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Financial Inclusion: Boosting Green Practices and Innovation for Female Vendors Well-Being



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ABSTRACT

This paper examines the factors that influence the quality of life of women street vendors in Serang City, focusing on the contributions of environmentally friendly practices, entrepreneurial innovativeness, and financial inclusion. 100 participants were randomly selected and interviewed using structured questionnaires. Descriptive statistics provided insights into the respondents' profiles, while Structural Equation Modeling with Partial Least Squares (SEMPLS) was used to analyze the relationships between the study variables. The results show that green practices have a significant positive impact on the well-being of women street vendors. Entrepreneurial innovation also proved to be a crucial factor that had a positive impact on their well-being. Green practices were found to promote entrepreneurial innovation, directly creating a reinforcing dynamic. Furthermore, a positive correlation was found between financial inclusion and well-being. It also played a mediating role by reinforcing the impact of green practices and entrepreneurial innovation on participants' well-being. In conclusion, the study shows that promoting green practices, entrepreneurial

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innovation, and improving access to financial resources are important strategies to improve the quality of life of women street vendors in Serang City. These findings underscore the importance of integrated interventions to promote sustainable livelihoods and economic empowerment of women in the sector.

KEYWORDS: green, practices, entrepreneurial, innovation, financial, female, street

Introduction

In Indonesia, women street vendors make an important contribution to the informal sector, which supports the household economy and urban commerce. Many choose this profession because it requires little capital and basic skills that enable financial independence. In the city of Serang, 132 out of 275 street vendors were recorded by the Office of Cooperatives, Micro, Small and Medium Enterprises, Industry and Commerce in 2024.

Despite financial instability and limited access to financial services, women street vendors remain in strategic locations (Muindi & Masurel, 2022; Pineda Duque & Castiblanco Moreno, 2022). While the local government has provided bins for organic and non-organic waste, weak regulations hinder their effectiveness. Training on sustainable practices is needed to improve cleanliness and the use of environmentally friendly materials (Nyamnjoh, 2020; Kaya, 2021). Sustainability strengthens the economy, while technology and marketing innovations improve competitiveness (Grangxabe et al., 2023; Milojevic et al., 2021).

This study highlights the role of inclusive financial services in overcoming economic barriers and improving vendors' livelihoods while addressing the research gap on green practices, business innovation, and financial access in shaping well-being. It contributes to the literature by examining (a) female street vendors' environmental conservation practices, (b) the impact of green practices and entrepreneurial innovation on vendor well-being, (c) the role of financial inclusion in enhancing welfare, (d) the influence of green practices on entrepreneurial innovation, and (e) public perceptions of female street vendors, particularly regarding waste management and business opportunities.

Green practices, such as recycling and biodegradable materials, reduce environmental impact and promote community engagement (Nandru et al., 2021). Financial inclusion provides capital for business growth (Irankunda & Van Bergeijk, 2020), while entrepreneurial innovation enhances competitiveness and income (Babović & Kočović De Santo, 2023). This study examines how these factors influence the well-being of female street vendors in Serang City.

Accessibility of Inclusion Financial Services (AIFS)

This variable examines female street vendors' access to financial services, considering collateral, risk perception, information asymmetry, household dynamics, and loan interest rates (Ndaba & Reddy, 2024). Limited access arises from structural barriers and vendors' risk-mitigation strategies (Nandru et al., 2021). Operating in strategic urban areas, they balance entrepreneurship and family roles, showcasing resilience and serving as community role models (Moges et al., 2024; Munawir and Suseno, 2024).

Green Practices (GP)

This variable assesses green practice adoption among female street vendors in cleanliness, materials, waste, awareness, and hygiene (Popovic-Pantic et al., 2023). Consumer demand drives eco-friendly initiatives, enhancing livelihoods (Takaza & Chitereka, 2022;Suseno and Dwiatmadja, 2016; Saad, 2022). However, waste management challenges require policy support (Basu & Nagendra, 2020). High adoption rates indicate market potential and business resilience (Ndaba & Reddy, 2024).

Entrepreneurship Innovation (EI)

This variable evaluates female street vendors' entrepreneurial innovation in creativity, technology, adaptability, collaboration, and efficiency (Frare & Beuren, 2023). Innovation fosters eco-friendly, cost-effective solutions and strengthens competitiveness(Suseno, 2019; Soomro et al., 2024). Collaboration reduces costs, improves quality, and enhances credibility (Popovic-Pantic et al., 2023). Ultimately, it sustains businesses and boosts economic well-being (Taskin et al., 2023).

Female Street Vendors' Welfare (FSVW)

This variable assesses female street vendors' welfare in economic, social, and psychological aspects through income, challenges, training, and

local economic conditions (Irankunda & Van Bergeijk, 2020). Gender disparities and sociocultural factors influence their strategies and wellbeing, with additional pressure from domestic responsibilities (Pineda Duque & Castiblanco Moreno, 2022). Financial education and better banking access can enhance financial stability and empowerment (Nandru et al., 2021).

Research Methodology

This study uses descriptive statistics and a 1–5 scale of 100. The Three Box Method categorizes responses into Low (20–46.27), Medium (47.27–73.54), and High (74.54–100) acceptance levels. The index ranges from 20 to 100. Tables 1–4 present findings on financial access, green practices, entrepreneurial innovation, and female street vendors in Serang City, offering insights into respondents' perceptions.

Table 1: Analysis of Respondent Accessibility of Inclusion Financial Service

Indicator	SD	D	N	A	SA	Total (N)	Ideal Score	% Index	Category
Credit Costs									
AIFS_1	11	19	12	14	43	100	500	71.2	Moderate
fxs	11	38	36	56	215	356			
AIFS_2	12	15	11	26	35	100	500	70.8	Moderate
fxs	12	30	33	104	175	354			
Information As	symme	etry							_
AIFS_3	12	15	11	19	42	100	500	72.2	Moderate
fxs	12	30	33	76	210	361			
AIFS_4	11	16	5	31	36	100	500	72.4	Moderate
fxs	11	32	15	124	180	362			
Risk Perception	n								
AIFS_5	9	19	3	42	26	100	500	70.8	Moderate
fxs	9	38	9	168	130	354			
AIFS 6	13	21	8	20	37	100	500	68.8	Moderate
fxs	13	42	24	80	185	344			
Guarantee Rec	uirem	ents							_
AIFS_7	12	17	8	20	42	100	500	72.0	Moderate
fxs	12	34	24	80	210	360			
AIFS_8	14	14	5	31	35	100	500	71.2	Moderate
fxs	14	28	15	124	175	356			

Indicator	SD	D	N	A	SA	Total (N)	Ideal Score	% Index	Category
Household									
AIFS_9	11	16	4	42	26	100	500	70.6	Moderate
fxs	11	32	12	168	130	353			
AIFS_10	10	18	5	44	22	100	500	69.4	Moderate
fxs	10	36	15	176	110	347			
Average Index	x Value							70.94	Moderate

Source: Processed survey data (2024)

Table 1 shows that access to inclusive financial services for female street vendors in Serang remains moderate. Risk perception at 70.8% reflects high financial concerns, while credit costs (70.8–71.2%), information asymmetry (72.2–72.4%), guarantee requirements (71.2–72%), and household factors (69.4–70.6%) indicate limited access. Despite these challenges, 62.6% of the middle economic category still require additional capital, emphasizing the need for external funding.

Table 2: Analysis of Respondent Green Practice

Indicator	SD	D	N	A	SA	Total	Ideal Score	% Index	Category
Environmental	Clean	liness							_
GP_1	9	11	9	23	47	100	500	77.0	High
fxs	9	22	27	92	235	385			
Materials Used									
GP_2	9	11	12	28	39	100	500	74.8	High
fxs	9	22	36	112	195	374			
Waste Disposal									
GP_3	10	10	11	29	39	100	500	74.8	High
fxs	10	20	33	116	195	374			
GP_4	15	9	4	14	57	100	500	77.2	High
fxs	15	18	12	56	285	386			
Environmental	Awar	eness							
GP_5	5	15	6	19	54	100	500	79.8	High
fxs	5	30	18	76	270	399			_
Product Cleanl	iness								
GP_6	8	17	3	14	57	100	500	78.4	High
fxs	8	34	9	56	285	392			_
Average Index	Value							77.0	High

Source: Processed survey data (2024)

Table 2 indicates that 79.8% of respondents implement green practices, with an overall adherence index of 77%. However, challenges persist in material use 74.8% and waste disposal. While environmental cleanliness and awareness demonstrate strong commitment, inconsistencies in product hygiene highlight the need for improved sustainable practices.

Table 3: Analysis of Respondent Entrepreneurship Innovation

Indicator	SD	D	N	A	SA	Total (N)	Ideal Score	% Index	Category
Creativity									
EI_1	6	14	12	32	35	100	500	74.6	High
fxs	6	28	36	128	175	373			
EI_2	5	17	3	36	38	100	500	76.4	High
fxs	5	34	9	144	190	382			
Technology Us	se								
EI_3	8	13	8	9	61	100	500	79.8	High
fxs	8	26	24	36	305	399			
EI_4	8	12	5	9	65	100	500	81.6	High
fxs	8	24	15	36	325	408			
Adaptation									
EI_5	6	18	21	19	35	100	500	71.2	Moderate
fxs	6	36	63	76	175	356			
EI_6	8	14	14	32	31	100	500	72.2	Moderate
fxs	8	28	42	128	155	361			
Collaboration									
EI_7	11	13	7	31	37	100	500	73.4	Moderate
fxs	11	26	21	124	185	367			
EI_8	11	14	12	32	30	100	500	70.6	Moderate
fxs	11	28	36	128	150	353			
Operational E	fficien	ey _							
EI_9	16	16	8	25	34	100	500	68.4	Moderate
fxs	16	32	24	100	170	342			
Average Index	Score							74.24	High

Source: Processed survey data (2024)

The data in Table 3 indicate that certain aspects of entrepreneurial innovation among female street vendors in Serang require improvement. Operational efficiency has the lowest index (68.4%), followed by collaboration (70.6–73.4%) and adaptation (71.2–72.2%). These challenges

in business effectiveness, cooperation, and flexibility may hinder their competitiveness and long-term sustainability.

Table 4: Analysis of Respondent Welfare of Female Street Vendors

Indicator	SD	D	N	A	SA	N	Ideal Score	% Index	Category
Income									
FSVW 1	23	22	12	22	20	100	500	58.2	Moderate
fxs	23	44	36	88	100	291			
Challenges									
FSVW 2	17	18	22	25	17	100	500	60.8	Moderate
fxs	17	36	66	100	85	304			
FSVW_3	18	20	15	32	14	100	500	60.2	Moderate
fxs	18	40	45	128	70	301			
Skills									
FSVW_4	15	23	16	25	20	100	500	61.8	Moderate
fxs	15	46	48	100	100	309			
Economic Co	ndition	1							
FSVW_5	18	17	14	31	19	100	500	62.6	Moderate
fxs	18	34	42	124	95	313			
Accessibility									
FSVW_6	15	19	11	30	24	100	500	65.2	Moderate
fxs	15	38	33	120	120	326			
FSVW_7	11	22	8	36	22	100	500	66.6	Moderate
fxs	11	44	24	144	110	333			
Average Inde	x Scor	e						62.2	Moderate

Source: Processed survey data (2024)

The data in Table 4 shows that the welfare of female street vendors in Serang remains moderate at 62.2%. Income is the lowest (58.2%), followed by business challenges (60.2–60.8%) and skills (61.8%), which may hinder business growth. Accessibility is the highest (65.2–66.6%) but still presents challenges. Support is needed to improve income, skills, and economic access.

Table 5: Respondent Distribution

Aspect	Category	Absolute Frequency	Relative %	Cumulative %
Age	19–30 years	26	26	26
	31–40 years	38	38	64
	41–50 years	30	30	94
	>50 years	6	6	100
Years of Selling	1–3 years	43	43	43
9	4–6 years	21	21	64
	7–10 years	30	30	94
	>10 years	6	6	100
Daily Income	<€5.80	15	15	15
·	€5.80 – €17.40	80	80	95
	€17.40 – €29.00	5	5	100
	>€29.00	0	0	100
Type of Goods	Food	40	40	40
	Beverages	11	11	51
	Clothing	25	25	76
	Accessories	13	13	89
	Fruits	11	11	100
Education	Elementary School	30	30	30
	Junior High School	39	39	69
	Senior High School	31	31	100

Source: Processed survey data (2024)

Table 5 presents the demographic and business characteristics of the respondents. The majority (64%) are between 19 and 40 years old, with most having 1–3 years (43%) or 7–10 years (30%) of selling experience. In terms of daily income, 80% earn between €5.80 and €17.40, while only 5% earn between €17.40 and €29.00. Food products dominate the types of goods sold by 40%, followed by clothing at 25% and accessories 13%. Regarding education, most respondents have completed junior high school (39%) or senior high school (31%), while 30% have only finished elementary school. In the context of the Indonesian education system, junior high school grades 7–9 provides a general educational foundation, whereas senior high school grades 10–12 offers specialized tracks that prepare students for higher education or employment. It is important to emphasize that this structure specifically applies to Indonesia.

Hypothesis Development

The hypothesis testing results highlight the relationships between green practices, entrepreneurial innovation, financial access, and the welfare of female street vendors.

H1: Green practices (GP) positively impact the welfare of female street vendors (FSVW).

Green practices like reducing plastic use improve economic and social well-being (Schenck et al., 2022). Aligning with market demand enhances financial stability (Kirumirah & Munishi, 2021), while efficient waste management reduces costs and boosts reputation (Grangxabe et al., 2024). Compliance builds trust and loyalty (Piazzoni, 2024), strengthening resilience (Kalitanyi, 2021).

H2: Entrepreneurial innovation (EI) positively influences the welfare of female street vendors (FSVW).

Female vendors use technology and creative strategies to stay competitive (Suseno et al. 2019; Matpootorn & Suvittawat, 2023), improving operations and mitigating challenges (Reina Marín et al., 2024; Sharma et al., 2023). Innovation boosts both economic and social well-being (Misiko & Kisiang'ani, 2024).

H3: Green practices (GP) positively influence entrepreneurial innovation (EI).

Eco-friendly practices promote innovation through cost-saving waste management and resource efficiency (Ramprakash et al., 2024; Prevolšek et al., 2021; Soomro et al., 2024). Recycling and biodegradable materials increase creativity, supported by regulations that enhance sustainability and public health (Suseno et al. 2019; Basu & Nagendra, 2020).

H4: Green practices (GP) positively influence the accessibility of financial services (AIFS).

Green practices improve sustainability and financial access (Takaza & Chitereka, 2022). Financial institutions favor eco-friendly businesses (Popovic-Pantic et al., 2023), while policies strengthen vendor-bank ties and funding support (Adera & Abdisa, 2023; Yana Mbena & Yeboah, 2024).

H5: Entrepreneurial innovation (EI) significantly influences the accessibility of financial services (AIFS).

Innovation improves access to finance and business growth (Nandru et al., 2021). Financial services enable strategy implementation and income generation (Adera & Abdisa, 2023; Sun et al., 2022). Supportive policies foster creativity and long-term growth (Nyamnjoh, 2020; Garg, 2024).

H6: The accessibility of financial services (AIFS) significantly impacts the welfare of female street vendors (FSVW).

Financial access improves business stability, operations, and livelihoods (Irankunda & Van Bergeijk, 2020; Bernal-Torres et al., 2020; Feranita et al., 2024). Credit and financial support expand capacity and security, enhancing well-being (Fieve & Chrysostome, 2024; Suseno et al. 2024).

H7: Green practices (GP) significantly affect the welfare of female street vendors (FSVW) through the mediation of the accessibility of financial services (AIFS).

Regulatory compliance enhances financial access and vendor welfare (Takyi et al., 2023), though uncertainty may hinder adoption (Nogueira, 2021). Solutions include risk management and training (Ndaba & Reddy, 2024; Meher & Ghatole, 2020). Financial inclusion supports sustainability and better living conditions (Grosu, 2024; Maskudi et al. 2024).

H8: Entrepreneurial innovation (EI) significantly influences the welfare of female street vendors (FSVW) through the mediation of the accessibility of inclusion financial services (AIFS).

Innovation supports financial inclusion via technology and policy engagement (Matpootorn & Suvittawat, 2023; Liu & Liu, 2022). Attitudinal and family support also ease access and adoption (Kelikume, 2021; Munawir and Suseno, 2024), showing innovation improves welfare through finance.

Methods

This study in Serang City employed a quantitative survey to analyze the impact of green practices, entrepreneurial innovation, and financial inclusion on the welfare of female street vendors. A purposive sampling method was used to select 100 respondents based on specific criteria: (a) actively operating a business, (b) engaging in trade activities, (c) aged 18 or older, (d) possessing business-related insights, and (e) willing to participate

(Takaza, 2024). Data collection involved a pre-tested questionnaire, and analysis was conducted using PLS-SEM with SmartPLS 3.2.9, chosen for its effectiveness in exploratory research, small sample sizes, and complex relationships (Hair et al., 2024).

Data Analysis SEM-PLS

Convergent Validity

Each indicator must have a factor loading above 0.7 to confirm its validity in measuring the intended construct. Convergent validity (Figure 1) presents the PLS-SEM model with path coefficients and R² values. The PLS-SEM output evaluates the structural model, analyzing relationships between latent variables and the model's predictive capability (Hair et al., 2024).

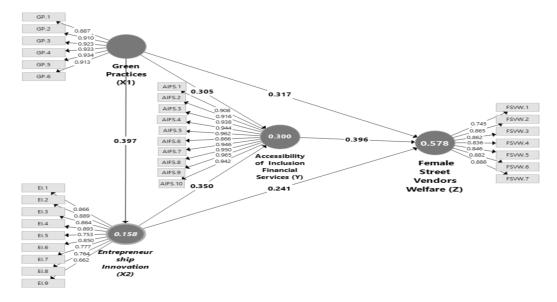


Figure 1: Path Analysis

Figure 1 confirms that all indicators meet the convergent validity criteria, with factor loads above 0.7, effectively representing their respective constructs. Path coefficients and R² values validate the model's predictive strength, ensuring an accurate explanation of variable relationships.

Discriminant Validity

The discriminant validity was assessed using the Heterotrait-Monotrait Ratio (HTMT). When the HTMT value is less than 0.85, it indicates that discriminant validity has been achieved. Table 6 presents the HTMT values of the constructs examined in this study, all of which are below the threshold of 0.85.

Table 6: Heterotrait-Monotrait Ratio (HTMT)

Construct /Construct	Accessibility of Financial Inclusion (Y)	Entrepreneursh ip Innovation (X ₂)	Female Street Vendor Welfare (Z)	Green Practices (X ₁)
Accessibility of Financial Inclusion (Y)	-			
Entrepreneurship Innovation (X ₂)	0.482	-		
Female Street Vendor Welfare (Z)	0.668	0.581	-	
Green Practices (X_1)	0.451	0.415	0.610	-

Source: Result SEM PLS 3.2.9

Table 6 confirms discriminant validity, as all HTMT values are below the 0.85 threshold, indicating that each construction is distinct and wellmeasured by its indicators.

Reliability Analysis

Cronbach's alpha and composite reliability values above 0.7 indicate strong internal consistency and effective measurement of latent constructs, as shown in Table 7.

Table 7: Cronbach's Alpha and Composite Reliability Results

Construct	Cronbach's Alpha	S rho_A	Composite Reliability	Average Variance Extracted (AVE)
Green Practices (X1)	0.962	0.965	0.969	0.840
Entrepreneurship Innovation (X2)	0.936	0.941	0.947	0.667
Accessibility of Inclusion Financial Services (Y)	0.984	0.985	0.986	0.873
Female Street Vendors' Welfare (Z)	0.934	0.944	0.947	0.718

Source: Result SEM PLS 3.2.9

Cronbach's alpha and composite reliability (CR) values above 0.7 confirm the strong consistency and accurate representation of the latent constructs, ensuring the instrument's reliability in this study.

Hypothesis Test

The hypothesis testing results indicate the following direct effects between the independent and dependent variables.

Table 8: Hypothesis Test

3 7 • 11	Original	Sample	Standard	T	P
Variable	Sample	Mean	Deviation	Statistics	Values
Green Practices (X1) -> Welfare	0.317	0.315	0.101	3.146	0.001
of Female Street Vendors (Z)					
Entrepreneurship Innovation	0.241	0.244	0.096	2.515	0.006
(X2) -> Welfare of Female Street	t				
Vendors (Z)					
Green Practices (X1) ->	0.397	0.404	0.099	4.001	0.000
Entrepreneurship Innovation					
(X2)					
Green Practices (X1) ->	0.305	0.307	0.114	2.667	0.004
Accessibility of Financial					
Inclusion Services (Y)					
Entrepreneurship Innovation	0.350	0.353	0.114	3.073	0.001
(X2) -> Accessibility of					
Financial Inclusion Services (Y)					

Variable	Original	Sample	Standard	T	P
variable	Sample	Mean	Deviation	Statistics	Values
Accessibility of Financial	0.396	0.397	0.123	3.233	0.001
Inclusion Services (Y) ->					
Welfare of Female Street					
Vendors (Z)					
Green Practices (X1) ->	0.121	0.122	0.058	2.084	0.038
Accessibility of Financial					
Inclusion Services (Y) ->					
Welfare of Female Street					
Vendors (Z)					
Entrepreneurship Innovation	0.139	0.142	0.064	2.158	0.031
(X2) -> Accessibility of					
Financial Inclusion Services (Y)					
-> Welfare of Female Street					
Vendors (Z)					

Source: Result SEM PLS 3.2.9

Table 8 highlights the significant relationships among green practices, entrepreneurial innovation, financial inclusion, and vendor welfare, followed by a detailed analysis.

First hypothesis, Green practices improve vendor welfare by enhancing sustainability, reducing costs, and attracting eco-conscious customers (Adera & Abdisa, 2023). These practices foster financial stability and long-term success, benefiting both vendors and the environment (Mustofa et al., 2023; Wulandari et al., 2024).

Second hypothesis, Entrepreneurial innovation enhances female vendors' welfare through economic stability and social well-being. Product diversification, digital payments, and social media increase sales, efficiency, and market reach while strengthening customer relations (Suseno & Basrowi, 2023; Sharma et al., 2023).

Third hypothesis, Green practices stimulate innovation by encouraging creativity, eco-friendly products, and waste reduction (Mehta et al., 2024; Kaya, 2021). These align with consumer demand and are supported by training and incentives, improving vendor reputation and long-term success (Taskin et al., 2023; Babović & Kočović De Santo, 2023).

Fourth hypothesis, Green practices promote financial inclusion by improving vendors' access to credit, as sustainable businesses are prioritized

in lending (Bhatia & Singh, 2019; Fieve & Chrysostome, 2024). Energy-efficient practices enhance creditworthiness, while sustainable models and financial literacy broaden economic opportunities (Kalitanyi, 2021; Antonijević et al., 2024).

Fifth hypothesis, Entrepreneurial innovation enhances financial inclusion by expanding vendors' access to financial services and supporting sustainable enterprises (Turner et al., 2021; Adera & Abdisa, 2023). It also drives financial innovation, while stakeholder collaboration ensures effective policy implementation (Yana Mbena & Yeboah, 2024; Ndaba & Reddy, 2024). Strengthening vendor welfare further reinforces this link (Thanh & Bao Duong, 2024)

Sixth hypothesis, Financial inclusion improves female vendors' welfare by enhancing financial stability, enabling business expansion, and increasing income through access to savings, credit, and insurance (Misiko & Kisiang'ani, 2024; Irankunda & Van Bergeijk, 2020; Nandru et al., 2021). It also promotes economic independence and financial control.

Seventh hypothesis, Green practices significantly impact vendor welfare through financial inclusion, emphasizing its mediating role (McKay & Osborne, 2022). Sustainable practices enhance credibility, improving financial access (Moges et al., 2024) and fostering socio-economic benefits (Muindi & Masurel, 2022). Policymakers should integrate sustainability with financial inclusion through incentives, microfinance, and financial literacy programs (Bhatia & Singh, 2019; Milojevic et al., 2021).

Eighth hypothesis, Entrepreneurial innovation enhances welfare through financial inclusion by fostering reinvestment, growth, and stability (Feranita et al., 2024). Policy involvement improves financial access (Chibango, 2024), while innovation aligned with market needs boosts efficiency (Kelikume, 2021). This mediation underscores the interconnectedness of innovation, financial inclusion, and welfare (Gehlot et al., 2023). Integrating entrepreneurship and financial strategies supports sustainable growth (Popovic-Pantic et al., 2023).

Conclusion

This study confirms that access to financial services, entrepreneurial innovation, green practices, and the well-being of women street vendors are interrelated in promoting business stability and sustainability. Green practices and entrepreneurial innovation have a positive impact on vendors'

well-being by improving income and business resilience. In addition, access to financial inclusion is an important link that enables women vendors to utilize financial services for their growth. Traders who have access to credit and savings programs are more likely to be able to expand their business, while green practices drive entrepreneurial innovation, promoting competitiveness and adaptability.

To improve the welfare of traders, efforts should focus on improving financial access, promoting business innovation, and supporting sustainable practices. The support of policymakers, financial institutions, and stakeholders is crucial to creating an inclusive, innovative, and sustainable business environment that benefits both individual vendors and broader economic development.

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Appendix

The appendix presents factor loadings for items measuring Green Practice, Entrepreneurial Innovation, Financial Services Accessibility, and Vendor Welfare, all indicating strong indicator reliability and a robust measurement model.

Construct	Item Statement	Factor Loading
Green Practice	I keep my vending area clean.	0.887
	I seek eco-friendly material alternatives.	0.910
	I reduce plastic use with reusables.	0.923
	I use biodegradable materials.	0.933
	I keep my selling area clean.	0.934
	I use recyclable packaging.	0.913
Entrepreneurship	I vary routines to keep customers interested.	0.866
Innovation	I expand promotions to reach more buyers.	0.899
	I use tech for stock and sales records.	0.864
	I use apps and digital payments to ease transactions.	0.893
	I adapt quickly to market changes.	0.753
	I adjust to new regulations.	0.850
	I collaborate with vendors or partners.	0.777
	I join community or local government programs.	0.764
	I set daily sales targets.	0.662
Accessibility of	High loan interest makes me hesitant.	0.908
Financial	Bank fees make loans costly.	0.916
Services	I struggle to get clear loan info.	0.938
	I find credit terms easy to meet.	0.944
	I'm concerned about repaying loans.	0.962
	I fear losing assets if I default.	0.866
	Banks demand high collateral.	0.946
	Providing collateral is difficult.	0.950
	Credit helps grow my business.	0.965
	My business relies on credit for urgent needs.	0.942
Female Street	My income is unstable.	0.745
Vendors'	I feel safe and comfortable selling.	0.865
Welfare	Levy fees disrupt my business.	0.862
	Training has improved my skills.	0.836

High prices hinder marketing.	0.846
I easily access capital.	0.882
My location is accessible to customers.	0.888

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