Salt Making in the Visayas: A Review on Asin Tibuok Artisanal Salt

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Abstract

This review provides a systematic examination of the literature on Asin Tibuok, a traditional artisanal salt produced in Bohol. The study addresses four core areas: the historical origins of Asin Tibuok, the sequential production process, the influence of multicultural practices, and the implications for incorporating traditional knowledge into modern educational frameworks. Employing a structured literature review methodology, the Artisanal salt production is found to be a globally rooted cultural tradition that employs time-honored, location-specific methods for salt preservation and is increasingly challenged by modern industrial practices. Asin Tibuok is produced through an artisanal process in which coconut husks absorb mineral-rich seawater and then are sequentially chopped, dried, burned, leached, filtered, and boiled in earthenware to yield a pure salt with a subtle smoky flavor. Historical multicultural trade interactions have integrated Chinese, Javanese, and Spanish salt-making techniques with indigenous methods in the Visayas, yielding diverse artisanal practices now compromised by modern economic, regulatory, and environmental challenges. Integrating the traditional Asin Tibuok saltmaking process into context-specific curricula through culturally immersive pedagogical strategies and collaborative partnerships enhances academic outcomes while preserving indigenous heritage. This review concludes with targeted recommendations for research development, policy reform, and documentation initiatives that aim to integrate Asin Tibuok into culture-based pedagogical models, thereby promoting both technological skills development and cultural heritage conservation.

Keywords: Asin Tibuok, Salt making, Visayas, Bohol, Cultural heritage, Traditional knowledge, Socioeconomic impact, Food preservation

Introduction

Salt is primarily an essential ingredient in food preparation. It gives taste to the foods that people consume every day. It is also used in food preservation, such as meat and fish, and as a currency in ancient times. Salt has been essential in human societies (Elias et al., 2020). Salt also had a notable role in the socioeconomic aspect of people's lives. Saltmaking was a significant source of income in many regions across the world. Its production created a source of livelihood and could even make an entire population dependent on it (Círillo et al., 1994). In the Philippines, local salt production significantly decreased due to many factors that pushed local producers to obscurity, as a study by Montojo et al. (2024) reported.

Saltmaking has been a vital industry in the Visayas region of the Philippines for centuries (Scott, 1994), contributing significantly to the local economy and cultural heritage. Among the various types of salt produced in the area, *Asin Tibuok* stands out due to its unique production process and cultural significance. *Asin Tibuok*, translated as "whole salt" and referred to by foreigners as "dinosaur egg," is an artisanal salt made by evaporating seawater in clay pots over a wood fire locally produced in the province of Bohol in the town of Albuquerque. This intricate and labor-intensive method results in a solid block of salt, which is then cracked open to reveal its crystalline form. The importance of *Asin Tibuok* extends beyond its culinary uses. It symbolizes the region's rich cultural heritage and traditional knowledge. The craftsmanship involved in its production reflects the ingenuity and resilience of the local communities. Co (2024) considered *Asin Tibuok* a rare and valuable commodity, often sought after by chefs and culinary enthusiasts for its unique flavor and texture.

Research on *Asin Tibuok* is sparse. Therefore, to ensure research on it fits within extant scholarship, reviews of the literature on a broader category in which it fits will guide future research on the *Asin Tibuok*. This paper sought to identify the historical origins of *Asin Tibuok*, describe its traditional method of preparation, examine the multicultural influences that have impacted its production and cultural significance, and discuss the educational implications of preserving and promoting the traditional knowledge and skills involved in making *Asin Tibuok*.

This study held significant cultural and educational value. By documenting and analyzing the traditional practices and historical background of *Asin Tibuok*, this research contributed to preserving a unique cultural heritage.

Understanding the multicultural influences on its production enhances appreciation of the region's diverse history and interactions. Furthermore, the educational implications of this study highlight the importance of integrating traditional knowledge into contemporary educational frameworks, thereby enriching social studies literature and promoting cultural awareness among future generations.

Specifically, this study is guided by the following research questions (1) What are the historical origins of *Asin Tibuok* and saltmaking practices in the Visayas region? (2) How is *Asin Tibuok* traditionally prepared, and what are the unique methods involved in its production? (3) What multicultural influences have shaped the saltmaking practices in the Visayas, particularly in the context of *Asin Tibuok*? and lastly, (4) What are the educational implications of studying *Asin Tibuok* and its saltmaking process for contemporary social studies education?

Methodology

This study employs a structured literature review approach, as Snyder (2019) outlined, to comprehensively examine the existing literature on *Asin Tibuok* and saltmaking practices in the Visayas. The methodology is divided into four phases: designing the review, conducting the review, analyzing, and writing up the review.

In the first phase, the need for this review was established by identifying the gap in academic documentation on the historical, cultural, and educational aspects of *Asin Tibuok*. The review aims to address four primary research questions: the historical origins of *Asin Tibuok* and saltmaking practices in the Visayas, the traditional preparation methods and unique production techniques, the multicultural influences shaping these practices, and the educational implications for contemporary social studies education. Given the exploratory nature of these questions, an integrative review approach was chosen to include diverse sources such as historical texts, ethnographic reports, academic articles, and cultural studies. A comprehensive search strategy was developed, selecting search terms like "*Asin Tibuok*," "Visayas saltmaking," "traditional salt production," and "multicultural influences on saltmaking." Databases, including JSTOR, Google Scholar, and institutional repositories, were utilized, with inclusion criteria focusing on studies published in English and Filipino, peer-reviewed articles, and relevant cultural and historical documents (Snyder, 2019).

The second phase involved conducting the review. A pilot test refined the search terms and inclusion criteria by searching a small sample of literature to ensure relevance. The selection process was conducted in three stages:

- Initial screening of titles and abstracts for relevance.
- A full-text review of selected articles to ensure they met the inclusion criteria.
- Scanning references of selected articles for additional relevant literature.

The search and selection process was meticulously documented to ensure transparency and replicability (Snyder, 2019).

In the third phase, data was abstracted from the selected literature, focusing on authors, publication years, research methods, findings, and thematic content related to the research questions. Two reviewers independently abstracted data to ensure quality and reliability, resolving discrepancies through discussion and consensus. Reviewers were trained to standardize the abstraction process. The analysis involved synthesizing the extracted data to identify patterns, themes, and insights related to the research questions using descriptive and thematic approaches (Snyder, 2019).

The final phase involved writing up the review. The review was structured to communicate the motivation, need, and research questions, including sections on the historical origins of *Asin Tibuok*, traditional preparation methods, multicultural influences, and educational implications. The review adhered to accepted conventions for reporting literature reviews, ensuring transparency in methodology and clarity in presenting findings. The findings were synthesized into a coherent narrative, highlighting key insights and contributions to social studies education. The review concluded with a discussion on the implications of the findings for educators and recommendations for future research (Snyder, 2019).

Results and Discussions

1. Historical origins of Asin Tibuok and Saltmaking practices in the Visayas region

Global Perspectives on Artisanal Salt Production. The art of making artisanal salt is a time-honored tradition that spans cultures and continents. Across the world, communities have developed saltmaking as one of the oldest methods of food preservation, reflecting their ingenuity and resourcefulness. Salt production practices have evolved under the influence of geography, climate, and cultural heritage (Hueso-Kortekaas, & Iranzo-García, 2022). This section first outlines an overview of global artisanal salt production and then gradually narrows the focus to Asia, Southeast Asia, and eventually to local practices in the Philippines.

For example, in Averio, Portugal, Rodrigues et al. (2011) discussed that artisanal salt production dates back as early as the 9th century BC and was introduced by the Phoenicians. Rodrigues et al. (2011) explain that while Portugal's perfect coastal climate enabled a rich, centuries-old tradition of artisanal salt-making, modern industrial methods have largely replaced it, risking the loss of both traditional practices and their cultural and environmental heritage. In inland Spain, salt production is achieved by choosing between rock salt mining, natural brine evaporation, or a hybrid dissolution—evaporation method based on local geography and resource availability, with integrated infrastructures ensuring efficient, near-zero waste operations (Iranzo-García et al., 2021). Artisanal salt production in the Gulf of Cadiz—a key element of intangible cultural heritage that underpins local biodiversity and traditional lifestyles—is increasingly endangered by industrialization and insufficient protection policies, highlighting the need for integrated safeguarding measures to ensure sustainable development (del Valle, 2023).

Artisanal Saltmaking in Asia and Southeast Asia. Moving from Europe to Asia, evidence demonstrates that salt production has deep historical roots. In East Asia, archaeological sites in the Eastern Sichuan Basin reveal dense accumulations of potsherds linked to saltmaking from the third millennium BC. By the Han Dynasty (206 BC – AD 220), salt had become a state-controlled monopoly that underscored its economic and cultural importance (Chien, 2004). Similarly, in Japan, coastal sites on Honshu provide indications that salt production dates back to the Late Jomon Period (first millennium BC) (Yakownski, 2007).

In Southeast Asia, early salt production is evident yet less thoroughly documented. Archaeological evidence from northeastern Thailand (e.g., sites such as Non Tung Pie Pong and Bo Phan Kan) dates salt production to as early as the fifth century BC. The unique geological conditions of these sites supported a longstanding saltmaking industry that became integrated into the region's trade system. Additionally, in southern Vietnam, the archaeological site of Go O Chua, dating to the first millennium BC, reveals extensive evidence of salt production (Yakownski, 2007). Chinese records from the ninth century further underscore salt's pivotal role in trade—particularly in Vietnam, where salt was critical for political control and economic stability. Eighteenth- and nineteenth-century historical accounts also describe salt as a vital commodity for coastal and inland trade in Southeast Asia.

Distinctive Saltmaking in the Visayas Region. The unique identity of *Asin Tibuok* is rooted in the longstanding saltmaking traditions of the Visayas. Local natural resources played a critical role in shaping these methods. For example, the abundant seawater and the use of coconut shells as fuel contributed to establishing the ideal conditions for artisanal salt production in the Visayas. The extensive coastline of the region further enabled a thriving communal economy that integrated local environmental conditions with cultural practices. Montojo et al. (2024) trace the origins of *Asin Tibuok* and saltmaking practices in the Visayas to pre-Hispanic times, emphasizing its enduring cultural significance and deep-rooted heritage. Produced via an ancient "ash" saltmaking method, *Asin Tibuok* stands as a testament to the resilience of local communities in preserving their cultural practices amidst modernization pressures.

Yankowski (2010) conducted fieldwork from May to August 2000 in Bohol, Philippines, to document traditional salt manufacturing and pottery production practices that have been passed down through generations; her study records methods such as the seawater-based "sal de Bisayas" process—first described by Alcina (1668) and later referenced by Loarca (1582) and Jenks (1905)—and notes regional variations like the use of coconut husks in western towns versus alternative materials in eastern towns, while highlighting how these household-level, seasonal craft activities serve as fixed trade commodities (e.g. Scott 1994; Hall 1999) and produce standardized artifacts that offer valuable archaeological insights into site formation processes (Chen 2004; Flad 2004; Falkenhausen 1999).

"Tultul" is a century-old artisanal salt-making practice in Hoskyn, Jordan, Guimaras, pioneered by Semion Ganila in the 1890s. Although scholarly

work on tultul has been sparse (Demaisip, 2024), recent accounts emphasize its multifaceted character as both a culinary art and a form of sustainable coastal resource management. The process involves using driftwood ash—derived from materials naturally deposited along the shoreline—which is soaked in seawater and then carefully leached through bamboo baskets. The resulting liquid is blended with coconut milk and slow-cooked over a low fire for approximately 16 hours until it forms distinctive, soap-sized salt blocks that retain a unique gray-white hue. After a hiatus between 2014 and 2020 due to tourism shifts and environmental challenges, production was revived in 2021 by Shirley "Nenen" Padojenog, who invested ₱15,000 per batch to yield a net profit of ₱30,000 by selling individual pieces at \$\mathbb{P}150\$ each. This revival, supported by word-of-mouth, a burgeoning tour business, and consultations with the Department of Trade and Industry regarding packaging standards, underscores tultul's resilience and its vital role in preserving cultural heritage and promoting sustainable practices (Demaisip, 2024; Slow Food Foundation, 2023; Gerada & Parreno, 2018).

In contrast, Asin Tibuok remains a uniquely Boholano tradition. It is set apart by its specific use of coconut husks and its deeply embedded cultural ties Asin Tibuok is especially emblematic of the Boholano culture, with the town of Alburquerque in Bohol preserving this tradition as a significant part of its cultural identity (Salibay & de los Santos, 2020). In Bohol, artisans collect coconut husks from local sources and then submerge them in seawater for extended periods—ranging from three months to a year—to optimize salt absorption. After soaking, the husks are chopped and sun-dried before being burned into ash. This ash is then mixed with seawater to produce a brine, which is filtered and slowly boiled; the thickened mixture is immediately transferred into locally made earthenware, where it solidifies into a large, hard lump known for its mild, smoky, and fruity flavor. Although the economic returns are modest and the production cycle is lengthy, involving intricate, labor-intensive steps that serve as a bonding activity for families, Asin Tibuok endures as a symbol of Bohol's artisanal excellence and environmental stewardship (Salibay & delos Santos, 2020). Its continued practice not only safeguards a centuries-old technique but also reinforces Bohol's unique cultural identity in contrast to other regional salt-making practices, such as tultul, which are rooted in different raw materials and production methodologies.

Economic and Trade Implications in Bohol and the Wider Visayas. The historical significance of salt in Bohol extends to its economic development. Early economic records—drawn from Chinese trade documents and

16th-century Spanish explorers' journals—highlight the importance of salt in local trade. Miguel Lopez de Legazpi's 1565 account, for example, provides the first documented historical reference to Bohol, noting bustling trade in fish, wax, goat meat, rice, and salt in what is believed to be present-day Loay.

Archaeological findings from Bohol's southern coast, ranging from Tagbilaran City to Loay, indicate robust inter-island trade networks dating as far back as the Metal Age (500 BC-960 AD). Analysis of earthenware vessels supports evidence of a sophisticated pottery industry and a wide distribution network that facilitated long-distance trade (Yankowski, 2019). During the Protohistoric Period (960 AD-1521 AD), international trade flourished further with the influx of Thai Sawankhalok wares and Chinese tradewares. Ethnographic research from the early to mid-20th century confirms that traditional trade practices, such as annual salt exchanges between coastal barangays in Loay and Valencia, have persisted over generations.

2. Production of Asin Tibuok

Yankowski (2007) demonstrates that salt was a crucial commodity in early East and Southeast Asian economies—produced and traded through diverse methods with archaeological evidence from China (Chen, 2004; Flad, 2004; von Falkenhausen, 1999) and Japan (Imamura, 1996; Kondo, 1975), historical records from the Han Dynasty, and prehistoric sites in Thailand (Higham, 1989, 1996; Nitta, 1986) and Vietnam (Reinecke, 2006)—while early political economies in the Philippines and neighboring regions relied on salt trade as documented by Steinberg (1985), Postma (1977), Reid (1988), Junker (2000), and Hall (1999), with Spanish accounts by Loarca (1979) and Alcina (2004) and economic comparisons by Scott (1994) further highlighting its importance; today, despite commercial salt predominating, a few families in Bohol continue the traditional seawater-based salt production that once fueled long-distance trade and local exchange (Municipality of Loay, 1990; Municipality of Valencia, 1990; Cembrano, 1998; Ushijima & de la Pena, 1996).

Seawater contains only about 3.7% minerals (with 2.9% being salt), thus converting it into usable salt requires extra processing that varies by region; in some areas like the northeastern coast of Java and the Gulf of Siam, salt is made simply by sun evaporation (Reid, 1988), while in other places, such as in Iloilo on Panay, a more labor-intensive method called budbud is used to concentrate seawater in fishponds before sun drying it (Yano, 1994), and among the

Mangyan of Mindoro, salt is produced by repeatedly firing, filtering, and boiling seawater to extract salt (Postma, 1977); in Bohol—specifically in Santa Filomena, Alburquerque—families create specialized salt-beds known as paril, use coconut husks and locally made equipment like kamalig huts, sagsag funnels, pasong containers, and earthenware pots (kon) to process the seawater, and although this traditional salt-making supported local trade and the early economy, it is now declining due to higher production costs and competition from commercial salt (Yankowski, 2007).

In Bohol artisanal salt-making culminates in the distinctive product known as *Asin Tibuok*. This elaborate, multigenerational craft begins with the excavation of a *paril*—a shallow, coral-lined soaking pit constructed among coastal mangroves. Coconut husks and driftwood are gathered and immersed in the *paril* for periods of up to six months, allowing them to absorb mineral-rich seawater (Yakownski, 2007). Once sufficiently soaked, the biomass undergoes a sequence of processing steps:

- 1. *Pagtapok* (gathering): Collection of coconut husks from household and communal sources.
- 2. **Paghumol** (soaking): Extended immersion of husks in seawater for three to twelve months, with longer durations yielding greater salt uptake (Salibay & de los Santos, 2020)
- 3. *Pagtadtad* (chopping): Division of water-logged husks into smaller fragments.
- 4. *Pagbuwad* (drying): Sun-drying of chopped husks over three to seven days until fully desiccated.
- 5. *Pagsunog* (burning): Controlled combustion of dried husks over several days to produce fine ash.
- 6. *Pagtasik* (brining): Leaching of ash with seawater—typically a 1:2 ash-to-water ratio—to generate a turbid brine known locally as *tasik*.
- 7. *Pagsala* (filtering): Clarification of the brine through cloth or sand filters.
- 8. *Pagpalapot/Pagluto* (boiling): Evaporation of filtered brine on metal sheets until viscosity increases.
- 9. *Pagkulon* (potting): Transfer of concentrated brine into earthenware pots called *kon* or *kulon*.
- 10. *Pagpagahi* (solidifying): Continued heating until the liquid phase has fully evaporated, leaving a single, unbroken salt mass.

11. *Panghinapos* (finishing): Cooling and removal of the hardened lump—often likened to a dinosaur egg—for packaging or barter (Salibay & de los Santos, 2020; Yakownski, 2007)

This *mag-itus* method yields approximately 100–124 pots of *Asin Tibuok* per batch and demands the coordinated labor of all able-bodied family members (Yakownski, 2007). The resulting salt is celebrated for its purity, subtle smokiness, and nuanced flavor profile, attributes that derive from both the coconut-hus k ash and the low-temperature, slow-cooking regime (Montojo et al., 2024).

Despite its cultural and gastronomic significance, *Asin Tibuok* production faces mounting challenges. The specialized materials (e.g., coral-lined pits, locally fired *kulon*) and extended processing times have limited its diffusion beyond a few families. Moreover, legislative mandates—such as the 1995 ASIN Law requiring iodine fortification of all commercial salts—effectively bar non-iodized artisanal products from domestic markets, even as imported non-iodized salts remain permissible (Bofill & Gan, 2022; Co, 2024). Coupled with rising costs for fuel, clay pots, and transport, as well as generational disinterest, these pressures threaten the continuity of a practice that embodies centuries of Indigenous ingenuity and ecological adaptation.

3. Multicultural Influences on Salt-Making Practices in the Visayas

Historical Integration and Multicultural Influences. Historical records demonstrate that salt production and trade have long been embedded within the socioeconomic fabric of Southeast Asia. Chinese and Javanese merchants, as documented by Yakownski (2007), played pivotal roles in establishing extensive regional trade networks. Spanish historical accounts from the 16th century further attest to vibrant exchanges between lowland and highland populations in the *Visayas*, highlighting a dynamic interplay of commodities such as fish, salt, rice, and cotton (Yakownski, 2019). These sources collectively underscore the multicultural foundations that have shaped traditional salt-making practices.

Regional Trade and Ethnoarchaeological Insights. The intercultural dynamics inherent in regional trade are further illuminated by ethnoarchaeological studies. Andrea Yankowski (2019) examines Albuquerque's intertwined traditional crafts of salt making and pottery, emphasizing the cultural

and economic significance of locally made earthenware pots. The study, based on direct observations, interviews, and process analyses, reveals that such artisanal practices not only facilitated the movement of goods but also influenced local production techniques. This evidence further confirms that multicultural interactions have been central to the evolution of these practices.

Local Traditions and Production Techniques in *Bohol*. The *Bohol* region, a critical node in these trade networks, has a long history of salt trading within the island and with neighboring regions. Historical documents, including Miguel de Loarca's chronicles from 1582–1583 (Yankowski, 2019), indicate that salt was a crucial commodity exchanged between coastal and mountain populations. The production techniques in *Bohol* exhibit considerable local variation: some towns along mangrove coasts employ paril, while others along open coasts utilize methods involving shallow water soaking with coral stones. Additionally, eastern towns substitute coconut husks with seaweed and nipa palm stalks, yielding salt with a distinct bitter taste. These variations illustrate the localized adaptations of a broader, culturally synthesized production methodology.

Socioeconomic Shifts and the Decline of Traditional Practices. Despite its historical prominence, traditional salt production is now in decline. Ethnographic interviews and coastal surveys indicate a diminishing number of active producers in *Bohol*, largely attributable to rising production costs and a waning interest among younger generations. Where families once owned essential materials—wood and coconut husks—modern salt-makers must now purchase these inputs, markedly increasing production costs. The escalation in the price of essential earthenware pots, from 4 centavos to between 3 and 10 pesos, and the added expense of transporting salt to inland markets have further undermined profitability (Yakownski, 2007). These economic pressures are compounded by market competition with inexpensive commercial salt, leading to a significant reduction in both production and demand.

Regulatory and Global Influences on Traditional Practices. External influences have also redefined traditional salt-making practices in *Bohol*. The introduction of new techniques and tools during Spanish colonization, alongside trade interactions with Chinese and other Asian merchants, catalyzed the development of a hybrid production model that integrated indigenous practices with foreign innovations. More recently, the imposition of the *ASIN Law* (Montojo et al., 2024) and stringent food safety standards have further altered local methodologies. These regulatory and global market pressures have not only

reshaped production processes but have also intensified the economic challenges facing artisanal salt-makers. A way to counteract this is the institution of an ASIN Festival, similar to the benchmark set by one barangay LGU (Tingco & de Asis, 2018).

Cultural Heritage and Preservation Efforts. The cultural significance of traditional salt production remains evident despite its decline. The production of Asin Tibuok—a labor-intensive process that requires at least three months to complete—epitomizes the intersection of artisanal craft and cultural heritage. The indigenous method, which includes soaking coconut husks in seawater, drying, burning to create ash, and boiling brine in clay pots to produce a uniquely flavored salt, has been passed down through generations. The Manongas family, long recognized for their commitment to this craft, has achieved international acclaim, notably with recognition from the Slow Food Ark of Taste in 2016 (Bofill & Gan, 2022). However, challenges such as the ASIN Law of 1995—which mandates iodine supplementation—and rising production costs have severely restricted local sales and market appeal (Bofill & Gan, 2022; Co, 2024). Moreover, natural calamities, such as Typhoon Odette in 2021, have further imperiled the continuity of these traditions. The declining artisanal practices not only diminish the local salt industry but also threaten the associated pottery industry, once a thriving enterprise integral to creating the traditional asin tibuok.

In sum, the indicators of multicultural influences are manifest throughout the historical and contemporary trajectories of salt production in Southeast Asia. The interplay between foreign trade, local traditions, and modern regulatory frameworks has culminated in a hybrid production system that is both culturally significant and economically challenged. The decline of artisanal practices, as observed in *Bohol* and exemplified by the production of *Asin Tibuok*, underscores the urgent need for interventions that preserve these unique cultural heritages while adapting to modern economic realities.

4. Educational Implications of Studying Asin Tibuok and its Saltmaking Process

The integration of traditional practices such as *Asin Tibuok* into the educational curricula must be actively pursued using a firmly rooted, context-specific approach. Grounded in socio-cultural learning theories—where

Vygotsky's proposition that each culture functions as a developmental tool and Piaget's model of assimilation substantiate the value of aligning new experiences with existing schemas (Bibon, 2021; Centillas et al., 2024)—this initiative demands decisive action. Empirical evidence (Kana'iaupuni et al., 2010; Bibon, 2020) supports the assertion that culture-based educational strategies not only enhance learning outcomes but also foster a stronger positive disposition towards indigenous knowledge systems.

Policy must actively support indigenization. In strict accordance with the Enhanced Basic Education Act of 2013 (RA 10533), the curriculum should be fully adaptable to reflect the unique cultural and social environment of Bohol. Local policy directives issued by DepEd Bohol and the Bohol Provincial Government must be clearly aligned with the national framework to support community-based education and cultural preservation (e.g. Cabasag et al., 2021; Ogwari et al., 2021). It is imperative that local institutions such as Bohol Island State University (BISU) and the local DepEd offices collaborate closely in the reformulation of curricula so that they incorporate traditional practices into academic discourse, with clear benchmarks for cultural integration and preservation. Local culture, and by extension, history, should be explicitly included in curricula across basic and higher education. Recent directives such as the Division Memorandum from the Office of the Schools Division Superintendent (e.g., the memos dated January 25, 2021, and February 10, 2025) underscore the regional commitment to integrating cultural initiatives within educational programs, which is a small but important step in the right direction.

Support Graduate Research in Anthropology. Moreover, in light of the observation that no anthropology program is currently offered in Bohol—and that the nearest program is available at the University of San Carlos, an institution with high tuition fees—the provincial government must take proactive steps to support cultural research. The province must sponsor generous scholarships for local faculty who are interested in pursuing graduate work in anthropology, thus empowering them to uncover and disseminate Bohol's rich cultural heritage. This approach not only addresses the gap in local academic offerings but also ensures that faculty and educational leaders are equipped with the specialized knowledge needed to lead culturally relevant research and curriculum development. Holy Name University (HNU) offers the Master of Arts in Education major in Cultural Education program, which requires much support and empowerment because it has the strong albeit unappreciated potential to raise the bar in preserving Boholano culture, as is evident in the multitude of research that has emerged from the institution's College of

Education precisely on this agendum (Bulilawa et al., 2024; Cagulada & Bulilawa, 2024; Janiola, 2024; Gementiza, 2023; Moral & Pandan, 2024). Alternatively, the only state university (BISU) or the different local universities and colleges (LUCs) must be generously supported so they can offer the anthropology program. This way, the province can foster an environment where traditional practices like *Asin Tibuok* are rigorously studied, preserved, and celebrated.

Pedagogical innovation is non-negotiable. To enrich social studies curricula, the historical evolution of *Asin Tibuok*, as detailed by Montojo et al. (2024) and primary accounts like those of William Henry Scott (1994), must be incorporated into academic modules. This curriculum should be designed to enable students to explore local history through immersive, experiential learning activities. Field trips to recognized traditional saltmaking sites in barangays with documented practices, simulation-based learning that employs locally sourced materials (e.g., coconut husks and driftwood as noted by Salibay & de los Santos, 2020, and community workshops led by local cultural experts and artisans are critical. Engagement with institutions such as the Bohol Provincial Tourism Office and local heritage centers like Museo de Loboc is essential to ensure that these initiatives are both practical and impactful.

Preservation of intangible cultural heritage must be prioritized. As modernization poses increasing threats to traditional practices, innovative ways to preserve intangible cultural heritage must be done. For example, the urgent development of a localized *Asin Tibuok* teaching model is proposed. This model should complement existing Boholano teaching models and paradigms—such as the Lantugi Model of Agonist Teaching and the Fiesta Teaching Model (Moral & Pandan, 2024; Pandan, 2025)—while integrating additional resources from Bohol-based researchers and cultural historians.. This structured approach will ensure systematic documentation and intergenerational knowledge transfer, as further underscored by research on preserving traditional crafts (Yankowski, 2019).

Center for Boholano Studies. Cebu has already set a benchmark with its Cebuano Studies Center, established in December 1975 as part of the University of San Carlos's extension services. Bohol now urgently requires a dedicated Center for Boholano Studies that will serve as a multidisciplinary hub for research, cultural documentation, and community engagement focused on Boholano heritage. This proposed center should be anchored within local institutions such as BISU and HNU and in close collaboration with DepEd Bohol, the Bohol Arts and Cultural Heritage Council, and other key cultural

agencies. It will provide a platform for rigorous research on traditional practices like *Asin Tibuok* and foster the dissemination of indigenous knowledge systems through academic programs, specialized training, and community-based projects. The center must also address the current gap in local anthropology programs by facilitating pathways for faculty and scholars to pursue advanced studies—through government-sponsored scholarships, private partnerships, and international grants—thereby cultivating local expertise that can drive culturally relevant curriculum development and preservation initiatives. In doing so, this center will not only enhance academic and cultural resilience but also play a pivotal role in ensuring that Bohol's unique cultural heritage is documented, celebrated, and transmitted to future generations. Cebu sets a benchmark as a product of decades of toil (Mojares, 1976). It is not yet too late for Bohol.

Strategic multi-stakeholder partnerships are essential. The establishment of collaborations with local government units (LGUs), cultural organizations, and prominent local artists is strongly recommended. The Provincial Government of Bohol, DepEd Bohol, and BISU, the Cultural Affairs and Development Center under Joshibiah G. de Juan must take the lead in forming a formal memorandum of understanding (MoU) with cultural bodies such as the Bohol Arts and Cultural Heritage Council, the National Museum of the Philippines-Bohol and other groups such as the Institute for Solidarity in Asia (2024). These partnerships should facilitate cultural immersion activities, artist-led demonstrations, and community-based projects that ensure a direct, tangible engagement with the heritage of *Asin Tibuok*.

Teacher Training. Students enrolled in education programs, especially BSED social studies majors, must extensively engage in culturally immersive internships and field-based training that bridge academic theory and community practice. They should participate in specialized seminars and hands-on workshops led by local cultural custodians and heritage experts, which include visits to traditional sites such as *Asin Tibuok* production areas. This direct engagement will not only deepen their understanding of indigenous practices but will also equip them with innovative pedagogical strategies that foster the integration of local culture into classroom instruction. By collaborating with institutions like Bohol Island State University and local DepEd offices, these future educators can learn to design curricular modules that reflect the unique cultural fabric of Bohol and support the intergenerational transfer of traditional knowledge

Future research. Finally, it is imperative that future research emphatically establishes and measures specific indicators of educational impact. A robust evaluative framework that combines qualitative and quantitative metrics must be implemented in select pilot programs within Bohol's educational institutions. These indicators should comprehensively assess improvements in student learning outcomes, the degree of cultural preservation, and the levels of community engagement. Only through such a targeted evaluative process—enriched with local case studies and additional empirical research—can the efficacy of these culture-based teaching strategies be accurately determined.

In summary, the educational implications of incorporating *Asin Tibuok* into the curriculum extend well beyond academic enrichment. Decisive policy reforms and pedagogical innovations, anchored in local context and enforced through multi-stakeholder partnerships, are vital to the preservation of our cultural heritage. This proactive approach will not only enrich social studies curricula and foster cultural awareness but will also safeguard the intangible cultural heritage of Bohol for future generations.

Conclusion

Asin Tibuok represents a distinctive artisanal salt production process that is specific to Bohol. Its production method involves a series of well-defined, labor-intensive steps that utilize locally sourced materials such as coconut husks and traditional earthenware. This method, which has been refined over generations, provides both a material record of Boholano technical expertise and a repository of associated cultural practices and oral histories.

The production of *Asin Tibuok* reflects a convergence of traditional techniques and locally available resources, differentiating it from other saltmaking practices in the Visayas. Its continued practice constitutes both an important material heritage—through its technical craftsmanship and documented procedural knowledge—and an intangible cultural asset, as demonstrated by the transmission of local expertise and traditional narratives. Consequently, the conservation and systematic safeguarding of *Asin Tibuok* are imperative. Such measures will support the technical integrity of the process,

ensure continuity of the practice, and facilitate its integration into educational frameworks for cultural heritage preservation and technical skills development.

Recommendations

To ensure the ongoing viability and integration of Asin Tibuok into both local economies and educational frameworks, further research must be initiated to develop quantifiable indicators that precisely measure its educational, socioeconomic, and cultural impacts. This research should be coordinated through local academic institutions in partnership with cultural and governmental agencies, thereby enabling evidence-based decision-making and targeted interventions. Concurrently, the establishment of a formal institutional framework is necessary, wherein local government units collaborate with cultural organizations and educational bodies to implement comprehensive training programs, support grants for traditional saltmakers, and develop effective marketing strategies for artisanal products. Emphasis should be placed on the systematic documentation of the detailed, step-by-step production process of Asin Tibuok through digital recording methods and standardized archiving systems, ensuring that both technical procedures and associated cultural narratives are preserved. Finally, existing regulatory frameworks must be revised to accommodate the unique characteristics of non-industrial salt production, thereby providing a supportive policy environment that recognizes and promotes artisanal methods while maintaining food safety standards. These coordinated efforts are expected to safeguard the technical rigor of the production process, enhance cultural literacy, and stimulate local economic development.

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