

BASKET WEAVING INDUSTRY IN ANTEQUERA, BOHOL: A QUANTITATIVE STUDY ON ITS EFFECTS

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ABSTRACT

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Keywords— Basket Weaving,
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Basket weaving is a global heritage that serves as a vital socio-economic pillar in rural communities. The primary goal of this research is to objectively assess the social, livelihood, and environmental implications of the basket-weaving sector in Antequera, Bohol, also known as the province's "Basket Capital". Using the Principle of Parsimony, this study assesses how traditional craftsmanship translates into observable community growth. The

study uses a quantitative research design and surveys craftspeople in the Antequera area. A thorough population selection guarantees that the sample is representative of local weavers and businesspeople. Research ethics, such as informed consent and data privacy, are scrupulously upheld. The results show that the sector remains a primary source of livelihoods that promotes social cohesion, albeit facing difficulties due to globalization. The conclusions show



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that policy support and innovation are essential for sustainability.

INTRODUCTION

One of the most popular crafts in the world is still traditional basket weaving. It is not just a work of art, but it also makes money and helps pass down cultural information from one generation to the next. Recent studies show that handicrafts are not just beautiful goods; they are also important parts of sustainable development and intangible cultural heritage. Craft production increases household income in many rural economies while also preserving local identity and community (Lim et al., 2019).

While this is going on, established industries are under increasing pressure. Several factors can make it difficult for artists to earn as much as they would like (Deshmukh et al., 2024). Some of these factors include global rivalry, shifting market prices, and limited product differentiation options. In addition, studies of enterprises that produce plant-based crafts have identified further ecological concerns. These studies suggest that unsustainable harvesting practices may jeopardize the supply of raw materials and the industry's long-term profitability. These findings demonstrate that to maintain the viability of weaving communities, there must be a balance among fulfilling essential requirements, preserving the environment, and implementing adaptable market strategies.

It reflects the natural resources and culture of the Philippines, which are well known for the prevalence of basket weaving. Indigenous materials come in a broad range, each with the potential to influence the design and functionality of various things. The materials in this category include bamboo, rattan, and a wide range of palm species, among others. As a result, artisanal skills are associated with specific regions of the world and the cultural norms found there.

Despite this, a significant number of individuals are concerned about the company's long-term health due to increasing population movements, shifting consumer preferences, and generational differences. In the year 2003, the United Nations Educational, Scientific, and Cultural Organization (UNESCO) conducted research on intangible heritage. Five years later, in the year 2008, Ding and colleagues conducted research on the same topic.

When it comes to the preservation of intangible legacy in contemporary marketplaces, both studies underlined the significance of organized transmission mechanisms and adaptive innovation.

Against this background, the basket-weaving industry in Antequera, Bohol, which is locally recognized for its long-standing craft tradition, provides an educational setting for exploring how a heritage-based livelihood affects the community. Despite weaving remaining a visible part of local economic activity, there is a lack of quantitative research on the perceived social, economic, and environmental implications of weaving. This study

aims to fill that gap by determining how residents participating in the sector evaluate the industry's contributions and limitations.

Theoretical Background. As with many other traditional crafts, basket weaving is situated at the intersection of identity, sustainability, and means of subsistence. Several theoretical perspectives can help us better understand its far-reaching implications for community development and heritage preservation. In this regard, one such framework is the Sustainable Livelihoods Framework (SLF). Chambers and Conway (1992) define livelihoods as systems that are made up of five different types of capital that are interconnected with one another: human, social, natural, financial, and physical capital. Many different kinds of capital are intricately intertwined in communities involved in weaving, influencing their social cohesion and economic resilience.

This concept of cultural capital, developed by Bourdieu in 1986, offers an alternative perspective on well-established industries. It is possible to speak of weaving knowledge as embodied cultural capital. This knowledge can be obtained through observation, apprenticeship, and family practice. Baskets that have been completed, on the other hand, become an objectified form of cultural capital that carries both symbolic and financial meaning. When viewed in this light, craft is more than just the act of producing something; it is also about perpetuating meaning.

Human Capital Theory holds that knowledge and skills are long-term investments (Becker, 1964). A community's production and earning potential can be increased by acquiring skills through years of weaving practice. Having said that, this form of capital depends on ongoing transmission. The expertise gained may gradually decline if future generations do not continue to use artisanal methods.

Romer's Endogenous Growth Theory (Romer, 1986) emphasizes that communities can drive progress through invention and information exchange. On the other hand, this does not necessarily mean that historic industries are giving up their legacy altogether. On the contrary, it may incorporate minor changes, such as product enhancements, design diversification, or new marketing tactics, while still maintaining its authentic local identity.

Taken together, these viewpoints suggest that basket weaving should be viewed as a multifaceted system with economic, cultural, and environmental components.

Craft Livelihoods and Community Development. The use of handicrafts in rural development has been the subject of investigation in numerous studies. According to Lim et al. (2019), women-owned craft businesses played a key role in the rehabilitation process following the disaster in the Philippines. Not only did these businesses generate revenue, but they also helped reestablish social networks. Their findings suggest that traditional industries can serve multiple purposes within communities, including economic and relational functions.

Deshmukh et al. (2024), who conducted a study of small-scale artisans

in India, concluded that organized market access, cooperative organization, and product branding contributed to increased income stability. This was the conclusion the researchers reached. Nevertheless, they also noted that artisans remain vulnerable when value chains are decentralized, and institutions do not provide sufficient support. The findings of this research shed light on a common feature of craft-based economies: the capacity to support oneself often depends not only on one's level of knowledge but also on access to structured marketplaces.

More comprehensively, the study of traditional handicrafts has highlighted the importance of balancing preservation of the skill with its adaptation to new circumstances. Ding et al. (2025) noted in a comprehensive study on the sustainability of handicrafts that, to conserve them, it is necessary to consider not only the cultural traditions of the people who make them but also the economic feasibility of the activities. By integrating heritage education, market expertise, and innovation into communities' planning and development processes, it is possible to strengthen the industry's resilience.

Cultural Transmission and Intangible Heritage. The long-term sustainability of weaving depends heavily on generational continuity. The Convention of the United Nations Educational, Scientific, and Cultural Organization (UNESCO) for the Safeguarding of the Intangible Cultural Heritage (2003) states that the only way traditional knowledge and craftsmanship can be conserved is through their active practice and transmission from generation to generation. For the sake of this conversation, the term "safeguarding" does not refer to preserving traditions indefinitely; rather, it refers to the process of ensuring they remain relevant despite ever-changing societal conditions.

For this position, there is empirical evidence to support it. Ding et al. (2025) observed that many traditional sectors are experiencing a decline in young individuals' participation. This phenomenon is frequently attributed to urban migration or shifting professional ambitions among the youth population. On the other hand, the transmission of skills tends to remain more prevalent in environments characterized by educational efforts and community-based apprenticeship programs. It would suggest, on the basis of these facts, that social and institutional support structures have a direct connection to the development of cultural traditions in a sustainable manner.

Environmental Sustainability and Resource Use. When plant-based materials play a large role in the production process, there is a strong connection between basket weaving and the natural environment. This is especially true when the baskets are made from plant-based materials. According to research by Cunningham and Milton (1987) on the harvesting of palms for basket production in Botswana, resource depletion occurred due to increased commercial demand for palms without regulated harvesting processes. The work they do serves as an early reminder that, to achieve success, economic prosperity and ecological care need to be balanced.

More recent research has reaffirmed that, to achieve sustainability in conventional industries, responsible sourcing and regeneration planning are necessary (Ding et al., 2025). Instead of being a distinct worry, environmental management becomes an important part of the continuity of the weaving business for communities that rely on bamboo, rattan, or other materials of a similar nature.

Market Adaptation and Innovation. Adaptability is essential to survival in modern marketplaces, despite the fact that tradition is the foundation upon which craft businesses are built. Romer (1986) argues that growth may result from internal innovation rather than external interference. When applied to the discipline of basket weaving, innovation can manifest in a variety of subtle ways, including enhancing finishing methods, expanding product lines, or consciously branding products that convey cultural significance. According to Deshmukh et al. (2024), artisans who participated in cooperative marketing and product differentiation were better positioned to respond to competitors' pressures.

In light of these findings, it would appear that sustainability may depend on striking a fine balance between maintaining authenticity and adapting to consumers' ever-changing preferences.

Legal and Policy Context. The basket-weaving industry operates within broader policy frameworks that recognize both cultural preservation and economic participation.

At the international level, the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage (2003) affirms the importance of protecting knowledge systems and craftsmanship. The 2030 Agenda for Sustainable Development, particularly Goal 8, promotes decent work and inclusive growth (United Nations, 2015), aligning with the livelihood dimension of craft industries.

In the Philippines, the Barangay Micro Business Enterprises Act (Republic Act No. 9178) provides incentives for small-scale enterprises, including tax exemptions and support mechanisms (Republic of the Philippines, 2002). These policy instruments collectively acknowledge that micro-scale industries contribute to local economic activity and merit institutional support.

Objectives Of The Study. This study aims to quantitatively examine the perceived effects of the basket-weaving industry in Antequera, Bohol, in terms of:

1. Social relationships
2. Livelihood opportunities
3. Environmental impact

Specifically, it seeks to:

1. Describe respondents' demographic profile (age, sex, educational attainment).
2. Assess perceived levels of social, livelihood, and environmental effects.

3. Determine whether demographic variables are significantly associated with perceived effects.
4. Determine whether perceived effects differ when grouped by sex.
5. Propose strategic recommendations for sustainability.

Null Hypotheses

Ho1: There is no significant relationship between respondents' demographic profile and perceived level of effects of the basket-weaving industry.

Ho2: There is no significant difference in the perceived level of effects when respondents are grouped according to sex.

RESEARCH METHODOLOGY

In this study, a quantitative correlational research design was used to examine whether demographic variables are associated with perceived effects of the basket-weaving enterprise on social interactions, livelihood opportunities, and environmental implications. The correlational strategy was chosen as the preferred method because it allows for the analysis of naturally occurring correlations between variables without changing conditions or setting up experimental controls (Field, 2018). The approach allowed the researchers to identify patterns of linkage and evaluate statistical links throughout the community.

The research was conducted in the Municipality of Antequera, Bohol, a rural community noted for its long tradition of basket weaving. Given the concentration of weaving homes and artisanal activity in the area, the municipality is an excellent location for studying the links between livelihoods, culture, and sustainability. The target audience included basket weavers, with an estimated total of 1,300 practitioners. Slovin's formula was used to determine the required sample size with a 5% margin of error, resulting in a sample of 250 respondents. A purposeful sampling technique was utilized to ensure that all participants had direct experience relevant to the inquiry.

Respondents had to be at least 18 years old, permanent residents of Antequera for at least 1 year, and have been involved in weaving activities for at least 1 year. These criteria were developed to ensure educated and experience-based responses.

The information was gathered using a standardized survey questionnaire consisting of two primary components. The initial part of the survey collected demographic information, including age, gender, and educational level. In the second part of the survey, a 4-point Likert scale was used to assess respondents' perceptions of the basket-weaving industry's consequences across three dimensions: social connections, livelihood opportunities, and environmental impact. An expert validated the instrument before it was administered

to ensure it was clear and the material was relevant. The Cronbach's alpha coefficient for a pilot test designed to examine reliability was 0.910, indicating that the test had outstanding internal consistency (Taber, 2018).

Before field deployment, the relevant institutional and local permits were obtained. Participation was voluntary and carried out in accordance with informed consent guidelines. Respondents were assured of confidentiality and anonymity, and informed of their ability to withdraw at any time without penalty. Face-to-face administration was used to gather data, ensuring comprehensive replies and allowing clarification if necessary.

Data analysis included both descriptive and inferential statistics. Respondents' demographic profiles were described using frequency and percentage distributions. Weighted or composite means were used to calculate the perceived level of effect across the three areas. To test the first null hypothesis, the Chi-square test of association was used to examine the association between demographic characteristics and perceived outcomes. The second null hypothesis, which examined sex differences in perceptions, was tested with an independent-samples t-test. All statistical tests were performed with a 0.05 threshold of significance.

RESULTS AND DISCUSSION

This section presents the findings on the perceived social, livelihood, and environmental effects of the basket-weaving industry in Antequera, Bohol. The discussion situates the results within broader scholarship on craft livelihoods, cultural continuity, and community-based development.

Demographic Profile. The study involved 250 individuals actively engaged in weaving. A substantial proportion of respondents were in their twenties, followed by those in their thirties and forties, with fewer participants in older age groups. This distribution suggests continued participation among younger community members, alongside experienced older practitioners. Such generational overlap may support the transmission of traditional knowledge, a key element in sustaining intangible cultural heritage (UNESCO, 2003).

Women comprised the majority of respondents, reflecting patterns commonly observed in artisanal and home-based industries, where craftwork often complements household responsibilities and flexible income arrangements (International Labour Organization [ILO], 2018).

Nearly half of the participants had reached college level or completed tertiary education. Although weaving skills are largely acquired informally, formal education may facilitate engagement with market systems, entrepreneurship, and adaptive innovation in evolving trade environments (OECD, 2021; World Bank, 2020).

Perceived Effects of the Basket-Weaving Industry

Social Effects. The social dimension yielded a composite mean of 3.60,

indicating a high positive effect. Respondents generally agreed that weaving strengthens interpersonal relationships, fosters cooperation, and contributes to cultural continuity.

These findings resonate with research emphasizing the role of collective production in building social capital and reinforcing community cohesion (Putnam, 2000). Shared creative engagement has also been associated with enhanced well-being and a stronger sense of belonging in community contexts (World Health Organization [WHO], 2019).

The strong perception of cultural preservation underscores weaving's role as a living heritage practice. As UNESCO (2003) notes, traditional knowledge systems remain viable when they are actively practiced and socially valued. In Antequera, weaving appears to function not only as a source of income but also as a cultural anchor within the community.

Livelihood Effects. The livelihood dimension registered a composite mean of 3.58, likewise interpreted as a high positive effect. Participants viewed weaving as contributing to skills development, supplemental income, and tourism-related economic activity.

Prior studies suggest that artisan enterprises can support income stability and local economic resilience when accompanied by cooperative organization and skills training (International Trade Centre, 2016; UNCTAD, 2018).

Slightly lower ratings related to access to international markets may reflect awareness of structural limitations. Research on traditional craft sectors indicates that limited value-chain integration can constrain growth, even when production capacity and skill levels are strong (Deshmukh et al., 2024). Strengthened institutional linkages and market access strategies may therefore enhance long-term viability.

Environmental Effects. The environmental dimension produced a composite mean of 3.54, suggesting that weaving is generally perceived as environmentally favorable. Respondents particularly valued the use of plant-based, biodegradable materials.

Natural-fiber products are increasingly recognized as alternatives to plastic-based goods within sustainability discourse (United Nations Environment Programme [UNEP], 2018). At the same time, moderate concern about potential resource depletion underscores the importance of responsible harvesting and regeneration practices. Studies on non-timber forest products emphasize that commercial expansion must be accompanied by sustainable resource management to prevent ecological strain (Food and Agriculture Organization [FAO], 2018).

Taken together, the findings suggest that weaving is viewed as environmentally aligned, though its long-term sustainability will depend on continued ecological stewardship.

Association Between Demographic Variables and Perceived Effects. To examine whether demographic characteristics were associated with perceptions of the industry's effects, nonparametric statistical tests were used

because the data were ordinal. None of the demographic variables showed a statistically significant association with overall perceived effects ($p > .05$). The correlation between age and perceived effects was very weak ($\rho = .028$), indicating minimal practical association.

Table 1. *Association Between Profile Variables and Overall Perceived Effects*
($\alpha = .05, n = 250$)

Profile Variable	Statistical Test	Test Value	p-value	Interpretation
Sex	Chi-square	$\chi^2 = 2.985$	.394	Not Significant
Age	Spearman's rho	$\rho = .028$	.656	Not Significant
Educational Attainment	Chi-square	$\chi^2 = 11.005$	.088	Not Significant

These results suggest that perceptions of the industry's social, livelihood, and environmental contributions are relatively consistent across age, sex, and educational categories. Rather than reflecting demographic segmentation, evaluations appear to stem from shared community experience.

In culturally embedded industries, benefits and meanings are often collectively distributed (UNESCO, 2003). The absence of association with educational attainment may also indicate that embodied skills and experiential knowledge—acquired through apprenticeship and community practice—exert an influence comparable to that of formal schooling in shaping perceptions of impact (Becker, 1964).

Difference in Perceived Effects Based on Sex. The Mann–Whitney U test indicated no statistically significant difference between male and female respondents ($p = .960$). Although women make up a larger share of participants, both groups reported comparable evaluations of the industry's effects.

Table 2. *Mann–Whitney U Test Comparing Perceived Effects by Sex*

Group	Mean Rank	U	p-value	Interpretation
Male	124.8	3495	.960	Not Significant
Female	125.6			Not Significant

This pattern may reflect the communal character of weaving, in which economic and social contributions extend beyond gender distinctions. Studies of rural craft economies similarly report that even when participation is gender-skewed, perceived benefits tend to be collectively recognized (International Labour Organization [ILO], 2018).

Across inferential analyses, demographic variables did not significantly predict perceptions of the industry's effects. While statistical non-significance does not rule out subtle variations, the pattern suggests broadly shared recognition of the weaving industry's role in the municipality.

Such consistency aligns with endogenous development perspectives,

which emphasize that locally rooted industries generate shared meaning and collective identity (Romer, 1990). In communities where production systems are socially embedded, perceptions of benefit may be shaped more by communal participation than by demographic differentiation.

The statistical findings reinforce the descriptive results: the basket-weaving industry in Antequera is widely perceived as socially cohesive, economically contributive, and environmentally aligned across respondent groups.

CONCLUSION

The study found that the basket-weaving industry in Antequera, Bohol, is widely perceived as having meaningful social, livelihood, and environmental contributions. Respondents consistently viewed weaving as strengthening community relationships, supporting income generation, and promoting environmentally responsible practices by using natural, biodegradable materials. The absence of significant demographic differences suggests that the industry's value is collectively recognized across age, sex, and educational groups. Overall, weaving remains an embedded cultural and economic activity that continues to contribute to local resilience.

RECOMMENDATIONS

1. **Strengthen Market Access.** Enhance cooperative branding, digital marketing strategies, and linkages with trade, tourism, and export agencies to improve market reach and value-chain participation.
2. **Sustain Skills Development.** Implement continuous training programs, particularly for younger artisans, to support generational transfer of skills and encourage innovation.
3. **Institutionalize Sustainable Resource Management.** Develop and enforce responsible harvesting guidelines and resource regeneration practices to safeguard raw materials.
4. **Reinforce Multi-Sector Partnerships.** Strengthen collaboration among artisans, local government units, cooperatives, and development agencies to support long-term economic viability and cultural preservation.

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