






Research paper

# Urrak as a Traditional Fermented Cashew Beverage

## Tourist Perceptions and Bio-Cultural Sustainability in Goa

Harsha Assotikar <sup>a \*</sup>

<sup>a</sup> Department of Hospitality and Tourism Management, Agnel Institute of Food Crafts and Culinary Sciences, Agnel Ashram Verna - Goa 403722, India

ARTICLE INFO	ABSTRACT
<b>Keywords</b>  Urrak Goan beverage gastronomic tourism cultural heritage sustainable tourism	<p>A distinctive bio-cultural product of Goa, urrak is a traditional fermented alcoholic beverage made from cashew apple juice (<i>Anacardium occidentale</i> L.). Its manufacturing connects biological transformation with ancient knowledge systems through natural fermentation processes mediated by native microorganisms. Beyond its cultural significance, Urrak supports rural lives and has promise for heritage-based, sustainable tourism.</p> <p>This study looks at the knowledge, attitudes, and consumption patterns of tourists on Urrak, a traditional Goan alcoholic beverage made from fermented cashew apple juice that was initially distilled. Despite Goa's international fame for its beaches and nightlife, local beverages like Urrak are still not often mentioned by visitors. Using a mixed-method approach that included surveys of 120 tourists and interviews with eight local stakeholders, the study found that tourists' inclination to taste Urrak is significantly influenced by authenticity, flavour, and cultural narrative. Regulatory restrictions, lack of standardization, sanitary concerns, and limited availability are some of the primary obstacles that have been identified. According to the report, Urrak might gain greater recognition via planned advertising, seasonal branding, heritage-based tourism initiatives, and Geographical Indication (GI) protection. Including Urrak in sustainable tourism might contribute to the preservation of traditional knowledge, the livelihood of rural residents, and the expansion of Goa's culinary tourism offerings.</p>
 <b>DOI</b> <a href="https://doi.org/10.5281/ib-2242726">10.5281/ib-2242726</a> <b>*Corresponding author</b> <a href="mailto:Harsha.Assotikar@gmail.com">Harsha Assotikar</a> <b>Email</b> <a href="mailto:harshaassotikar@gmail.com">harshaassotikar@gmail.com</a> 	

### 1. Introduction

The fermented juice of the cashew apple (*Anacardium occidentale* L.) is used to make the traditional Goan alcoholic beverage known as urrak. It has a unique role in Goan cuisine culture and rural livelihoods and is periodically distilled during the early cashew harvesting season. In contrast to commercially standardized spirits, Urrak is firmly ingrained in community-based consumption, informal manufacturing methods, and local knowledge systems. Urrak is a bio-cultural product that was traditionally made for local use and is influenced by local environment,

agricultural cycles, and customary processing techniques. Urrak is underrepresented in popular tourism narratives despite its cultural value, which emphasizes the necessity to record and comprehend its role in sustainable heritage-based tourism and local economic development.

The spontaneous fermentation of cashew apple juice, a sugar-rich substrate that fosters microbial activity, is the biological basis of Urrak. Naturally occurring yeasts, especially *Saccharomyces* species, are the main drivers of fermentation. They transform fermentable carbohydrates into ethanol and organic byproducts. Fruit ripeness, ambient temperature,

fermentation time, and hygienic conditions all have an impact on the process, which in turn affects the alcohol concentration, taste profile, and scent of the beverage. Urrak synthesis is a biologically controlled process that shows how microbial metabolism interacts with substrates produced from plants. Understanding traditional fermentation biology in the context of standardization, health concerns, and sustainable production is crucial since variations in fermentation techniques lead to inconsistent quality and safety.

Goa's tourism character extends beyond its nightlife and beaches. It also has a rich history of food and drink that has been formed by the area's culture, history, and environment. One of these customs that receives little notice is urrak, a mild, seasonal alcoholic beverage created from fermented cashew apple juice. While Urrak is mostly consumed in the region where cashews are harvested from March to May, Feni is well-known worldwide. Due to its freshness, low alcohol content, and cultural significance, people like Urrak. It is created by distilling it once in traditional copper pot stills (bhattis), and since it spoils quickly, it should be consumed immediately. This makes it harder to sell things on a wide scale, but it also gives visitors a rare chance to see real culture.

Traditional foods and beverages have become crucial components of destination identity as global tourism emphasises authenticity, experiential travel, and cultural immersion (Richards, 2018). Gastronomic tourism research demonstrates the growing significance of regional cuisine and beverages in fostering authentic travel experiences and enhancing a destination's identity (Bessière, 2013). It is often accepted that traditional alcoholic beverages are expressions of local culture and intangible heritage, supporting both local economic development and cultural continuity. This research investigates visitor perceptions and consumption of Urrak, analyzing its potential contribution to heritage-based and sustainable tourism in Goa.

Because they are interested, want to try something new, or want to understand more about the culture, people who travel often like to consume local beverages (Hall & Sharples, 2003). However, strict regulations, a lack of standardisation, and hygienic concerns may hinder the growth of traditional drinks (Everett & Aitchison, 2008). Additionally, studies demonstrate the need of maintaining Geographical Indication (GI) in order to enhance market positioning, safeguard authenticity, and increase product trust (Rangnekar, 2011). These protection systems serve as quality indicators that might increase consumer confidence and provide new economic opportunities for regional producers.

In many different parts of India, traditional alcoholic beverages play a significant role in social

and cultural gatherings. In Jharkhand, Madhya Pradesh, Odisha, and Chhattisgarh, people drink mahua, a floral drink produced from *Madhuca longifolia*, during ceremonies and celebrations. The tribal people of central and eastern India are the source of it (Wikipedia authors, 2024). Additionally, Mahua gives indigenous producers an opportunity to collaborate on marketing and policy initiatives that will benefit them. Fermented beverages made from rice demonstrate the depth of the native brewing tradition in Northeast India (Smujo, 2021). The Dimasa tribe in Assam uses the indigenous beginning culture (humao) to make judima, a traditional rice wine. It is known for its cultural and religious importance and is protected by GI. Apong (Apo), a significant component of festivals and community gatherings, is also produced by the Mishng tribe in Assam and Arunachal Pradesh (Journal of Ethnic Foods, 2025). In Jharkhand and Odisha, handia and other rice beers are closely associated with the agricultural cycles and hospitality customs of their respective tribes (Journal of Ethnic Foods, 2024).

Other indigenous drinks include Lugdi in Himachal Pradesh (Wikipedia authors, 2025b) and Zutho and Thuthse in Nagaland (Wikipedia contributors, 2025a). They show how fermentation is done in different parts of the country and how it is used in culture (Open Magazine, 2025). These beverages are more than simply a beverage; they are a reflection of your identity and background. These drinks may look more authentic and contribute to the development of rural regions if they are included in tourism activities like village brewery tours, guided tastings, or cultural events. However, there are still issues with unregulated production, concerns about hygiene, and regulations that hinder larger-scale sales.

In Goan society, Urrak fulfills a variety of social, cultural, and commercial purposes. It is typically drunk as a seasonal beverage, frequently combined with citrus juices or regional seasonings, and connected to celebrations and community get-togethers. Beyond recreational usage, Urrak supports rural lives by giving cashew growers and small-scale producers more revenue. Urrak has drawn interest recently as a possible heritage product within sustainable tourism, providing chances for culinary branding, cultural narrative, and experience travel. Urrak may help preserve traditional knowledge, offer value to agricultural byproducts, and support locally based, ecologically responsible business operations when it is carefully included into tourist frameworks.

This study seeks to evaluate visitors' understanding and impression of Urrak as a traditional Goan beverage, estimate its cultural and economic possibilities within Goa's tourism industry, and explore the role of hospitality businesses and local marketing in its promotion. This research

contributes to the little literature on indigenous Indian alcoholic beverages and provides lawmakers, travel planners, and hospitality professionals with valuable information to enhance Goa's tourism offers.

## 2. Methodology

### 2.1 Research Design

In order to get a comprehensive understanding of Urrak consumption patterns and its potential in tourist surroundings, the study used a mixed-method research technique, integrating quantitative and qualitative methods. The methodological triangulation made possible by the coupling of experience narratives and numerical data increased the results' credibility and robustness.

### 2.2 Data Collection and Sampling

Primary data for the research came from 120 visitors, 70 of whom were from inside the nation and 50 of whom were from outside, at the popular tourist destinations of Goa Panaji, Calangute, Baga, and Margao. The data was gathered during the cashew harvesting season (March–May 2025), which is also when Urrak is traditionally produced and consumed. A convenience sample technique was used because of the exploratory nature of the research and the seasonal availability of Urrak. Even though it limits statistical generalization, this method worked well for obtaining early insights into a time-bound, culturally unique product. In order to get quantifiable data on tourists' knowledge levels, consumption habits, preferences, and genuine opinions, they were given standardized questionnaires to fill out.

### 2.3 Qualitative Interviews with Stakeholders

To supplement visitor responses, semi-structured interviews were conducted with eight local stakeholders, including traditional Urrak distillers, bar owners, and hospitality specialists. The interviews provided in-depth information on traditional production techniques, cultural significance, barriers to commercialization, legal

issues, and the perceived value of Urrak in enhancing the travel experience. The semi-structured approach ensured consistency across interviews while facilitating the investigation of emergent themes.

### 2.4 Data Analysis Techniques

In order to identify patterns and trends regarding awareness, frequency of consumption, and visitor preferences, quantitative data were analyzed using simple percentage analysis. To find recurring themes including authenticity, historical significance, sustainability, and tourism potential, qualitative data was subjected to thematic analysis, which included thorough coding and categorization. For the best interpretation, all data were methodically arranged and examined using Microsoft Excel.

### 2.5 Ethical Considerations

Ethical research practices were strictly adhered to throughout the study. Participation was voluntary, informed consent was obtained from all respondents, and anonymity and confidentiality were ensured to protect participants' identities and responses.

## 3. Results and Discussion

### 3.1 Tourist Awareness and Consumption Patterns

Tourist awareness of Urrak is limited, with just 42% of respondents (50 out of 120) reporting prior knowledge of the beverage. International visitors had a higher level of expertise at 44%, compared to 40% among domestic tourists. This tendency suggests that cultural exploration customized for specific places may be increasingly pronounced among international tourists seeking authentic local experiences. The actual consumption rates decreased, with 31.5% of tourists (38 respondents) having tasted Urrak. International visitors had a consumption rate of 36%, above the 28.5% rate of domestic tourists, so highlighting the appeal of distinctive cultural artifacts for travelers seeking extraordinary experiences.

**Table 1** Tourist Awareness, Consumption, and Future Intent Regarding Urrak (N=120)

Parameter	Domestic Tourists (n=70)	International Tourists (n=50)	Total (n=120)	Percentage
Awareness of Urrak	28	22	50	41.7%
Tried Urrak	20	18	38	31.7%
Likelihood to Consume Again	15	16	31	25.8%
Interest in Guided Tasting/Distillery Visit	30	28	58	48.3%

Table 1 indicates a notable disparity between awareness and consumption, with awareness at 41.7% and actual consumption at just 31.7%. The 10-percentage-point disparity suggests possible

obstacles beyond simple awareness. International travelers exhibit greater involvement across all metrics, indicating that marketing strategies should focus on this demographic. The significant interest in

experience tourism activities (48.3%) indicates a distinct possibility for organized heritage tourism projects. The comparatively low repeat consumption intent (25.8%) among those who have sampled Urrak suggests that, while the experience is favorable, other variables like as availability and packaging may affect future consumption choices.

Younger tourists and overseas visitors had a heightened inclination to sample the beverage, driven by curiosity and a quest for original experiences, while older travelers favored conventional alcoholic

beverages, citing taste predictability and safety apprehensions. Of the individuals that drank Urrak, 25.8% indicated a propensity to drink it again, with overseas visitors demonstrating a greater inclination at 32%, in contrast to 21% for domestic tourists. The favorable feedback indicates that addressing access hurdles allows Urrak to possess considerable potential for repeat consumption and word of mouth advocacy.

**Table 2** Perceived Taste Quality of Urrak Among Tourists Who Consumed It (n=38)

Taste Rating	Domestic Tourists (n=20)	International Tourists (n=18)	Total (n=38)	Percentage
Good	18	15	33	86.8%
Average	2	3	5	13.2%
Poor	0	0	0	0%

Table 2 illustrates a mostly favourable taste impression among customers, with 86.8% evaluating Urrak as excellent and no unfavorable assessments noted. This finding is significant because it refutes the belief that classic beverages could not be appealing to modern palates. The moderate average ratings and absence of bad ratings suggest that taste is not a major barrier to intake. The data indicates that the sensory experience of Urrak is very satisfying if visitors get over initial resistance and access barriers. The positive response provides strong factual support for marketing campaigns that emphasize the beverage's true flavor profile and shows that taste-related complaints are often unfounded.

### 3.2 Barriers to Consumption

Hygiene issues were identified as the primary obstacle, reported by 35.8% of respondents, with comparable percentages among domestic (36%) and overseas visitors (36%). The uniform trend all tourist categories suggests that the standardization of manufacturing and packaging might markedly improve market acceptability. Thirty percent of respondents mentioned availability as a barrier, with local visitors expressing this issue somewhat more often at 31%, compared to 28% of overseas tourists. The seasonal characteristics of Urrak production and its restricted distribution network exacerbate this difficulty.

**Table 3** Key Barriers to Urrak Consumption as Perceived by Tourists (n=120)

Barrier	Domestic Tourists (n=70)	International Tourists (n=50)	Total (n=120)	Percentage
Hygiene Concerns	25	18	43	35.8%
Limited Availability	22	14	36	30.0%
Regulatory Restrictions	15	10	25	20.8%
Lack of Information	18	15	33	27.5%
Price Concerns	8	6	14	11.7%

Table 3 illustrates a clear hierarchy of consumption barriers, with hygiene issues dominating at 35.8%. This result has significant implications for policy and practice, suggesting that initiatives focused on sanitary standards and certification may substantially impact market development. The second most recognized barrier, poor availability (30%), signifies structural challenges linked to seasonal production and informal distribution networks. Regulatory limits rank third at 20.8%, indicating tourists' comprehension of the complex legal framework governing traditional alcohol production. The little concern with cost (11.7%) suggests that tourists are predisposed to spend in authentic cultural experiences, hence supporting premium positioning strategies. The notable indication of inadequate

information (27.5%) underscores the need for enhanced marketing and educational initiatives. Regulatory constraints were recognized by 20.8% of respondents, with local visitors demonstrating somewhat more understanding at 21% compared to 20% for international tourists. Despite these challenges, 48.3% of visitors expressed a preference for guided tasting experiences or distillery tours, with international tourists exhibiting much more enthusiasm at 56% compared to 42.8% for domestic tourists. This result aligns with prevailing trends in experiential tourism and suggests that structured, customized experiences may overcome individual consumption barriers while creating new revenue streams for local businesses.



3.3 Stakeholder Perspectives

Interviews with eight local stakeholders revealed varied viewpoints of Urrak's tourist potential and the obstacles to its commercialization. Traditional Urrak distillers (n=3) highlighted the beverage's cultural history and genuine flavor, although noted limited

production capacity, seasonal availability, and informal production frameworks as significant problems. The producers proposed that standardization, GI certification, and organized distillery tours may improve market positioning while maintaining traditional practices.

Table 4 Stakeholder Perceptions and Recommendations for Urrak Promotion (n=8)

Stakeholder Type	Key Perception	Primary Challenges	Promotional Recommendations
Traditional Distillers (n=3)	Cultural heritage product with authentic taste	Limited production capacity; seasonal availability; informal structure	Standardization; GI certification; guided distillery visits; cooperative marketing
Tavern/Bar Owners (n=2)	Attractive unique offering for tourists	Short shelf life; hygiene perceptions; regulatory compliance	Seasonal menus; tasting events; tourism board collaboration; branded packaging
Hospitality Professionals (n=3)	Experience enhancer; cultural differentiator	Lack of awareness; marketing gaps; inconsistent supply	Integration into tour packages; cultural storytelling; branded souvenirs; staff training

Table 4 clarifies notable similarities and differences in stakeholder perspectives. All three stakeholder groups recognize Urrak's cultural and economic importance; yet, each identifies issues relevant to their own roles in the value chain. Distillers focus on production-related constraints, bar owners emphasize point-of-sale challenges, and hotel professionals highlight demand-side shortcomings. This variety suggests that effective interventions must be comprehensive, simultaneously tackling production, distribution, and marketing. The recommendations indicate consensus on fundamental strategies like standardization, experience tourism development, and cooperative marketing. All stakeholders emphasize the need for external support from tourism authorities and regulatory bodies, indicating that market-driven solutions may be insufficient. The recurrent mention of GI certification among stakeholder groups signifies acknowledgment of successful instances involving other area products.

Proprietors of taverns and bars (n=2) recognized Urrak as an attractive choice for tourists seeking

unique experiences, although voiced concerns over its short shelf life, perceptions of cleanliness, and compliance with regulatory norms. They proposed seasonal menus, sampling events, and collaborations with tourism boards to provide structured promotional opportunities. This perspective highlights the role of hospitality establishments as crucial intermediaries between producers and consumers.

Hospitality professionals (n=3) noted that Urrak enhances guest experiences via cultural distinctiveness, although emphasized that inadequate awareness and marketing shortcomings are significant obstacles. They proposed incorporating Urrak into experiential tourism offers, developing cultural narratives, and creating branded souvenirs. The convergence of stakeholder perspectives on shared themes such as cleanliness, availability, regulation, and marketing suggests that collaborative projects might successfully address several challenges simultaneously.

Table 5 Comparative Analysis of Tourist Segments on Key Variables

Variable	Domestic Tourists	International Tourists	Key Insight
Awareness Rate	40.0%	44.0%	International tourists show marginally higher awareness, suggesting better pre-visit research
Consumption Rate	28.5%	36.0%	International segment demonstrates higher conversion from awareness to trial
Repeat Intent	21.0%	32.0%	International tourists show 50% higher repeat consumption likelihood
Experiential Interest	42.8%	56.0%	Strong international preference for immersive cultural experiences
Primary Barrier	Hygiene (35.7%)	Hygiene (36.0%)	Consistent concern across segments requiring standardized solutions

Table 5 enables a comparison examination of local and foreign visitor groups, highlighting systematic disparities in involvement patterns. International

travelers regularly exhibit elevated rates across the conversion funnel, from awareness to consumption to repeat intent, indicating that this demographic should

be targeted in marketing campaigns. The 7.5-percentage-point disparity in consumption rates across sectors is notably substantial, suggesting that foreign travelers exhibit a greater propensity to explore local drinks despite comparable knowledge levels. The 13.2-percentage-point disparity in experiential interest underscores a potential to create premium heritage tourism offerings aimed at foreign travelers. The almost comparable concern for sanitation in all segments (35.7% vs 36.0%) suggests that this problem transcends cultural borders and needs universal remedies rather than segment-specific strategies. The results indicate that whereas foreign travelers constitute a more amenable market, resolving cleanliness and availability issues will advantage all categories equally.

Stakeholder insights indicate that Urrak is seen as a culturally important beverage with considerable tourist potential. Realizing this potential requires the resolution of systemic constraints via strategic interventions such as branding efforts, geographical indication preservation, experiential tourism development, and improved coordination among hospitality stakeholders, producers, and tourist authorities.

#### 4. Conclusion

Urrak represents a significant but little-known facet of Goa's intangible cultural heritage. The research shows that when information, accessibility, and safety concerns are adequately addressed, tourists respond favorably to Urrak. Urrak might become a distinctive symbol of Goan heritage via strategic efforts including guided tastings, hotel marketing, seasonal branding, and geographical indication protection. There is a significant market need for organized cultural tourism efforts, as shown by the finding that more over half of tourists express interest in participating in activities related to Urrak production.

Policymakers, tourism officials, and locals working together might enhance sustainable tourism outcomes while preserving traditional knowledge and supporting rural livelihoods. Urrak's inclusion in Goa's tourism framework presents opportunities to expand culinary tourism, support traditional producers financially, and strengthen destination identity via authentic cultural products. To improve marketing strategies and policy recommendations, future research must examine the long-term benefits of promotional campaigns, compare them to other indigenous beverages, and examine consumer behavior patterns across different visitor groups.

#### 5. Recommendations

This study introduces a multi-faceted paradigm for improving Urrak within Goa's tourism ecosystem, grounded on empirical data and stakeholder

perspectives. The recommendations are classified into policy, marketing, manufacturing, and hospitality sectors to ensure comprehensive implementation.

The Government of Goa and relevant regulatory authorities should streamline licensing procedures for traditional Urrak producers to facilitate formal market participation while maintaining quality standards. The establishment of an efficient regulatory framework designed for seasonal, small-scale traditional beverage production would reduce entry barriers and enhance compliance. Secondly, securing Geographical Indication (GI) certification for Urrak should be prioritized to protect authenticity, enhance credibility, and provide a competitive advantage in both domestic and global markets. The effective geographical indication protection for beverages such as Judima in Assam sets a significant precedent (Smujo, 2021). Third, establishing hygiene and quality certification procedures tailored for traditional manufacturing techniques would address the primary challenge identified in this study while preserving artisanal integrity. This certification may be administered by tourism or food safety agencies and prominently displayed at points of sale to enhance consumer confidence.

Producers want support in developing standardized packaging solutions that extend shelf life while maintaining product quality. Investing in appropriate bottling technology, labeling, and preservation techniques might transform Urrak from a strictly seasonal, on-premise beverage into a packaged product available beyond the harvest season. The formation of producer cooperatives or collectives would provide economies of scale in manufacturing, marketing, and distribution, while ensuring quality control and fair pricing. Cooperative techniques have shown effectiveness with other indigenous beverages and may provide Urrak producers more collective bargaining strength and consolidated resources (Rangnekar, 2011). Furthermore, training programs focusing on hygiene standards, tourism expertise, and customer engagement should be implemented for traditional distillers to enhance their participation in tourism value chains.

A comprehensive branding initiative depicting Urrak as "Goa's Seasonal Secret" or "The First Spirit of Spring" would leverage its limited availability as a unique selling proposition rather than a limitation. Marketing materials must emphasize the beverage's cultural heritage, traditional production methods, and connection to Goan identity. Digital marketing strategies including social media, influencer partnerships, and user-generated content might significantly enhance awareness among younger travelers and international visitors, who demonstrated higher consumption rates in this study. Creating dedicated Urrak tourist routes that connect

distilleries, historical sites, and cultural events will capitalize on the 48.3% of visitors who express a preference for engaging in activities. These trails may include guided distillery tours, visits to cashew orchards, traditional music and dance performances, and culinary pairing experiences, thereby producing diverse cultural tourism products.

Collaborating with hospitality establishments to develop seasonal Urrak menus, distinctive cocktails, and tasting flights would integrate the beverage into current tourist consumption patterns. Hotels, restaurants, and beach shacks need to be rewarded or approved to publicly display Urrak throughout the harvest season. Participation in food and beverage events, both in Goa and major metropolitan markets, would enhance exposure and enable direct consumer engagement. Annual events such as the "Urrak Festival," held during the peak production season, may attract dedicated cultural tourists and elicit media coverage and social media engagement.

The Goa Tourism Development Corporation and commercial travel operators have to include Urrak-centric activities into their offerings. This may include half-day distillery tours, sunset tasting events, and multi-day heritage trails that integrate Urrak with many aspects of Goan culture, including cuisine, architecture, and traditional crafts. Training programs for tour guides and hospitality personnel must include comprehensive lessons on Urrak's history, production techniques, and cultural significance, enabling them to serve as adept cultural interpreters. Creating explanatory materials, such as booklets, films, and mobile applications in several languages, would enhance tourists' understanding and pleasure, particularly for international visitors who may be unfamiliar with traditional Indian beverages. Collaborations between producers and luxury resorts might provide exclusive, high-end Urrak experiences, transforming the beverage into a sophisticated cultural product rather than just a local curiosity. These connections may include special distillery tours, master distiller dinners, or limited-edition bottlings available just to resort guests. Producing Urrak-themed memorabilia and products, such as branded glassware, recipe books, and gift packages, will enrich the consumer experience and provide additional revenue for stakeholders.

Improving physical accessibility to distilleries via enhanced signage, road infrastructure, and public transportation would alleviate barriers to tourist visits, particularly for those without own vehicles. Establishing specialized retail outlets known as Urrak corners at high-traffic tourist destinations, including as airports, major markets, and seaside areas, will enhance product accessibility. Creating an online platform or mobile application that connects tourists with licensed Urrak producers, retail establishments, and experiential activities would address the

accessibility concern identified by 30% of respondents. This portal may provide features such as geographic mapping, product information, booking capabilities for tours and tastings, and educational resources on Urrak's cultural significance.

Developing educational initiatives for both tourists and local communities would promote mutual understanding and tolerance. This may include succinct educational sessions at hotels, interpretive exhibitions at cultural sites, and culinary or mixology classes including Urrak. Educational initiatives for local communities, particularly teenagers, must to emphasize the cultural importance and economic potential of Urrak, promoting intergenerational knowledge transmission and job opportunities in traditional beverage production. Goan academic institutions could include indigenous beverage studies into their hospitality, tourism, and cultural studies curricula, therefore fostering a cohort of knowledgeable workers to further the sector's development.

## 6. Future Research Directions

This study provides critical insights on visitor perception and consumption of Urrak; nevertheless, other avenues for future research might augment understanding and provide more nuanced solutions. Longitudinal study examining consumption patterns across several seasons and years would reveal changes in awareness, perception, and demand, facilitating more accurate forecasting and strategic planning. This research may evaluate the effectiveness of promotional strategies over time and identify suitable marketing approaches for different visitor segments.

Comparative assessments of tourist interactions with indigenous beverages in other Indian states will contextualize Urrak within the broader framework of cultural beverage tourism. Examining Urrak in conjunction with products such as Mahua, Judima, Apong, and others will elucidate best practices, common challenges, and relevant methodologies. This research may use similar analytical approaches to enable substantial cross-regional comparisons and further theory development in gourmet tourism.

Thorough economic impact analyses evaluating the potential benefits of Urrak tourism on local livelihoods, governmental revenue, and regional advancement would provide compelling justification for policy measures and resource distribution. Research using multiplier analysis, value chain mapping, and economic modeling may demonstrate the substantial economic benefits of investing in traditional beverage tourism beyond just sales revenues.

Research on consumer behavior using advanced techniques like as conjoint analysis or discrete choice modeling would clarify the importance of many



product attributes, including taste, price, packaging, certification, and cultural narrative, in shaping purchase decisions. This knowledge would enhance product development and marketing strategies.

Examining the environmental sustainability of Urrak production, including cashew apple waste management, water use, and energy usage, will promote the development of genuinely sustainable tourism practices. Research may reveal opportunities for waste valorization, circular economy initiatives, and the extension of sustainable industry.

An anthropological research documenting traditional knowledge systems, manufacturing techniques, and cultural significances associated with Urrak would preserve intangible heritage and enrich authentic tourism experiences. Oral history projects, participatory documentation, and community-based research approaches would emphasize local perspectives and insights in knowledge creation.

Market segmentation study using cluster analysis or latent class modeling would identify distinct tourist groups based on consumption motivations, preferences, and behaviors, enabling more precise targeting and customization of offerings. Assessing whether segments are mostly influenced by demographics, psychographics, travel motivations, or other attributes would inform strategic marketing decisions. Research examining the effects of digital media, social influence, and electronic word of mouth on Urrak awareness and consumption will provide significant insights for contemporary marketing strategies. Examining social media material, online reviews, and influencer impacts may uncover effective digital engagement techniques. A comparative research examining visitor impressions before and after GI certification, should Urrak get such protection, would provide substantial insights into the impact of certification on awareness, perceived quality, willingness to pay, and consumption behavior. Quasi-experimental research methods may clarify certification options for traditional products. Research on potential export markets and worldwide distribution strategies would pinpoint opportunities for Urrak to connect with diaspora communities and international consumers in search of authentic cultural artifacts. Conducting market research in key tourist-generating countries may clarify demand patterns and enable distribution partnerships.

Ultimately, action research and participatory approaches including producers, hospitality stakeholders, tourist authorities, and visitors as co-researchers will ensure that future studies are practice-oriented, culturally relevant, and easily transferable. Community-based participatory research approaches would democratize knowledge collection and bolster local ability for ongoing assessment and adaptation. Examining the alignment

of Urrak tourism with other sustainability goals, such as rural employment, gender equality, and climate adaptation, would situate beverage tourism within broader development frameworks and improve integrated policy initiatives.

## References

1. Bessi re, J. (2013). Heritage and gastronomy: A review of food heritage practices. *Journal of Heritage Tourism*, 8(2-3), 120-134.
2. Everett, S., & Aitchison, C. (2008). The role of food tourism in sustaining regional identity. *Tourism Studies*, 8(2), 150-167.
3. Hall, C. M., & Sharples, L. (2003). *Food tourism around the world*. Oxford: Butterworth-Heinemann.
4. *Journal of Ethnic Foods*. (2024). Traditional alcoholic beverages of the Bonda tribe in Odisha, India: Evidence from the field. *Journal of Ethnic Foods*.
5. *Journal of Ethnic Foods*. (2025). Methodology of ethnic cereal-based and fruit-based beverages of Bodo community of Assam. *Journal of Ethnic Foods*.
6. *Open Magazine*. (2025). Brewing heritage: Indigenous brews in India. *Open Magazine*.
7. Rangnekar, D. (2011). Geographical indications and local development. *World Development*, 39(3), 371-382.
8. Richards, G. (2018). Cultural tourism: A review of recent research and trends. *Journal of Hospitality and Tourism Management*, 36, 12-21.
9. Smujo. (2021). Compendium of plants used for preparation of traditional alcoholic beverages by ethnic communities of Assam, Northeast India. *Biodiversitas Journal of Biological Diversity*.
10. Wikipedia contributors. (2024, March 15). *Mahuli (wine)*. Wikipedia.
11. Wikipedia contributors. (2025a, January 10). *Zutho*. Wikipedia.
12. Wikipedia contributors. (2025b, January 15). *Lugdi*. Wikipedia.