



WEAVING OF DREAMS: THE BAMBOO CRAFTS OF BAGOS AT BULALAN, SUDIPEN, LA UNION

***MAYRENA, ARMON C.**

***ANGLIGEN, ANTHOINETTE B.**

***GALDONES, RHOMELIA L.**

***LUQUINGAN, TRISHA ANNE**

Orcid Number 0009-0007-4714-350X

College of Teacher Education

Ilocos Sur Polytechnic State College

Quirino, Tagudin, Ilocos Sur

armonmayrena10@gmail.com

Abstract

This study acknowledges the importance of bamboo weaving in creating numerous handicrafts made out of bamboo that contribute to the welfare of the weavers and to the community itself. A qualitative-exploratory approach was employed. The data were examined using thematic analysis. Using interviews and observation, it determined the opportunities, challenges, and preservation of the culture. Thematic analyses the extended texts yielded the four (4) themes made in accordance with their responses: (1) Cultural and Social Connections; (2) Financial Support and Fulfillment; (3) Challenges in Bamboo Crafting; and (4) Cultural Promotion. These refer to how the bamboo weavers revealed the challenges, opportunities, and preservation of bamboo weaving. Interestingly, the sharing of participants revealed that the practice of bamboo crafting can enhance social and cultural ties within communities. By earning a sustainable income from their craft, these families can improve their standard of living and have access to educational support. The challenges they encounter commonly cause them to suffer from a range of physical ailments, including strains and injuries. Bamboo crafters learned to accept the changes that occur in society and how to preserve the culture through the strategic implementation of agri-tourism initiatives and the distribution of tokens as symbolic gestures of appreciation. Based on the findings, the researchers recommend that for bamboo weavers to actively engage in passing down their knowledge and skills to the younger generation and address the physical challenges of bamboo crafters, establishing an ergonomic workspace is essential. The community itself is urged to advocate for policy support and funding mechanisms to sustain and promote bamboo crafting as an integral part of the community's cultural heritage

Keywords: bamboo weaving, challenges, preservation, opportunities



I. Introduction

Bamboo weaving is not just a craft; it is a lifeline, a fire of hope, and a source of sustenance for countless weavers and their families. As they meticulously create intricate patterns, they also weave dreams of education and opportunity for their children. The income from weaving sustains the family and fuels the dreams of sending their children to school. With each bamboo craft they produce, they weave together their children's dreams.

Bamboo is a strong and durable natural material. It grows much faster than wood, typically reaching its optimal strength for structural use in just 3 to 5 years Yunida et al., (2018). The utilization of bamboo showcases its wide application in everyday life and decorative arts, making it an integral part of their livelihood and cultural expressions. It requires minimal water and pesticides and can be harvested without causing damage to the environment. This makes it an attractive alternative to traditional materials like wood and plastic. Bamboo offers wonderful opportunities to develop and promote these traditional crafts and their market value. However, to stay competitive, it's essential to improve labor skills, enhance product quality, and devise effective marketing strategies to attract more customers. Although bamboo is often praised for being a highly sustainable material, improper harvesting and processing practices can cause serious environmental damage. This can lead to deforestation and harm bamboo ecosystems and biodiversity, as noted by Alemayehu and Hido (2023).

In the Philippines, bamboo crafting presents a unique blend of challenges and opportunities. The study by Barandon, (2015) in Rinconada District of Camarines Sur area revealed that the social benefits derived by the bamboo entrepreneurs can able to communicate to more networks, adequate support for the education of children is being provided, and television sets, while economic benefits are having their own house with sanitation. Thus, it becomes evident that bamboo entrepreneurship not only fosters significant social and economic benefits for the individuals involved but also highlights the broader implications for similar communities engaging in bamboo crafting. Despite of its potential, bamboo crafting often lacks recognition compared to other materials like wood or metal. Many people are unaware of bamboo's versatility and strength as mentioned in the study of Hailemariam, et al. (2023). A survey was conducted to understand how much designers in Kerala, India, know about bamboo construction. The results were quite telling: while bamboo is a commonly known material, its use in building is not widely seen. According to Mohan et al. (2022), 80% of designers are unaware of the techniques and methods needed to construct and preserve bamboo structures.

This gap in knowledge highlights the need for greater awareness and education in this sustainable building practice. With increasing awareness of environmental issues and the need for sustainability, more people are seeking out eco-friendly products. Bamboo items are particularly appealing to environmentally conscious consumers looking for sustainable alternatives. According to a study by Pramono et al. (2021), bamboo crafts have great potential and demand as tourism products, with many participants showing a preference for traditional bamboo crafts. Indigenous peoples have cultivated a deep connection with bamboo, utilizing it for various purposes ranging from construction and crafts (Maneesh,2022). Bamboo-based livelihoods empower indigenous communities by providing economic opportunities and promoting self-sufficiency. By harnessing the potential of bamboo resources, indigenous peoples can assert greater control over their economic futures and strengthen community resilience. Bamboo weaving holds particular significance, especially among indigenous tribes like the Bagos in Barangay Bulalaan, Sudipen, La Union. The Bagos traces its roots back to the 1st Malay migrating groups to the Philippines, settling along the upper delta of the Amburayan River in the Ilocos Province. For centuries, they have practiced the art of bamboo weaving, creating



utilitarian items such as chairs, tables, and baskets, as well as decorative pieces that reflect their cultural identity and traditions. The intricate patterns and motifs found with the Bagos bamboo crafts serve as a testament to their rich cultural heritage and artistic prowess. Their traditional expertise in bamboo cultivation, harvesting, and crafting reflects centuries of intimate interaction with their natural environments. By integrating bamboo-based livelihoods into their communities, indigenous peoples not only preserve their cultural heritage and traditional practices but also foster economic empowerment and environmental conservation. Recognizing and supporting indigenous-led initiatives in bamboo management and craftsmanship are essential for promoting sustainable development, preserving cultural diversity, and upholding the rights and dignity of indigenous peoples.

Due to fast-changing times, the researchers have noticed that the younger generation of the Bagos in Bulalaan, Sudipen, La Union seems to be less interested in learning the intricate techniques of bamboo weaving, preferring instead to pursue modern livelihood opportunities. Modernization, urbanization, and the influx of alternative materials have posed significant challenges to the preservation and continuation of this ancient craft. By harnessing its inherent strengths and addressing challenges collaboratively, bamboo crafting has the potential to emerge as a dynamic force for positive change, supporting livelihoods, preserving traditions, and promoting sustainable development.

Moreover, the demand for sustainable products and the potential for rural development underscore bamboo crafting is potential to create positive social and economic impacts. With concerted efforts to address challenges and leverage opportunities, bamboo crafting can emerge as a thriving industry contributing to environmental sustainability and community well-being. Thus, in this study, the researchers aim to explore the status of bamboo weaving among the Bagos in Bulalaan, Sudipen, La Union, identify the challenges and opportunities for its preservation and revitalization, and propose strategies to ensure the sustainability of this cultural heritage.

Research Questions

1. What are the opportunities in bamboo crafting in terms of:
 - a. socio-cultural; and
 - b. socio-economic
2. What are the challenges experienced in bamboo crafting?
3. How does the community contribute to the preservation of bamboo crafting as cultural heritage?

II. Literature

Alemayehu and Hido (2023) identified six key barriers and advantages in the use of bamboo. Designers face challenges such as a lack of awareness, an unorganized supply chain, exclusion from standards, competition from industrial products, a lack of innovation and institutional support, and bamboo's mechanical limitations. Despite these barriers, bamboo offers benefits like structural suitability, being a viable timber alternative, meeting sustainability demands, cost-effectiveness, and positive social implications. Addressing these barriers through improved awareness, supply chain organization, standard inclusion, and innovation support could enhance bamboo's adoption.

Baksy (2023) discovered that bamboo products have significant potential in both domestic and international markets. The study emphasizes that, while a large domestic market exists, the export market, currently dominated by China, presents even greater opportunities. Tapping into this market requires the industrialization of the bamboo sector. However, numerous challenges exist at each stage of the production-to-consumption system, many of



which are legislative and regulatory in nature. Addressing these challenges is crucial for realizing the full market potential of bamboo products.

Barandon (2015) revealed significant social and economic benefits for bamboo entrepreneurs in the Rinconada District of Camarines Sur, Philippines. Social benefits include improved social networks and better educational support for children, while economic benefits encompass improved living conditions and better sanitation. Bamboo entrepreneurship provides economic stability and enhances social cohesion and quality of life. The study highlights the broader implications of bamboo crafting for similar communities. This underscores the potential for bamboo entrepreneurship to foster significant social and economic benefits.

Creswell (2009) defines ethnography as a methodological framework where researchers immerse themselves in the daily lives of a cultural group. This approach is crucial for exploring the socio-economic aspects of bamboo weaving within a community. It reveals how the craft supports livelihoods and the challenges and opportunities faced by bamboo weavers. Ethnographic studies provide insights into the cultural significance of bamboo weaving. This helps in understanding the socio-economic dynamics of traditional crafts.

De Ligt (2023) examines the historical significance of fairs and markets in the Roman Empire. The study highlights their role in economic exchange, social interaction, and cultural diffusion. By analyzing archaeological evidence and historical records, the research provides valuable lessons for understanding the roots of modern market systems. The findings have implications for local area development. This underscores the enduring importance of market institutions in economic and social contexts.

Huang and Sun (2021) compare the hygrothermal performance of bamboo and timber construction materials in the Asia-Pacific region. Their research highlights bamboo's potential as a sustainable building material. By analyzing thermal conductivity, moisture absorption, and other relevant factors, the study underscores the environmental benefits and energy efficiency advantages of bamboo-based construction materials. The findings advocate for the wider adoption of bamboo in sustainable building practices. This promotes the environmental benefits of bamboo.

Li et al. (2022) explore how design innovation can drive economic development and cultural preservation in rural China, focusing on bamboo weaving in Shengzhou. The study shows how leveraging local resources and traditional craftsmanship can create value-added products. These products improve livelihoods. Design-driven approaches can catalyze economic development and cultural preservation. This highlights the transformative potential of combining traditional craftsmanship with modern design.

Maneesh (2022) highlights several challenges faced by bamboo product manufacturers, including personal, social, financial, and work-related problems. Issues such as high debt, lack of funds, insufficient income, and health problems are common. Additionally, difficulties in selling products due to a lack of marketing and changing consumer tastes were noted. These challenges underscore the need for better support and resources for bamboo manufacturers. Addressing these issues is essential for the growth of the bamboo industry.



Newaz et al. (2020) explore the socio-economic importance of non-wood forest products for indigenous communities. Their case study on the Marma people highlights the need for policies that safeguard the rights of indigenous communities to access and manage forest resources sustainably. These forest resources support indigenous livelihood strategies. The findings emphasize the socio-economic well-being and cultural resilience of indigenous communities. Sustainable management of forest resources is crucial for these communities.

Ngo et al. (2021) investigate the relationship between forest-related culture and sustainable development in Vietnam. The study examines cultural practices and their contribution to environmental conservation and community well-being. It emphasizes the role of cultural heritage in fostering environmental stewardship and social cohesion. Integrating traditional knowledge and values into sustainable development strategies is essential. This promotes holistic approaches to development that prioritize cultural preservation and environmental sustainability.

Pawar et al. (2022) reveal that bamboo weavers often experience pain in their lower back, neck, shoulders, and buttocks, leading to temporary work stoppages. This highlights the need for better ergonomic interventions and workplace safety measures. The study underscores the health issues faced by bamboo weavers. Addressing these ergonomic challenges is essential for the well-being of bamboo craftsmen. Improved workplace conditions can enhance the sustainability of bamboo weaving.

A survey in Kerala revealed that 80% of designers are unaware of bamboo construction techniques and preservation methods (Mohan et al., 2022). This gap in knowledge suggests a need for greater awareness and education. The lack of awareness hinders the adoption of bamboo in construction. Educating designers about bamboo techniques can promote sustainable building practices. This highlights the importance of knowledge dissemination in the construction industry.

Pieter and Utomo (2023) found that while bamboo value chains in Indonesia perform well economically and socially, they face environmental challenges such as raw bamboo waste. The study emphasizes the need for government support to link craftsmen with potential buyers and create new markets. Improving the economic performance of bamboo value chains is crucial. Addressing environmental challenges can enhance the sustainability of the bamboo industry. This supports the vision of sustaining a green economy.

Phuong and Hop (2022) show how traditional crafts can enhance the tourism experience and support local economic development. Their study on the UNESCO Non Nuoc Cao Bang Global Geopark in Vietnam underscores the importance of preserving traditional crafts as part of sustainable tourism initiatives. These crafts enrich visitor experiences and support the livelihoods of local artisans. Promoting traditional crafts can foster economic and cultural benefits. This highlights the role of traditional crafts in sustainable tourism.

Pramono et al. (2021) found that bamboo batik craft products have significant market potential. Developing labor skills, improving product quality, and creating effective marketing strategies are essential to increase their competitiveness. The study shows that most participants prefer traditional bamboo batik crafts. Promoting these crafts can enhance their



market value. This highlights the need for targeted efforts to develop and market traditional crafts.

Yunida et al. (2018) highlight bamboo's strength and durability, making it an integral part of everyday life and decorative arts in many cultures. Bamboo grows much faster than wood, typically reaching optimal strength for structural use in just 3 to 5 years. The study emphasizes bamboo's wide applications and its cultural significance. This showcases the versatility of bamboo in various aspects of life. Promoting bamboo can enhance its utilization and cultural appreciation.

Sanni-Anibire et al. (2022) propose a framework for the safe use of bamboo scaffolding in Nigeria, addressing safety concerns and promoting sustainable construction practices. The study examines regulatory frameworks, safety guidelines, and best practices. It offers practical recommendations for enhancing safety standards and reducing occupational hazards. Promoting a safety culture is crucial for sustainable construction. This highlights the importance of proactive risk management in the construction sector.

Shah et al. (2020) emphasize the potential of agritourism to increase income and promote rural development in hilly regions. Through case studies and stakeholder analyses, the research assesses the socio-economic impacts of agritourism initiatives. The findings highlight the role of agritourism in diversifying rural economies and enhancing livelihood opportunities. Targeted policy interventions are essential for maximizing these benefits. This underscores the importance of community-based approaches in rural development.

Sriagustini and Supriyani (2022) investigate the ergonomic challenges and occupational risks faced by bamboo craftsmen in Indonesia. The study focuses on work posture and safety concerns. It identifies potential hazards associated with bamboo weaving and proposes preventive measures to mitigate occupational health risks. Ensuring workplace safety is crucial for the well-being of craftsmen. This highlights the need for ergonomic interventions in the craft sector.

Wang (2021) discusses the wide applications of bamboo, from construction to food, and its role in alleviating rural poverty and promoting socio-economic progress. The study highlights the economic benefits of developing the bamboo industry. Bamboo's versatility supports various sectors, including agriculture, fisheries, paper-making, and household products. Promoting the bamboo industry can increase farmers' incomes and drive local economic development. This underscores bamboo's potential in fostering socio-economic progress.

TUN (2019) explores the effects of community-based tourism on local development in Kyaikthale Village, Myanmar. The study analyzes economic, social, and environmental aspects of tourism activities. It reveals how community involvement can foster sustainable development. Empowering local communities in tourism planning and management is essential. This ensures equitable distribution of benefits and minimizes negative impacts on the environment and culture.

Utomo et al. (2021) conduct a value chain analysis of bamboo enterprises in Gunungkidul, Indonesia. The study identifies opportunities and challenges for enhancing the competitiveness and sustainability of bamboo-based businesses. Strengthening market



linkages and improving product quality are crucial. The findings emphasize the importance of value chain interventions for socio-economic resilience. This highlights the potential of bamboo-based livelihoods in sustainable development.

Zhenhu (2015) shows that reviving traditional handicrafts can lead to economic development and modernized lifestyles. The study highlights the importance of innovation and creativity in the handicraft industry. It underscores the role of handicrafts in preserving traditional culture and local characteristics. The development of traditional handicrafts supports economic and cultural continuity. This emphasizes the significance of handicrafts in community development.

III. Research Method

In this study, we employed a qualitative-exploratory approach to investigate bamboo crafting within the Bago community. This method facilitated the collection of nuanced, non-numerical data—comprising narratives, visual documentation, and oral histories—that illuminate individuals' subjective perceptions and social realities (McLeod, 2023)

Guided by ethnography as outlined by Creswell (2009), our research involved deep immersion into the daily lives of Bago community members over an extended period. Through direct participation and observation, we documented their cultural practices, behaviors, and distinctive viewpoints on bamboo crafting. This immersive approach allowed us not only to identify the challenges and opportunities related to bamboo preservation but also to uncover the underlying meanings and cultural values embedded in their craft traditions. By focusing on these personal and communal narratives, our study aimed to generate insights that transcend the immediate context, contributing to a broader discourse on the significance of cultural heritage and sustainability. Ethical considerations, including informed consent and confidentiality, were rigorously upheld throughout the data collection process to ensure respect for participants and the integrity of the research.

It systematically uses a predefined set of procedures to answer questions, collect evidences and procedures, and produce findings that are applicable beyond the immediate boundaries of the study. In addition, according to the study of Shuttled, qualitative approach involves up-close observation of the participants and a detailed description of their cultures, behavior, mutual differences and practices. Through the immersive lens of ethnography, this research was a transformative exploration to unveil the intricate tapestry woven by bamboo within the fabric of community life and cultural identity. This methodological approach not only elucidated the meticulous practices of traditional bamboo craftsmanship but also underscored their contemporary relevance, thereby enriching scholarly discussions on sustainability and cultural heritage.

Selection and Study Site/ Sources of Data

The study was situated in Bulalaan, Sudipen, La Union, an area that emerged as a distinct community from Duplas due to rapid population growth. Nestled in the mountainous terrain, Bulalaan is accessible from Bangar, La Union, requiring a journey of about an hour by jeepney or forty minutes by motorcycle. Approximately 25 kilometers from Sudipen, La Union, this locale provided a rich backdrop for our research on bamboo crafting.

Our participants hailed from the Bago community, renowned for their mastery in bamboo crafting. Utilizing purposive sampling, we deliberately selected individuals whose insights and expertise were essential to addressing our research questions effectively (Nikolopoulou, 2023). This approach enabled us to focus on those who could provide in-depth perspectives on bamboo preservation and cultural practices.



The following inclusion criteria were used to interview a total of 6 respondents for this study: they were bamboo weavers aged between 30 and 50, specialized in their craft, and resided in Bulalaan, Sudipen La Union. Additionally, all participants were Filipino citizens and members of the Bago Community.

According to Creswell (2009), the determination of our sample size was guided by data saturation, a stage where new participants ceased to introduce novel information, thereby ensuring a thorough exploration of pertinent themes. Saunders et al. (2018) conceptualize data saturation in terms of informational redundancy, proposing that it occurs when additional data fail to yield further insights or alter the interpretation of findings. Braun and Clarke (2006), in their discourse on thematic analysis, underscore the importance of quality and depth in qualitative research sample sizes over quantitative benchmarks. They advocate for prioritizing the capture of diverse and nuanced perspectives rather than adhering strictly to a predetermined number of participants. This approach acknowledges that achieving saturation depends on factors such as the complexity of the research topic, the diversity of perspectives within the sample, and the depth of analytical scrutiny required.

Through iterative cycles of data collection and analysis, the researchers ensured a comprehensive exploration of perspectives and experiences pertinent to their study. This methodological rigor facilitated an in-depth examination of the lived experiences and cultural intricacies associated with bamboo crafting within the community, thereby enhancing scholarly understanding of its significance beyond mere statistical quantification.

Research Instrument

The researchers utilized interviews and participant observation as methods for data collection. Researchers prepared semi-structured interview guides tailored to address specific issues relevant to the challenges, opportunities, and benefits associated with bamboo crafting in the Bago community. A semi-structured interview involves asking questions based on a predetermined theme, but without strict ordering or wording, as explained by Tegan (2022).

Additionally, the interview guide for the study was divided into three sections: (a) opportunities in bamboo crafting from socio-cultural and socio-economic perspectives, (b) challenges faced, and (c) preservation of bamboo crafting as cultural heritage. The interview guide was reviewed and validated by the adviser and field experts.

The researchers conducted interviews with the respondents. Informed consent was obtained before scheduling the interviews. Once the respondents agreed, interviews were arranged at times convenient for them to avoid disrupting their work. The interviews were conducted face-to-face. Additionally, the researchers used participant observation. According to the study of Tegan (2023), through participant observation, it aims to observe the culture from an insider's perspective, gaining insights into social dynamics, behaviors, and practices that might not be readily apparent to an outsider or through interviews alone.

This method helps in understanding the context of cultural practices and the subtle nuances of social interaction. Prior to conducting interviews and observations, informed consent was obtained from the participants. Informed consent was obtained to address ethical considerations, ensuring that respondents understood they were not obligated to participate in the study, thus preventing any feelings of unease or discomfort.

Data Collection Procedure

In conducting this study, the researchers allocated time to formulate valid questions aimed at participants. Researchers developed a questionnaire with three main sections focusing on opportunities, challenges, and the preservation of bamboo crafting as cultural heritage within the community. Each section contained specific questions designed to elicit detailed responses. Before



conducting the main interviews, the questionnaire underwent testing with a small group of Bulalaan residents in Sudipen, La Union, who had experience in bamboo crafting, ensuring clarity and relevance to the research goals.

After to ensure the validity of their research questions, the researchers underwent a validation process supervised by their adviser and field experts. This process likely involved assessing the clarity, relevance, and appropriateness of the questions for the study's objectives. Upon approval by their adviser, the researchers proceeded to draft a consent letter addressed to key authorities, including the Dean of the College of Teacher Education, Campus Administrator, Barangay Captain, community Chieftain, participants, and the Municipal Mayor of Sudipen, La Union. This letter sought permission for data collection, emphasizing ethical considerations and compliance with local regulations and institutional requirements.

Thereafter, researchers conducted formal interviews with participants, utilizing storytelling to authentically capture their experiences and cultural practices (Clandinin & Connelly, 2000). To document the data, researchers employed a recording and site observation approach. This method encouraged participants to share insights into bamboo crafting, including its cultural significance, techniques, challenges, and community opportunities. In addition to storytelling, observational techniques provided firsthand insights into participant behaviors and contexts (Satapathy, 2019).

To validate participants' responses, researchers used triangulation, which involved employing multiple data collection methods including storytelling and observational techniques. This approach ensured findings were corroborated from different perspectives (Denzin, 1978), enhancing the understanding of cultural practices and experiences related to bamboo crafting..

Mode of Analysis

To analyze the data, the researchers employed thematic analysis, a widely-used qualitative research method for identifying and interpreting patterns or themes within data (Braun & Clarke, 2006). To interpret the qualitative data, researchers followed a systematic approach outlined by Braun and Clarke (2006). The researchers thoroughly reviewed the data, which consisted of interview transcripts and field notes. During this initial review, researchers identified recurring ideas or concepts, which were labeled as initial codes. These codes were derived directly from the data, reflecting an inductive approach where themes emerge without preconceived notions. Subsequently, the researchers grouped similar codes into broader themes based on their shared meaning or relevance to the research questions. This process required careful consideration of how each theme represented the experiences and perspectives of the participants.

Transcripts were thematically analyzed using an inductive approach. The inductive approach entails extracting meaning and developing themes directly from the data, without any predetermined notions. This means that researchers begin their analysis without any specific expectations about what codes and themes that will emerge (Crosley, 2021).

After transcribing data from various notes and recordings, the researchers marked important information, with recurring responses grouped together in the same column. In the process of analyzing the data, the researchers' major task was coding the data, which was done using the open coding method to construct themes. Open coding is the initial interpretative step in which raw research data is methodically examined and organized into categories Mills, Durepos, & Wiebe, (2010). Techniques like cutting and sorting, as described by Ryan & Bernard (2003), were used to identify similarities and differences among quotes or expressions deemed important.

Ethical Consideration

The researcher followed ethical guidelines meticulously, ensuring participants were protected and respected throughout the study. At the heart of these ethical considerations was the deep respect for



the participants, recognizing them as individuals with intrinsic worth rather than merely sources of data.

A carefully written consent letter was sent to several key figures, including the Dean of College Teacher Education, the Campus Administrator, the Barangay Captain, the community Chieftain, the participants, and the Municipal Mayor of Sudipen, La Union. This letter wasn't just a formal request; it was a promise of transparency and ethical responsibility, signaling the researchers' commitment to conducting their work with integrity.

A crucial aspect was ensuring that participants willingly and fully informedly joined the study. Before conducting any interviews, participants were asked to complete a consent form detailing the study's purpose and their involvement. This process ensured that they retained full control over their decision to participate (E. Smythe, 2000). The consent form also disclosed the intention to audio-record the interviews, giving participants the option to consent to this aspect. Participants were encouraged to ask questions, fostering an open dialogue where their voices and concerns were addressed. This approach fostered a collaborative and respectful research environment.

Another critical element of the research was the commitment to maintaining privacy, confidentiality, and anonymity. These principles were not just technical requirements but were central to respecting the participants' dignity and ensuring they felt safe and valued. By prioritizing these aspects, the researcher created an environment where participants could share their experiences openly, knowing their privacy was protected. This dedication to ethical principles was essential for the study's success and integrity.

IV. Results and Findings

This section demonstrates the collected information regarding the socio-cultural, socio-economic, challenges and the preservation of the Bagos regarding the Bamboo crafts. Their answers have been studied and compiled accordingly and four (4) themes are made in accordance with their responses: (1) Cultural and Social Connections; (2) Financial Support and Fulfillment; (3) Challenges in Bamboo Crafting; and (4) Cultural Promotion.

Cultural and Social Connections

This theme explains the significance of bamboo craftsmanship in enhancing and expanding cultural and social ties within the community. Through crafting, individuals engage in dialogue, share ideas, and exchange experiences, thereby weaving social bonds. Traditional crafts serve as a means of storytelling, allowing individuals to express their emotions, feelings, and even pain Sydora et.al (2023). Two sub-themes have arisen: (1) Fostering a sense of belonging and (2) Engaging in cultural exchanges.

Fostering a Sense of Belonging

Fostering a sense of belonging revolves around how engaging in cultural activities, such as bamboo crafting, strengthens social connections and nurtures a feeling of belonging within the community. Evidently, most of the participants in this study determined and shared that bamboo crafting fosters a sense of belonging within the community.

P1 emphasizes that bamboo crafting engages in dialogue, share ideas, and exchange experiences, thereby weaving social bonds, as he stated:

“Para kaniak, ti panaglaga ket makaitid ti nasayaat a relasyon kadagiti tattao iti komunidadtayo gapu ta naaddaankami iti gundaway a makisarita wenna maki-inistorya.” (“For me, weaving can bring good relationships with people in our community because we have had the opportunity to talk or share stories.”)



Similarly, P3 stated that crafting provides an opportunity for mutual teaching and learning, fostering strong relationships within the community.

“babaen iti daytoy, naaddaan kami ti gundaway nga agsinnursuro ken makaitid ti nasayaat nga relasyon kadagiti tattao iti komunidad tayo.” (through this, we have had the opportunity to learn from each other and provide a good relationship with the people in our community.)

Meanwhile, P6 also shared that crafting together creates an opportunity to cultivate strong camaraderie among individuals within the community.

“ti panaglaga iti kawayan a makatulong kaniak tapno adda met nasayaat a relasyon ko iti mannursurok ken gayyemko iti komunidad.” (weaving bamboo helps me to have a good relationship with my teacher and friend in the community.)

Social learning theory, introduced by psychologist Albert Bandura, posits that learning is a dynamic process influenced by observation, imitation, and modeling. It emphasizes the interplay between environmental and cognitive factors, including attention, motivation, attitudes, and emotions, in shaping the learning experience. In the context of bamboo crafting, social learning theory highlights how individuals acquire crafting skills by observing and imitating the techniques demonstrated by others, such as children learn from parents who are constantly beside them observe their parents’ approaches to bamboo crafting, social learning theory applies perfectly.

Moreover, in Cultural theory by Jane Collier and Milt Thomas, it deals with the study into how individuals use communicative processes to construct and negotiate their cultural group identities and relationships in particular contexts. Also, cultural identity theory explores how individuals’ sense of belonging and self-concept are shaped by their cultural backgrounds. In the case of the study about bamboo crafting among the Bagos in Bulalaan, cultural identity theory helps illuminate the significance of this craft in shaping the community’s identity. Bamboo crafting serves as a cultural expression deeply embedded in the Bago tribe’s heritage and traditions. Through bamboo crafting, the Bagos preserves their cultural identity and passes it down through generations. The craft reflects the tribe’s values, beliefs, and social practices, reinforcing their collective identity. It serves as a means of cultural continuity and resistance against external influences.

In addition, research reveals that participation in bamboo crafting fosters a strong sense of community identity and belonging among villagers. TUN (2019) reveals that participation in bamboo crafting fosters a strong sense of community identity and belonging among villagers. The collaborative nature of bamboo crafting sessions provides opportunities for villagers to come together, share stories, and support one another. Moreover, the traditional knowledge passed down through generations during these crafting sessions reinforces cultural pride and strengthens intergenerational bonds within the community Ngo et. al, (2021)

Engaging in Cultural Exchanges

Engaging in cultural exchanges involves the sharing and learning cultural practices, and knowledge between individuals. In this section, the participants narrated how they learned bamboo crafting.

According to P2, P4, and P5 they learn bamboo crafting skills through passing down from one generation to the next and also by simply observing the process up close, ask questions, and gain insights into the nuances of bamboo crafting

P2 “binuyak ken inadal ko iti katugangak no kas anu daytoy nga panaglaga, manipod ditoy nasursurok kit manipod tatta isu ti maysa nga innak araramidin.” (I watched and learned from my mother how to weave, from this process, I gained knowledge and skills, and thus became someone who crafts.)



P4 “Ni nanangko ket binuybuyak ken insuru nak no kasano ti agaramid kadagiti produkto a kawayan.” (I observed my mother and learned how to craft bamboo products from her.)

P5 “Nasursurok ti panagaramid iti kawayan babaen ti panangpaliiwko ken damdamag kadagiti dadakkelko, ket nagpraktisak agingga a maaramidko dayta nga agmaymaysa.” (I learned bamboo crafting through observing and assisting my parents, and I practiced until I became proficient at it myself.)

These narratives of participants underscore the value of intergenerational knowledge transfer and observational learning in cultural exchanges, particularly within the context of traditional craft practices like bamboo crafting.

Socio-cultural theory, brought to life by Lev Vygotsky, shines a spotlight on the power of social interaction, cultural context, and collaborative learning in shaping who we are. This theory paints learning as a profoundly social process, where our cognitive abilities are sculpted through exchanges with those who possess greater skills. Imagine the bamboo crafting of the Bagos, a tradition steeped in socio-cultural richness. Here, the intricate dance between cultural practices and individual growth is vividly on display. The bamboo crafting techniques of the Bagos, passed down through generations like treasured heirlooms, are a tapestry woven with cultural values and norms. Through the art of apprenticeship and the keen eye of observation within their tight-knit community, individuals absorb the skills and wisdom essential for bamboo crafting. Socio-cultural theory illuminates how these practices do more than keep cultural heritage alive—they weave a fabric of social unity and carve out a shared identity, binding the community together in a collective embrace.

Phuong & Hop (2022) explores the role of community-based learning initiatives in preserving and promoting cultural heritage crafts, including bamboo crafting. It highlights the importance of social networks, mentorship relationships, and experiential learning opportunities in transmitting traditional craft knowledge across generations.

Financial Support and Fulfilment

This theme delves into how bamboo craftsmanship aids in fulfilling economic requirements within the Bago community, while also fostering a sense of fulfilment and achievement through involvement in bamboo-related endeavors. In the study of Wang (2021) findings several bamboo industries practiced in the country that helps to increase farmers’ incomes and promote economic development. Conversely, in the study of Barandon, (2015) revealed that the social benefits derived by the bamboo entrepreneurs can able to support to education of children and daily necessities in their own house with sanitation. Thus, it becomes evident that bamboo entrepreneurship not only fosters significant social and economic benefits for the individuals involved but also highlights the broader implications for similar communities engaging in bamboo crafting. Two underlying sub-themes have emerged: (1) Educational Support and (2) Daily necessities support.

Educational Support

Bamboo crafting has been found to provide significant support for education of their children. Specifically, R1, R3, and R10, shared that the income generated through bamboo crafting often contributes directly to funding education expenses for their children.

P1 “Babaen iti panaglaglagak nasuportarak met dagiti anakko iti panagadalda”. (Through my weaving, I supported my children in their schooling.)

Similarly, P2 stated that bamboo crafting can also contribute even to his grandchildren.

“Iti innak panaglaga iti kawayan naikanak iti gundaway a mangsuporta iti edukasyon dagiti annak ko iddi ken agtultuloy nga araramidek dayta aggingana tatta para kadagiti appok.” (Through my



bamboo weaving, I found a way to support my children's education, and I continue to do so to ensure the same for my grandchildren.)

Moreover, P6 revealed that it was through bamboo crafting he can provide for his children.

“Iti panaglagak iti kawayan iso ti pagal-alaak iti dadduma pay a kasapulan ken balon dagiti annak ko nga apan agiskwela.” (Bamboo weaving is my means of providing for other needs and for my children to continue their schooling.)

It shows in a study by Utomo et.al (2021) found that the income generated from bamboo crafting directly contributes to funding children's education, including school fees, supplies, and other related expenses. The intricate relationship between bamboo crafting, and children's education provides insights into how sustainable livelihood strategies centered around bamboo can contribute to poverty alleviation and human development outcomes, particularly through investments in education Newaz (2020).

Daily necessities support

Daily necessities support refers to the role of bamboo crafting in addressing the basic needs of individuals and families within the Bago community. It encompasses various aspects related to livelihoods, income generation, and the fulfillment of essential requirements for a decent standard of living. Bamboo entrepreneurship also plays a crucial role in meeting the daily necessities of individuals and families within the community.

According to P3 crafting has provided a means for families to sustain their livelihoods.

“Babaen ti panagaramid iti kawayan, nasustinerko dagiti kasapulanmi, manipud panangikabil iti taraan iti lamisaan agingga iti panangbayadko iti koryente.” (Through bamboo crafting, I sustain our needs, from buying groceries at the market to paying for electricity.)

Similarly, to P4 “Ti panaglaga iti kawayan ti nangted kaniak iti gundaway a mangilako iti inaramidko, nga iso iti pagalaak iti kuartak tapno magatangko dagiti kasapulan mi iti balaymi.” (Bamboo weaving provided me with the opportunity to become a seller of my creations, which helps me earn money to buy our household necessities.)

P5 also stated “Uray man haan nga dakkal ti kita a maala babaen iti panaglaga, dagiti aramidmi mi met ken ilaklakomi a kas kadagiti wedding tokens nga order ti kliyente ket nakatulong kadakami a nangpasayaat iti dadduma a paset ti balaymi.” (Even though the income from weaving may not be substantial, our crafted products, such as the wedding tokens ordered by clients, have helped us supplement our income and improve some parts of our household.)

The results steadfast the idea that engaging in bamboo crafting can lead to improvements in living standards within the community Li (2022). On the other hand, results might show that engagement in bamboo crafts creates employment opportunities within local communities. Craftsmen may be able to support themselves and their families through various bamboo-related activities, such as bamboo furniture making, handicraft production, or bamboo-based construction Utomo (2021).

Challenges in Bamboo Crafting

The theme explores into the multifaceted obstacles encountered by Bagos in the bamboo crafting industry. These challenges span various aspects of the craft, including material sourcing, technical skills, market dynamics, and environmental sustainability. Understanding and addressing these challenges are essential for artisans to overcome barriers to success and ensure the longevity and vibrancy of bamboo crafting as a sustainable livelihood. Two distinct sub-themes were developed: (1) Market Fluctuation and (2) Physical strain.



Market Fluctuation

The demand for bamboo products is subject to market fluctuations influenced by complex interplay of economic, social, and environmental factors. As reference, P1, P2, and P6 share their challenges in reaching costumers.

P1 said that selling bamboo crafts during the pandemic was challenging due to reduced foot traffic in physical stores.

“iddi nagraira dayta nga Covid nga addu iti haan nga nalako gapo ta narigat iddi iti makarwar.” (During the Covid-19 Pandemic we didn't earn much because it was difficult to sell since it was hard to go out.)

Meanwhile, P2 said that he faced competition from other materials or products. “Narigat daytoy a kita ti trabaho ta adda dagiti mamayat ken nalaklaka nga mausar tattan” (This kind of work is difficult because there are already better and cheaper products now.)

And lastly, P6 shares that during rainfall can be challenging for them.

“ti talaga nga rigat na met ket no awan gumatang kadagiti produkto aglalo no panagtutudo kit narigat iti agibyaha iti sabali nga lugar.” (the real challenge is when no one buys our products, especially during the rainy season. It becomes difficult for us to transport our products to another place).

Market fluctuations in the bamboo craft industry are subject to a multifaceted array of influences, including consumer preferences, economic conditions, and competition from alternative materials Huang (2021). Economic conditions exert significant pressure on market dynamics within the bamboo craft industry. Additionally, as environmental consciousness grows, bamboo craft producers must navigate competition not only from traditional materials but also from other sustainable alternatives, necessitating continuous innovation and adaptation to stay ahead in the market. Maneesh (2022) found out that manufacturers face several problems like personal problems, social problems, financial problems, work related problems in the procurement of raw materials, problem in selling, technological problem in getting government support. They cannot concentrate on work properly due to household works. Covid-19 causes threat to their work. They were of the view that they face difficulties in selling their products due to lack of advertisements, lack of marketing finance, and change in consumer tastes.

Economic Theory by Adam Smith explains economic phenomena on why and how the economy behaves, what is the best solution on how to influence and solve the economic phenomena. In the context of the Bagos bamboo craft, the researchers utilized this economic theory because it helps to explain its importance as a source of income and could promote cultural heritage. It analyzes economic factors such as availability and demand for bamboo products, marketing methods, and customer preference factors. It also emphasizes challenges such as raw material availability, market competitiveness, and value-added processes. Policymakers and stakeholders can use economic concepts to design policies to assist the bamboo craft industry. This could include encouraging sustainable harvesting practices, increasing market access for artisans, and encouraging innovation in product design and marketing. Economic theory highlights the need to consider both economic and cultural elements when developing effective solutions for the long-term growth of the bamboo craft sector in the Bagos community.

Physical Strain

Bamboo artisans endure the rigors of physical labor, engaging in repetitive motions and prolonged periods of manual work. This arduous endeavor often leads to bodily strain and fatigue,



requiring artisans to implement ergonomic practices and prioritize their physical well-being Sanni-Anibire (2022).

P2 said there are instances their hands were wounded with a knife.

“Adda met dagiti pasamak a masugatan ti ima bayat ti panagkayas.” (There are also incidents of hand injuries during the slip.)

Meanwhile, P5 and P6 experienced body ache after work.

P5 “Iti panaglaglaga kit haan nga maiwasan nga agsakit iti bagbagi” (In crafting, it's inevitable to avoid experiencing body pains.)

P6 “Nasakit ti bagbagi syempre ngem talaga nga kasta.” (I experienced body pains of course but it really is.)

In the study of Sriagustini (2022) craftsmen also reported feeling discomfort in their waist, legs, and back. prolonged periods of bamboo crafting can also pose risks to physical health. Many craftsmen spend hours sitting or standing in one position, which can lead to musculoskeletal issues. Repetitive movements, such as weaving or carving, may strain muscles and joints, resulting in discomfort and potential long-term injuries. Additionally, poor posture during crafting exacerbates these risks, increasing the likelihood of back pain, neck strain, and other related ailments. Moreover, the risk of being wounded with a knife. This risk is inherent to the nature of bamboo, as it possesses natural features that can cause injury if not handled carefully. Therefore, it's crucial for craftsmen to be aware of this risk and take necessary precautions to avoid such injuries, such as wearing protective gear or handling the bamboo with care to minimize the likelihood of being wounded Supriyani, (2021).

Cultural Promotion

Cultural promotion typically begins by safeguarding and recording cultural traditions and history. Festivals, fairs, and cultural gatherings then offer chances for communities to unite and honor their cultural legacy. It's about fostering appreciation and understanding of the cultural significance and eco-friendly qualities of bamboo beyond its traditional contexts.

Showcasing Bamboo Crafts

Numerous artisans are dedicated to safeguarding traditional craft methods and the cultural legacy linked with bamboo. Presenting their bamboo creations not only underscores the cultural importance of these crafts but also ensures the continuation of traditional expertise and wisdom for future generations. By actively involving the community in creating and promoting authentic experiences, destinations can offer memorable and meaningful experiences that showcase their unique cultural heritage and natural beauty while supporting local livelihoods and fostering sustainable tourism development.

According to P1, P2, P4, P5, and P6 every year during the province-wide fiesta of La Union, the Salo-Salo Agri Tourism Fair showcases various types of bamboo crafts from all municipalities. This serves as a platform to exhibit the beauty of the products and promote local goods.

P1 said: “Iti tinawen nga panag fiesta ti probinsya ti La Union, haan met nga maawawan iti Salo-Salo Agri Tourism Fair a pakaidisplay amin nga klase ti bamboo crafts ti amin nga munisipyo, ditoy nga maipakita ti kinapintas dagiti produkto ken mailako.” (In the yearly province-wide fiesta of La Union, the Salo-Salo Agri Tourism Fair never fails to showcase various types of bamboo crafts from all municipalities. Here, the beauty of the products can be exhibited and marketed.)



Similarly, to P2, stating “No maang-angay iti fiesta ditoy ayanmi adda met ti actividad iti barangay mi nga adda contest dagiti aglaglaga ket syempre babaen ditoy maipakita da met iti kinalaing da nga aglaga” (If there’s a fiesta in our place, there’s also an activity which includes a contest for those who are good at weaving, and of course, through this, they can showcase their skills in weaving.)

And in P4: “Anya man a pasamak kada programa ditoy barangay tayo, adda dagiti maited a token para kadagiti bisita, ket gapu iti daytoy, maipakita ken maipannakel mi met kadagiti dadduma a tattao no kasano ti kinapintas dagiti produkto mi a kawayan.” (In every program here in our barangay, we always provide tokens for our visitors, and because of this, we are able to showcase and promote to others how excellent our bamboo products are.)

P5 shared as well: “Malagip ko, adda iddi iti programa da idjay monisipyo nga agisuro no kasatno ti aglaga iti kawayan ken nagasatak met a iddi ta maysa ak nga napagasatan nga apan agisuro iti sabali nga lugar.” (I remember, back then the municipality had a program in which they selected those who knew how to weave and they would be given the opportunity to teach in another place and I was one of those who was given this opportunity.)

Lastly, P6 states “Adda iti mapasasamak nga nga maysa nga programa iti munisipyo isu iti maawawagan nga Skills Training on Bamboo Crafts and Finishing Technique. Dagiti aglaglaga kit apan da agisuro iti sabali nga lugar. Maysa nak kadagiti napagasatan nga apan mangisuro mit kadagiti naadadal ko ti kabangibar nga barangay tapno mas adado ti makaammo iti aglaga.” (There is a fast-paced program in the municipality called Skills Training on Bamboo Crafts and Finishing Techniques. And the skilled individuals can also go to other places to teach. I am lucky to be the one of those who went to share the knowledge that was also taught to me before so that more people can learn about it.)

The province-wide fiesta of La Union is a significant event that celebrates the culture, traditions, and local products of the province. One of the highlights of this celebration is the Salo-Salo Agri Tourism Fair, which occurs annually and serves as a platform to promote the agricultural and tourism industry of La Union. During the Salo-Salo Agri Tourism Fair, various types of bamboo crafts from all municipalities are showcased. In the study of Chan (2020) the city festivals represent a rich and meaningful culture and tradition of Vigan set and valued at different times and occasions of the year. These major festivals express the blissful, vibrant and historic lifestyle that the Bigueños exemplify and a way to preserve and protect the variegated and grand heritage of the city that are inherited from the past, maintained in the present, and bestowed for tomorrow’s generation.

The 1987 Constitution of the Republic of the Philippines – Article XIV. Section 14, entrusts the State with a vibrant mission: to nurture the preservation, enrichment, and dynamic evolution of a Filipino national culture, celebrating unity in diversity within a landscape of free artistic and intellectual expression. In the same spirit, Section 15 envisions a flourishing realm where arts and letters are cherished under the State's patronage, tasked with conserving, promoting, and popularizing the nation's historical and cultural heritage and artistic creations. Further enriching this cultural tapestry, Section 17 pledges the State's unwavering commitment to recognizing, respecting, and protecting the rights of indigenous cultural communities, ensuring they have the freedom and support to preserve and develop their unique cultures, traditions, and institutions.

By showcasing locally made goods, fairs help preserve traditional craftsmanship and cultural practices. This fair provides an excellent opportunity for artisans and craftsmen from different municipalities to exhibit their finest bamboo products. It allows them to showcase the beauty, quality, and uniqueness of their creations to a wider audience.

V. Statements and Declarations



- (a) Funding: Please add: “This research received no external funding
- (b) Conflicts of Interest: “The authors declare no conflict of interest.”
- (c) Acknowledgments: “No acknowledgement of people, grants, funds, etc.

VI. Conclusion

The practice of bamboo crafting can enhance social and cultural ties within communities. Through participation in bamboo crafting, people cultivate common interests and collaborate, sharing expertise, methods, and cultural heritage. This collaborative effort fosters interaction and understanding, reinforcing social cohesion and preserving cultural traditions. Bamboo crafts serves as a crucial source of livelihood. By earning a sustainable income from their craft, these families can improve their standard of living, access education, and break the cycle of poverty.

Bamboo crafters commonly suffer from a range of physical ailments, including strains and injuries in areas such as the hands, wrists, arms, shoulders, and back. These physical ailments can have a significant impact on the well-being and productivity of bamboo crafters. Bamboo Crafts preserved through the strategic implementation of agri-tourism initiatives and the distribution of tokens as symbolic gestures of appreciation. Through these combined efforts, bamboo crafts emerge not just as objects of beauty, but as powerful symbols of community resilience, cultural pride, and sustainable development.

VII. References

1. Crosely, J. (2021). What (exactly) is thematic analysis? https://gradcoach.com/what-is-thematic-analysis/?fbclid=IwAR1NZsTEDsuBpyVJcJ4fOQpKlr4swHaoN8_oCSSzzQqeOAc
2. De Ligt, L. (2023). Fairs and markets in the Roman Empire: economic and social aspects of periodic trade in a pre-industrial society (Vol. 11). Brill.
3. Department Of Economics And Development Studies University Of Nairobi <https://economics.uonbi.ac.ke/thematic-areas/economic-theory>
4. Environmental and ecological studies in anthropology <https://www.britannica.com/science/anthropology/Environmental-and-ecological-studies-in-anthropology#ref839862>
5. Hailemariam, E. K., Hailemariam, L. M., Amede, E. A., & Nuramo, D. A. (2023). Identification of barriers, benefits and opportunities of using bamboo materials for structural purposes. *Engineering, Construction and Architectural Management*, 30(7), 2716-2738. <https://www.emerald.com/insight/content/doi/10.1108/ECAM-11-2021-0996/full/html>
6. Kendra, C. (2022) How Social Learning Theory Works <https://www.verywellmind.com/social-learning-theory-2795074>
7. Kendra, C. (2022) Sociocultural Theory Sociocultural Theory: Understanding Vygotsky's Theory (verywellmind.com)
8. Phuong, C. T. T., & Hop, N. Q. (2022). Traditional crafts contribute to community-based tourism development: a case study of the UNESCO Non Nuoc Cao Bang Global Geopark. *HANDICRAFT–FAMILY BUSINESS TRADITION OR INNOVATION?*, 27.
9. Republic Act No. 8371. (1997). Indigenous Peoples' Rights Act of 1997. <https://faolex.fao.org/docs/pdf/phi13930.pdf>
10. Ryan, G., & Bernard, R. (2003). Techniques to identify themes. <https://qualquant.org/wp-content/uploads/text/Ryan%20&%20Bernard%202003.pdf>
11. Sanni-Anibire, M. O., Salami, B. A., & Muili, N. (2022). A framework for the safe use of bamboo scaffolding in the Nigerian construction industry. *Safety science*, 151, 105725.



12. Shah, C., Shah, S., & Shah, G. L. (2020). Agritourism as a local economic development tool for rural hill regions. *Extension strategies for doubling farmer income*, 19-33.
13. Tegan, G. (2022). Semi-structured interview: Definition, guide & examples. <https://www.scribbr.com/methodology/semi-structured-interview/>
14. Tun, N. N. (2019). The effects of community-based tourism on local area development (Case Study: kyaikthale village in twantay township, yangon) (doctoral dissertation, meral portal).
15. Utomo, M., Pieter, L., & Siagian, C. M. (2021). Value chain structure analysis as a starting point for bamboo enterprise development: Lessons from Gunungkidul, Indonesia. *Forest and Society*, 5(2), 405-420.
16. Wang, R., Guo, Z., Cai, C., Zhang, J., Bian, F., Sun, S., & Wang, Q. (2021). Practices and roles of bamboo industry development for alleviating poverty in China. *Clean Technologies and Environmental Policy*, 23, 1687-1699.
17. Alemayehu, A., & Hido, A. (2023). Determinants and governance of bamboo production and marketing in Ethiopia: A critical review. *Advances in Bamboo Science*, 100047. <https://www.sciencedirect.com/science/article/pii/S2773139123000332>
18. Baksy, A. (2023). The bamboo industry in India: supply chain structure, challenges and recommendations. *Challenges and Recommendations* (July 2023).
19. Barandon, S. B. (2015). Socio-Economic Benefits of Bamboo-Craft Entrepreneurship: The Case of Rinconada Bamboo Entrepreneurs. *Asia Pacific Journal of Multidisciplinary Research*, 3(5). <https://www.academia.edu/download/62091805/APJMR-2015-3.5.2.2420200213-80606-5y53s7.pdf>
20. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101. doi.org/10.1191/1478088706qp063oa <https://psychology.ukzn.ac.za/?mdocs-file=1176>
21. Creswell, J. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Sage. <https://gdaviesedd.wordpress.com/2015/10/05/five-methods-of-qualitative-research-creswell-2009/>
22. Huang, Z., & Sun, Y. (2021). Hygrothermal performance comparison study on bamboo and timber construction in Asia-Pacific bamboo areas. *Construction and Building Materials*, 271, 121602.
23. *Interdisciplinary Research Journal*, 53. https://www.wiidrj.com/files/ugd/622008_cae00217fb4c4d2891eda2d73eccc82.pdf#page=68
24. Li, W., Li, Z., & Kou, H. (2022). Design for poverty alleviation and craft revitalization in rural China from an actor-network perspective: the case of bamboo-weaving in Shengzhou. *Heritage Science*, 10, 1-16.
25. Lufuno et al. (2022). An exploratory-descriptive study on the impact of COVID-19 on teaching and learning: The experiences of student nurses in the rural-based historically disadvantaged University of South Africa. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9073114/>
26. Maneesh B. (2022). Problems and prospects of bamboo product manufacturers during COVID-19: A case study of Thiruvananthapuram district in Kerala. *Worldwide International* https://www.wiidrj.com/files/ugd/622008_cae00217fb4c4d2891eda2d73eccc82.pdf#page=68
27. McLeod S. (2023). Qualitative vs quantitative research: Methods & data analysis. <https://www.jblearning.com/catalog/productdetails/9781284262391>
28. Mohan N., Dash, S. P., Bobby, N. M., & Shetty, D. (2022). Study of bamboo as a building material—Construction & preservation techniques and its sustainability. *Materials Today: Proceedings*, 60, 100-114. <https://www.sciencedirect.com/science/article/abs/pii/S2214785321079931>



29. Newaz, MS, Hossain, GS, Khan, NA, & Masreque, MS (2020) Non Wood Forest Products as a Source of Livelihood for Indigenous Community: A Case Study on the Marma of the Chittagong Hill Tracts.
30. Ngo, T. T. H., Nguyen, T. P. M., Duong, T. H., & Ly, T. H. (2021). Forest-related culture and contribution to sustainable development in the northern mountain region in Vietnam. *Forest and Society*, 5(1), 32-47.
31. Nikolopoulou, K. (2023, June 22). What is purposive sampling? Definition & examples. Scribbr. <https://www.scribbr.com/methodology/purposive-sampling/>
32. Pawar, S., Chitagubbi, G., & Desai, R. (2022). Impact of bamboo weaving on the health status of bamboo artisans in Northern Karnataka. S-11-4-82-637.pdf (thepharmajournal.com)
33. Pieter, L. A. G., & Utomo, M. M. B. (2023). Performance and development challenges of micro-small bamboo enterprises in Gunungkidul, Indonesia. *Advances in Bamboo Science*, 4, 100037. <https://www.sciencedirect.com/science/article/pii/S277313912300023X>
34. Pramono, R., Hidayat, J., Dharmawan, C., Sihombing, S. O., & Maleachi, S. (2021). Opportunities for the development and promotion of traditional bamboo craft as tourism products. *Academy of Strategic Management Journal*, 20, 1-14. <https://www.proquest.com/openview/60c0dfd3db256ad5eb748cbf8e43697e/1?pqorigsite=gscholar&cbl=38745>
35. Sriagustini, I., & Supriyani, T. (2022). Assessment of Work Posture on Woven Bamboo Craftsmen. *The Indonesian Journal of Occupational Safety and Health*, 11(2), 295-306.
36. Sriagustini, I., & Supriyani, T. (2021). The Risk Assessment on Bamboo Weaving Craftsmen in Rajapolah District Tasikmalaya Regency. *The Indonesian Journal Of Occupational Safety and Health*, 10 (1), 64-78.
37. United Nations. (2007). UN Declaration on the Rights of Indigenous Peoples. https://www.un.org/development/desa/indigenouspeoples/wpcontent/uploads/sites/19/2018/11/UNDRIP_E_web.pdf
38. Yunida, S., Mita, W., & Octaviana, S. C. (2018). Bamboo as a sustainable material for furniture design in disaster and remote areas in Indonesia. *IOP Conference Series: Earth and Environmental Science*, 126, Article ID 012150. <https://bioresources.cnr.ncsu.edu/resources/the-application-of-bamboo-weaving-in-modern-furniture/>
39. Zhenhu Town Chorography Compiling Committee. (2015). Local Records of Zhenhu Town. Publishing House of Local Records: Beijing, China. <https://www.mdpi.com/2071-1050/13/16/9176>