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EXPLORING THE INTERSECTION OF TOURISM AND COCOA-BASED PRODUCTS: A SIGNIFICANT LITERATURE REVIEW

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Abstract:

The intersection of tourism and cocoa-based products presents a growing area of interest within sustainable development and cultural heritage studies. Despite increasing scholarly attention, a consolidated understanding of how cocoa-related initiatives contribute to tourism remains limited. This Systematic Literature Review (SLR) aims to bridge this gap by analyzing the current body of research related to cocoa and tourism using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) protocol. Articles from Scopus and ScienceDirect yielded a final sample of 12 primary studies. The analysis revealed three major thematic areas: Chocolate and Agro-Tourism Development, emphasizing how cocoa-based experiences stimulate rural economies and enhance tourist engagement; Socio-Historical and Cultural Dimensions of Chocolate, highlighting the role of chocolate in shaping local identities and cultural narratives; and Sustainability and Logistical Challenges in Cacao Supply Chains, focusing on the environmental and operational constraints impacting cocoa-tourism synergy. Results suggest that while cocoa-related tourism holds significant potential for socio-economic growth and cultural preservation, it also faces considerable logistical and sustainability challenges. The review underscores the need for integrated strategies that align tourism development with ethical sourcing, cultural integrity, and environmental stewardship. This study contributes to the emerging discourse on food-based tourism and provides a foundation for future interdisciplinary research in the field.

Keywords:

Cocoa Tourism, Chocolate Heritage, Agro-Tourism Development, PRISMA

Introduction

Tourism and agriculture have long shared an interdependent relationship, with agro-tourism emerging as a growing niche that bridges rural livelihoods and visitor experiences (Tabita and Suryaningsih 2023). Within this context, cocoa, one of the world's most valuable cash crops, offers a unique opportunity to connect local agricultural heritage with global tourism markets. Notably, cocoa-based products, such as artisanal chocolate, cocoa beverages, cosmetics, and cultural experiences related to cocoa cultivation, are increasingly being leveraged as both economic drivers and storytelling tools in tourism destinations, particularly in cocoa-producing regions across Africa, Latin America, and Southeast Asia (Suharijadi, Fausiyah, and Astuti 2023). This intersection is significant for its economic potential and role in promoting sustainable tourism, enhancing local identity, and fostering rural development. As consumer preferences shift toward authentic, sustainable, and experiential travel, integrating cocoa-based products into tourism offerings becomes increasingly relevant, offering avenues for diversification in both sectors.

Despite the growing recognition of cocoa's role in tourism, the academic literature exploring this intersection remains fragmented and underdeveloped. That is, existing studies have focused on cocoa's contribution to rural economies, value-added product development, and chocolate tourism in specific contexts, such as Ghana's cocoa heritage tours or chocolate festivals in Belgium and Switzerland (Läderach et al. 2013). However, comprehensive frameworks examining the strategic integration of cocoa-based products into tourism systems are scarce. Moreover, critical issues such as value chain equity, the commodification of cultural heritage, and the environmental impacts of cocoa-tourism initiatives remain underexplored. This article addresses these gaps by examining how cocoa-based products are utilized within tourism and whether such integration promotes inclusive and sustainable development. In particular, the central Research Question (RQ) guiding this study is: *How can the integration of cocoa-based products into tourism enhance socio-economic benefits and sustainability for cocoa-producing communities?* By investigating this intersection through a multidisciplinary lens, the article aims to better understand how agro-based resources can be leveraged for tourism development. It offers policy and practice insights that bridge economic opportunity, cultural preservation, and environmental stewardship.

Literature Review

The intersection of tourism and cocoa-based products has gained increasing attention to foster sustainable development, cultural preservation, and economic diversification in rural and indigenous communities. Research by Santafe-Troncoso and Loring (2021) highlighted how the Chakra Route in Ecuador's Amazon region integrates traditional agroforestry practices with tourism, emphasizing food sovereignty and communal well-being. The study revealed that chakra gardens, which cultivate cocoa alongside other crops, serve as both a cultural symbol and an economic asset, attracting tourists interested in indigenous knowledge and sustainable agriculture. Similarly, Sidali et al. (2016) explored the role of Geographical Indications (GIs) in promoting Ecuador's cacao Nacional Arriba, suggesting that such certifications enhance marketability and support agro-tourism initiatives. These studies collectively demonstrate that cocoa-based tourism can empower local communities by preserving traditional practices while

generating income. Despite that, challenges remain, including governance issues and the need for greater indigenous participation in tourism planning (Santafe-Troncoso and Loring 2021). Thus, strengthening institutional frameworks and ensuring equitable benefit-sharing are critical for sustaining these initiatives.

The economic potential of cocoa-based tourism is further evidenced by its role in diversifying livelihoods in rural areas. Bannor et al. (2022) examined cocoa farmers in Ghana who are willing to engage in agritourism, citing income generation and alternative livelihood strategies as key motivations. Their findings suggested that small-scale farmers view tourism as a complementary revenue stream, particularly when cocoa prices fluctuate. Likewise, Bosquez et al. (2023) documented how rural communities in Ecuador leverage cocoa production alongside cheese-making and textile crafts to attract tourists, enhancing local economic resilience. However, limitations such as inadequate infrastructure and limited marketing expertise hinder scalability (Loureiro and Sarmento Ferreira 2015). Additionally, Vasco et al. (2024) noted that while cocoa contributes significantly to household income among Ecuador's Kichwa people, it remains insufficient, necessitating diversified agroforestry systems and supplementary tourism activities. These studies underscore the significance of integrating cocoa-based tourism with broader rural development strategies, including capacity-building and infrastructure improvements, to maximize socio-economic benefits.

Cultural authenticity and experiential tourism are crucial themes in cocoa-based tourism, particularly in post-colonial contexts where heritage and identity play a central role. de Andrade-Matos, de Azevedo Barbosa, and Costa (2021) analyzed the rebranding of Ilhéus, Brazil, as a chocolate tourism destination, emphasizing storytelling and cultural immersion as key drivers of visitor engagement. Their research highlighted how experiential tourism, such as farm visits and chocolate-making workshops, fosters a deeper connection between tourists and local traditions. Similarly, Arias and Cruz (2019) explored artisan chocolate entrepreneurship in Honduras, where small-scale producers capitalize on tourist demand for authentic, place-bound products. However, concerns about cultural commodification and appropriation persist, as noted by Heinonen (2023), who critiqued the commercialization of indigenous rituals in Finnish mystical tourism involving cacao ceremonies. Note that balancing authenticity with commercial viability requires careful negotiation to avoid diluting cultural significance. Hence, future research should explore participatory models that involve local communities in co-creating tourism experiences, ensuring that cultural integrity is preserved while economic opportunities are maximized (de Andrade-Matos et al. 2021).

Research Question

RQs are essential in a Systematic Literature Review (SLR) since they shape the entire process. They help define the scope and focus of the review, guiding which studies to include or exclude to keep the review relevant and specific. In particular, clear RQs ensure the search for studies is thorough and organized, reducing bias and covering all vital information. They also help organize and analyze the data, making it easier to understand and draw conclusions. Furthermore, well-formed questions improve clarity, avoid confusion, and focus the review on the main topic. They also make the review process transparent and easy to repeat, which is helpful for other researchers. Overall, RQs are the foundation of a strong, useful, and trustworthy SLR. Specifying the RQs is the most crucial activity at the planning stage and the most fundamental part of any SLR, as it drives the entire review methodology (Kitchenham 2007). Correspondingly, our SLR aims to explore and understand the current state of research

in this area. The PICO framework is a mnemonic style used to formulate RQs, particularly in qualitative research, proposed by Lockwood, Munn, and Porritt (2015), and was applied in this study. PICO stands for Population, Interest, and Context. Here is what each component means:

1. Population (P): This refers to the group or participants of interest in the study. It specifies who the research is focused on, such as a specific demographic, patient group, or community.
2. Interest (I): This represents the main focus or phenomenon of interest in the study. It could be a particular experience, behavior, intervention, or issue that the research aims to explore or understand.
3. Context (Co): This defines the setting, environment, or specific context in which the population and interest are situated. It might refer to geographical location, cultural or social settings, or any other relevant backdrop for the research.

Using the PICO framework helps structure RQs clearly and systematically by breaking down the key elements of the study into these three components. This approach ensures that the research is focused and the questions are well-defined, making searching for relevant literature or designing a study easier. This study achieved three RQs as follows;

1. How does the development of cocoa-based agro-tourism influence the economic empowerment of local communities in cocoa-producing regions?
2. In what ways do historical narratives and cultural traditions shape consumer perceptions of chocolate in cocoa-producing and consuming societies?
3. What are the main sustainability and logistical challenges faced by stakeholders in the global cocoa supply chain, and how are these issues being addressed?

Materials and Methods

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) approach is a well-recognized standard that ensures systematic reviews are transparent, complete, and consistent (Page et al. 2021). By following PRISMA guidelines, researchers can improve the accuracy and reliability of their reviews by systematically identifying, screening, and including relevant studies. The method values randomized studies for their ability to reduce bias and provide strong evidence. In this review, Scopus and ScienceDirect were chosen for their broad and reliable coverage. PRISMA includes four main steps: identification (searching databases for studies), screening (excluding irrelevant or poor-quality research), eligibility (confirming studies meet the inclusion criteria), and data abstraction (extracting and analyzing information from the selected studies). This structured process helps ensure high-quality results supporting future research and decision-making.

Identification

The identification phase marks the initial and critical step in the SLR process. It involves systematically retrieving potentially relevant studies based on clearly defined search criteria. In this review, two authoritative academic databases, Scopus and ScienceDirect, were utilized to ensure a comprehensive collection of scholarly literature related to the intersection of cocoa and tourism. The search was guided by the keywords “Cocoa” and “Tourism,” aiming to capture literature that discusses cocoa in contexts such as agro-tourism, culinary and cultural tourism, and sustainable tourism development. Notably, the Scopus database yielded 132

records, reflecting its broad interdisciplinary coverage and indexing of high-impact peer-reviewed journals and conference proceedings. In addition to Scopus, a supplementary search in the ScienceDirect database was conducted, which resulted in 15 additional records. Although the number of articles retrieved from ScienceDirect was smaller, the inclusion of this database ensured a more diverse and inclusive dataset, potentially capturing articles not indexed elsewhere. In total, 147 records were identified during the identification stage. This comprehensive dataset forms the foundation for the subsequent phases of the SLR process, including screening, eligibility assessment, and final inclusion. The dual-database approach enhances the reliability and completeness of the literature pool, aligning with established best practices in systematic review methodology.

Table 1: The Search string.

Database	Search String
Scopus	TITLE-ABS-KEY ((tourism OR travel OR ecotourism OR hospitality) AND (cocoa OR cacao OR chocolate OR "Theobroma cacao")) Date of Access: May 2025
ScienceDirect	("Tourism" OR "Travel" OR "Hospitality") AND ("Cocoa" OR "Cacao" OR "Chocolate") AND ("Sustainable" OR "Ecotourism") NOT "Coconut" Date of Access: May 2025

Screening

Following the identification phase, the screening process constitutes the second critical stage of the SLR. At this point, inclusion and exclusion criteria are rigorously applied to filter out records that do not meet the predefined scope of the study. In our review, we excluded records based on the following criteria: non-English publications, documents published before 2010, and sources such as conference papers, books, reviews, and articles marked as in press. Furthermore, we limited our scope to specific subject areas considered most relevant to the intersection of cocoa and tourism. These included: Social Sciences; Agricultural and Biological Sciences; Business, Management and Accounting; Environmental Science; Economics, Econometrics and Finance; Medicine; Arts and Humanities; Engineering; and Earth and Planetary Sciences. As a result of this rigorous screening process, a total of 86 records were excluded. This left 54 records from Scopus and seven from ScienceDirect, resulting in 61 eligible studies for further examination.

Subsequently, a duplicate check was performed to ensure the uniqueness of records across both databases. This process identified seven duplicate articles, which were then removed. The resulting dataset consisted of 54 unique and potentially relevant studies. Consequently, these records were subjected to a full-text review to evaluate their direct relevance to the research objectives. Several records were excluded during this phase due to a range of issues: (1) the article was reported to be out of the scope of cocoa-related tourism research, (2) the title lacked significance or relevance to the core themes of the review, (3) the abstract did not align with the objectives of the study, or (4) full-text access was unavailable, preventing a proper assessment. This stage helped ensure that only methodologically sound and thematically relevant studies were retained for the final synthesis and analysis.

Table 2: The Selection Criterion Is Searching

Criterion	Inclusion	Exclusion
Language	English	Non-English
Time line	2010 – 2025	< 2010
Literature type	Journal (Article)	Conference, Book, Review
Publication Stage	Final	In Press
Subject Area	Social Sciences, Agricultural and Biological Sciences, Business, Management and Accounting, Environmental Science, Economics, Econometrics and Finance, Medicine, Arts and Humanities, Engineering, Earth and Planetary Sciences	Besides Social Sciences, Agricultural and Biological Sciences, Business, Management and Accounting, Environmental Science, Economics, Econometrics and Finance, Medicine, Arts and Humanities, Engineering, Earth and Planetary Sciences

Eligibility

The eligibility phase serves as a refinement stage in the SLR process, wherein full-text articles are critically assessed to determine their relevance, quality, and alignment with the research objectives. At this stage, a total of 54 articles, previously screened and deemed potentially relevant, were subjected to a thorough evaluation. The assessment criteria were applied rigorously, focusing on the relevance of the study's field, the title's significance, the alignment of the abstract with the study's objectives, and the availability of full-text access. As a result of this evaluation, 42 articles were excluded. These exclusions were necessary to ensure that only studies directly contributing to understanding the relationship between cocoa and tourism were retained for analysis.

Following this meticulous eligibility process, 12 studies met all inclusion criteria and were deemed suitable for the final qualitative analysis. These articles represent a focused and thematically coherent body of literature, providing insights into various aspects such as cocoa-based tourism initiatives, the socio-economic impact of cocoa tourism, sustainability practices, and the integration of cocoa heritage into local and global tourism frameworks. The selected studies form the foundation for the synthesis and interpretation stage, which will extract patterns, identify gaps, and highlight key contributions in the field. In essence, by maintaining a rigorous filtering process across the identification, screening, and eligibility stages, the review ensures the academic robustness and relevance of its findings.

Data Abstraction and Analysis

An integrative analysis was utilized in this study as a principal methodological approach to critically examine and synthesize findings from diverse research designs, with a predominant focus on quantitative methodologies. The primary aim was to systematically identify, categorize, and structure central themes and subthemes pertaining to the nutritional potential of chocolate in cancer prevention. At the same time, thematic development was initiated through a rigorous and comprehensive data collection process. As depicted in Figure 2, the researchers systematically reviewed 12 selected publications, extracting data and claims directly relevant to the study's scope. Each publication's methodological rigor and empirical findings were meticulously evaluated to ascertain their contribution to the overarching research

framework. The refinement of the thematic structure was achieved through collaborative deliberations among the authors, thereby ensuring conceptual coherence and thematic relevance. Throughout the analytical process, a structured log was maintained to document interpretative notes, emerging patterns, methodological challenges, and critical reflections. Moreover, to ensure the robustness and reliability of the thematic framework, the authors performed cross-validation of findings and addressed any inconsistencies through consensus-driven discussions.

Table 3: Number and details of Primary Studies Database

No	Authors	Title	Year	Journal	Scopus	ScienceDirect
1	Santafe-Troncoso V.; Loring P.A.	Indigenous food sovereignty and tourism: the Chakra Route in the Amazon region of Ecuador	2021	Journal of Sustainable Tourism	/	
2	Dias J.	The history of chocolate consumption in Portugal: A blend of tradition and innovation	2025	International Journal of Gastronomy and Food Science	/	/
3	Bosquez V.A.; Chávez G.S.; Del Salto Dávila D.; Guamán C.P.	Rural tourism prospects on the example of communities of Parroquia Salinas in Guaranda, Ecuador	2023	Economic Annals-XXI	/	
4	Uygun Y.; Jafri S.A.I.	Controlling risks in sea transportation of cocoa beans	2020	Cogent Business and Management	/	
5	Arias R.A.C.; Cruz A.D.	Rethinking artisan entrepreneurship in a small island: A tale of two chocolatiers in Roatan, Honduras	2019	International Journal of Entrepreneurial Behaviour and Research	/	/
6	Pérez-Neira D.; Copena D.; Armengot L.; Simón X.	Transportation can cancel out the ecological advantages of producing organic cacao: The carbon footprint of the globalized agrifood system of	2020	Journal of Environmental Management	/	/

		ecuadorian chocolate				
7	de Andrade-Matos M.B.; de Azevedo Barbosa M.L.; Costa J.H.P.	From cacao crisis to chocolate experiential tourism: the beginning of the brand repositioning movement of the tourist destination of Ilhéus, BA	2021	Revista Brasileira de Pesquisa em Turismo	/	
8	Koonar C.	Making chocolate American: Labor, tourism, and American empire in the Hershey company, 1903–85	2018	Pennsylvania Magazine of History and Biography	/	
9	Narciso A.; Barzini S.A.; Di Nuzzo A.	Discovering Neverland: São Tomé and Príncipe and the development of the agricultural heritage of a multi-ethnic population	2020	Journal of Agriculture and Environment for International Development	/	
10	Cadby J.	Can COVID-19 Melt the Craft Chocolate Industry?	2021	Food Ethics	/	
11	Petrick J.F.; Huether D.	Is Travel Better Than Chocolate and Wine? The Benefits of Travel: A Special Series	2013	Journal of Travel Research	/	
12	Bantacut T.; Raharja S.	Determination of the prospective processed cacao product and calculation of the added value in agro-tourism based on cacao agroindustry in Pidie Jaya Regency	2018	Acta Universitatis Cibiniensis - Series E: Food Technology	/	

Quality of Appraisal

Following the guidelines established by Kitchenham (2007), once the primary studies were selected, it was necessary to assess the quality of the research and perform a quantitative comparison. For this SLR, the Quality Assessment (QA) framework proposed by Abouzahra, Sabraoui, and Afdel (2020) was adopted, which comprises six specific QA criteria. Each criterion was evaluated using a three-point scoring system: a score of 1 (“Yes”) was assigned if the criterion was fully met, 0.5 (“Partly”) if the criterion was partially fulfilled but presented some limitations, and 0 (“No”) if the criterion was not met at all.

- QA1. Is the purpose of the study clearly stated?
- QA2. Is the interest and the usefulness of the work clearly presented?
- QA3. Is the study methodology clearly established?
- QA4. Are the concepts of the approach clearly defined?
- QA5. Is the work compared and measured with other similar work?
- QA6. Are the limitations of the work clearly mentioned?

The table presents a QA process for evaluating each study based on defined criteria. Three experts independently reviewed and rated the studies using a standardized scoring system: “Yes” (Y), “Partly” (P), or “No” (N). Below is a detailed description of each criterion:

1. **Is the purpose of the study clearly stated?**
 - This criterion assesses whether the study clearly defines its objectives. A well-articulated purpose provides direction and establishes the research scope.
2. **Is the interest and usefulness of the work clearly presented?**
 - This evaluates the clarity with which the study conveys its relevance and potential value. It reflects the extent to which the research contributes meaningfully to its field.
3. **Is the study methodology clearly established?**
 - This criterion examines whether the research methods are well-described and appropriate for meeting the stated objectives. A transparent methodology ensures the reliability and reproducibility of findings.
4. **Are the concepts of the approach clearly defined?**
 - This focuses on the clarity of the theoretical framework and key terms used in the study. Clearly defined concepts are vital for understanding and interpreting the research approach.
5. **Is the work compared and measured with other similar work?**
 - This evaluates whether the study situates its findings in relation to existing literature. Comparative analysis helps contextualize the work and underscores its unique contributions.
6. **Are the limitations of the work clearly mentioned?**
 - This assesses whether the study openly discusses its limitations. Acknowledging limitations demonstrates critical reflection and transparency in the research process.

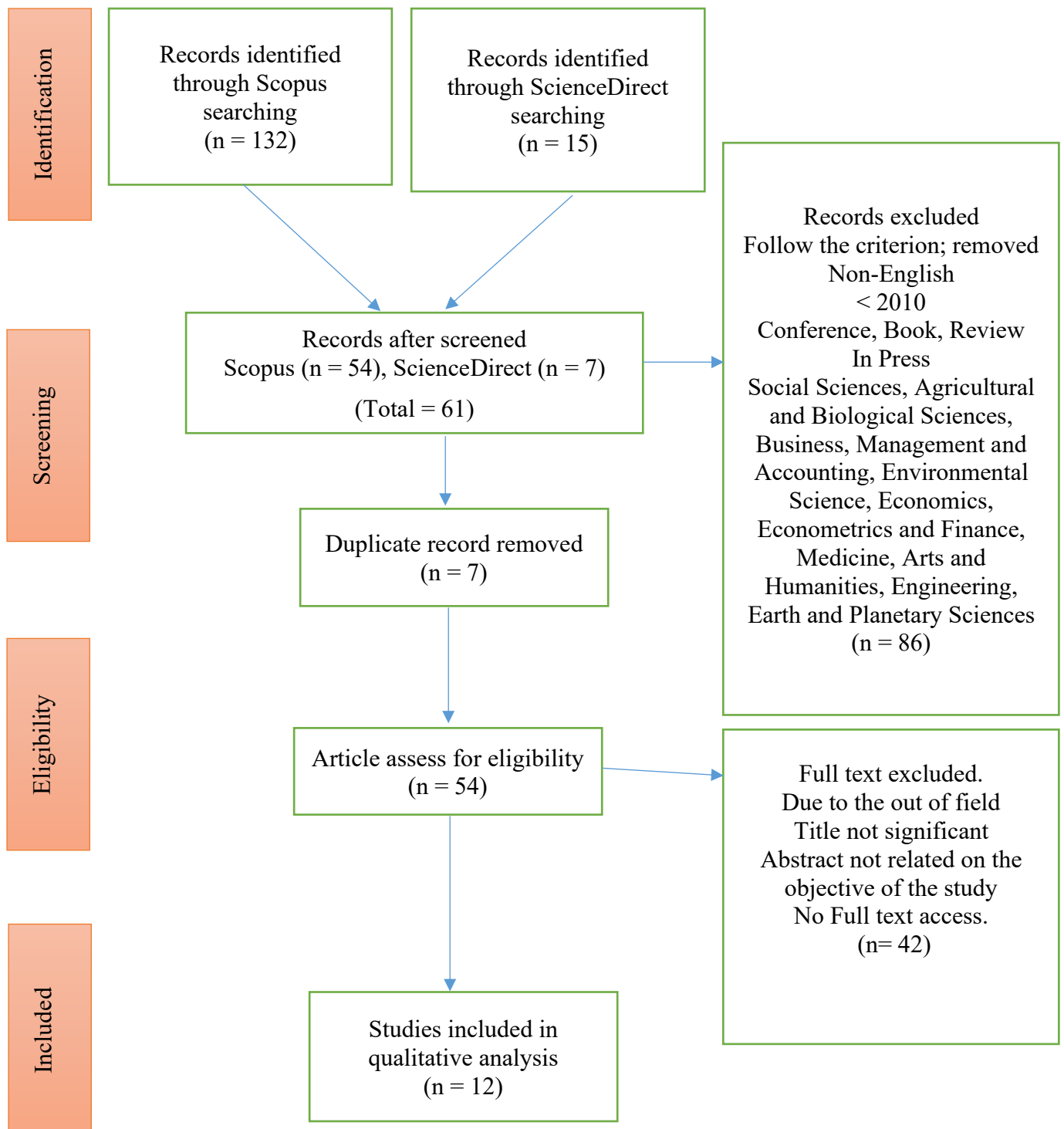


Figure 2. Flow Diagram Of The Proposed Searching Study

Result and Finding

The QA of the twelve selected primary studies, as summarized in Table 4, reveals a generally positive trend in terms of research clarity, methodological soundness, and relevance. Most studies clearly articulate their purpose (QA1) and demonstrate the interest and usefulness of the work (QA2), with all papers receiving a “Y” in these categories. A high degree of methodological clarity (QA3) is also evident, with only one study (PS 11) falling short in this regard. However, conceptual clarity (QA4) is somewhat more variable, as three studies (PS 2, PS 3, PS 8) received partial marks. This suggests that while most authors effectively communicate the rationale and process of their research, some struggle to define the conceptual frameworks guiding their approach. Conversely, comparative analysis (QA5) and the identification of limitations (QA6) are the least addressed criteria, with most papers failing to fully engage in benchmarking their work against existing literature or acknowledging potential weaknesses.

Quantitatively, only one study (PS 6) achieved a perfect score, indicating rigorous scholarly standards across all quality indicators. Studies PS 4, PS 5, PS 9, and PS 10 also scored highly (above 83%), reflecting well-balanced and methodologically robust research. In contrast, PS 2 and PS 11 received the lowest scores (58.3%), primarily due to insufficient discussion of related works and unclear limitation statements. The average quality rating across all papers strongly emphasizes presenting clear research goals and methodology. However, it consistently neglects critical reflection and contextual comparison. This underlines a potential gap in the analytical depth and scholarly positioning of many studies, emphasizing the need for more comprehensive evaluations and transparent limitation reporting in future research efforts.

Table 4: Performance Quality Assessment Table For The Selected Papers

Primary Study	QA1	QA2	QA3	QA4	QA5	QA6	Total Mark	Percentage (%)
PS 1	Y	Y	Y	Y	P	N	4.5	75.0
PS 2	Y	Y	Y	P	N	N	3.5	58.3
PS 3	Y	Y	Y	P	P	N	4.0	66.7
PS 4	Y	Y	Y	Y	Y	N	5.0	83.3
PS 5	Y	Y	Y	Y	Y	N	5.0	83.3
PS 6	Y	Y	Y	Y	Y	Y	6.0	100.0
PS 7	Y	Y	Y	Y	N	N	4.0	66.7
PS 8	Y	Y	Y	P	Y	N	4.5	75.0
PS 9	Y	Y	Y	Y	P	Y	5.5	91.7
PS 10	Y	Y	Y	Y	P	Y	5.5	91.7
PS 11	Y	Y	P	Y	P	N	3.5	58.3
PS 12	Y	Y	Y	Y	N	N	4.0	66.7

Chocolate and Agro-Tourism Development

Within the scope of chocolate and agro-tourism development, recent research has emphasized the integration of cocoa-based enterprises and tourism as a strategy to promote rural development, cultural preservation, and economic diversification in resource-constrained regions. One significant finding highlights the role of Indigenous-led agroforestry systems, such as the chakra gardens in the Ecuadorian Amazon, in expressing food sovereignty while supporting ecotourism initiatives that preserve biodiversity and Indigenous identity (Santafe-

Troncoso and Loring 2021). Furthermore, similar rural strategies are visible in the community-managed tourism model of Salinas Parish in Ecuador, where promoting products like chocolate and cheese is linked with enhancing cultural heritage and stimulating economic growth (Bosquez et al. 2023). In addition, artisan entrepreneurship also plays a vital role in this sector, particularly on small islands like Roatan, Honduras, where the emergence of local chocolate businesses reflects a demand for authentic, place-bound experiences shaped by tourism (Arias and Cruz 2019). These studies collectively underscore how chocolate tourism fosters grassroots economic empowerment that aligns with cultural sustainability and market demands for experiential travel.

Further analysis reveals that chocolate tourism can also be a transformative tool for rebranding traditional destinations, such as Ilhéus, Brazil, where the tourism narrative is shifting from conventional beach tourism to a cacao-based experiential identity. Accordingly, the rebranding movement incorporates product authenticity and regional storytelling to attract a niche market of experience-seeking tourists, offering economic revitalization post-cacao crisis (de Andrade-Matos et al. 2021). In parallel, the case from Pidie Jaya Regency demonstrates the tangible economic benefits of integrating cacao processing with tourism, where the development of value-added products like chocolate bars contributes significantly to local incomes (Bantacut and Raharja 2018). These findings reveal a common thread: successful chocolate-based tourism initiatives depend on the quality of the product and the cultural, entrepreneurial, and ecological narratives woven around them. In other words, this convergence of identity, economy, and tourism reinforces chocolate's role as both a commodity and a medium for sustainable regional development (de Andrade-Matos et al. 2021); (Bantacut and Raharja 2018); (Arias and Cruz 2019).

Socio-Historical and Cultural Dimensions of Chocolate

The socio-historical and cultural intersections of chocolate and tourism reveal a nuanced landscape where gastronomic heritage, identity formation, and economic revitalization converge. Research from different regions underscores how chocolate is not only a culinary product but also a symbol of cultural continuity and economic adaptation. For instance, studying Portugal's chocolate history illustrates its evolution from a medicinal and elite item to a widespread culinary ingredient embedded in national tradition. As such, contemporary entrepreneurial movements have revitalized this heritage by integrating chocolate with traditional products like wine and olive oil, advancing gastronomic tourism and innovation (Dias 2025). In parallel, São Tomé and Príncipe's agricultural legacy, rooted in creolized labor and colonial plantations, demonstrates how cocoa production is central to national identity and economic aspirations. In line with this, the integration of GIs and sustainable farming models has the potential to raise product value, although infrastructural limitations present ongoing barriers (Narciso, Barzini, and Di Nuzzo 2020). These findings underscore the significance of historical continuity and local innovation in repositioning chocolate within regional development and heritage preservation frameworks (Dias 2025); (Narciso, Barzini, and Di Nuzzo 2020); (Petrick and Huether 2013).

Moreover, chocolate's symbolic role within broader socio-political and commercial narratives emerges clearly through historical-industrial analysis. The transformation of the Hershey Company into an emblem of American identity demonstrates how corporate narratives can be constructed to mask imperial histories while fostering cultural attachment through tourism and philanthropy (Koonar 2018). This branding successfully integrated chocolate into the national

consciousness while positioning the town as a nostalgic tourism destination. In contrast, São Tomé and Príncipe's model offers a bottom-up approach by aligning agricultural memory with sustainability and ecotourism, highlighting a divergent pathway where cultural preservation drives economic participation (Narciso, Barzini, and Di Nuzzo 2020). Although the empirical benefits of travel and cultural experiences require further validation, existing studies support the argument that heritage-linked tourism, including chocolate-based tourism, strengthens social cohesion and economic resilience (Petrick and Huether 2013). Together, these analyses provide critical insights into how chocolate serves as a lens through which historical narratives, economic strategies, and cultural identities are negotiated and expressed across different geographic contexts (Koonar 2018); (Dias 2025); (Narciso, Barzini, and Di Nuzzo 2020).

Sustainability and Logistical Challenges in Cacao Supply Chains

The literature reveals critical sustainability challenges within the global cocoa supply chain, particularly centered on transportation and its environmental implications. Pérez-Neira et al. (2020) highlighted that while organic agroforestry cacao systems significantly reduce greenhouse gas emissions during cultivation, these ecological benefits can be offset by the carbon footprint of long-distance transportation. Their findings demonstrated that the carbon advantage of organically produced chocolate diminishes beyond specific transportation thresholds, suggesting that current global trade routes may negate the intended sustainability outcomes. Similarly, Uygun and Jafri (2020) analyzed how sea transportation conditions, such as temperature fluctuations and inadequate ventilation, can directly compromise the physical quality of cocoa beans. Their system dynamics simulations indicate that while ventilation can mitigate damage under high-temperature scenarios, it can be detrimental under colder conditions, thus complicating the choice of shipping strategies. Overall, these findings highlight the delicate balance between production-side improvements and post-harvest logistics, implying that environmental sustainability in the cacao sector cannot be addressed solely through farming practices. Nonetheless, it must include re-evaluation of transport mechanisms and distance. The discussion also suggests that relocation of chocolate manufacturing closer to the production source could effectively reduce carbon emissions and improve overall ecological performance (Pérez-Neira et al. 2020); (Uygun and Jafri 2020); (Cadby 2021).

Beyond environmental concerns, the global cocoa supply chain also faces systemic vulnerabilities in terms of economic resilience and producer welfare. Cadby (2021) discussed how the COVID-19 pandemic disrupted craft chocolate enterprises and exposed their fragility due to revenue loss, constrained market access, and operational inflexibility. Unlike large-scale industrial players, the craft and specialty chocolate sector depends heavily on direct trade, labour-intensive processes, and transparent value chains, features that make them more exposed to external shocks. Simultaneously, the pandemic further highlighted the dependence of these businesses on global mobility and stable trade networks. A shared theme across studies is the urgent need for structural reforms that prioritize ethical investment, technological inclusion, and enhanced autonomy for cacao producers. All three studies underscore the significance of integrated approaches that bridge sustainability, logistical efficiency, and social justice in the cacao and chocolate value chain (Petrick and Huether 2013); (Uygun and Jafri 2020); (Cadby 2021).

Discussion

The intersection of cocoa-based products and tourism presents a dynamic field of study with significant implications for sustainable development, cultural preservation, and economic resilience. This SLR synthesized findings from 12 primary studies to explore three thematic areas: Chocolate and Agro-Tourism Development, Socio-Historical and Cultural Dimensions of Chocolate, and Sustainability and Logistical Challenges in Cacao Supply Chains. The analysis revealed that cocoa-related tourism initiatives can stimulate rural economies, enhance cultural narratives, and foster community empowerment, but these benefits are often counterbalanced by systemic challenges in sustainability, supply chain logistics, and equitable participation. For instance, Indigenous-led agroforestry models in Ecuador's Amazon region exemplify how cocoa tourism can align ecological stewardship with cultural identity. At the same time, artisanal chocolate enterprises in Honduras and Brazil demonstrate the economic potential of place-bound authenticity. However, the environmental costs of globalized cocoa trade and the fragility of craft chocolate industries during crises like COVID-19 underscore the precarious balance between growth and sustainability. These findings align with broader trends in agro-tourism and ethical consumption, where demand for experiential travel intersects with calls for transparency and equity in food systems. However, the fragmented nature of existing research, often limited to specific regions like Latin America, highlights gaps in understanding diverse global contexts, particularly in African and Asian cocoa-producing regions. Thus, by consolidating these themes, this review underscores the need for integrated frameworks that harmonize economic, cultural, and environmental priorities in cocoa-tourism development.

The practical implications of these findings are multifaceted. Hence, policymakers and stakeholders must prioritize strategies that empower local communities through participatory models of tourism planning. This ensures that initiatives like Ecuador's Chakra Route or Ilhéus's rebranding as a chocolate destination are co-designed with Indigenous and rural populations. Such inclusivity can mitigate risks of cultural commodification while enhancing socio-economic benefits. Additionally, supply chain reforms are critical to address sustainability challenges. Moreover, relocating chocolate production closer to cocoa farms, as suggested by Pérez-Neira et al. (2020), could reduce carbon footprints and improve value retention for producers. Similarly, investments in infrastructure, such as temperature-controlled transportation and decentralized processing units, could mitigate post-harvest losses and enhance market access for smallholders. For the craft chocolate sector, diversification of revenue streams, digital marketing, and ethical certification programs could build resilience against external shocks like pandemics. These measures align with global sustainability agendas, including the United Nation Sustainable Development Goals (SDGs), by promoting decent work (SDG 8), responsible consumption (SDG 12), and climate action (SDG 13). Furthermore, educational programs highlighting cocoa's cultural heritage, such as Portugal's integration of chocolate into gastronomic tourism, can foster consumer awareness and demand for ethically sourced products. Nonetheless, realizing these opportunities requires collaboration across governments, Non-governmental organization (NGO), and the private sector to fund capacity-building initiatives and enforce fair-trade practices.

Despite its contributions, this review has limitations that warrant consideration. The small sample size of 12 studies, sourced exclusively from Scopus and ScienceDirect, may introduce selection bias and overlook insights from gray literature or region-specific journals. Additionally, the focus on qualitative analysis limits quantitative generalizations about cocoa-tourism's economic impact. Therefore, future research should expand geographical scope to

include understudied regions like West Africa and Southeast Asia, where cocoa is central to livelihoods but tourism integration remains nascent. On the same note, longitudinal studies tracking the long-term effects of agro-tourism on community well-being could provide deeper insights into sustainability outcomes. Mixed-methods approaches combining ethnography with econometric analysis would also strengthen the evidence base, particularly in examining power dynamics within value chains. Furthermore, exploring the role of digital technologies, such as blockchain for traceability or virtual reality for immersive heritage experiences, could address logistical challenges and enhance market reach. Finally, interdisciplinary collaborations between tourism scholars, anthropologists, and supply chain experts are essential to develop holistic frameworks that bridge the gaps identified in this review. By addressing these limitations, future studies can advance the discourse on cocoa-based tourism, ensuring it evolves as a tool for equitable and regenerative development rather than mere commodification. This review thus serves as a foundational step toward understanding cocoa's multifaceted role in tourism, calling for actionable strategies that harmonize profit, people, and planet.

Conclusion

This study explored the intersection of cocoa-based products and tourism, focusing on how their integration influences socio-economic development, cultural preservation, and sustainability. The research addressed three core questions: the economic impact of cocoa-related agro-tourism on local communities, the role of cultural narratives in shaping chocolate's perception, and the logistical and sustainability challenges within global cocoa supply chains. An SLR revealed that cocoa-tourism initiatives hold significant potential for rural economic empowerment, particularly through agro-tourism models that combine traditional farming practices with visitor experiences. For instance, community-led projects in regions like Ecuador and Honduras demonstrated how cocoa cultivation and artisanal chocolate production can enhance livelihoods while preserving cultural heritage. However, these benefits are often tempered by challenges such as infrastructural deficits, environmental costs of global supply chains, and risks of cultural commodification. The analysis further highlighted chocolate's dual role as an economic commodity and a cultural symbol, emphasizing its capacity to foster identity and storytelling in tourism contexts.

The findings contribute to a deeper understanding of cocoa-tourism's multifaceted dynamics, offering insights into its potential as a tool for sustainable development. By consolidating fragmented research, this study underscores the importance of aligning tourism strategies with ethical practices, community participation, and ecological stewardship. Practical implications suggest that policymakers and stakeholders should prioritize inclusive planning, infrastructure investment, and localized production to mitigate carbon footprints and enhance value retention for producers. Additionally, fostering digital tools and certification programs could strengthen resilience in craft chocolate sectors vulnerable to external shocks. Despite these insights, the study's limitations, including a narrow geographical focus on Latin America and reliance on qualitative data, highlight the need for broader research encompassing African and Asian cocoa-producing regions. Thus, future studies should adopt mixed-method approaches to quantify economic impacts and explore technological innovations like blockchain for supply chain transparency. By addressing these gaps, the field can advance toward holistic frameworks that balance economic growth, cultural integrity, and environmental sustainability. This ensures that cocoa-tourism evolves as an equitable and regenerative force in global development agendas.

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Conflicts of Interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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