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Research Article

Value-Capture Gaps in Loloh Cemcem MSMEs: Intellectual Property, Pricing, and Digitalization in Penglipuran, Bali

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ABSTRACT

Background: Research on Penglipuran Village, Bali, has examined community-based tourism mainly at the village level, emphasizing customary governance and socio-cultural sustainability. Little is known about whether the households and micro, small, and medium enterprises (MSMEs) that make the village's signature products capture enough value to remain commercially viable when products are imitated elsewhere, sold through resellers, and priced without cost records. Loloh cemcem, a traditional herbal drink made from cemcem (Spondias pinnata) leaves, was chosen as the case because it is the village's flagship culinary product and because published cost, price, and legal-potential data exist against which field accounts can be compared.
Purpose: This study explores how intellectual property protection, reseller pricing, cost literacy, and digitalization are associated with producer-level value capture in the loloh cemcem business within the village's governance context.
Design/methodology/approach: An exploratory qualitative case study was conducted during an international community service program in June-July 2026, using field observation and informal discussions with two informants, a village tourism management representative, and a loloh cemcem producer, analyzed thematically. Field accounts were compared with published studies, news reports, and official consumer price index (CPI) data, which were used for an illustrative cost-of-goods-sold (COGS) projection.
Findings/Results: The producer reported selling at IDR5, 000 per bottle, a price unchanged for approximately five years, while distributors and resellers sold at IDR6, 000 and IDR7, 000, respectively. The informants also reported no registered intellectual property protection and no systematic COGS calculation, and news reports documented production outside the village. Indexing a documented 2019 COGS of IDR2.897 per bottle to the official CPI suggests that producers' gross margin would have fallen from 42,1% to about 32% by 2025.
Conclusion: Village-level institutional strength does not automatically secure producer-level commercial resilience. A formal intellectual property assessment and cost-based pricing are immediate priorities, while collective organization and selective digitalization are proposed for further testing.
Originality/value (State of the art): This study extends Penglipuran research from the village level to producer-level value capture by jointly examining intellectual property, pricing, cost literacy, and digitalization in one culinary MSME sector and proposes an analytical pathway for confirmatory research.

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INTRODUCTION

In community-based tourism, the sustainability of a destination ultimately depends on whether the households and micro-enterprises that make local products can earn a viable income from them. Research on place-based products shows that producers' capture of the value embodied in a local product is not automatic and depends on institutional arrangements along the value chain (Neilson, Wright, & Aklimawati, 2018). Where producers cannot capture a fair share, because products are easily imitated, sold through intermediaries who set prices, or priced without cost knowledge, local products may become commercially fragile even in destinations that are well governed. Community-based customary village tourism has become an increasingly prominent regional development model in Indonesia because of its capacity to balance economic growth with cultural preservation. Penglipuran Village, Bangli Regency, Bali, with an estimated population of approximately 1,280 residents, is among the most frequently studied cases of this model. Its economy depends substantially on culinary MSMEs and homestays, while its physical layout and social governance continue to reflect customary (adat) principles. Prior studies find that the socio-cultural dimension is the most dominant

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driver of perceived sustainability among Penglipuran's visitors, even ahead of physical scenery (Budiarta, Kasni, Pulawan, & Laksmi, 2023), and that its cultural tourism has been developed through pentahelix collaborative governance involving the government, academia, business, community, and media (Savitri, Wijaya, & Prabawati, 2024).

What remains comparatively under-examined in this literature is the operational management level of individual MSMEs, whose sustainability is an important foundation of the village's economy. One emblematic product is loloh cemcem, a traditional herbal beverage. The two informants in informal discussions during the 2nd Sustainable International Community Service (SICS) program in June-July 2026 estimated that approximately 16 households produce it, with a combined output of approximately 2, 400 bottles per day. These are preliminary field estimates based on the informants' recollection rather than village records or systematic counts, and they differ from earlier published accounts of three to five producers and approximately 1, 500 bottles per day (Pebiana, Puspasari, Dewi, & Arnyana, 2021); they are therefore used only to indicate the approximate scale of the activity. Field-level academic studies indicate that loloh cemcem possesses substantive geographical-indication potential that has not been formally pursued (Satria, Sudiatmaka, & Mangku, 2020), and that its producer group has, at various points, comprised as few as three major producers or as many as twenty registered member businesses depending on how 'producer' is defined (Putra, Larasdiputra, Pratama, & Putra, 2020).

Existing research on Penglipuran can be grouped into three streams. Governance studies document community-based management and pentahelix collaboration while noting the growing pressure from overtourism (Savitri et al., 2024; Susi, 2025). Sustainability studies show that visitors value the village mainly for its socio-cultural characteristics (Budiarta et al., 2023). Digital business studies report that digital marketing supports the sustainability of tourism villages in Bali (Oka & Subadra, 2024); however, MSME adoption of digital marketing and digital payments in Penglipuran is still at an early stage (Fitriyani & Rachmawati, 2023). Studies specific to loloh cemcem have addressed its geographical indication potential (Satria et al., 2020), producers' financial recording, marketing, and hygiene (Putra et al., 2020), and its ethnobotanical and economic contribution (Pebiana et al., 2021). These streams have largely been pursued separately, and none has examined within one analysis how legal protection, reseller pricing, cost literacy, and digitalization jointly shape the value that producers capture. This producer-level gap is the point of departure for the present study.

Field discussions pointed to three interrelated managerial gaps in the loloh cemcem business: the absence of any intellectual property protection, leaving the product vulnerable to imitation outside the village; a weak bargaining position relative to resellers, associated with selling prices that have reportedly remained unchanged for approximately five years; and the absence of systematic cost-of-goods-sold (COGS) calculation, meaning that pricing follows habit and reseller pressure rather than a rational cost basis. Conceptually, these gaps are linked through the logic of value capture. Legal and reputational differentiation determines whether producers can distinguish their products from substitutes and thus underpins their bargaining position with intermediaries. The bargaining position shapes the price producers obtain, and cost knowledge determines whether producers can recognize when that price no longer covers rising costs and can defend a price floor. When all three are weak, rising input costs tend to be absorbed by producers as shrinking margins, which threatens the financial sustainability of the business, even when demand is stable. This gap is consistent with wider findings that most Indonesian culinary MSMEs lack proper COGS practice (Bahri & Rahmawaty, 2019; Wiralestari, Firza, & Mansur, 2018), that MSME operators are broadly unaware of geographical-indication or collective-mark protection despite substantial economic benefit (Manalu, Siahaan, Viranda, & Nababan, 2025), and that culinary MSMEs elsewhere similarly require deliberate adaptation strategy and digital marketing support to remain viable, as documented in prior case studies on pandemic-era culinary MSMEs (Arofahtiani & Cahyadi, 2022) and tourism destination marketing strategies (Abidin et al., 2025).

These three issues intersect directly with three complementary lenses: management (governance, cost literacy, and institutional strengthening), sustainability (inclusive, regenerative local economic resilience, aligned with the Ministry of National Development Planning/Bappenas's emphasis on village-based job creation to curb youth outmigration), and digital business (branding and marketing digitalization as a lever for bargaining power without eroding authenticity). Accordingly, this study aims to: (1) describe the governance model surrounding culinary MSMEs in Penglipuran; (2) explore how intellectual property protection, reseller pricing, and cost literacy are associated with producer-level value capture in the loloh cemcem business; and (3) propose management and digitalization strategies to strengthen MSME sustainability without eroding local cultural identity. Because the primary data derive from informal field observation and discussions rather than a structured interview protocol, this study is explicitly exploratory and intended as a foundation for further confirmatory research.

Consistent with its exploratory design, the study does not test statistical hypotheses. Instead, it is guided by four working propositions derived from the value-capture literature (Neilson et al., 2018) and prior MSME studies: (PR1) village-level governance strength does not automatically translate into producer-level value capture; (PR2) the absence of legal differentiation weakens producers' bargaining position with resellers; (PR3) the absence of cost-based pricing prevents producers from detecting margin erosion and defending a price floor; and (PR4) digitalization can expand market reach but is unlikely to improve producers' incomes unless PR2 and PR3 are addressed. This study is expected to produce (a) an evidence-graded description of producer-level value-capture gaps, (b) an illustrative, officially indexed estimate of how margins may have changed under stagnant prices, and (c) a proposed analytical pathway and set of propositions that can be tested in confirmatory research.

METHODS

This study employed a qualitative exploratory single-case design. The case is the loloh cemcem producer sector in Penglipuran Customary Village, and the unit of analysis is producer-level value capture, that is, the ability of producing households to obtain prices that cover their costs and sustain the business. Individual producer enterprises are treated as embedded units within the village governance context. Primary data consisted of field observation notes and informal discussions with two purposively selected informants: one from the village tourism management and customary village-owned enterprise (coded VI), who provided the village-level perspective, and one loloh cemcem producer (coded PD), who provided the producer-level perspective on production, pricing, sales channels, and cost practices. Informants are not identified by name; the purpose of the conversations and the intended academic use of the information were explained verbally, and informants agreed to share information on that basis. Secondary data consist of peer-reviewed journal articles and policy documents on village governance, MSME cost accounting, intellectual property protection, and business digitalization, prioritizing studies conducted on or directly relevant to Penglipuran. Secondary sources also include news reports on loloh cemcem production and prices and official CPI data from Statistics Indonesia (Badan Pusat Statistik/BPS).

Field data were collected during the 2nd Sustainable International Community Service (SICS) 2026 program, a multi-institutional collaboration among Universitas Cahaya Bangsa (UCB), Universitas Negeri Jakarta (UNJ), Universiti Malaysia Sarawak (UNIMAS), Politeknik Negeri Banjarmasin (Poliban), and Universitas Wahid Hasyim, held in Penglipuran from 29 June to 2 July 2026. The observations covered the village's main street and household sales points, the production and sales practices of loloh cemcem, packaging and labelling, displayed prices, and interactions between sellers and visitors. The discussions with the village informant and the producer took place at the producer's premises and the village meeting area and lasted approximately 10–15 minutes each. Observations and discussion content were recorded as field notes during and immediately after each visit, supplemented by photographs of products and sales points, and were organized by theme at the end of each field day. The discussions were not conducted as pre-designed, recorded interviews; consequently, no verbatim quotations are attributed to informants in this paper, and figures relating to producer numbers and daily output are treated as preliminary field estimates rather than verified statistics.

Field notes were analyzed through data condensation, data display, and conclusion drawing (Miles, Huberman, & Saldaña, 2020). Notes were first coded deductively into five themes derived from the research objectives: governance, intellectual property protection, pricing and bargaining, cost literacy, and digitalization opportunities; statements that did not fit these themes were coded inductively and reviewed for additional issues. The themes were displayed in a matrix comparing the village informant's and the producer's accounts, which allowed data-source triangulation between the two informants and field observation. Because only one producer was interviewed, producer-level findings reflect a single producer's account, corroborated where possible by the village informant, observation, and published sources, and are not assumed to represent all producers. Published studies, news reports, and official statistics were used for corroboration and contextual interpretation rather than as independent triangulating sources, and each finding is reported with its evidence status (reported, observed, documented, or interpreted), as summarized in Table 1. To translate the cost-literacy theme into managerial figures, an illustrative projection was constructed using a documented 2019 COGS as the baseline, adjusted annually by official December year-on-year CPI inflation published by Badan Pusat Statistik [BPS] (2026). The following definitions are applied: gross margin (%) = (P - COGS) / P x 100 and markup (%) = (P - COGS) / COGS x 100, where P is the selling price per bottle; the price required to maintain the 2019 gross margin in year t is COGS(t) / (1 - 0,421). A hypothetical 5% annual cost increase is reported only as a sensitivity scenario. These projections are illustrative and are not audited financial findings.

Figure 1 presents a proposed analytical pathway rather than a tested causal model. The first two elements, the village governance context and producer-level value-capture gaps, are described from field data and literature (solid lines). The links from these gaps to candidate interventions and to the expected outcome of stronger producer value capture and MSME commercial resilience are propositions (PR1–PR4) that this exploratory study cannot verify and that are offered for future confirmatory research (dashed lines).

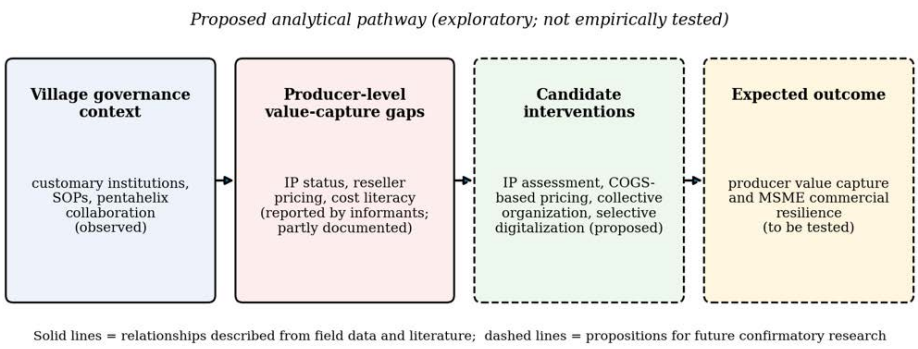

Figure 1. Proposed analytical pathway linking village governance, producer-level value-capture gaps, candidate interventions, and expected outcomes

RESULTS

Governance Model of Penglipuran Customary Tourism Village

Field observations were broadly consistent with previous governance-focused studies (Savitri et al., 2024; Susi, 2025) in indicating that Penglipuran manages tourism under the principle of innovating without abandoning its customary soul, restricting the physical alteration of traditional buildings while allowing culinary MSMEs and homestays to develop as sources of grassroots income. According to information conveyed during informal discussions with the village informant (VI), the village's principal value proposition is not visual beauty alone but a memorable experience that visitors carry home, supported by customary standard operating procedures, human resource competence building, and collaboration with academic institutions through programs such as SICS. The same informant described local job creation as a way of encouraging young residents to remain in the village. This is consistent with the policy orientation of Kementerian PPN/Bappenas, which regards local job creation as an indicator of village development. However, because no migration, employment, or demographic data were collected, it is presented here as a contextual interpretation rather than a finding of this study. In contrast, the producer's account focused less on village-level achievements than on day-to-day concerns about imitation, prices, and costs, which are examined below.

Loloh Cemcem as a Marker of Local Economic Identity

Loloh cemcem is closely associated with Penglipuran's culinary identity and is described as the village's flagship product (Putra et al., 2020). The 2026 field estimates (approximately 16 producing households and approximately 2, 400 bottles per day) exceed earlier published figures: based on fieldwork in 2019, Pebiana et al. (2021) reported three principal producers (five in another passage of the same article) and a village-wide output of approximately 1, 500 bottles per day; one established producer reported producing 1, 500–2, 000 bottles per day with eight workers (detikTravel, 2023); and a producer group of twenty member businesses has been documented (Putra et al., 2020). These differences may reflect growth over time, seasonal variation, or different definitions of 'producer' (principal enterprises versus all producing households or group members), and none of these figures should be read as an official village statistic. Regarding legal protection, two instruments under Law No. 20 of 2016 must be distinguished. A geographical indication (GI) protects a sign indicating a product's area of origin where geographical environmental factors, including natural and human factors, give the product a particular reputation, quality, or characteristics; it is registered by an institution representing the community of that area or by the regional government. A collective mark is a trademark used jointly by several persons or a legal entity for goods with shared characteristics under agreed rules of use and control, and it does not require a demonstrated link between product qualities and place. Prior legal analysis concluded that loloh cemcem shows potential for GI protection (Satria et al., 2020), but whether it would satisfy a GI examination, or whether a collective mark would be more appropriate, can only be determined through a formal assessment. Table 1 summarizes the three value-chain issues identified, together with their evidence status.

Intellectual Property Protection and Reported Reseller Pressure

Both the village informant and the producer reported that loloh cemcem has no registered trademark, collective mark, or geographical indication, and that producers outside the village make and sell similar drinks under the same name. The latter is corroborated by news reporting that loloh cemcem, once produced only in Penglipuran, is now also produced in Tegalalang, Gianyar, and parts of Denpasar (Kompas.com, 2021). The registration status itself, however, is reported rather than verified: it was not checked against the database of the Directorate General of Intellectual Property (Pangkalan Data Kekayaan Intelektual/PDKI), and such verification is a necessary first step before any protection strategy is chosen. If the reported status is accurate, the community has limited legal means to act against outside producers' use of the product's name, because protection under Law No. 20 of 2016 arises from registration. This pattern mirrors broader Indonesian findings that MSME operators are often unaware of intellectual property registration even where products have protectable potential (Manalu et al., 2025).

The producer also described the price chain for the product: the producer sells at IDR5.000 per bottle, distributors sell to resellers at IDR6.000, and resellers sell to consumers at IDR7.000; the producer stated that this selling price had not risen for approximately five years. On these reported figures, the producer receives 71,4% of the consumer price, while distributors and resellers each add IDR1.000 per bottle (markups of 20,0% and 16,7%, respectively) and together capture IDR2.000, or 28,6% of the consumer price. Because this study did not include distributor or reseller interviews, transaction records, or contracts, it cannot establish how these prices are set, whether intermediaries hold disproportionate bargaining power, or whether weak legal protection caused the stagnation of the producer price. The more cautious interpretation is that, in the producer's experience, the absence of a distinguishable, protected identity leaves them few arguments with which to negotiate higher prices when substitutes are available, which is consistent with the bargaining asymmetry commonly observed between micro-producers and intermediaries. Evidence from Indonesian coffee also cautions that registration alone does not guarantee that producers capture more value: formally registered GIs have delivered limited benefits to farmers where collective governance, quality control, and engagement along the value chain were weak (Neilson et al., 2018; Quiñones-Ruiz, Nigmann, Schreiber, & Neilson, 2020). Legal protection should therefore be regarded as a potentially necessary but insufficient condition, whose effect depends on producers' collective organization and pricing capability.

Table 1. Value-Chain Issues in the Loloh Cemcem MSME Sector and Their Evidence Status

Issue (as reported in the field)	Evidence and status	Interpretation and implication
No registered intellectual property protection for the product name or recipe	Reported by the village informant and the interviewed producer. Registry status not verified against PDKI. Unrealized GI potential identified by Satria et al. (2020). Production outside the village documented by Kompas.com (2021).	Interpretation: weak legal differentiation may limit producers' ability to distinguish Penglipuran-made products from imitations.
Producer selling price of IDR5.000 per bottle unchanged for about five years	Reported by the interviewed producer: IDR5.000 producer price, IDR6.000 distributor-to-reseller price, IDR7.000 reseller-to-consumer price; no distributor or reseller interviews or transaction records. The IDR5.000 price is also documented for 2019 and 2023 (Pebiana et al., 2021; detikTravel, 2023).	Interpretation: intermediaries add IDR2.000 to the consumer price, while producers' real margins are likely to have narrowed as input costs rose (see Table 2).
No systematic calculation of COGS or margin	Reported by the interviewed producer and the village informant; consistent with limited financial recording found by Putra et al. (2020).	Interpretation: prices are not anchored to costs, so margin erosion may go unnoticed and cannot be argued in negotiations.

Cost Literacy Gap: A Documented COGS Baseline and CPI-Adjusted Margin Projection

The producer reported not calculating COGS or profit margins systematically, with prices following custom and buyers' offers, and the village informant described this as common among producers, which is consistent with the limited financial recording identified in an earlier empowerment program with the producer group (Putra et al., 2020). This mirrors recurring Indonesian culinary MSME findings recommending full costing as a more accurate alternative to intuition-based estimation (Bahri & Rahmawaty, 2019; Wiralestari et al., 2018). Although current producer costs could not be collected in this study, a documented baseline is available: based on fieldwork in October-November 2019, Pebiana et al. (2021) reported an average production cost of IDR2.897 per 600 ml bottle (ingredients, bottle, label, electricity, and labor of IDR400 per bottle) against a selling price of IDR5.000, which corresponds to a gross margin of IDR2.103 (42,1%) or a markup of 72,6% on cost. The same price was reported by a producer in 2023 (detikTravel, 2023) and was confirmed as the current producer price by the producer interviewed in 2026, whereas a 2026 news report cites a price of IDR6.000 per bottle (ANTARA News Bali, 2026), consistent with the higher downstream prices in the reported chain.

Table 2 indexes the 2019 COGS forward using official December year-on-year CPI inflation for 2020-2025 (BPS, 2026) and holds the selling price at IDR5.000, the producer price reported by the producer interviewed. Under these assumptions, COGS would have risen by about 17% to IDR3.396, and the gross margin would have narrowed from 42,1% to 32,1% by 2025; maintaining the 2019 margin would have required a price of approximately IDR5.861. Because the costs of food ingredients and packaging may rise faster than headline CPI, a hypothetical 5% annual increase is shown as a sensitivity scenario, under which the margin would fall to about 22%. The projection therefore does not indicate that producers are selling at a loss; it indicates that margins in a channel with unchanged prices are likely to have narrowed substantially, and that producers without cost records have little basis for recognizing or negotiating against this erosion. By 2025, the producer's projected gross margin of about IDR1.604 per bottle would thus be smaller than the IDR2.000 added jointly by distributors and resellers, even though producers bear all production costs and spoilage risk. This comparison is indicative only, because intermediaries' own costs are unknown, but it illustrates how a fixed producer price leaves producers to absorb rising costs, a pattern that should be verified with current cost data.

Digitalization: Market Reach Versus Producer Value Capture

Digitalization is often proposed as a remedy for weak MSME performance in tourism villages. Evidence specific to Bali and Penglipuran shows that digital marketing supports the promotion and sustainability of tourism villages (Oka & Subadra, 2024), but that local MSMEs have only begun to adopt digital marketing and digital payments (Fitriyani & Rachmawati, 2023). Studies of branding and digital marketing training for MSMEs in tourism villages report improvements in product image, packaging, and market reach (Harahap, Dewi, & Ningrum, 2021; Susilowati et al., 2025). Market reach, however, is not the same as value capture: in a quantitative study of a Balinese tourist village, digital platform implementation had no significant effect on the mobilization of community economic resources, whereas community empowerment and sustainable village development did (Purnamawati, Yuniarta, & Nugraha, 2024). Read together with the findings above, this points to the central managerial argument of this study: digitalization may expand the market for loloh cemcem without improving producers' incomes if cost literacy, bargaining power, and legal differentiation remain unresolved, because additional demand could be absorbed through reseller channels at unchanged prices. This argument rests directly on the Penglipuran-specific evidence on reported price stagnation and cost practices. Evidence from other contexts, such as the adaptation strategy of a pandemic-affected culinary MSME (Arofahtiani & Cahyadi, 2022) and marketing strategy formulation for a community-managed coastal destination (Abidin et al., 2025), is analogous only; it suggests approaches worth testing but does not establish their transferability to loloh cemcem producers.

Table 2. Documented 2019 COGS Baseline and CPI-Adjusted Margin Projection for Loloh Cemcem (600 ml Bottle), 2019-2025

Year	CPI inflation (%)	COGS per bottle (IDR)	Gross margin at IDR5.000 (IDR)	Gross margin (%)	Price to keep 2019 margin (IDR)
2019 (documented)	-	2.897	2.103	42,1	5
2020	1,68	2.946	2.054	41,1	5.084
2021	1,87	3.001	1.999	40,0	5.179
2022	5,51	3.166	1.834	36,7	5.464
2023	2,61	3.249	1.751	35,0	5.607
2024	1,57	3.3	1.7	34,0	5.695
2025	2,92	3.396	1.604	32,1	5.861
2025, sensitivity (5% per year, hypothetical)	5,00	3.882	1.118	22,4	6.7

Note: 2019 values from Pebiana et al. (2021), fieldwork October-November 2019. CPI inflation is December year-on-year headline inflation published by BPS. Gross margin (%) = (P - COGS)/P x 100 with P = IDR5.000 (producer price reported in the 2026 interviews); price to keep the 2019 margin = COGS(t)/(1 - 0,421). Values for 2020-2025 and the sensitivity row are illustrative projections, not observed or audited data.

For loloh cemcem, digital strategies that could be tested include: (1) a consistent collective brand identity ('Loloh Cemcem Penglipuran') used by participating producers; (2) social media narratives that frame the product as cultural experience rather than commodity beverage; (3) simple digital payment and transaction recording (e.g., QRIS) to support sales-data transparency, which also enables future COGS calculation; and (4) collaboration with village-tourism digital platforms for culinary-themed experience packages (e.g., a loloh-mixing class), diversifying income around memorable experience. Direct-to-consumer and experience-based channels are the options most likely to improve value capture, because they allow producers to set prices themselves. These strategies should be embedded within a stronger institutional framework — a producer cooperative or association pursuing an appropriate form of intellectual property protection identified through formal assessment, agreeing a COGS-based minimum price, and coordinating digital marketing — with academic collaboration (as through SICS) deepened into sustained mentoring rather than a one-off activity.

Managerial Implications

For producer groups, village enterprise managers, and mentors, three tentative implications follow. First, because digital marketing expands reach but does not by itself raise the price producers receive, digital initiatives are more likely to benefit producers if they are accompanied by cost-literacy and collective pricing efforts; this sequencing is a proposition to be tested rather than an established result. Second, the documented COGS baseline and CPI-adjusted projection (Table 2) provide a simple, replicable tool that producer groups and mentors can update with current cost data to set a minimum acceptable price. Third, a formal intellectual property assessment is a low-cost first step that clarifies which protection instrument, if any, is appropriate. These implications are specific to the loloh cemcem case; whether they apply to other customary tourism villages would require comparative evidence that this study does not provide.

Position within the Wider Literature

Positioned against prior Penglipuran research, this study's contribution is one of analytical level rather than topic novelty. Governance-oriented studies (Savitri et al., 2024; Susi, 2025) and sustainability-oriented studies (Budiarta et al., 2023) have established, at the village level, that Penglipuran's pentahelix collaboration and socio-cultural preservation are strong, while also flagging overtourism as an emerging governance strain. The present case study examines one culinary MSME sector and suggests that this village-level institutional strength has not automatically translated into MSME-level commercial resilience. The existing macro-level literature has generally not examined producer-level cost structures, legal-protection status, or pricing mechanisms, so this observation complements rather than contradicts it: it does not dispute that Penglipuran's governance is comparatively strong, but it indicates that governance strength and MSME-level financial sustainability are distinct constructs that future research should measure separately. The finding on cost practices agrees with earlier work on the loloh cemcem producer group, which identified limited financial recording (Putra et al., 2020), and with broader studies of Indonesian culinary MSMEs (Bahri & Rahmawaty, 2019). It differs from the more optimistic picture of Pebiana et al. (2021), who presented loloh cemcem as highly profitable; the CPI-adjusted projection suggests that this profitability may have narrowed in channels where prices have not changed. Because the evidence comes from one MSME sector and an illustrative cost projection, these observations are offered as propositions rather than generalizable conclusions about business resilience or preferred interventions.

With respect to the digital business literature, this study agrees with Fitriyani and Rachmawati (2023) and Oka and Subadra (2024) that digital adoption in Penglipuran is still developing, and extends their observations by identifying a mechanism through which digitalization might fail to benefit producers even if it expands reach, namely unresolved pricing and legal-differentiation deficits. This is consistent with evidence that digital platform implementation alone did not improve the mobilization of economic resources in another Balinese tourist village (Purnamawati et al., 2024) and with GI studies showing that legal instruments deliver producer benefits only when accompanied by collective governance (Neilson et al., 2018; Quiñones-Ruiz et al., 2020). These convergent findings support treating a combination of cost literacy, collective organization, legal assessment, and selective digitalization as a proposition for future testing rather than as a validated prescription.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

This exploratory study set out to describe the governance context of culinary MSMEs in Penglipuran, to explore how intellectual property protection, reseller pricing, and cost literacy are associated with producer-level value capture in the loloh cemcem business, and to propose strategies to strengthen MSME sustainability. The conclusions are stated at three levels. At the level of empirical observation, the village informant and the interviewed producer reported that the product lacks registered intellectual property protection, that the producer price of IDR5.000 per bottle has not risen for about five years while distributors and resellers sell at IDR6.000 and IDR7.000, and that producers do not calculate COGS systematically; production of loloh cemcem outside the village is documented in secondary sources, and a CPI-adjusted projection from documented 2019 costs indicates that margins at an unchanged price are likely to have narrowed from about 42% to about 32%. At the level of analytical contribution, the case suggests that village-level institutional strength and producer-level commercial resilience are distinct: strong customary governance has not automatically secured the value that producers capture. This agrees with earlier findings on limited financial recording among loloh cemcem producers (Putra et al., 2020) and with studies showing that legal or digital instruments alone rarely guarantee producer benefits (Neilson et al., 2018; Purnamawati et al., 2024), while qualifying earlier portrayals of the product as highly profitable (Pebiana et al., 2021). At the level of managerial proposition, the study proposes that cost literacy, collective organization, intellectual property protection, and selective digitalization be combined, with the first two as immediate priorities.

Recommendations

Three recommendations follow. First, producers and the village enterprise should conduct a formal intellectual property assessment, beginning with a search of the PDKI database, to determine whether geographical-indication registration, a collective mark, or a complementary protection strategy would be most appropriate for Loloh Cemcem Penglipuran. Second, participatory full-costing COGS training should be provided to all producers and used as the basis for discussing a collectively agreed minimum selling price, with Table 2 serving as a starting template to be updated with current costs. Third, digital branding, digital payments, and direct-to-consumer or experience-based channels should be piloted alongside these measures and evaluated for their effect on producer prices, not only on sales volume. This study is limited by its reliance on informal, unrecorded, and brief discussions with only two informants, including a single producer, the absence of reseller data, and a cost projection built on a single documented baseline and headline inflation. Future research should use structured interviews with producers and resellers, household-level surveys, and financial documentation to verify the preliminary figures reported here and to test propositions PR1-PR4.

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