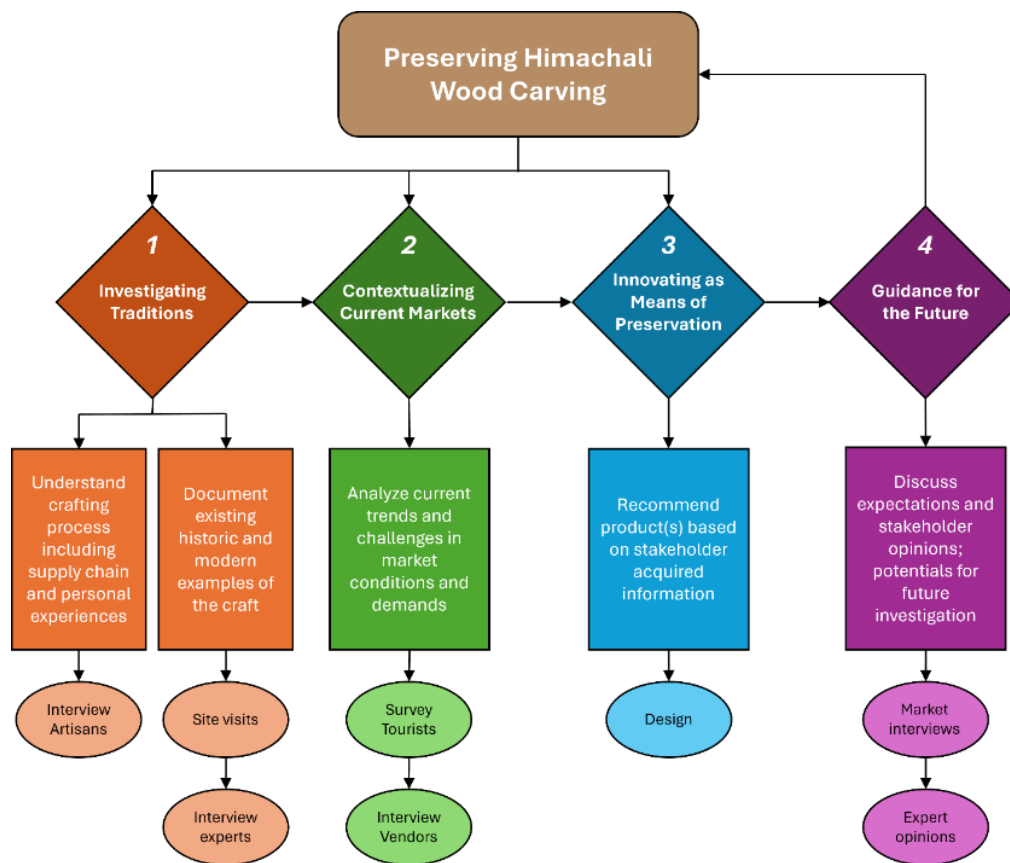


### *Objective 3: Innovating as Means of Preservation*

Thirdly, we worked with the Product IIT team to develop recommendations for innovative products artisans could make. These recommendations considered market interviews and design inspirations from field visits taken in Himachal Pradesh.

### *Objective 4: Guidance for the Future*

Lastly, we gauged the opinions of stakeholders and professionals in the field to inform our research and understandings of the project scope at various points in the investigation. We developed a pamphlet to promote insightful tourism to wood carved sites as a strategy to preserve wood carving.



E-1: Flowchart outline for project goal, objectives, and methodology (seen again as Figure 8).

## Results

The results we developed during the project are focused on defining and documenting contemporary woodcarving in Himachal Pradesh. While analyzing this, special attention was given to recent (defined relative to the timescale of its practice) trends related to its economic status. The main points of our findings are summarized below.

Woodcarving primarily exists today for decorative purposes. It can most reliably be found in the temples of the region in the form of religious imagery, as it has been for thousands of years. Previously, everyday items had been made with the same techniques, but industrialization has supplanted these with cheaper goods, pushing craftspeople out of the market. Other factors reducing its use include environmental regulations that affect wood availability, the advent of automated carving processes, and the allure of success in other careers. While usage of woodcarving in temples is not declining, the methods are shifting away from the hand tool usage of the past. This affects the cultural value of the works produced: many of the woodcarvers we spoke to felt that skill is an important element of the practice. It represents the transfer of knowledge from generation to generation. Woodcarving is not formally taught, but rather passed down via exposure and indirect learning. Often, this process occurs in families or tight-knit village communities. When combined with the religious significance, the true value of woodcarving becomes clear: the connection to a long-standing tradition upheld by the people of the region for centuries.

We found Himachali woodcarving to be uniquely ingrained in its home. The deep connections to the region and people make external preservation impossible; removal of any of its context, be it demographic, material, or cultural, would remove with it the authenticity. Preventing this craft from dying out requires it to be sustainable for the current practitioners.

## Recommendations

### *1. Conveying the Value of Wood carving*

For the craft and art of wood carving to be preserved it is pertinent that the value of the practice be upheld and revitalized. We recommend the creation and distribution of pamphlets (Appendix D) dedicated to specific wood carved sites. These informational guides can provide an engaging entryway into the world of wood carving for tourists by being placed in hotel and museum lobbies. We would also suggest future projects to further explore the stories and narratives of the tradition to understand its importance in history and tradition and come up with more means of conveying its value in the modern context.

### *2. Support and Promote Existing Organizations*

Organizations pursuing the preservation of traditional wood carving exist throughout Himachal Pradesh. We recommend future projects to connect with and explore institutions like museums and architecture firms which document history and work for the continuation of the traditions and practices. We explored the Museum of Himachal Culture and Folk Art in Manali and the Himachal State Museum in Shimla which have expansive collections of historic items, but with limited information readily available. The architecture firm, NORTH, also works to document the history of the craft, but also actively works to build new structures utilizing it. We would suggest future projects to incorporate a collaborative effort between IIT and these organizations to better understand the historical context behind artisanal crafts and advocate funding for such ventures.

### *3. Continue Product Development*

From our research and understanding, in order for a wood carved product to be respectful to tradition and be valuable to consumers, it must be representative of Himachal Pradesh and have spiritual significance. We recommend future projects to develop products with the close support of local artisans to create something authentic and realistic as a souvenir

for the region. We suggest looking at what factors make successful souvenirs elsewhere and incorporate them into the regional context.

## **Conclusion**

Our project involved the documentation and contextualization of wood carving in Himachal Pradesh and to consider innovations in the field of such artisanal works. Two avenues—that of markets and products were headed by two separate IIT teams with whom we collaborated with for the scope of this project. From our research and developments in these ventures we were able to observe and understand the challenges and changes to wood crafts in Himachal Pradesh from the perspectives of artisans, vendors, historians, and architects. The craft of wood carving has evolved over millennia in terms of value, meaning, and importance. However, so long as a craft is indicative of its people and their beliefs it is worth preserving for the cultural and historical significance to its people.

# Chapter 1 - Introduction

The art from a region, place, or society reflects the history, culture, and values of its people. When this artistic creation interacts with utility, a complex dynamic emerges that shows both the material and cultural needs of a group. This combination of form and function can be considered a *craft*: skilled labor with meaningful ties to the people that participate in it. It is both art and spirit for a group of people by the people, indicative of their emotions, lives, and stories.

Historically, these crafts rely heavily on locality, especially for the raw materials used. This study will examine the wood carving craft of modern-day northern India, with a focus on Himachal Pradesh, while comparing it to similar practices throughout the world. Wood carving has been present in the region since at least the seventh century with little foreign influence. However, in modern times, the increasing connectedness of the world has begun to affect how this craft fits into society. Industrialization and cultural unification have contributed heavily to the growing risk of losing these centuries old styles and techniques. Uniquely, despite the loss of traditional wood carving globally, Himachal Pradesh shows a continuation of the historic craft, mostly through temple architecture (Figure 1). By studying the historic craft, analyzing markets, and developing a new avenue for industry there is potential to promote the wellbeing of local artisans and the craft as a whole.



Figure 1: Newly constructed temple featuring wood carvings in Kataula, Mandi.

The past has shaped current circumstances and advancements—it is thus necessary to preserve and respect it to better appreciate the present and to continue learning for the future. The goal of this project is to investigate the current standing of wood carving in Himachal Pradesh and to propose solutions that support the livelihoods of wood carvers. This task is separated into three distinct avenues: documentation, market implementations, and design innovations. These are led by the WPI team and two teams at IIT Mandi respectively. As a result, the project is broken up into the following four objectives: investigating traditions, contextualizing challenges, innovating as a means of preservation, and guidance for the future.

*“To us, craft is culture, molded into a piece of art.”*

*-Raul Bhushan from NORTH*

## Chapter 2 – Background

*In this background chapter, we highlight the importance of traditional artisan crafts around the world to gain a better understanding of the issues faced globally. Learning from these international sites, a closer inspection of wood carving in Himachal Pradesh, India will be developed.*

### The Broad Issue

Traditional practices, like wood carving, often carry cultural significance along with material importance. As cultural desires and physical needs shift, the historical value of practices can be lost. This trend can be seen worldwide.

In Sub-Saharan Africa, indigenous wood carving has been a vital practice which connects to the ancestry of African people. Wood carved sculptures, which are important dignitaries kept by chiefs in the community to express their history, help in answering fundamental questions of origin, culture, and practices. However, the perishability of both materials and knowledge poses a risk of losing artifacts important to African identity (Coleman, 2016). In Kenya for instance, the wood craft industry faces the risk of depleting the harvestable trees with over 15,000 cubic meters of wood used by the industry per year (Choge, 2009). It is evident that the challenge of preserving the craft, environment, and livelihoods for artisans is ever growing.

In China, architectural wood carvings are an important part of Chinese heritage, style, and techniques. Recently, architecture has trended towards homogeneity and the erosion of traditional, vernacular architectural practices. A decline in quality, substance, and challenge in urban planning arises with this modernization in culturally historic regions, utilizing cheaper and quicker means of construction. Beyond cultural heritage, a loss of the craft means a loss of skill and diversity. Cookie-cutter cities as a product of industrialization have stripped the unique regional distinctions of the nation. Preserving the knowledge of ancient architecture is important in maintaining the culture of local communities and the tested principles of construction (Na et al., 2023).

In Malaysia, the 14<sup>th</sup> century old craft of ornamentation on traditional buildings has been mostly forgotten due to changes in newer building technology. Traditionally, wood carving in Malay architecture has the characteristics of creative folk art, requiring an extensive apprenticeship to learn the necessary skills. This poses a challenge for securing future artisans,

especially when the interests in the style wane with similar circumstances to the aforementioned trends in China (Ullah, 2018).

Through these global case studies, it is seen that around the world local artisanal work has been facing the challenge of extinction. Many cultures have been facing similar challenges in terms of changes in architectural styles, practices, and the younger generation's interest in the craft. Some specific issues are also discovered in wood procurement and shortages, providing for environmental concerns over unmanaged deforestation. Overarchingly, the importance of these traditional crafts—which are tied so integrally to culture—is still emphasized throughout the world.

## **Glimpse into Global Solutions and Recommendations**

From Nigeria to Indonesia to China, it is evident that wood carving plays an important role in each country's culture and traditions (Ajayi & Adékòyà, 2021; Na'am et al., 2019; Shi, M., & Ren, S., 2019). Including India, in nations around the world, it appears that wood carving as a practice is diminishing (Aamir, N., 2018; Ullah, I., 2018). The decline in wood carving has prompted revival recommendations worldwide, and research into issues wood carvers are currently facing. The following section will investigate the specifics of some of these countries and examine what ideas they have put forth to solve the issue. While these solutions may not be effective or directly applicable to Himachal Pradesh, they serve as a point of inspiration when investigating what solutions may fit the culture and needs of the region.

### ***1) Government Programs***

A big issue for wood carvers in Kenya is the depletion of wood favorable for carving and lack of a central organization for wood carvers. This wood depletion can lead to increased competition for wood, lower quality products, loss of earnings, and poverty for some wood carvers. Pilot programs have been put in place to address these issues. One of these is a nursery program that encourages wood carvers to grow trees on their land as an investment for the future. Another is a program aimed at educating inexperienced carvers on creating new and innovative designs that use less wood or are otherwise more efficient at using the wood. Another strategy used in Kenya was the creation of the Kenya Crafts Cooperative Union (KCCU). This was meant to be an organization to bring together Kenyan artisans under one identity. However, due to mismanagement and lack of transparency, the KCCU has become insignificant. Because of this, artisans have withdrawn their membership in favor of other organizations. Poor outcomes have resulted as lack of organization has led to poor marketing,



to the point where only 25% of items get sold per month (Choge, 2004). Although Kenya has put some effort into keeping their wood carving practices alive, there is still a way to go in terms of unifying the community.

## 2) Database

Wood carvers in Taoyuan County, China are also facing issues with the practice declining. For these wood carvers, it is a lack of sales and a lack of younger generations learning the craft that is leading to the downfall of their wood carving practices. In general, wood carvers in Taoyuan County are older in age. In a case study conducted of 50 wood carvers, the average age of these artisans was found to be 54.7 years old. Soon, these wood carvers will become too old to practice wood carving, as it is a physically demanding job. This, in combination with the fact that the younger generations are not taking up wood carving, is leading to a dwindling number of wood carvers. The study proposes an Intangible Cultural Heritage (ICH) knowledge database for Taoyuan woodcarving (TWC), which consists of 3 separate parts as demonstrated by Figure 2.

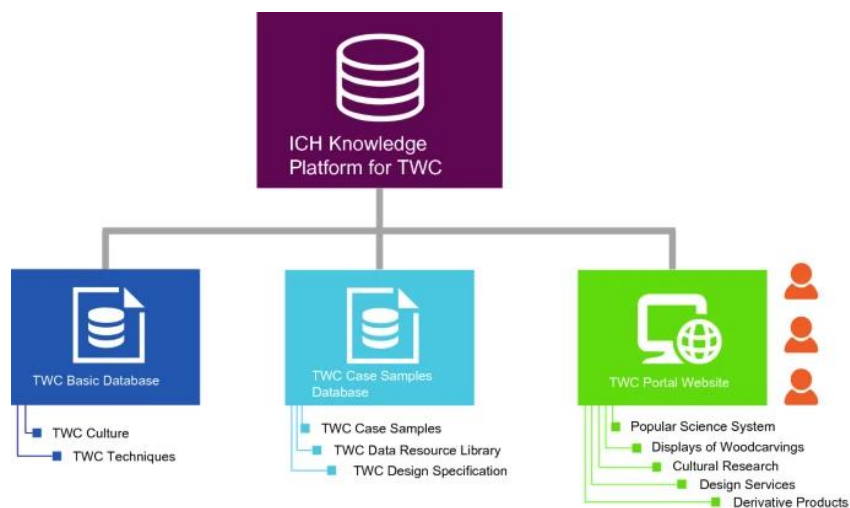


Figure 2: ICH knowledge database for TWC, (Shi & Ren, 2019).

The first part is a basic database, which contains general information about wood carving culture and techniques that was found through research and data collection. The second part is the case samples database, which contains 3D scans and photography which can help wood carvers innovate on past wood carving designs. The third part is the portal website, which is the user interface. These three parts work together to create an experience that

preserves cultural knowledge of wood carving while serving as an inspirational and educational tool (Shi & Ren, 2019). It should be noted that this is a passive solution. It does not actively address the loss of sales or lack of apprentices; it instead acts to deal with their consequences- wood carving is dying so the craft should be preserved digitally in order to keep its history alive.

### *3) Vocational Schooling*

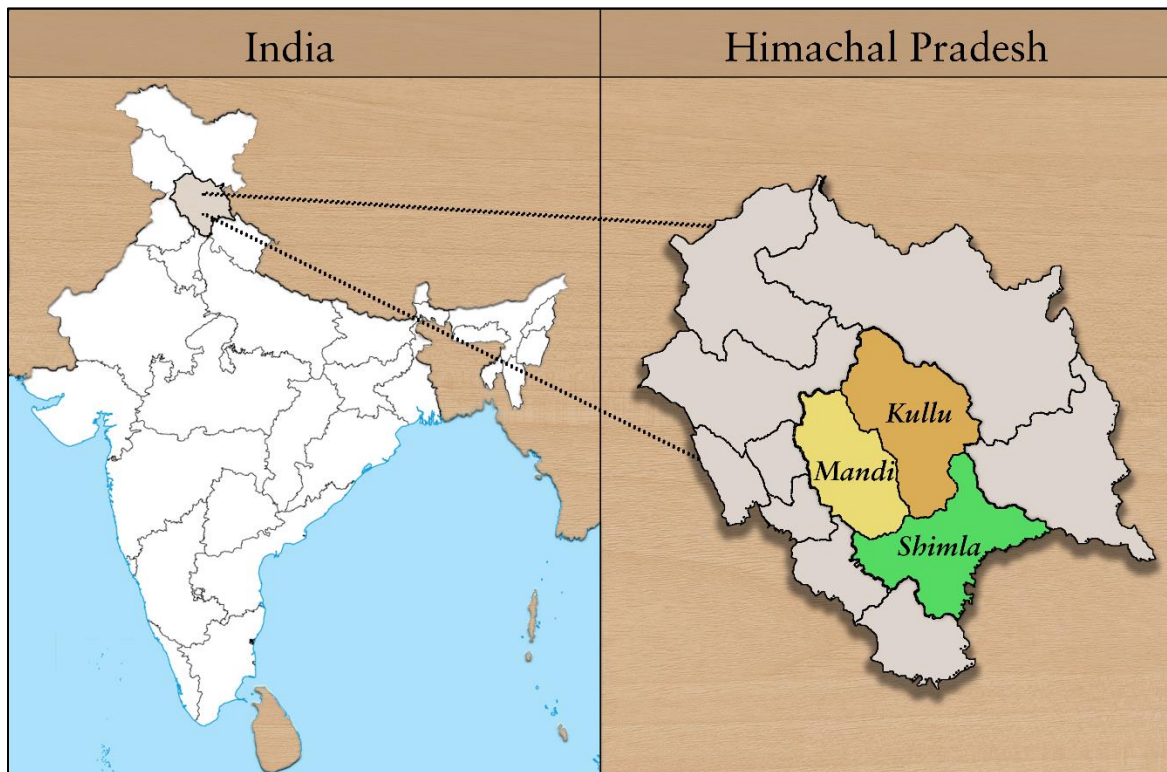
In Jepara, Indonesia, the creative industry serves an important role in the economy. Therefore, there is an emphasis on vocational high schools in which students can learn the techniques needed to go directly into the workforce after graduation. Their government has implemented a vocational education program to produce “quality” graduates- those ready to directly enter the workforce. The program is designed to ensure there are enough qualified workers to maintain the furniture industry in Jepara. There is an emphasis on collaboration between vocational schools, academics, private and government agencies to keep wood carving a prosperous industry (Na’am et al., 2019). Contrary to the database solution, this solution is more active in nature. It supports the longevity of the furniture industry by feeding new students into it. Without the younger generation being invested, the craft is destined to fizzle out.

### *4) Increasing Perceived Value*

From Nigeria, a study by Ajayi & Adékòyà (2021) has documented the various tools, techniques, and practices that wood carvers in Lagos have used. They have recognized that while canoe carving used to be a common tradition, the activity has been fading out of practice. Their recommendations were to have farmers provide land for planting trees and traditional rulers to organize festivals showcasing the carved canoes. The hope with these festivals is to create a renewed sense of heritage and tradition so that the practice of carving canoes regains popularity (Ajayi & Adékòyà, 2021). Similarly, certain regions in Morocco have adapted to the reduced marketability of products by indirectly adding value to them. Artisans have begun a practice of leading tours of workshops and demonstrations of their crafts for tourists, who then are more interested in purchasing the physical items made. This form of value creation can also be seen in the coconut carvers of Kenya, whose unique choice of material increases the significance of the objects to potential buyers, often as a souvenir to remember travel. Now a mature industry, coconut carving began when wood became scarce, but has since proven to be effective for improving the economic viability of craft work (Wright, K. D., 2008).

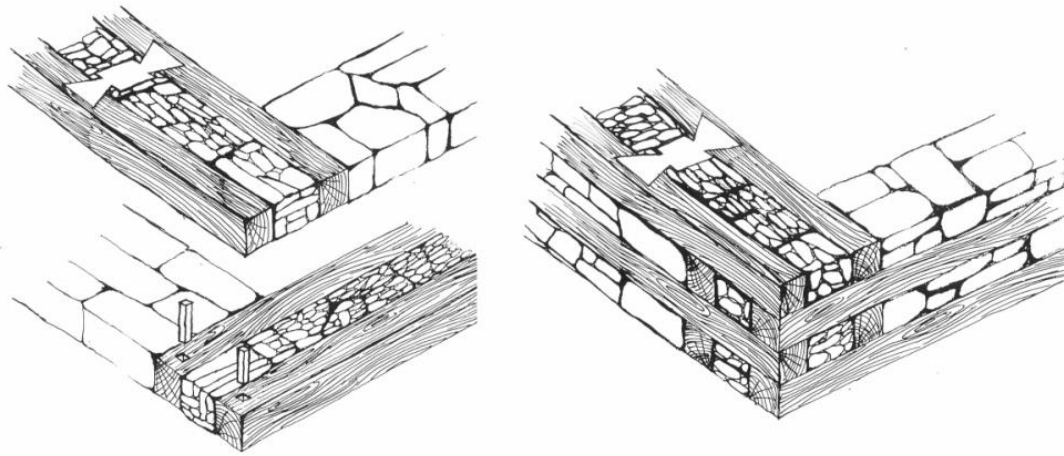
In general, the leading causes for the decline in wood carvers seen around the world include environmental factors, decline in sales, and the younger generations not taking up the practice. While some countries have tried to remedy the situation, it is difficult to tackle the issue directly because there are so many factors to deal with.

### Himachal Pradesh as a Case Study



*Figure 3: A map of Himachal Pradesh (H.P.) with the specific districts of fieldwork indicated.*

As described previously through global examples, the craft of wood carving is becoming a dying practice. Learning from global challenges will help inform similarities and differences in addressing these hardships at different scales. To gather a more tangible, firsthand account of the problems faced by local artisans, the state of Himachal Pradesh, India (Figure 3) will be analyzed as a case study for preservation and innovation of wood carving for the future. Traditionally, wood carving in India has flourished in applications ranging from vernacular architecture, artwork and home objects, religious temples and idols, as well as ornate furniture.



*Figure 4: Traditional Kath Kuni construction method. The dry construction of staggered stone and wood act to dampen and dissipate the seismic forces of the mountainous region (Shah and Thakkar, 2018).*

The Kath Kuni architectural style (Figure 4) has developed over centuries, allowing the Himachali people to survive the local climate and seismic conditions of the Himalayas (Down To Earth, 2021). In recent years, vernacular architecture has been increasingly looked to for inspiration, with new styles drawing on its aesthetic appeal and its convenient, eco-friendly construction. This is the case for Kath Kuni architecture, in which stones and wood beams are alternated in dry layers to provide the structure both compressive and tensile strengths—similar in functionality to the reinforced concrete techniques only developed in the past few centuries. The roof is comprised of shingle lapped slates similar to modern asphalt shingle systems. Using these materials along with mud plastering, the thermal performance of the structure is much better than concrete alone, reducing the need for electricity or fuel in heating and cooling systems. In regions where the facilities and acquisition of modern fuels can be challenging due to terrain or costs, looking back to vernacular architecture is an important consideration. These methods have been historically proven in their reliability and utilize local materials without heavy machinery or transportation involved. Preserving this implementation of woodworking is important not only in terms of culture and history, but also in terms of sustainability amongst climate change (Nasir & Kamal, 2021).

Alongside Kath Kuni, Himachal Pradesh is home to other architectural forms to address the climate and landscape of the Himalayas. These include Taq, Koti Banal, and Dhajji Dewari. Utilizing different forms and constructions methods, each building system

incorporates regionally available stone and deodar wood. The various styles are indicative of their regions of origin, with Dhajji and Taq for instance coming from further north, in Kashmir. The most prevalent style in the region of central Himachal Pradesh that is explored in this project is Kath Kuni, found in traditional homes and temples of the region.

Throughout India, indigenous wood crafts are used in worship. Prayer wheels, home temples, idols of varying sizes, etc., are all handcrafted with special techniques and materials befitting religious importance. Among such religious works, the most sacred is that of temples. The remote hills of the Himalayas were largely spared from encroaching forces due to the difficult terrain and conditions. This allowed for the art and practices of the region to be preserved in its wholeness, which, importantly, includes many constructions that make use of wood carving (Bernier, 1983). These sites include, but are not limited to, the Parashar Rishi Temple in Parashar Dhar (Figure 5), the Hadimba Devi Temple in Manali (Figure 6), and the Bhimakali Temple in Shimla (Figure 7) (Hansda, 2018). In the Kath Kuni style, ornamentation is added through wood carving depicting Gods and Goddesses on the exterior façade of the structures. These temples provide for the continuation of the craft of wood carving, as worshipers wish to erect new temples for their divinities.



*Figure 5: Parashar Rishi Temple at Parashar Lake.*



*Figure 6: Hadimba Devi Temple in Manali.*



*Figure 7: Bhimakali Temple in Shimla (Eichmann, 2016).*

## Investigating Solutions for Himachal Pradesh

Finding proper solutions for Himachal Pradesh requires deep analysis of the current wood carving context. Therefore, the global solutions researched will be used as inspiration for the project, but it is important to remember that Himachal is a unique place with its own culture and values. Choosing a solution and implementing it directly into the region would most definitely prove unsuccessful. Therefore, it is necessary to interview artisans and experts, and then figure out the best solution based on those findings. Outlined below are measures which may be taken into consideration, and their respective viability.

### *1) Government Programs*

Multiple government programs have existed to promote handicrafts in India, including the Handicrafts and Handlooms Export Corporation of India (1958-2021), and the Office of the Development Commissioner for Handicrafts in the Ministry of Textiles (current). Through examination of the latter's website, there is an Artisan ID Card program in which it is possible to find information about artisans. This information includes their ID number, name, craft, phone number, gender, and address. Out of 25,020 registered artisans, only a few deal with wood crafts. Looking at the first 5000 results, only 57 artisans work with wood, with 33 having the category "woodwares", 23 having the category "wood (carving)", and 1 having the category "wood (turning and lacquer ware)". Since these government programs already exist, further investigation must be done into their effectiveness and if local wood carvers are aware of the programs.

### *2) Database*

The implementation of a database is one means of preserving history and art. However, the goal of this project is not simply to preserve these works in stagnant time, but to consider means of revitalizing wood carving amongst modern challenges and trends. A database is passive in approach and thus is not considerable as a good solution for Himachal Pradesh. There are a variety of factors for this thinking. For one, wood carving is an integral part of temple and religious significance to the region—as is the case, photography of these sites (specifically of inner altars) is prohibited and disrespectful to the very culture that is to be honored. Furthermore, by collectivizing photographs of these locations, it would undermine the purpose of discovering these magnificent sites in person. Lastly, an archive-based website which could document wood carving in the region does not help artisans directly. Not to

mention, the audience would already need to have some level of interest in analyzing the craft to interact with such a site.

### *3) Vocational Schooling*

The process for which wood carving skills are learned in Himachal Pradesh needs to be investigated. While implementing a formal vocational program like the one in Indonesia may not make sense for Himachal Pradesh, it can serve as an inspiration point for if there is a need to increase the number of young students training to become wood carvers.

### *4) Increased Perceived Value*

The current perceived value of wood crafted items in Himachal Pradesh needs to be investigated. Based on global research, it is likely that wood crafted items are not as valued as they once were. If this is the case, then we can take inspiration from Nigeria, Morocco, and Kenya to find a solution that makes sense to implement in Himachal Pradesh.

In summary, the global modernization that has led to a decline in traditional wood carving also creates new opportunities for these practices. This study will examine the extent to which these opportunities can help the traditional craft thrive in a new era of industry. There will not be a one-size-fits-all solution, but based on the information learned in Himachal Pradesh recommendations were made to promote the wood craft industry using the discussed global solutions as a basis for inspiration.



# Chapter 3 - Methodology

To carry out our overarching goal of preserving Himachali wood carving, we proposed four main objectives and associated methodologies, which are illustrated in Figure 8.

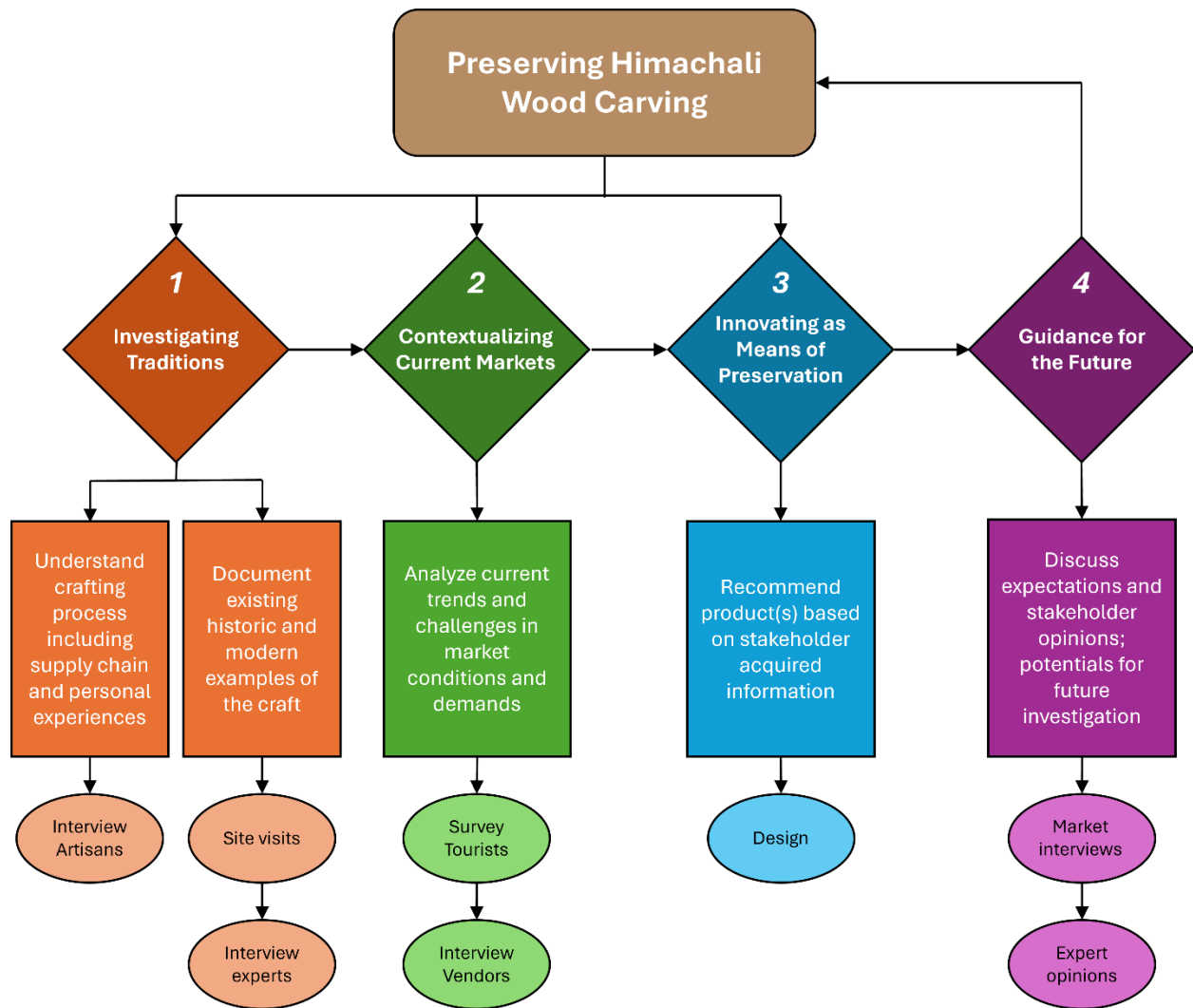


Figure 8: Flowchart outline for project goal, objectives, and methodology.

## Objective 1: Investigating Traditions

To gain an understanding of current artisans' work, we conducted several semi-structured interviews with artisans, locals, and experts in the following places: Somgad village, Mandi town, Shimla State Museum, NORTH Architecture Firm, Tripura Sundri Mandir Temple, and Sharan village, also seen in Table 2. We focused the questions in the following categories:

- 1) *Practice / Craft* – i.e. what types of work they do, how the craft has changed, do they make smaller items
- 2) *Marketing / Business* – i.e. how do they find jobs, how do they spread the word about their business, how long items take to make
- 3) *Apprentices / Younger Generation* – i.e. how their apprentice program works, are the younger generations as invested in the craft now versus in the past
- 4) *Materials / Supplies* – i.e. where they get wood and tools, how the current supplies differ from the past

We chose a semi-structured approach because we were interested in the answers to these questions, but we also wanted to give the artisans room to talk about their unique experiences. As outsiders with little background in wood carving, we lacked the depth of knowledge that these wood carvers have. Thus, there were bound to be topics of conversation that we had not thought of or encountered in our research. So, the semi-structured approach allowed us to naturally follow the conversation and learn more about the artisans' experiences than we would have if we just stuck to a rigid script. We discussed our findings from the artisans and our prior knowledge with these experts to understand fully the context of the craft as it has stood and currently stands today. We recorded and transcribed these interactions as a means to preserve the traditional craft of Himachali wood carving.

While interviewing the Somgad and Sharan village artisans, we documented the projects they worked on, using our phone cameras. These projects consisted of temple and home architecture. We additionally documented other sites exhibiting historic and modern wood carvings from museums and temples in various regions of Himachal Pradesh. With these photographs, we were able to compare the different temples to identify and draw conclusions about the design, form, and function of wood crafting across the different areas in Himachal Pradesh that we explored.

## **Objective 2: Contextualizing Current Markets**

From our interviews, we grasped some understanding of market trends based on an artisanal, scholarly, and business perspective. By discussing directly with wood carvers and historians, we were able to understand their thoughts on existing and future implementations of the traditional craft. In addition, market research interviews were conducted in Mandi town and over the phone with artisans and vendors. Questions were asked to gauge consumer interests and determine the demand for wood carved products in Mandi. By utilizing the opinions of consumers and vendors we were more clearly able to determine what features may be best for creating a marketable souvenir.

## **Objective 3: Innovating as Means of Preservation**

By introducing new products for production through traditional wood carving, we hoped to drive more economic growth into the industry. We identified contributing factors to success in similar situations worldwide and applied them to develop a range of products. Crucially, the development cycle included working with wood carving experts and practitioners to prototype and iterate on the product designs, as seen in Figure 9. We attempted to develop products which encapsulate both the traditional history we documented as well as the contemporary market tastes we observed in Objectives 1 and 2. The resulting products could be produced by wood carvers to expand their market into the tourist segment.

## **Objective 4: Guidance for the Future**

The timeframe of this project prevented us from assessing the full impact of our work. However, we were able to predict it, through a mixture of speculative interviews and comparison to similar work (Figure 9). We began the process of gathering feedback early in the timeline, which allowed us to adjust our work based on it. Wood carving experts were the focus, as they have the domain knowledge and experience to accurately make predictions about our success. Tourists and potential customers were also questioned as part of the marketing team's research. The results of this feedback continually informed our project throughout its scope, allowing for the necessary guidance on any future work done by teams continuing the project.

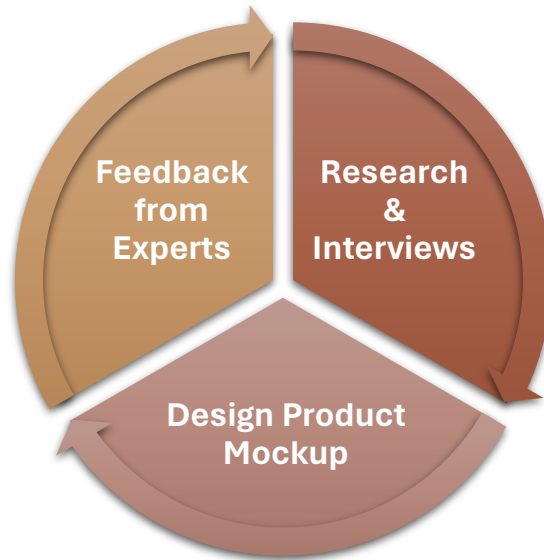


Figure 9: Development methods for designing a wood carved product.

## Technology

Table 1 shows the technology that was utilized for our interviews.

Table 1: Breakdown of technology utilized.

Technology	Purpose
Voice Memos App (Apple)	Audio recording during interviews
Personal Smartphone Cameras	Photos/videos of temples and wood carvings
Notebook / Pen	Taking notes during interviews

## Chapter 4 – Results

*After interviewing local artisans and experts in wood craft, we have learned valuable information about the current state of wood craft in Himachal Pradesh. Figure 10 shows the locations we conducted interviews and Table 2 shows a summary of our fieldwork, including the people we interviewed and the sites we visited. We also obtained the book Woodcarving in the Himalayan Region by O.C. Handa as suggested by Dr. Hari Chauhan to use to supplement our fieldwork. Below is a summary of our findings. We have also included the results of our product development as well as feedback we received. See Appendix E for Findings Summary Matrix.*

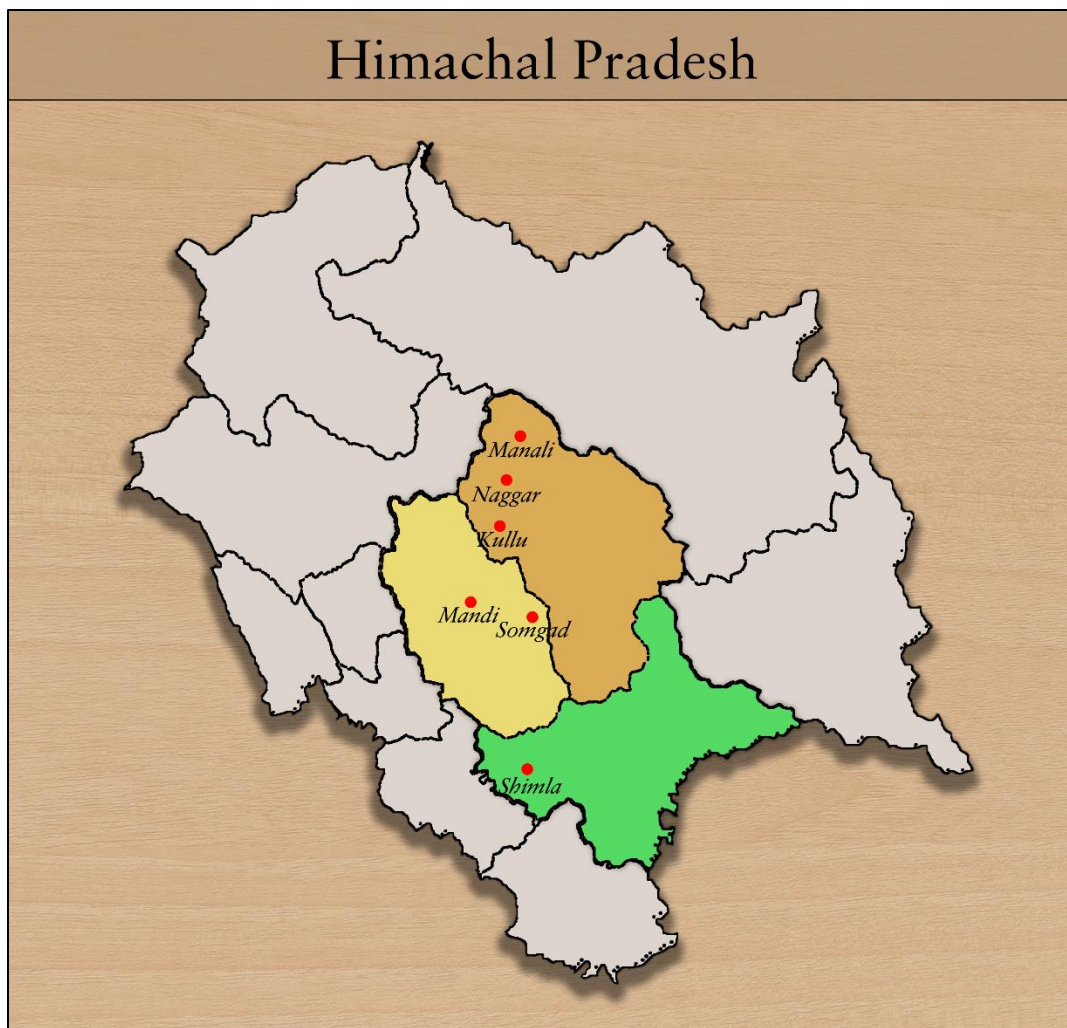


Figure 10: Map of field visit sites in the districts of Mandi, Kullu, and Shimla. A more detailed breakdown is provided in Table 2.

Table 2: Breakdown of interviews and site visits. \*Indication of interviews conducted by IIT counterparts.

Location	Interviews	Temples Visited	Other Sites Visited
Jehera Village, Somgad	<ol style="list-style-type: none"> <li>1. Wood carver in late 50s</li> <li>2. Group of 4 wood carvers (mixed age range 40s-91)</li> <li>3. Wood carver in 60s</li> </ol>	<ol style="list-style-type: none"> <li>1. Local village Temple</li> </ol>	<ol style="list-style-type: none"> <li>1. New home construction</li> </ol>
Mandi	<ol style="list-style-type: none"> <li>4. Group of 3 wood carvers in Mandi town*</li> <li>5. Online Interview with wood carver from Kullu*</li> <li>6. Wood carver who makes wooden temples in Mandi town*</li> </ol>	<ol style="list-style-type: none"> <li>2. Temple in Kataula</li> <li>3. Adi Brahma Temple</li> <li>4. Shri Parashar Rishi Temple (at Parashar Lake)</li> </ol>	
Shimla	<ol style="list-style-type: none"> <li>7. Dr. Hari Chauhan at the Himachal State Museum</li> </ol>	<ol style="list-style-type: none"> <li>5. Tara Devi Temple</li> <li>6. Temple at Jakhu Hill</li> </ol>	<ol style="list-style-type: none"> <li>2. Himachal State Museum</li> </ol>
Naggar, Kullu	<ol style="list-style-type: none"> <li>8. Rahul Bhushan at NORTH Architecture Firm</li> <li>9. Local at Tripura Sundri Mandir Temple</li> <li>10. Woodworker at Sharan village</li> </ol>	<ol style="list-style-type: none"> <li>6. Maa Vaishno Devi Temple (Kullu)</li> <li>7. Tripura Sundri Mandir Temple</li> <li>8. Murlidhar Krishna Mandir Temple</li> <li>9. Jagat Patti Temple</li> </ol>	<ol style="list-style-type: none"> <li>3. NORTH Architecture Firm</li> <li>4. Nicholas Roerich Estate</li> <li>5. Sharan Village</li> </ol>
Manali, Kullu		<ol style="list-style-type: none"> <li>10. Hadimba Devi temple</li> </ol>	<ol style="list-style-type: none"> <li>6. Museum of Himachal Culture &amp; Folk Art</li> </ol>

## Practice and Craft

Through our interviews, we have noticed changing trends in wood carving between the past and the present. In Jehera Village in Somgad, we conducted interviews with artisans of the Thai caste, specializing in wood carving at an architectural scale. From our questioning we were able to identify the changes in the practice and craft with respect to design influences and styles. The traditional folk styling of wood carving involved depictions of local deities to the people of the regions where their temple resided. Sacred animal entities such as snakes were also depicted in importance to folk religious beliefs. In more recent history however, the far more popular and nationally significant Brahmanical influence can be seen in wood carving styling. Local deities are replaced by images of Brahma, Vishnu, and Shiva depending on the specific temple's ideology (notice Figure 11). Portrayals of nature persist, except with the inclusion of non-native flora and fauna, with a keen focus on symmetry and perfect geometric patterning. This widening of depictions towards the widening geographical expanses of India as a whole act as a means of uniformity and order.



*Figure 11: "UMA-MAHESHWAR" (11th Century C.E. Shimla, H.P.) photograph from HSM of an ancient wood carved entrance gate with a sculpture of two deities in the center. Depictions of intertwined snakes, geometric shapes, floral patterns, battle scenes, and local deities are seen carved into the posts and lintels. The central sculpture is of the Brahmanical deities of Parvati and Shankar-more popularly known as Shiva.*

This information was confirmed during our interview with Dr. Hari Chauhan at the Himachal State Museum in Shimla. As per his recommendation, while visiting the newly renovated Tara Devi Temple in Shimla, we identified the prevalence of nature-based designs, as seen in Figure 12, as opposed to deity and narrative focused designs.



*Figure 12: Image of an exterior façade to the Tara Devi Temple in Shimla, originally built around 1766, it was recently renovated/reconstructed from 2015-2018 upholding as close to the original style. The precision of detail in symmetry and form is to be noted, with perfect repeated motifs of flowers, leaves, geometric shapes, and peacocks.*

We also spoke to architect Rahul Bhushan from NORTH in Naggar, who had grown up in Shimla. Bhushan noted that the temple had not been made of wood originally, but made as so to appeal to newer demands. Our interview with him on his work reinforced many of our other findings; his work revolves around promoting traditional architectural practices for modern use. In doing so, they run into the same issues as those involved in the trade have begun to face recently, like competition with modern technology creating cheaper goods and changing consumer tastes and demands. Bhushan is taking an approach that highlights the value of these practices compared to modern construction in terms of sustainability and craftsmanship, which pushes the product into the luxury segment of the building market. This mirrors the strategy we identified for selling smaller carved wooden items: promote them as works of skill, with the labor put in adding value that mass produced items lack.

During our temple visits, we noticed that many of the carvings had appeared as though they were more recent. According to NORTH, the original wood carvings for many temples are reconstructed at somewhat regular intervals—approximately every 15 years. This was the case for the Tripura Sundari Temple in Naggar, where the sacred original panels are kept in safekeeping and copies are seen in their place. NORTH has adapted and taken advantage of this process to fit their work by reusing wood artifacts from temples. The benefit of this is twofold: the wood can be sourced locally without causing deforestation, and its use aligns with the religious standards on temple wood after its removal from the temple. This practice of restoration also demonstrates one way that this craft can survive, despite economic challenges,



as the temple construction process continues to value human skill in ways that the general market does not. NORTH sees potential in collaborating with these wood carvers to expand their work to include NORTH's architectural projects and ensure that the practice remains viable.

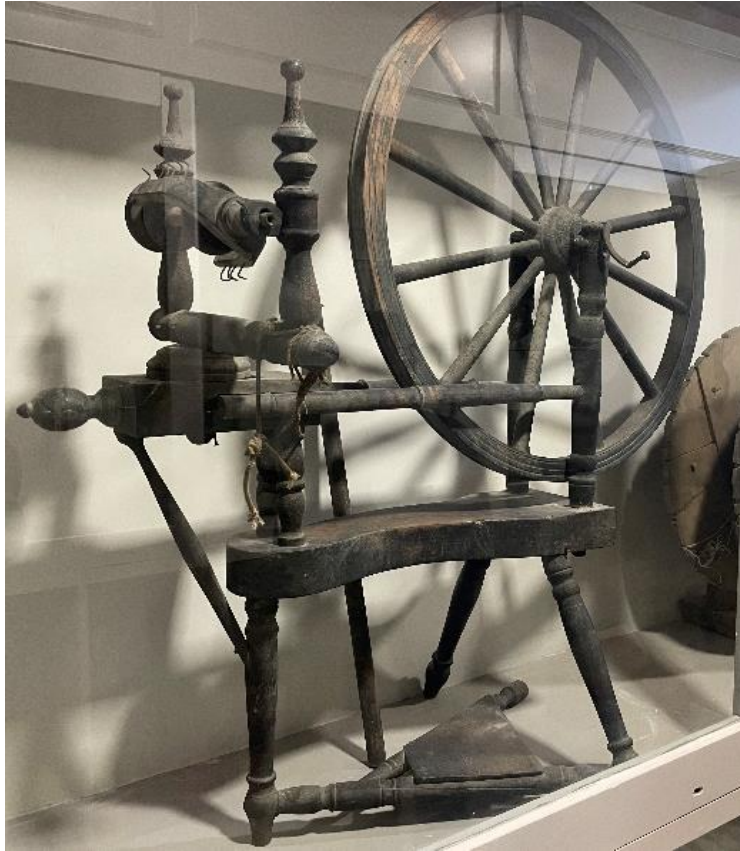
In regard to smaller works of wood carving, many of our sources concurred that the market is unlikely to support workers making them. Typical household items which were once carved from wood in the Himachal region include kitchenware, boxes, tools, and even mechanical systems. Examples of these can be seen in the Museum of Himachal Culture & Folk Art in Manali (Figures 13-15).



*Figure 13: Wood carved box at the Museum of Himachal Culture and Folk Art.*



*Figure 14: Wood carved container at the Museum of Himachal Culture and Folk Art.*



*Figure 15: Wooden spinning wheel at the Museum of Himachal Culture and Folk Art.*

As they were valued mainly for their function, mass production techniques have almost entirely replaced these items due to cost. The author of *Woodcarving in the Himalayan Region*, O. C. Handa, prefaces the book with anecdotes from his childhood in Mandi. He states: “I assume, every house of...Mandi, had similar carved woodwork, and...a good collection of woodenwares for day-to-day use.” (Handa, 2006) He goes on to lament the lack of such goods in use presently, blaming consumerism for their replacement. Chauhan and Bhushan independently confirmed the disappearance of profitability in this sector, and expressed doubts that this could change on a large scale. The practice of creating functional items of this type is not likely to survive in any meaningful way. Figure 16 demonstrates that with the advent of new materials and manufacturing techniques during industrialization, traditionally wood carved products were replaced with products made of other materials.

<b>Use of Wood in Himachal Pradesh vs. Time</b>			
<b>Use Case</b>	Temples	Still used due to cultural value	
	General Buildings	Replaced with concrete	
	Household Objects	Replaced with plastic/metal	
	Mechanical Systems	Replaced with metal	
		Pre-Industrialization	Industrialization
<b>Timing Relative to Industrialization</b>			

Figure 16: Representation of wood usage changes

## Materials and Supplies

Devadaru-the Divine Wood of the Himachali region, referred to in the west as deodar wood had historically been the preferred type of wood for use in wood carvings (Handa, 2006, p. 17). One of our interviewees at Somgad village mentioned that Deodar is more hardy than other types of wood, meaning that it can resist insects and other maladies without extra chemical treatment. However, due to government restrictions on green felling to protect the species, it is increasingly more difficult to obtain this type of wood. Wood carvers must acquire this wood only through government sanctioned markets which is handled by the village committee. With modern demands there exist cheaper materials besides deodar wood, like lower grade imported woods which require additional chemical treatment, or concrete and unplasticized polyvinyl chloride (UPVC), it is typical that new construction favors these cheaper materials instead of wood to meet demand in cost and time.

These trends have been emerging for many years, as documented by the book *Woodcarving in the Himalayan Region*, published in 2006. The author notes in the preface that his motivation for documenting wood carving is the way that “the consumerist psychology has taken rather grievous toll of those values.” in reference to the public’s valuation of beauty and quality craftsmanship (Handa, 2006, p. 8). He references the changes in material and style that are associated with an industrializing society, like the use of ceramic tiles and paint on modern temples, that have worsened since. Our work has confirmed this, as we have

documented entire temples painted over and heard accounts on the switch to concrete as the builder's material of choice. Figure 17 shows one such example of a temple in Shimla that was entirely painted over, including the bricks of the left side of the picture. We were not able to get close enough to it to determine what materials the temple was made of, but it nonetheless shows a change in style between the traditional and the modern.



*Figure 17: Example of a painted temple at Jakhu Hill, Shimla*

While in Naggar we traveled to the Craft Handloom Village of Sharan. Here we noticed many traditional Kath Kuni constructed homes and temples and were able to conduct an interview with the local villagers. Our primary interviewee was a village elder who was involved in traditional woodcraft on the construction aspect. According to him much of the changes in the craft are from material considerations, such as an influx of concrete and painted surfaces. He himself has built many homes using concrete with single span wooden beams and acknowledges that the concrete homes do not compare to the durability of a traditional Kath Kuni home, stating that if a single column breaks in a concrete home, the whole structure will collapse. Moreover, he explained to us that the more traditional construction made for a healthier home. By using natural materials without chemical treatments, the harmful, volatile organic compounds present in modern materials such as paints, lacquers, concretes, and pretreated woods can be avoided altogether.



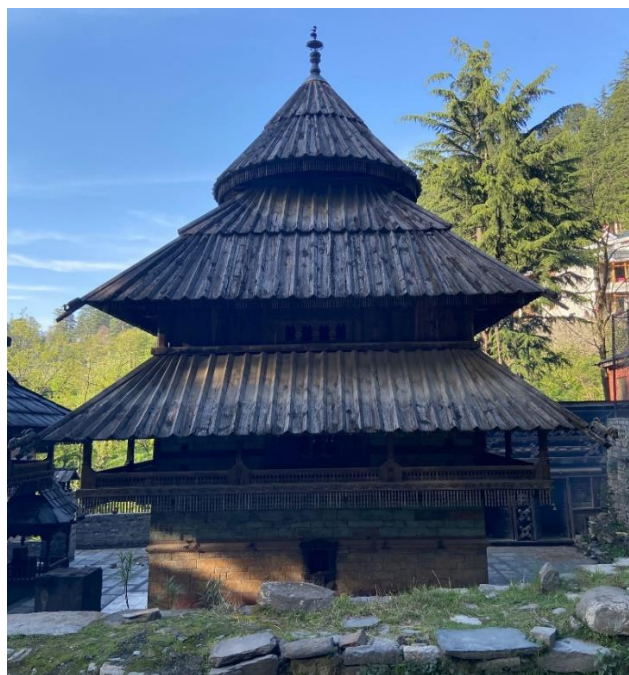
*Figure 18: Contemporary tools from wood carvers of the Thaiyi caste in Somgad. From front-to-back: planer, varying chisels, splitter/mallet.*

In terms of tools, we have found that while some traditional hand tools (Figure 18) are still used, it is also typical for modern wood carvers to use electric tools. Historically, the wood carvers of the Thaiyi caste had made their own tools with help from the Loha caste—specializing in metal working, using the same wood and shaped metal into instruments such as chisels, mallets, and planers. However, with modern markets they can acquire much cheaper tools and even machines to aid in their work, such as routers and lathes. According to one interviewee in Jehera, most of the façade wood carving is still done in large by hand, however repeated elements such as the peripheral wind chimes which encase the roofs of many temples are made in mass using a lathe. From other sources in Sharan, it appears that machinery use is more common, specifically to cut larger logs and panels to make the process more time efficient and less laborious.

## Spread of Knowledge

Wood carving as an art and practice of the Himachali people is one of community and sociability. Traditionally, specific wood carving castes were the ones practicing and creating temple and home architecture. Their skills were passed down from generation to generation through viewing village elders and experience. The younger generation was usually invested in the craft during their early teens from 14-16 years of age. With more and more experience gained, skills are developed into adulthood. At the Somgad village elders in their 50s-60s were still committed to the craft. In Sharan, the village elder also worked while being 64 years of age.

In modern times, the spread of this historic knowledge is more open. An interviewee at Somgad related a time where he had taught wood carving to an audience of 4-5 individuals outside of his village and caste at the bequest of the then Chief Minister of Himachal Pradesh. These students then went on to do their own work in wood carving elsewhere. It appears that although many cultures initially hope to retain their craft in secret in order to preserve their traditions, it is important to spread wisdom to however many are interested and engaged.



*Figure 19: Tripura Sundari Temple in Naggar.*

While visiting the Tripura Sundri Temple (Figure 19) we spoke with some locals about the temple and its history. There an older gentleman informed us of just how the site was chosen to have a temple erected upon it. The story goes as a man was using a sickle to cut grass

by a tree, he had stumbled upon a vase—those in which one may store food goods in. This he related, was an omen to bestow a temple on the site in accordance to the community religious leaders. This was an interesting discovery as prior, through our interviews we had only uncovered that there existed some means for the deity to inform village priests for the site of a temple to be created.

At Sharan village we also queried about the nature of passing over designs and similarities in temple wood carvings. The elder stated that in modern times people wish to specifically have renditions of other temples, alongside common motifs and depictions. We spoke to him of our findings from Somgad village where we had discovered that they used carbon paper to transfer over photographs of deities to ensure that they are identical throughout the temple. He stated that in olden times there had always been a unique hand touch to carvings as they were all carved through memory or honored characteristics of deities. However, he did not consider this copying of figures a negative thing, but simply a product of changing demands and values—not a demerit of skill. He recited a Hindi figure of speech: “Nakal ke liye bhi akkal chahiye”, translating roughly to: “you still require a brain in order to properly copy.”

“नकल के लिए भी अकल चाहिए”

*-Sharan Village elder*

It is within the nature of the passing of the craft—and in modern trends—of the carving depictions to be that of replication.

## Marketing and Economics

We have found that it is becoming less and less sustainable to only work on wood carvings as a profession. Our interviewee at the Himachal State Museum stated that “it is my observation [that] no person, no wood craftsman will survive on this profession”. This is because, he went on to say, that while in the past there was a shortage of wood craftsmen because all houses were made of wood, now there is less of a need for wood craft due to houses being made of cheaper materials.

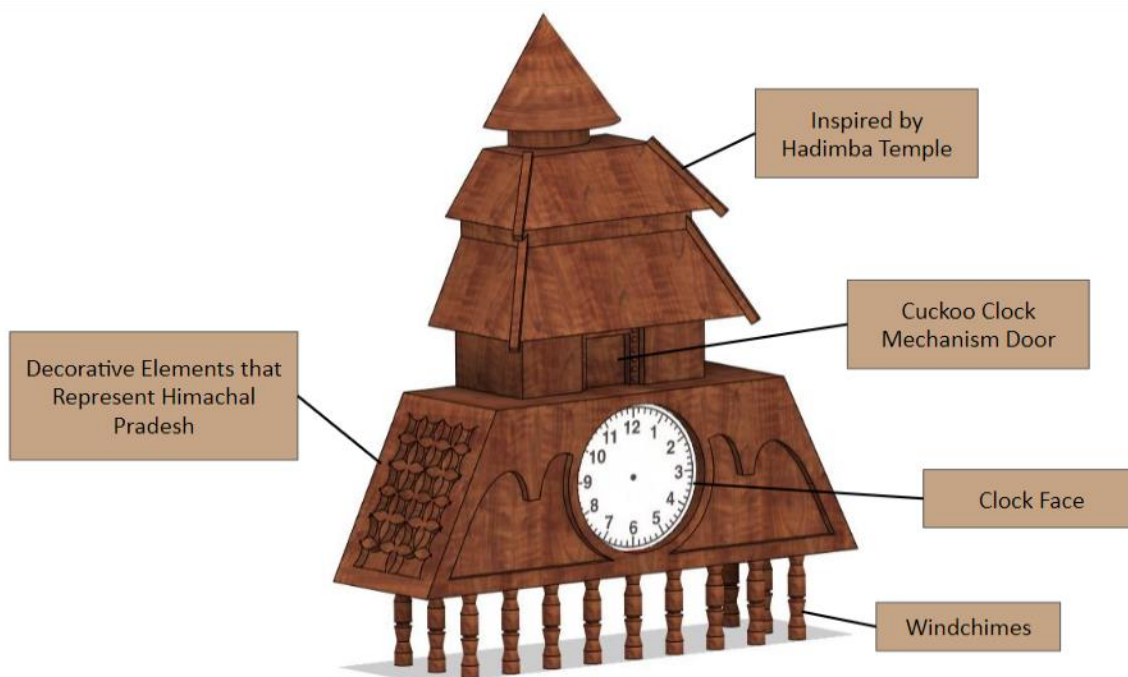
Interestingly, when we interviewed the artisans in Somgad village, it seemed that they were doing well for themselves, building temples in various regions of India. However, they too relied on apple orchards and farming as a secondary source of income in addition to wood

carving. When interviewing the artisans in Sharan village, they also said that they relied on apple orchards for additional revenue alongside their handloom industry.

The findings from the market interviews in Mandi confirmed this sentiment that wood carving itself does not provide enough sustainable income. It seems that, at least for these Mandi artisans, wood carving is more of a passion and artistic outlet rather than a source of reliable income. It is common to take up other jobs to gain a living wage.

Additionally, according to these artisans, products that are more likely to sell should include elements that represent Himachal Pradesh's spiritual culture. These could include temples, idols of the local rishis and devtas, or musical instruments. These would be good souvenirs for tourists to take back to remind them of their time in Himachal Pradesh.

## Product Design



*Figure 20: Mockup of the cuckoo clock product.*

We designed a prototype product which wood carvers can create and sell to help support their businesses. A mockup of the design can be seen in Figure 20. It features a Hadimba-inspired temple, decorative elements significant to Himachal Pradesh, windchimes which are commonly used in temples across the area, and a clock face with a cuckoo clock mechanism. We decided that instead of designing the decorative elements ourselves, it would be open for the wood carvers themselves to design depending on their skillset and personal



preferences—allowing for regional distinctions and unique hand touches. Possible design implementations include pinecones, leopards, peacocks, apples, flowers, and geometric patterns.

After this design was made, we sought guidance and feedback from an expert in the field, as described in the next section.

## Guidance for the Future

We asked Rahul Bhushan from NORTH for his expert opinion on the souvenir cuckoo clock design. He gave us some tips about what factors to consider when making a souvenir. Some factors to be considered are:

1. Startup cost
2. Size/weight
3. Sturdiness for transport
4. Is it day-to-day useful or just decor?

Based on these factors, we have concluded that the cuckoo clock in its current design state is not ideal to be a souvenir. The startup cost is too high, since it involves an artisan obtaining a complicated cuckoo clock mechanism. More thought needs to be put into its sturdiness for transportation, since the size and delicate designs could be prone to breaking. Therefore, we recommend exploring further product designs which have a lower startup cost and are easier to transport, but still capture the culture of Himachal Pradesh in the same essence that the cuckoo clock does.

## Chapter 5 - Discussion

While we were able to conduct ten interviews with a range of people with differing relationships to wood crafts, there are known limitations to our research. Out of the 12 districts of Himachal Pradesh, we only conducted field work in 3 of them: Mandi, Kullu, and Shimla. In addition, even within the Mandi-Kullu-Shimla region, there is more potential for exploring different villages and organizations with ties to wood carving. According to Rahul Bhushan, one of the most important parts of wood carving research is collecting stories and personal narratives. Interviewing with more villages, locals, and organizations can provide a deeper and richer picture of wood craft and how it is perceived from different stakeholders.



*Figure 21: The Dhajji cabin designed and constructed by NORTH Architecture Firm in Naggar. The wooden lattices with stone inlays and mud plastering can be seen indicative of traditional construction with a modern form.*

Throughout our research and interviews in Himachal Pradesh, we have had to face a number of philosophical questions. The task of “preserving wood carving” proved to be broad and hard to define. On one hand, “preservation” could mean capturing moments in time for the future to look back on. Museums and databases fall under this category. On the other hand,

“preservation” could mean keeping alive the wood carving techniques and tradition. NORTH architecture firm is an example of this, as they are training younger generations in building traditional style architecture, like their Dhajji cabin (Figure 21). The villagers at Somgad and Sharan also fall under this category, as they have built many temples, and some have taught their children to continue the craft. Each way comes at the task from a different perspective, but both may be necessary to keep wood carving from becoming a lost craft.

It must also be discussed that even if traditions and techniques are kept alive, a key influential factor is the value that the people place on wood carved products. We have found that cheaper methods and materials are now favored over traditional wood carved products. In the past, many household items were made of wood since the resource was cheap and easily available. Our visit to the Himachal State Museum and the Museum of Himachal Culture and Folk Art has made this clear, as there were many household items such as boxes, bowls, spoons, and religious artifacts. But now, this is not the case. According to Dr. Hari Chauhan, if a doorframe needs to be replaced, people are more likely to choose a cheaper option than to hire a wood carver to do the job. This is due to the cost and time associated with hiring a wood carver. Even though the wood carved door frame would be more durable, more decorative, and overall of higher quality, people nowadays find value in saving money. This speaks to how the value placed on wood carved items has declined over time, as new and cheaper methods have eliminated the need for traditional wood carvings.

One notable exception to this elimination of wood carved items is temples. Due to the value placed on temples for their religious significance, they are well maintained, and new temples are frequently made. This has resulted in many existing wood carvers to solely work on temple architecture, while occasionally making smaller items on demand. Since it is forbidden to destroy religious wood carvings from temples, these carvings have been preserved better than household items. This shows that when value is placed on something by the people, it is more likely to endure the test of time.

Another point to be made is that modernization and advancing technology is not always an improvement. Modern times have given us new materials to work with, such as plastic, concrete, and UPVC. However, these unnatural materials are more harmful to the environment and to the body than natural materials like wood, mud, and stone. In addition, new building techniques may be seen as superior to the traditional ways simply because they are cheaper and more modern. But what we learned at NORTH is that this is a misconception. Mud houses and Dhajji style architecture can be functional, durable, and modern. Wood can be used on a roof without rotting, and Kath Kuni architecture is more resistant to earthquakes than concrete structures. Today, there is an increasing push to find the cheapest and fastest

option, however, the drawback is a loss of quality and longevity. It is important to look back on and utilize traditional techniques in order to counteract this growing force.

There is no “one way” to save wood carving. Documentation alone cannot keep the practices alive. Keeping the practices alive alone cannot change people’s views on the value of wood craft. To prevent wood carving from becoming a lost craft, it is imperative that people still value it and want to take part in it, whether that be visiting wood carved temples, contracting wood carvers to build furniture, or buying small handmade products. The idea is cyclical in nature: museums and organizations like NORTH can teach and inform people to value traditional wood crafts, more people valuing the craft can keep artisan livelihoods alive, and a greater awareness and interest in these crafts can allow for more research by preservation organizations.

Throughout the course of our research, it became more and more evident that the most important factor contributing to the level at which wood carving is surviving is the value that people place on it. Value is placed on temples, so wood carvers are still able to work on building new temples and renovating old ones. However, less value is placed on furniture and other household objects since mass production has led to cheaper alternatives, so these wood carvings are not as common. To make wood carving thrive again, the very ideals of humans need to be altered, and this is no small task.

## Chapter 6 - Recommendations & Conclusions

*Below we provide recommendations for further continuation of this project. Based on our results and findings, we believe that these recommendations can help to support and promote the livelihoods of local wood carvers.*

### Recommendation 1: Conveying the Value of Wood Carving

Our first recommendation is to distribute a pamphlet that demonstrates the value and worth of wood carving. While speaking to our interviewee at the Himachal State Museum in Shimla, we were informed that people are less likely to buy traditional wood carved products, since items that have the same function can be mass produced significantly faster and cheaper. For example, jewelry boxes that were once intricately carved by hand can now be made significantly faster using modern machines, using the same wood or other cheaper materials like plastic. Therefore, educating the public on the history of wood carving and its importance is one way to convey the value and quality of traditional wood carved items, to show they are superior to mass produced goods.

One case study to gain inspiration from is ethically sourced chocolate bar companies. Typically, these chocolate bars are more expensive than regular grocery store chocolate bars, but they boast higher quality while supporting cocoa bean farmers. Many of these companies have websites to promote their products, where they have pages dedicated to explaining what makes their chocolate bars high-quality and their philosophies around ethical chocolate making. An example company is Dandelion Chocolate, which focuses on single origin cocoa beans. They highlight the people and places where they obtain the beans, increasing transparency and promoting trust through their advertising. Therefore, people are more likely to spend extra money if they believe in the cause and trust that the company's values align with their own.

We have taken inspiration from marketing tactics such as this to create a pamphlet, found in Appendix D, that showcases the importance of wood carving and promotes interaction with wood carved temples. While we are not trying to sell a specific product, we are attempting to sell the *idea* that wood carving is valuable and should be appreciated. The pamphlet contains easily digestible information about wood carving and showcases the Hadimba temple, which the reader can visit if they want to appreciate the intricate wood carvings. Since this pamphlet specifically focuses on the Hadimba temple, it should be

distributed around the Manali area to increase the likelihood of people travelling to the temple and being insightful visitors to the sites history and craft. Hotels and cafes are ideal locations for these pamphlets to target tourists who may not know that these wood carved temples exist. Future work involves creating different versions of the pamphlet to showcase temples to distribute in different areas, for example the Tara Devi Temple in Shimla or the Shri Parashar Rishi Temple in Mandi. For a more direct approach, products and artisan information may also be provided within similar pamphlets to provide a means of easy and cost-effective marketing.

## **Recommendation 2: Support and Promote Existing Organizations**

One second suggestion is to support and promote existing organizations aiding the cause of preservation. Throughout our field visits we met with different groups of people in the field of wood carving, from village artisans, museum historians, to architects and market vendors. We identified how organizations such as the Himachal Pradesh State Museum and NORTH architecture firm worked to preserve the historic craft through documentation and continuation of the craft. Connecting with and supporting these groups can be a viable and important means of preserving traditions and culture.

Museums allow the public to observe this ancient art in its original and magnificent depictions. Promoting greater visitors and governmental incentives towards these conservational groups can be enough to preserve the craft's history and culture. One such way is providing the museums with more resources to further their research. Throughout our museum visits, we have found a common lack of plaques and signs describing what each item is. Providing funding to add these plaques can help to further educate each visitor on the history and importance of wood carved items.

Furthermore, architecture firms striving on sustainability and vernacular design not only recreate history, which is at risk of being lost, but also help the environment and people which inhabit them. Learning from such groups and how they collaborate and work with the community will surely help future investigations in artisanal crafts. Further resources and funding can allow them to expand their network of apprentices, build traditional homes, and research environmentally friendly materials such as bamboo and hemp.

Future IQP-ISTP projects may find these community-based means of preservation quite impactful and significant to culture and tradition. It is thus our suggestion for others exploring this topic to consider a class or club based collaborative effort in the field of artisanal crafts at IIT Mandi. Students participate in many clubs on campus, of them ArtGeeks which conducts

activities during fests such as Exodia for various arts and crafts. Looking into how traditional art practices and skills may be implemented into this existing club, or into a new extracurricular program or class for humanities and social sciences credits could be beneficial to preserving the history of the craft and for engagement of the younger generation.

### **Recommendation 3: Continuing Product Development**

Our final recommendation is to further build on the product we designed during our project. Based on the feedback we received on the cuckoo clock, more work needs to be done to create a cost-effective and marketable souvenir. However, some careful consideration should be put into these new designs. Through the marketing surveys, we learned that some wood carvers are more likely to make products that have spiritual or religious significance. This is one of the reasons that our cuckoo clock showcases a Hadimba-inspired temple. Future product designs should also be considered containing spiritual or religious elements. In addition, tourists would be more likely to buy these products as they more accurately depict Himachal Pradesh and hold more significant meaning as opposed to a simple magnet or common trinket.

Another important factor to consider while creating designs for wood carvers to make and sell is to remember that wood carvers are the experts. While we can come up with designs that are marketable based on our research, the wood carvers should ultimately be held as the ultimate authority when it comes to what products they want to sell. Input from the artisans should be sought out, and the product designers should in turn incorporate any feedback from the artisans into their designs. It will take at least a few iterations to produce a good, marketable product, which has proven to be out of the scope of this project. But based on our initial research, there is promise in spending the time to design a souvenir that accurately represents the wishes of wood carvers and Himachal Pradesh itself.

Potential customers for these products include tourists coming to Himachal Pradesh and IIT Mandi itself. One of the initial goals of the project was to create a souvenir that symbolizes Himachal Pradesh, since such a souvenir does not already exist. Tourists would then buy this product since it holds such a cultural significance to the area. As for IIT Mandi, they could pay for local wood carvers to make these products and give them out as gifts to visitors and guests. This is valuable for both sides; IIT can provide its guests with quality souvenirs that are unique to Himachal Pradesh, and local wood carvers can make a profit while continuing the craft that is special to them.

## Conclusions

This project has constantly evolved over the short period of seven weeks, much like the art and craft of wood carving has changed over several millennia. We had come to the Himachal Pradesh region with the mindset that wood carving was a dying art, in need of preservation efforts. However, we quickly learned that the craft persists amongst contemporary life through temple architecture. Although there are stylistic changes in appearance due to cultural transformations as well as economic considerations, new wood carved temples are erected each year across India. However, smaller scale wood carved handicrafts made by artists have been limited in their growth. By examining the tourism industry of Himachal Pradesh, we identified means of expanding the market presence of wood carved goods through novel product designs and improved marketing strategies. In the end, by understanding the history and context of traditional artisanal works, and implementing them to modern tastes and demands, the culture and livelihoods of craftsmen can be improved.

When first introduced to this project we had considered technological and production innovations to the traditional craft as something beyond the scope of preservation and our background as foreign guests to native culture. Upon understanding the diversity of culture, craft, and thought of H.P. and India as a whole, it was pertinent to have a more inclusive perspective. The loss of a traditional art often feels inevitable with modernization and change, yet when analyzing wood carving of the region, we discovered that the craft has always been changing, adapting, and overcoming challenges through the ages. Here the question we faced was exactly what defines a form of art? Is it for us, or anyone for that matter to decide? Where there exist people, there will be art, and through our researching journey we have come across people still driven and passionate for this craft.

When this project was proposed there was limited understanding of the craft and market of wood carving. With the time we have dedicated in research, we were able to gather a good baseline of knowledge about wood craft traditions, the challenges that artisans face, what a marketable product might look like, and what is currently being done by existing organizations to protect the craft. However, we have merely scratched the surface of the intricacies and nuances of these topics. Had we been given more time, there are further ventures we could have explored in addition to diving deeper into the avenues we did focus on.

During our interview with Dr. Hari Chauhan, we learned that Chamba is a hot spot for wood carvings in Himachal Pradesh. While we had initially deliberated traveling to Chamba, we ultimately decided not to due to the prolonged period of travel and time logistics. We feel as though going to Chamba could have given us many more opportunities to speak



with artisans and experts, and a greater philosophical and narrative perspective on wood carving throughout Himachal Pradesh.

During our interview with Rahul Bhushan at NORTH, we discussed that even though government resources get allocated to aid traditional arts and crafts, the resulting outcomes are not usually in the best interest of preservation. He used the example of Naggar Castle, which was recently renovated. His opinion was that the castle is not accurate to what it used to be and seems to be more oriented to tourism rather than historical accuracy. We wish to have had the time to explore the topic of government funding and its impacts, as it could have helped us to discover where money is getting misused and make recommendations to tackle this issue. We also could have used it to bolster our argument for supporting organizations who are rightly preserving wood carving, especially museums. With a greater understanding of how much and where funds to these organizations are distributed, we would be able to make more knowledgeable and deeper recommendations.

Finally, if we had more time, we would have completed more iterations of the product design and more market research to determine advertising strategies. During our time, we were only able to complete one iteration, and we believe that multiple iterations will have to be completed before the product is ready to sell. We have been asked how this product will reach people, and our research lacks a good answer for this. At our current understanding for instance, we are not able to determine whether appealing toward local buyers or foreign customers would be more or less successful; or whether there is more space for growth in the luxury or more affordable markets. More interviews and data collection will have to occur before there is a well-supported answer to these factors.

When considering preservation or innovation there are different avenues of desires and results. While it may be important to continue the traditional techniques and skills to future generations, it is naught when the value of the craft itself is lost. Technological advancement in many cases is a double-edged sword—although allowing for quicker, lower cost production, as well as less physical labor and strain, the very value of the craft in its patient, laborious process is lost. With the loss in value the meaning of the craft is further lost. According to NORTH and from our interviewing experiences, the meaning and significance behind many of the carving styles, designs, and motifs are unknown or lost to time. Mere thumb rules persist, to depict certain deities such as Ganesha on the top of doorways or including Hanuman with Ram. With a greater understanding of the issues faced by wood carving in Himachal Pradesh it is more evident that there exists a societal challenge which is not so easy to tackle as creating a product or documenting sites. The importance of the craft must be conveyed in order for it to not only be preserved but honored and thrive.

## References

- Aamir, N. (2018). The Rise and Fall of the Tradition of Woodcarving in the Subcontinent. *Journal of the Punjab University Historical Society*, 31(1), 161–171.  
[http://pu.edu.pk/images/journal/HistoryPStudies/PDF\\_Files/16\\_V-31-No1-Jan18.pdf](http://pu.edu.pk/images/journal/HistoryPStudies/PDF_Files/16_V-31-No1-Jan18.pdf)
- Ajayi, N. O., & Adékòyà, E. O. (2021). Examining the Technology and Craft of Wood Carving in Isagira–Elele town, Lagos. *LASU Journal of African Studies*, 9(2), 131–148.
- Al-Baghdadi, M. (2017). 3D printing and 3D scanning of our ancient history: Preservation and protection of our cultural heritage and identity. *International Journal of Energy and Environment.*, 8(5). [https://www.ijee.ieefoundation.org/vol8/issue5/IJEE\\_07\\_v8n5.pdf](https://www.ijee.ieefoundation.org/vol8/issue5/IJEE_07_v8n5.pdf)
- Business Insider. (2021, September 3). How bone carvers in India are keeping a prehistoric art alive | Still standing [Video]. YouTube.  
<https://www.youtube.com/watch?v=A2rEZKPfAIs>
- Choge, S. K. (2004). The woodcarving industry in Kenya. *Center for International Forestry Research*, 149–167. <https://www.jstor.org/stable/resrep02033.15?seq=2>
- Coleman, A. (2016, July 1). Preservation of indigenous wood carving knowledge of African traditional people through the use traditional wood carvers database framework (Twcdf). <https://nopr.niscpr.res.in/handle/123456789/34272>
- Dandelion Chocolate. (n.d.). *Origins*. <https://www.dandelionchocolate.com/pages/origins>
- Development Commissioner (Handicrafts), Ministry of Textiles, Government of India.* (n.d.). <https://handicrafts.nic.in/>
- Eichmann, G. (2016). Sarahan-Bhimakali-04-gje.jpg [Photograph]. Wikipedia Commons.  
<https://commons.wikimedia.org/wiki/File:Sarahan-Bhimakali-04-gje.jpg>
- Handa, O. C. (2006). *Woodcarving in the Himalayan Region*. Indus Publishing Company.

India Today. (2022, August 23). Meet Rajesh Kumar, artist from Himachal Pradesh, who turns waste wood into art sculptures [Video]. YouTube.

<https://www.youtube.com/watch?v=WkJfn48er1Q>

Na, D., Muthuveeran, A., Azizi, N., Ma, L., Ma, Y., & Gao, Y. (2023). Research on the Protection of Architectural Woodcarvings in China from Building Homogeneity: A Synoptic Review. *International Journal of Academic Research in Business & Social Sciences*, 13(9). <https://doi.org/10.6007/ijarbss/v13-i9/18353>

Na'am, M. F., Achmadi, T. A., & Zakiyyatussa'diyah, Q. (2019). Learning Improvement of Wood Carving Skills in SMK for Preservation of Local Wisdom and Its Contribution in Furniture Industrial Sector in Jepara. *Atlantis Press*, 276–282.

<https://doi.org/10.2991/assehr.k.191217.045>

Nasir, O., & Kamal, M. A. (2021). Vernacular architecture as a design paradigm for sustainability and identity: the case of Ladakh, India. *American Journal of Civil Engineering and Architecture*, 9(6), 219–231. <https://doi.org/10.12691/ajcea-9-6-2>

*NORTH*. (n.d.). <https://thenorth.in/architecture>

Shi, M., & Ren, S. (2019). A study on Productive Preservation and design Innovation of Taoyuan Wood Carving. In *Lecture Notes in Computer Science* (pp. 203–214).

[https://doi.org/10.1007/978-3-030-22577-3\\_14](https://doi.org/10.1007/978-3-030-22577-3_14)

*The Handicraft & Handlooms Exports*. (n.d.). <https://www.hhecworld.com/>

Ullah, I. (2018). Wood carving- traditional art of Malaysia to be a safeguard and protected / Irfan ullah - UiTM Institutional Repository. <https://ir.uitm.edu.my/id/eprint/29925/>

*Wood Carvings*. (2022). Himachal State Museum. <https://himachalstatemuseum.in/wood-carvings/>

Wright, K. D. (2008). Cleverest of the clever: coconut craftsmen in Lamu, Kenya. *Journal of Modern Craft*, 1(3), 323–343. <https://doi.org/10.2752/174967808x379416>

# Appendices

## Appendix A: Consent Form for Interviews

“Hello. We are [introduce ourselves, something to the effect of – Pratt, Cam, and Laura from Worcester Polytechnic Institute, a science and engineering university located in the U.S., working with IIT Mandi]. We are doing research into issues that wood carvers in Himachal Pradesh face, and looking into solutions that can remedy these problems. This interview is one way that we are gathering data. This is a completely voluntary interview, and you have the right to end it at any point. You can choose to skip questions if you do not want to answer them. Your answers to these questions will help us determine a plan for the preservation and innovation of wood carving practices. Do we have your consent to begin the interview?”

## Appendix B: General Interview Format with Artisans

### *General Wood Carving Questions:*

- What are some items that you typically make/work on?
- How long have you been wood carving?
- How did you start wood carving?
- How has the craft changed over your lifetime?
- How important is wood carving to you?

### *Challenges - Marketing and business*

- What types of wood carving do you do?
  - Has this changed over time? Why and how?

- If they sell smaller items:
  - Have sales changed during your wood carving career? If so, explain how.
    - Follow-up: Why do you think that is (what factors contribute to the change in sales)?
  - Do you notice a change in the number of customers you get? Why do you think that is?
  - Do the customers today have different requests than those from 10-20 years ago?
  - How do you find customers?
    - How do you spread the word about your products? Is it mostly through word of mouth or do you utilize other methods to get customers?
  - Where do you typically sell your products (markets, out of a workshop, etc)?
- If they work on larger jobs (architecture/temples):
  - How has finding jobs changed over time?
    - Have you noticed a change in the number of jobs you can find?
  - How long does a typical job take you?
  - How do you find jobs?
    - Do you reach out to potential customers, or do they reach out to you?

### *Challenges - Apprentices / Younger Generation*

- How many apprentices/younger people have you trained in wood carving?
  - Can you explain the apprentice program?
    - How does it work?
    - How long does it take?

- Do the apprentices continue to work for you, or do they create their own small business?
- Do you have any apprentices currently?
- Have you noticed a change in the number of young people interested in the craft?

### *Challenges – Supplies*

- Where do you typically obtain your tools, wood, and any other supplies needed?
- Is the wood supply reliable?
- Has there been a change over time in things like availability, quality, wood type, price, etc?

### *Existing Solutions*

- How have you adapted to these changes?
- Has there been any help from organizations or the government?
  - If yes:
    - ask to elaborate on their opinions about the “help”
    - Is there anything you wish these organizations should do differently?

### *Concluding Questions*

- Do you know of any other wood carvers that might be willing to participate in our interview?

## Appendix C: Survey for IIT Students

This short questionnaire is intended to be distributed to the IIT students to gauge interest in a club or class for wood carving at IIT. We aim to understand if students currently enrolled and participating in clubs and electives would be interested in more art-oriented activities, and if wood carving would be of interest in the matter.

1) Name: \_\_\_\_\_

2) Email: \_\_\_\_\_

3) Class year

1<sup>st</sup>

2<sup>nd</sup>

3<sup>rd</sup>

4<sup>th</sup>

Other

4) Are you part of any clubs already?

Yes

No

5) If yes, which clubs? \_\_\_\_\_

6) Do you have the availability or time for another club?

Yes

No

Maybe



7) Should the existing art club (Art Geeks) involve more artisanal or traditional crafting activities?

Yes

No

Maybe

8) Would you be interested in more art-related clubs or classes?

Yes

No

Maybe

9) How interested would you be in a club or class focused around woodcarving?

1 – Not Interested

2

3

4

5 – Very Interested

10) Would you be interested in a woodcarving class to fill the humanities and social sciences requirement?

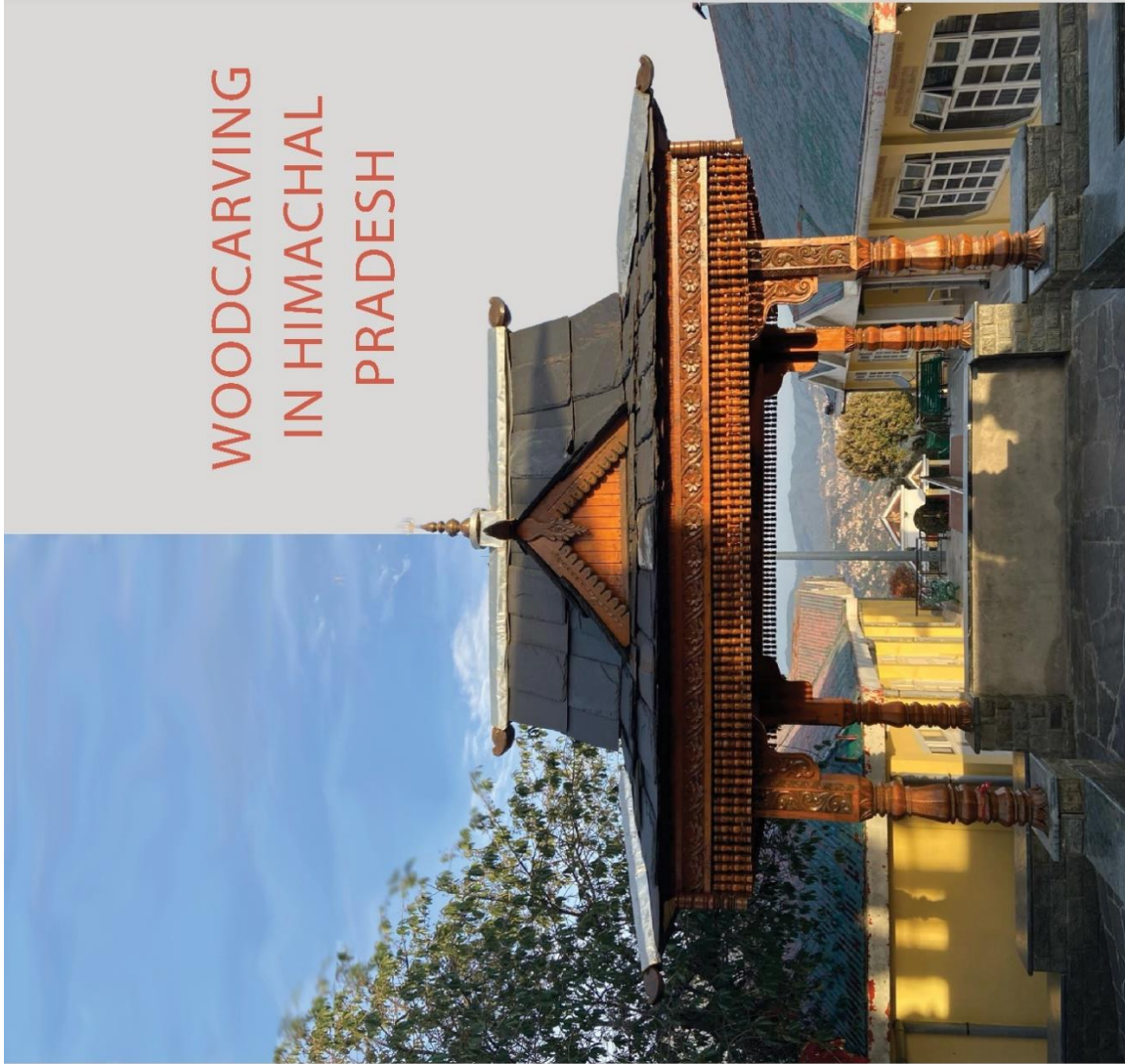
Yes

No

Maybe

11) Any further feedback? \_\_\_\_\_

## Appendix D: Pamphlet for Template (Hadimba Version)



# WOODCARVING IN HIMACHAL PRADESH



### Background

The tradition of wood carving in Himachal Pradesh has existed since the 7th century.

It is the basis for the creation of temple and home architecture, religious artifacts, and furniture making in the region.

Artisans learn from their forefathers and work collaboratively to construct projects using the native deodar wood.

However, due to challenges in wood regulations and contemporary tastes, the craft has evolved over time.

## Why is it important?

Wood carving as a craft is deeply rooted in the culture and traditions of Himichal Pradesh.

The art of wood carving has deep value and meaning for the people of the region and their beliefs and values.

Alterations due to globalization have led to a change from honored traditions and styles.

Native, vernacular architecture construction such as kath kuni is environmentally sustainable and resilient to seismic activity.

More synthetic and chemically treated materials are being used instead of natural construction diminishing the quality of traditional work.



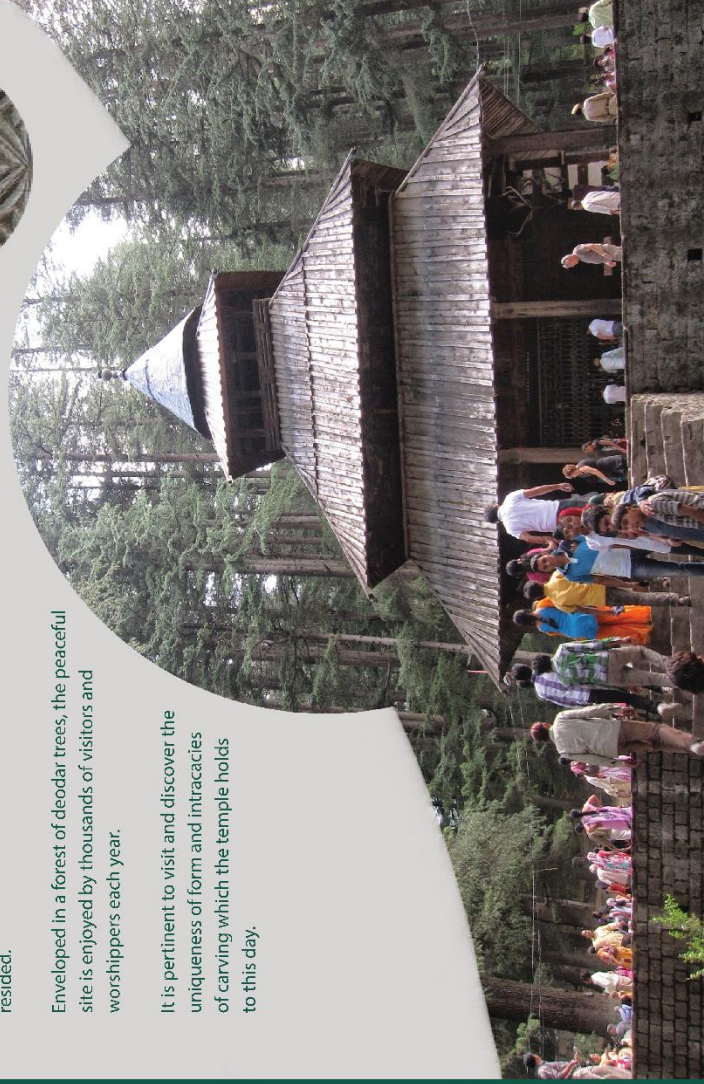
## Temple Spotlight: *Hadimba Devi*

The Hadimba Devi Temple located in Manali is a must visit site to experience centuries old native architecture.

It was created in 1553 by Maharaja Bahadur Singh on the site of where Hadimba Devi—wife to Bhima from the great Mahabharata, was thought to have resided.

Enveloped in a forest of deodar trees, the peaceful site is enjoyed by thousands of visitors and worshippers each year.

It is pertinent to visit and discover the uniqueness of form and intricacies of carving which the temple holds to this day.



## Appendix E: Findings Summary Matrix

		Sources				Scholar		Results		
								Collective Inferred Summary	Number of Sources in Agreement	
Primary Questions	Current Status	Is woodcarving dying out?	No	Neutral	Neutral	Yes	Yes	Somewhat	3	
	Materials	What wood is used?	Deodar and imported	Deodar, pine	Deodar	Deodar and imported	Deodar	Deodar	Deodar when available, imported otherwise	5
		Where does wood come from?	Gov't sanctioned sources	Salvaged from buildings, sanctioned sources	Gov't sanctioned sources	Gov't sanctioned sources	Gov't sanctioned sources, illegal harvesting	Gov't sanctioned and various supplemental harvesting sources	Gov't sanctioned and various supplemental harvesting sources	5
	Tools	What hand tools are used?	Planers, chisels, mallets	Planers, chisels, mallets	Planers, chisels, mallets	Planers, chisels, mallets	Planers, chisels, mallets	Planers, chisels, mallets	Planers, chisels, mallets	6
		What electric tools are used?	Lathes, routers	-	Lathes, routers	-	Lathes, routers, CNC machining	Lathes, routers	Lathes, routers	3
	Market	Where do tools come from?	Tool making caste/villages, handmade	Tool making caste/villages	Tool making caste/villages	Tool making caste/villages, handmade	Tool making caste/villages, handmade	Tool making caste/villages, handmade	Tool making caste/villages, handmade	5
		Who purchases these products?	Villages building a temple	Carving done by village, for villages?	Villages building a temple	Villages building a temple	Villages building a temple	Villages building a temple	Villages building a temple	4
	Traits of Objects Produced	What are the carvings produced for currently?	Temples, small objects by request	Temples and houses	Temples	Temples	Temples	Temples	Mainly temples	5
		What do current carvings depict?	Religious figures and symbols	Religious figures and symbols	Religious figures and symbols	Religious figures and symbols	Religious figures and symbols	Religious figures and symbols	Religious figures and symbols	5
	People Involved	Who is trained to be the next generation?	Children of current carvers	Children of current carvers	-	Children of current carvers	Children of current carvers	Children of current carvers	Children of current carvers	4
How is training done?		Lifetime exposure, limited formal instruction	Workshops and formal instruction sessions	Lifetime exposure, limited formal instruction	Lifetime exposure, limited formal instruction	Lifetime exposure, limited formal instruction	Lifetime exposure, limited formal instruction	Lifetime exposure, limited formal instruction	5	