

**COMPARATIVE ANALYSIS OF WOMEN ENTREPRENEURS IN
ORGANIZED AND UNORGANIZED SECTORS WITH
REFERENCE TO CHHATTISGARH**

A Synopsis

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By

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Abstract

Women's entrepreneurship is central to inclusive economic development, yet women-owned enterprises in India are concentrated in the unorganized economy and remain weakly connected to formal finance, public schemes, digital markets and institutional support. This thesis examines whether the organized–unorganized sector divide produces systematic differences in women entrepreneurs' resources, constraints and enterprise outcomes in Chhattisgarh, a state marked by pronounced urban–tribal and industrial–rural heterogeneity. The study compares women entrepreneurs in Raipur and Durg with those in Bastar and Surguja and interprets sector differences in relation to geography, education, social norms and institutional access.

A post-positivist pragmatic philosophy and a sequential explanatory mixed-methods design were adopted. The quantitative phase surveyed 200 women entrepreneurs using a 68-item structured questionnaire. Equal sector and district allocation was planned; after applying the study's multi-criteria sector classification, the final analytical groups comprised 101 organized-sector and 99 unorganized-sector respondents. The qualitative phase involved 20 purposively selected semi-structured interviews. Quantitative analysis used descriptive statistics, chi-square tests, independent-samples and Welch's t-tests, Mann–Whitney U robustness checks, Pearson correlation and ordinary least-squares regression on log monthly income. Interview data were analysed through Braun and Clarke's six-phase thematic procedure.

The evidence demonstrates a substantial sector divide. Formal credit had been accessed by 41.6% of organized-sector respondents compared with 6.1% of unorganized-sector respondents, $\chi^2(1) = 38.14$, $p < .001$, $\phi = .44$. Mean government-scheme awareness was 6.50 versus 2.76 out of 10, $t(198) = 13.14$, $p < .001$, $d = 1.87$. Mean digital-adoption scores were 5.62 versus 1.84 out of 8. Mean monthly enterprise income was ₹38,420 in the organized sector and ₹8,910 in the unorganized sector, Welch's $t(118.3) = 14.81$, $p < .001$, $d = 2.09$. The final five-predictor model explained 62.3% of income variance (adjusted $R^2 = .607$), with sector membership, formal credit, digital adoption, education and scheme awareness all significant. Seven qualitative themes showed how institutional design, geographic isolation, digital

capability, social capital, family permission, formalisation pathways and policy fragmentation produce these disparities. The thesis concludes that the sector divide is structural, multidimensional, geographically differentiated and self-reinforcing. It recommends block-level formalisation support, community-based scheme delivery, digital literacy-to-commerce pathways, enforcement of collateral-free lending rules, gender-sensitive banking and a state women-enterprise evidence system.

Introduction and Background

Entrepreneurship contributes to employment creation, innovation, household resilience and regional development. For women, enterprise ownership can additionally strengthen control over income, decision-making power and social recognition. However, the opportunities available to women entrepreneurs depend on the institutional and social environments within which their enterprises operate. A registered enterprise can produce verifiable records, open a business account, apply for formal credit, access procurement and government schemes, and develop relationships with professional networks. An unregistered enterprise may be economically active and locally valued but remain invisible to the same institutions. This difference is especially consequential in India, where women's enterprise activity is heavily concentrated in informal and home-based work (ILO, 2018; NSSO, 2016).

Chhattisgarh offers a distinctive setting for examining this divide. Raipur and Durg form the state's urban-industrial corridor and concentrate financial institutions, District Industries Centres, registered MSMEs, professional services and digital infrastructure. Bastar and Surguja represent tribal-rural economies shaped by forest products, agriculture, crafts, weekly haat markets, dispersed settlements and weaker institutional connectivity. Women entrepreneurs in these settings may face the same formal policy portfolio but encounter it through very different access conditions. The study therefore treats sector status as a structural position embedded in geography, education, family relations, social networks and administrative reach rather than as a purely legal label.

The organized sector is operationally associated with registration, written accounts, tax or trade documentation and non-family salaried employment. The unorganized sector consists of enterprises operating without sufficient formal

institutional attributes. In practice, the boundary is permeable: some informal enterprises aspire to register, while some formally registered enterprises retain informal operating practices. The thesis accordingly applies a transparent multi-criteria classification rule and examines both the direct income association of sector membership and the pathways through which sector status shapes credit, scheme awareness, digital capability and markets.

Statement of the Research Problem

Public policy frequently treats women entrepreneurs as a broadly homogeneous beneficiary category. Yet schemes designed around online information, formal documentation, bankable records and travel to district offices are easier to use for educated, urban and registered entrepreneurs than for low-literacy, home-based or tribal-rural entrepreneurs. The central research problem is therefore the mismatch between uniform scheme design and the structurally unequal conditions under which organized- and unorganized-sector women in Chhattisgarh attempt to establish and grow enterprises.

The state-level evidence base was insufficient in three respects. First, organized- and unorganized-sector women had rarely been compared using the same instrument and a multi-district sample. Second, scheme studies generally measured awareness or beneficiary counts without tracing the complete pathway from awareness to application and actual benefit. Third, enterprise-performance studies did not jointly estimate the contribution of sector status, formal credit, digital adoption, education and scheme awareness. Without comparative and multivariate evidence, policy cannot determine whether the same intervention is suitable for both sectors or which barriers deserve priority.

Core problem: Institutional support is formally available to women entrepreneurs, but its design and delivery may systematically privilege enterprises that are already registered, documented, connected and digitally capable.

Need, Significance and Scope of the Study

Need for the Study

Academically, Chhattisgarh is underrepresented in the quantitative women-entrepreneurship literature despite the analytical importance of its urban-industrial

and tribal-rural contrast. Existing studies provide valuable accounts of SHG enterprise, tribal livelihoods and women's constraints, but few use a common comparative design across sector and district contexts (Kumar, 2017; Rao, 2019; Sahu & Rao, 2019). The study therefore contributes primary evidence capable of testing sector differences rather than assuming them.

From a policy perspective, the need arises from possible leakage in targeting. National and state programmes can report large beneficiary portfolios while the most informal women remain unaware, ineligible or discouraged from applying. Measuring both awareness and utilization identifies where policy delivery fails. The digital dimension adds urgency: as UPI, social-media marketing and e-commerce become central to market access, unequal capability may widen rather than close income disparities. Finally, the study has operational value for banks, NRLM functionaries, DICs, NGOs and SHG federations because it identifies sector- and district-specific constraints and links them to measurable outcomes.

Significance

Academic significance: provides a Chhattisgarh-specific, sector-comparative mixed-method evidence base and integrates institutional, resource, human-capital and social-capital explanations.

- Policy significance: identifies where credit, scheme and digital-delivery systems fail and supports differentiated rather than uniform programme design.
- Managerial significance: shows which capabilities—formal records, credit access, digital tools, education and scheme knowledge—are most strongly associated with income.
- Social significance: makes visible the economic contribution and institutional exclusion of women operating in home-based, market, agricultural-processing and craft enterprises.

Scope

The geographical scope covers Raipur, Durg, Bastar and Surguja. The population comprises women who own or manage MSME-scale enterprises and exercise primary operational and strategic decision-making authority. The thematic scope includes socioeconomic and enterprise profiles; finance, training, technology, markets and

government schemes; constraints, growth aspirations, income and sustainability. The study is cross-sectional, with fieldwork conducted from February to August 2023 and selected retrospective questions covering the preceding years. Large enterprises and male-owned businesses are outside the study's delimitations.

Review of Related Literature

The literature demonstrates that women's enterprise performance cannot be explained solely by individual motivation. Contextual approaches show that entrepreneurship is embedded in household responsibilities, gender norms, networks, institutions and markets (Brush, de Bruin, & Welter, 2009; Welter, 2011). In developing economies, women are disproportionately represented in small, informal and home-based activities with low entry barriers but limited capacity for accumulation. Financial constraints are intensified by gendered asset ownership, weak credit histories, documentation requirements and the tendency of lenders to treat household male members as the primary economic decision-makers. SHGs and microfinance can improve access, but their small loan sizes and group-liability structures may support survival more effectively than scaling (Bali Swain & Wallentin, 2009; NABARD, 2018, 2022).

Institutional research distinguishes formal rules from their implementation. Schemes may prescribe collateral-free or simplified access while branch-level practices reintroduce collateral, paperwork or discretionary assessment. North's (1990) framework explains how formal and informal institutions jointly shape incentives, while Scott's (2014) regulative, normative and cultural-cognitive pillars clarify how legal rules, professional norms and assumptions about what constitutes a 'real' enterprise can operate together. Research on formalisation similarly shows that registration can confer credibility and access, but compliance costs can deter micro-enterprises if benefits are distant or uncertain.

The resource-based view identifies finance, information, technology, skills and networks as complementary resources rather than isolated inputs (Barney, 1991; Wernerfelt, 1984). A loan has limited productive value without financial capability and markets; digital skills create little value without connectivity; scheme awareness is ineffective when applications remain inaccessible. Human-capital theory predicts positive returns to education and training through productivity, information

processing and institutional navigation (Becker, 1964). Social-capital theory explains why SHGs, peer networks and community ties substitute for weak formal institutions by circulating information, providing rotating credit and enabling collective market participation (Coleman, 1988; Putnam, 2000). However, strong bonding ties can also reinforce restrictive norms or confine women to low-return local markets.

Digital entrepreneurship literature distinguishes first-level access from second-level capability. Smartphone ownership does not guarantee use of UPI, digital records, online marketplaces or social-media marketing. Language, literacy, connectivity, platform design and household control over devices all influence whether access becomes a business practice. The literature also shows that women's enterprise income is embedded in household labour allocation and seasonal livelihoods, making simple annual recall measures unreliable. Context-sensitive instruments and mixed methods are therefore required to understand both the magnitude of sector differences and the mechanisms producing them (Creswell & Plano Clark, 2018).

Research Gaps

- Absence of a systematic, multi-district comparison of organized- and unorganized-sector women entrepreneurs in Chhattisgarh using common measures and inferential tests.
- Limited integration of institutional theory, the resource-based view, human-capital theory, social-capital theory and gendered contextual embeddedness in state-level research.
- Insufficient evidence on digital business adoption, government-scheme conversion from awareness to benefit, and women's aspirations for sector mobility and formalisation.
- Weak multivariate analysis of how sector, credit, digital capability, education and scheme information jointly relate to enterprise income and sustainability.
- Inadequate attention to intersectional and spatial disadvantage, especially the interaction of sector informality with tribal identity, rural location, education and institutional distance.

The present study addresses these gaps by combining balanced sector and district coverage, a structured quantitative instrument, hypothesis testing, multivariate modelling and explanatory interviews. Its distinctive contribution is to treat the organized–unorganized distinction as a multidimensional institutional boundary and to estimate both the direct sector association and the enabling pathways linked to enterprise outcomes.

Theoretical and Conceptual Framework

No single theory adequately explains the observed sector differences. Institutional theory explains the rules, administrative practices and legitimacy advantages attached to registration. The resource-based view explains unequal bundles of financial, technological, informational and market resources. Human-capital theory explains the role of education, training and digital capability. Social-capital theory explains the networks through which women obtain information, finance, confidence and collective support when formal institutions are weak. Brush et al.’s (2009) gender-aware contextual perspective integrates these lenses by situating the enterprise within the household, community and policy environment.

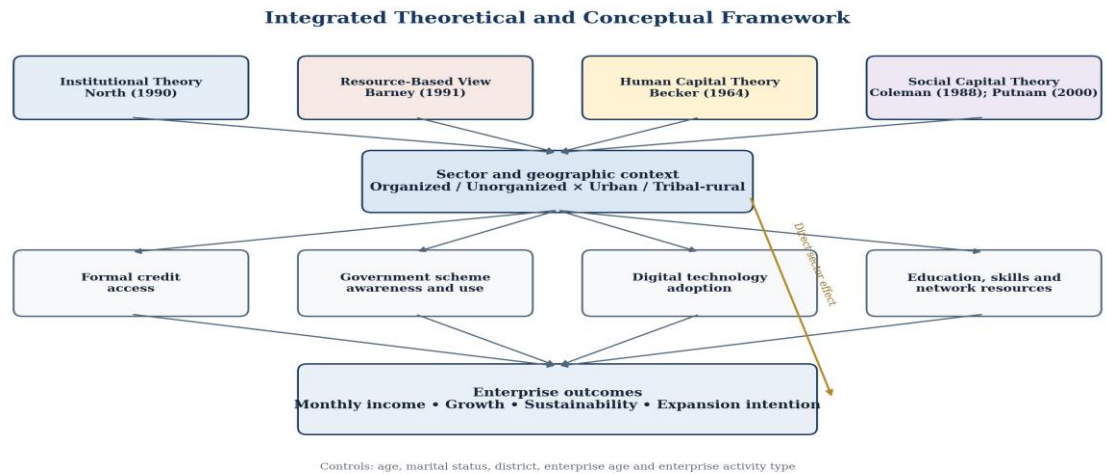


Figure 1. Integrated theoretical and conceptual framework developed from the thesis.

The conceptual model positions sector and geographic context as the principal structural conditions. These conditions shape four enabling pathways: formal credit access; scheme awareness and utilization; digital technology adoption; and education, skills and network resources. Enterprise income, growth, sustainability and expansion intention are the principal outcomes. Age, marital status, district, enterprise age and activity type are treated as controls or contextual modifiers. The model permits a

direct sector effect because formal status may confer credibility, procurement access and supply-chain legitimacy not fully captured by the measured pathways.

Aim, Objectives, Research Questions and Hypotheses

Aim

The aim is to conduct a rigorous comparative analysis of women entrepreneurs in the organized and unorganized sectors of Chhattisgarh by examining their socioeconomic and enterprise characteristics, resource and scheme access, constraints, growth and sustainability outcomes, and by formulating evidence-based sector-specific recommendations.

Objectives

- To compare the socioeconomic, demographic and enterprise characteristics and the major challenges of women entrepreneurs in the organized and unorganized sectors of Chhattisgarh.
- To assess and compare access to finance, training, technology and markets, together with awareness, utilization and perceived effectiveness of government entrepreneurship schemes in the two sectors.
- To compare enterprise growth, performance and sustainability, identify significant determinants, and recommend sector-specific policy and managerial measures for strengthening women's entrepreneurship in Chhattisgarh.

Research Questions

- How do socioeconomic, demographic and enterprise characteristics and major entrepreneurial challenges differ between the two sectors?
- What differences exist in access to finance, training, technology and markets, and in awareness, utilization and perceived effectiveness of government schemes?
- How do growth, performance and sustainability differ; which factors significantly determine enterprise success; and what measures can strengthen women's entrepreneurship in both sectors?

Null Hypotheses

H₀₁: There is no significant sector difference in socioeconomic, demographic or enterprise characteristics, or in the nature and severity of major entrepreneurial challenges.

H₀₂: Sector type is not significantly associated with access to finance, training, technology or markets, or with awareness, utilization or perceived effectiveness of government schemes.

H₀₃: There is no significant sector difference in enterprise growth, performance or sustainability, and credit, policy support, training, technology and market access do not significantly influence performance.

Empirical operationalisation: Chapter 4 tests the omnibus hypotheses through three principal comparisons—formal credit access, scheme awareness and monthly income—supplemented by digital-adoption, constraint, growth-aspiration and regression analyses.

Table 1. Alignment of objectives, questions, hypotheses and principal analysis

Objective	RQ	Null hypothesis	Principal analysis
Profile and challenges	RQ1	H ₀₁	Frequencies, cross-tabs, χ^2 , t-tests, constraint means
Resources and schemes	RQ2	H ₀₂	Credit χ^2 ; awareness t-test; digital index; correlations
Performance and policy	RQ3	H ₀₃	Welch's t-test; Mann–Whitney U; OLS regression

Research Methodology

Philosophy, Approach and Design

The study adopts a post-positivist pragmatic stance. It assumes that sector position, institutional access and income differences are materially real and can be measured, while recognising that measurements are fallible and that participants' interpretations are necessary to explain mechanisms. A sequential explanatory mixed-methods design was used: the quantitative survey established the pattern and magnitude of sector differences, after which qualitative interviews explained why those patterns occurred (Creswell & Creswell, 2018; Creswell & Plano Clark, 2018). The design is comparative, descriptive and cross-sectional; it supports association and prediction but not definitive causal inference.

Study Area, Population and Sampling

The four districts were selected to represent contrasting institutional and economic environments: Raipur (urban-commercial), Durg (urban-industrial), Bastar (tribal-forest and haat-market economy) and Surguja (tribal-rural and agricultural-processing economy). The target population consisted of women who were the primary decision-makers and operators of income-generating enterprises. The organized-sector frame combined DIC records, municipal trade licences, CSIDC records and Udyam information. The unorganized-sector frame combined NRLM/SHG lists, vendor and haat-market records, PM SVANidhi lists and supplementary field enumeration.

Cochran's formula at 95% confidence, $p = .50$ and a 7% margin of error yielded a minimum of approximately 196; the adopted sample was 200. Equal allocation was chosen to maximise comparison power: 25 respondents per sector in each district. Stratified random or systematic selection was used wherever reliable lists existed, with purposive cluster supplementation in remote unorganized-sector locations. After the multi-criteria sector classification was applied to the completed survey, seven self-identified organized enterprises were recoded as unorganized and four self-identified unorganized enterprises were recoded as organized, producing final analytical cells of 101 and 99.

Instruments and Measurement

The 68-item Hindi questionnaire covered respondent profile; enterprise characteristics; institutional finance; government-scheme awareness and utilization; digital adoption; income and financial outcomes; constraints; and growth aspirations. Sector status was classified using formal registration, written accounts, GST status and non-family salaried employment, with at least two of four criteria required for organized classification. Formal credit was coded as receipt of at least one institutional business loan during the previous three years. Scheme awareness was a 0–10 count, digital adoption a 0–8 index, and monthly enterprise income the self-reported average net income after direct business costs. Education, enterprise age and district were used as controls.

Twenty semi-structured interviews were drawn purposively from the survey sample to include both sectors, all districts, varied credit outcomes, digital-adoption levels and enterprise types. The guide covered enterprise history, credit, schemes,

digital practices, growth, social and family context, formalisation and policy needs. Interviews were conducted in Hindi or Chhattisgarhi, recorded with consent and transcribed verbatim.

Pilot Testing, Reliability and Validity

A pilot with 20 women outside the final sample tested clarity, timing and scale consistency. Problematic registration, employee-payment and scheme-name items were revised. Cronbach's alpha was .78 for the social/institutional constraint subscale and .81 for the digital-adoption index. A two-week retest produced $r = .83$ for income and $r = .88$ for scheme awareness. Content validity was assessed by three academic experts and a CSIDC practitioner. Qualitative credibility was strengthened through member checking, a reflexivity journal, an audit trail and an independent coding check; Cohen's $\kappa = .71$ indicated substantial agreement (Lincoln & Guba, 1985).

Data Collection, Analysis and Ethics

Fieldwork was conducted face-to-face from February to August 2023 by trained enumerators. Completed questionnaires were checked within 48 hours, and double entry in IBM SPSS Statistics 25 produced a documented error rate of 0.8% before correction. Quantitative analysis comprised frequencies, percentages and means; Pearson chi-square and Fisher's exact tests; independent-samples and Welch's t-tests; Mann-Whitney U robustness checks; Pearson correlations; and OLS regression on log-transformed income. Effect sizes were reported using ϕ , Cohen's d , r , standardized β and R^2 , with two-tailed $\alpha = .05$. Qualitative analysis followed Braun and Clarke's (2006) six phases and used NVivo 12.

Ethical clearance was obtained from the Kalinga University Research Ethics Committee (KU/REC/2022/18). Participation was voluntary and based on informed consent. Hindi forms and witnessed oral consent were available for respondents with limited literacy. Records were anonymised and stored securely. Female enumerators or community liaisons were used in rural-tribal fieldwork to reduce gendered response inhibition, and participants were assured that participation would not affect scheme eligibility.

Table 2. Methodology at a glance

Element	Specification
Design	Sequential explanatory mixed methods; comparative, descriptive and cross-sectional
Setting	Raipur, Durg, Bastar and Surguja, Chhattisgarh
Quantitative sample	N = 200; final analytical groups: organized n = 101, unorganized n = 99
Qualitative sample	20 purposively selected interview participants; 10 from each sector
Instrument	68-item structured questionnaire and 8-domain semi-structured interview guide
Core variables	Credit access; scheme awareness; digital adoption; monthly income; constraints; aspirations
Analysis	χ^2 , t-tests, Mann–Whitney U, correlations, OLS regression, thematic analysis
Quality and ethics	Pilot n = 20; α = .78–.81; κ = .71; ethics ref. KU/REC/2022/18

Data Analysis and Principal Findings

Respondent and Enterprise Profile

The organized-sector cohort was younger and markedly more educated. Respondents aged 26–35 constituted 42.6% of the organized group compared with 21.2% of the unorganized group. Graduate or postgraduate qualifications were held by 61.4% of organized-sector respondents but only 8.1% of the unorganized group. Unorganized enterprises were older on average (11.7 versus 6.3 years), reflecting continuity of family and community trades rather than sustained scaling. Organized enterprises concentrated in manufacturing/food processing, retail and professional services; unorganized enterprises concentrated in home-based production, agricultural processing and petty vending. These differences justify sector comparison but also require multivariate controls.

Formal Credit Access

Formal credit had been received by 42 of 101 organized-sector respondents (41.6%) and 6 of 99 unorganized-sector respondents (6.1%). The sector association was statistically significant, $\chi^2(1) = 38.14$, $p < .001$, $\phi = .44$. Among those without credit, 78.8% of unorganized respondents had never applied, compared with 30.7% of organized respondents. This indicates that the informal-sector gap operates through anticipatory discouragement and information barriers as well as rejection. Where applications were rejected, collateral, business-plan documentation and credit history were prominent reasons. Qualitative accounts showed that geographic distance,

inconsistent requirements and assets held in male relatives' names further constrained women's independent access.

Government-Scheme Awareness and Utilization

Mean awareness was 6.50 schemes out of 10 in the organized sector and 2.76 in the unorganized sector, $t(198) = 13.14$, $p < .001$, $d = 1.87$. Awareness of at least one scheme was 98.0% versus 67.7%; application to at least one scheme was 54.5% versus 17.2%; and receipt of at least one benefit was 41.6% versus 6.1%. The evidence therefore reveals attrition at every delivery stage. Organized-sector non-use was associated mainly with procedural complexity and delay, while unorganized-sector non-use was associated with missing documents, language barriers and unfamiliarity with applications. Community-delivered programmes such as NRLM showed narrower awareness gaps than schemes dependent on bank, office or digital self-navigation, demonstrating the importance of delivery architecture.

Digital Adoption

The organized-sector mean on the eight-item Digital Adoption Index was 5.62 ($SD = 1.47$), compared with 1.84 ($SD = 1.32$) for the unorganized sector. High adoption scores (6–8) were recorded by 69.3% of organized respondents but only 4.0% of unorganized respondents. The gap was modest for smartphone business communication but very large for UPI/QR acceptance, online marketplaces, social-media marketing and digital records. The full-sample correlation between digital adoption and income was $r = .573$, $p < .001$, with positive within-sector correlations as well. Interviews showed a second-level digital divide: device ownership did not translate into business use because of limited literacy, language support, network quality, household control and absence of practical training.

Income, Growth and Sustainability

Mean monthly enterprise income was ₹38,420 ($SD = ₹14,360$) in the organized sector and ₹8,910 ($SD = ₹4,190$) in the unorganized sector—a difference of ₹29,510 and a ratio of approximately 4.3:1. Welch's $t(118.3) = 14.81$, $p < .001$, $d = 2.09$; the Mann–Whitney U test confirmed the result. Nearly 72.7% of unorganized respondents earned ₹10,000 or less per month, while no unorganized respondent exceeded ₹25,000 in the reported distribution. Planned expansion within two years was reported by 71.3% of organized respondents and 31.3% of unorganized respondents. However,

73.7% of currently non-aspiring unorganized respondents indicated that they would reconsider expansion if adequate credit, market access and digital support became available, showing constrained rather than absent ambition.

Multivariate Income Model

The final OLS model used log monthly income and five theoretically selected predictors. The model was significant, $F(5, 194) = 64.43$, $p < .001$, $R^2 = .623$, adjusted $R^2 = .607$. Standardized effects were sector membership $\beta = .381$, formal credit $\beta = .248$, digital adoption $\beta = .231$, education $\beta = .201$ and scheme awareness $\beta = .167$; all $p < .001$. Diagnostics were acceptable: maximum VIF = 2.34, Durbin–Watson = 1.98, Breusch–Pagan $p = .149$ and residual Shapiro–Wilk $p = .071$. The residual sector effect suggests that formal status confers credibility, supply-chain and market advantages not fully captured by the measured pathways.

Table 3. Consolidated quantitative findings

Indicator	Organized sector	Unorganized sector	Primary statistical result
Formal credit received	41.6%	6.1%	$\chi^2(1)=38.14$, $p<.001$, $\phi=.44$
Scheme awareness (0–10)	M=6.50	M=2.76	$t(198)=13.14$, $p<.001$, $d=1.87$
Digital adoption score	M=5.62	M=1.84	$t(198)=16.87$, $p<.001$, $d=2.39$
Monthly enterprise income	₹38,420	₹8,910	Welch $t(118.3)=14.81$, $p<.001$, $d=2.09$
Plan expansion in 2 years	71.3%	31.3%	Large descriptive sector gap
Income model	—	—	$R^2=.623$; adjusted $R^2=.607$; $F(5,194)=64.43$

Constraint Profiles

Unorganized respondents rated finance (M = 4.61), scheme/government support (4.34), market access (4.23), infrastructure (4.12), digital barriers (4.08) and mobility (4.01) as severe. Organized respondents rated regulatory burden (3.71), finance (3.42) and labour availability (3.18) most highly. The profile confirms that one policy package cannot serve both groups: compliance simplification is relevant to registered enterprises, whereas unorganized enterprises require last-mile finance, infrastructure, mobility, information and capability support. Family/social obligations and gender

discrimination remained relevant across both sectors, demonstrating that formalisation does not by itself eliminate gendered constraints.

Qualitative Themes

- Finance as a structural barrier to enterprise identity: bank recognition supplied legitimacy as well as capital; exclusion weakened both business capacity and social recognition.
- Scheme awareness as geographic privilege: urban respondents encountered information through multiple channels, whereas tribal-rural respondents experienced information scarcity.
- The device-to-skill digital gap: smartphone ownership was common, but practical enterprise use was blocked by literacy, language, connectivity and platform complexity.
- Social capital as an institutional substitute: SHGs and mahila mandals functioned as banks, information centres, business schools and emotional-support systems.
- Family permission as a prior constraint: women negotiated permission for travel, loans, reinvestment, training and interaction with male workers or suppliers.
- Sector fluidity and formalisation aspiration: several women wanted to register but faced procedural uncertainty, while some registered enterprises considered informality because of compliance costs.
- Policy incoherence: incompatible documentation, fragmented departments and weak referral systems reduced the usefulness of otherwise well-designed schemes.

Discussion and Contribution

The findings support the thesis that the sector divide is a primary structural axis around which entrepreneurial advantage and disadvantage are organized. Sector status is associated not only with registration but with a bundle of mutually reinforcing conditions: documentation enables credit; credit enables investment; digital adoption expands markets; higher income creates records and resources; and these assets improve future institutional access. The unorganized sector displays the reverse

sequence. Its women often operate viable enterprises, yet weak documentation, low credit, local-market confinement and low income reproduce institutional invisibility. The cross-sectional design cannot prove the causal sequence, but the statistical pattern, theory and interview mechanisms converge strongly.

Institutional theory is extended by showing that exclusion arises from divergence between formal policy rules and implementation practice. The resource-based view is strengthened by evidence that deficits are bundled: a single resource rarely produces its full value without complementary capabilities. Human-capital theory is supported by the independent income association of education, but the findings show that education also works indirectly through digital capability and institutional navigation. Social-capital theory is refined by the distinction between bonding support, which sustains enterprise survival, and bridging connections to banks, markets and agencies, which support scaling. The study's mixed-method contribution lies in joining effect-size estimates with respondent accounts of the mechanisms behind them.

Geography modifies every pathway. The most severe exclusion occurs where unorganized status intersects with rural distance and tribal-region infrastructure constraints. Accordingly, policy must be universal in entitlement but differentiated in delivery. A digital-first scheme may reduce costs in Raipur while excluding an entrepreneur in an interior Bastar village. A bank-centred awareness campaign may reach registered firms but miss women whose only trusted institution is an SHG. Equity therefore requires additional last-mile support rather than identical procedures.

Conclusions

The study concludes that women entrepreneurs in the organized and unorganized sectors of Chhattisgarh operate in structurally different entrepreneurial environments. Organized-sector women have substantially greater access to formal credit, government-scheme information, digital business tools and higher-income markets. Unorganized-sector women face an interlocking constraint system involving documentation, institutional distance, weak digital capability, mobility restrictions, low market reach and gendered household authority. The observed 4.3:1 income ratio is therefore not adequately explained by motivation or individual effort.

All three omnibus null hypotheses are rejected on the principal empirical dimensions. Sector differences are large, statistically reliable and practically

consequential. Sector membership remains the strongest predictor of income after credit, digital adoption, education and scheme awareness are controlled, but those enabling variables also exert independent effects. This means that formalisation is important without being the only possible route to improvement: expanding credit, digital capability, information and market linkage within the unorganized sector can generate meaningful gains while women navigate longer formalisation pathways.

The policy problem is not primarily the absence of programmes. Chhattisgarh already possesses NRLM structures, DICs, bank correspondents, MSME schemes and digital initiatives. The central deficit is coordination and accessible delivery. Institutions must reach women through trusted community channels, simplify documentation, enforce existing collateral-free credit rules and connect training to actual commerce. Women's informal enterprises should be recognised as productive economic units capable of growth rather than as residual livelihood activity.

Recommendations

Table 4. Evidence-linked recommendations

Recommendation	Lead agencies	Priority	Evidence base
Quarterly block-level single-window formalisation camps with Udyam, business-account, credit and scheme assistance	State MSME; DIC; NRLM	High	Application discouragement, documentation barriers and formalisation aspiration
A four-module digital literacy-to-commerce pathway delivered through SHG meetings and linked to UPI, WhatsApp Business and e-commerce onboarding	NRLM; IT Dept.; MSME	High	Digital d=2.39; device-to-practice gap; income association
Enforce PMMY collateral-free rules, record rejection reasons and create accessible grievance channels	RBI; NABARD; SLBC	High	Collateral-linked rejection and inconsistent branch practice
Distribute a quarterly visual, Hindi/local-language multi-scheme update through NRLM and panchayat networks	DIC; NRLM; Panchayats	High	Awareness d=1.87 and stronger reach of community delivery
Audit the scheme portfolio for eligibility, language, minimum scale, documentation and last-mile assistance	MoMSME; State MSME	Medium	Structural ineligibility and policy fragmentation
Provide gender-sensitive banking and standardized credit-assessment training for branch staff	IBA; RBI FIDD; Banks	Medium	Gendered gatekeeping and spousal/collateral assumptions
Establish a biennial women-enterprise survey and public dashboard for all 33 districts	State Planning & Statistics	Medium	Fragmented data and weak monitoring by sector/district

Managerial Suggestions for Women Entrepreneurs

Complete free Udyam registration, preferably with assistance from the DIC or an NRLM coordinator, as the first institutional-visibility step.

Open and actively use a separate business bank account so deposits and transactions create a verifiable financial history.

Use SHG peer experience to identify workable bank branches, scheme processes and documentation practices.

Adopt digital tools sequentially: merchant UPI/QR, WhatsApp Business, social-media marketing, then marketplace onboarding.

Maintain a simple monthly sales, expense, inventory and borrowing record to support pricing, cash-flow management and future credit applications.

Limitations and Delimitations

The study is limited by its cross-sectional design, which supports association and prediction but cannot establish whether formalisation causes higher income or higher-performing enterprises are more likely to formalise. Monthly income and several access indicators are self-reported and may be affected by recall, record quality and social-desirability bias. The unorganized-sector sampling frame necessarily underrepresents women with no SHG, vendor-list or market connection; the most institutionally invisible enterprises may therefore face greater disadvantage than the sample records. Findings are based on four districts and should not be treated as precise estimates for all 33 districts or other states. The multi-criteria sector rule improves substantive classification but differs from a purely legal registration definition, which should be considered when comparing this study with administrative statistics.

The study deliberately excludes male-owned enterprises, large firms and women who are only nominal co-owners without primary decision authority. It focuses on MSME-scale economic activity, resource access and enterprise outcomes. These boundaries preserve analytical focus but prevent gender comparison with men and limit conclusions about larger corporate entrepreneurship.

Directions for Future Research

- Track a panel of unorganized enterprises before and after formalisation to distinguish selection from causal effects on credit, digital adoption and income.

- Replicate the design in states with different institutional profiles, including comparable tribal-agrarian settings, to test external validity.
- Evaluate block-level formalisation camps through stepped-wedge or difference-in-differences designs using registration, loan and income outcomes.
- Follow women through a digital-literacy programme to identify the specific barriers between device use, first digital payment, first online listing and sustained digital sales.
- Audit the women's credit application-to-disbursement pipeline at branch level and compare documented practice with PMMY requirements.
- Use social-network analysis to distinguish bonding and bridging ties and identify the people and institutions that act as information brokers for schemes and markets.

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