



Which Domain of Sustainability Performance Predicts Civic Engagement? The Case of Informal Microenterprises in Kabacan, Philippines

Mark Vincent G. Gaspan* Cathlyn Adel P. Samoy & Rowell P. Nitafan

Bachelor of Arts (Political Science), University of Southern Mindanao, Cotabato, 9407 Philippines

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Abstract

Civic engagement strengthens social relationships and promotes community growth. Despite its importance in inducing social change, there is still an empirical gap in understanding its correlates. This research aimed to test the significant influence of sustainability performance on the civic engagement of informal microenterprises in Kabacan, Cotabato. Specifically, it seeks to determine if there is a meaningful relationship between sustainability performance and civic engagement and identify which domain(s) of sustainability performance best predict(s) civic engagement. A causal research design was used in the study. Cluster sampling was employed in the selection of 400 informal microenterprises in Kabacan, Cotabato, while modified survey questionnaires were used to collect research data. The study concluded that there is a positively significant relationship between sustainability performance and civic engagement. Furthermore, it was determined that social sustainability and economic sustainability meaningfully predict civic engagement. The findings suggest that for every unit increase in social responsibility and economic sustainability, the civic engagement of informal microenterprises improves by 42.6% and 16.1%, respectively. Lastly, social sustainability has the highest Standardized Beta Coefficient among all the domains of sustainability performance, making it the best predictor of civic engagement.

Introduction

Sustainability performance and civic engagement are critical issues that increasingly gain the attention of researchers and policymakers across the globe. Brundtland (1987) defined the concept of sustainability as “meeting the needs of the present without compromising the ability of future generations to meet their own needs” Civic engagement, on the other hand, refers to “individual and collective actions designed to identify

and address issues of public concern (Skocpol & Fiorina, 1999).

In recent years, scholars and practitioners have recognized the importance of understanding the relationship between sustainability and civic engagement (Chen et al., 2019). Active community participation or civic engagement is crucial in creating sustainable communities (Portney, 2005). Supporters of local sustainability argue that involving local residents in the

decision making processes is essential to establish a strong and practical definition of sustainability. At the same time, within sustainability advocacy discussions, Portney (2005) emphasized that greater civic engagement is itself an integral part of what it means for a community to be more sustainable and that communities need to adopt policies that will promote civic participation. Given the importance of informal microenterprises in Kabacan and their growing population within the municipality and their potential role in promoting sustainable development and civic engagement, it is essential to understand the relationship between sustainability performance and civic engagement among these businesses and their community.

In particular, there is growing interest in the role of informal microenterprises in promoting sustainable development and civic engagement (Esguerra, 2016). Informal microenterprises are small businesses that operate outside the formal economy, often without legal registration and access to formal financial services (Charmes, 2016). These businesses are a critical source of income for many households in developing countries and are often the only means of livelihood for those living below the poverty line (Khandker et al., 2010).

Furthermore, any business, especially those in the informal sector is vulnerable to numerous difficulties which include but not limited to access to resources, poor infrastructure, and a lack of government support (Esguerra, 2016). These challenges may limit the ability of these businesses to operate sustainably and to contribute to the development of the local community.

The municipality of Kabacan being situated in Southern Mindanao in the Cotabato Province is one of the most competitive municipalities in the Philippines according to the 2022 Cities and Municipalities Competitiveness Index in the Philippines. Most importantly, it is known for its rich culture, abundant agricultural industry, and a competent state university that hosts thousands of students from different regions of the country. Its growing socio-economic condition has led to the emergence of numerous microenterprises in close proximity. Capitalizing on the advantageous location near the schools and commercial spaces, microenterprises have thrived in Kabacan, making it a hub for microenterprises to flourish.

Examining the relationship of sustainability performance and civic engagement in various contexts is not a new stream of research, but little is known about

exploring the domains of sustainability performance and how they meaningfully influence civic engagement. Moreover, it is interesting to note that there is a population gap about determining the meaningful relationship between sustainability performance and civic engagement of informal microenterprises in developing countries. It is on this ground that the research is conceptualized to fill the gap in the science of rural development that policymakers may use as a keystone to improve public service delivery. The findings of the study may also help local government units in the Cotabato Province to mobilize and engage informal microenterprises and other stakeholders in addressing local issues and concerns by initiating dialogues about social responsibility, introducing the concept of social entrepreneurship, and providing social programs that improve their sustainability performance in terms of economic, social, and environmental sustainability.

Objectives

The research generally aimed to test the influence of sustainability performance on civic engagement of informal microenterprises in Kabacan, Cotabato. Specifically, it seeks to:

1. Determine if there is a significant relationship between sustainability performance and civic engagement.
2. Determine the domain/s of sustainability performance that best predict/s civic engagement.

Hypothesis

The hypotheses of the study were tested at .05 level of significance:

H₀₁: There is no significant relationship between sustainability performance and civic engagement of informal microenterprises.

H₀₂: There is no domain of sustainability performance that best predicts civic engagement.

Conceptual Framework

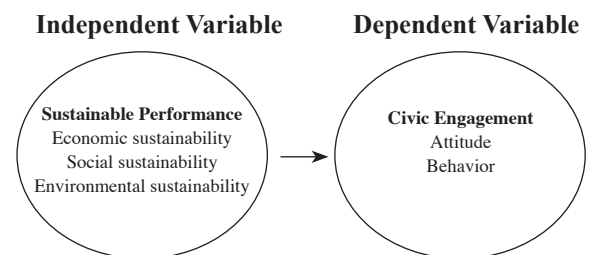


Figure 1. The conceptual framework

The conceptual framework of the study shows the hypothesized influence of sustainability performance to civic engagement of informal microenterprises of Kabacan, Cotabato. The study investigated sustainability performance using the construct validity of Quaddus & Khan (2015) who identified three dimensions of sustainability performance, namely economic, social, and environmental sustainability. Moreover, civic engagement was described using the conceptualization of Doolittle & Faul (2013) who indicated that the construct has two domains comprising of attitude and behavior. The conceptual paradigm was based on the methodological notes of De Castro et al. (2017). They indicated that the cause-and-effect relationship between the variables can be illustrated through a single-bladed arrow pointing from the independent variable to the dependent variable of the study.

Research Methodology

1. Respondents and Sampling Technique

The respondents of this study were informal microenterprises located in Kabacan, Cotabato, Philippines. They include street vending, home-based work, and small-scale manufacturing. Charmaine (2017) indicated that informal microenterprises are characterized in terms of low productivity, low wage, and poor working conditions. Additionally, among ASEAN countries, they are either not licensed or do not fully comply with standard registration, licensing requirements, non-compliance with labor, tax, or environmental/health laws and regulations of the state. Guided by the abovementioned criteria, the researchers utilized cluster sampling to select the 400 respondents from May to June 2023. The focus was exclusively on choosing informal microenterprises in Kabacan that hold a Barangay permit to operate.

2. Research Instrument

The researchers used survey questionnaires in data gathering. The *Sustainability Factors Scale* of Quaddus & Khan (2015) has an excellent reliability level as indicated by its Cronbach's alpha of 0.948, 0.935, and 0.900 for the three factors was used in measuring sustainability performance. In addition,, the *Civic Engagement Scale* of Doolittle & Faul (2013) with a good reliability level as indicated by its Cronbach's alpha of .86 and .85 for the two factors was used in ascertaining the civic engagement of informal microenterprises. Content validity was established by the researchers by subjecting the scales to a rigorous

review of three scholars in the field of political science and public administration from the University of Southern Mindanao, Philippines.

The *Sustainability Factors Scale* is a six-point Likert Scale with the following response options: 6-Strongly agree, 5-Agree, 4-Somewhat agree, 3-Somewhat disagree, 2-Disagree and 1-Strongly disagree. Moreover, the *Civic Engagement Scale* is a seven-point scale used in ensuring the item questionnaire: 7-Strongly agree, 6-Agree, 5-Somewhat agree, 4- Neither agree nor disagree, 3-Somewhat disagree, 2-disagree, 1-Strongly disagree.

The criteria for description are as follows: a mean scale ranging from 1 to 1.82 is quantitatively labeled as "Strongly Disagree" and interpreted as "Very Bad"; a mean scale from 1.83 to 2.65 is described as "Disagree" with an interpretation of "Rather bad"; a mean scale falling between 2.66 and 3.48 is quantitatively characterized as "Somewhat disagree" with an interpretation of "Bad"; a mean scale within the range of 3.49 to 4.31 is quantitatively designated as "Somewhat agree" with an interpretation of "Slightly good"; a mean scale ranging from 4.32 to 5.14 is quantitatively described as "Agree" with an interpretation of "Good"; finally, a mean scale between 5.16 and 6.00 is quantitatively labeled as "Strongly agree" with an interpretation of "Rather good."

3. Data Collection

The researchers conducted the study following the basic research ethical protocols. Firstly, they asked permission from the concerned authorities to allow them to conduct the study, such as the BA Political Science Program Head and College Dean. In the actual conduct of the study, the researcher prepared an informed consent and asked the respondents to sign it before administering the instrument to them as well as carefully explaining the content of the informed consent to them. They were oriented about the purpose and methods of the study and the risks and benefits of participating in the research. They were also informed that participation was voluntary, and the data gathered from them would be treated with utmost confidentiality. The respondents agreed with the conditions of the study and voluntarily participated in the research. After the data collection, they researchers expressed their gratitude for their participation.

4. Data Analysis

Descriptive and inferential statistical analyses were conducted to analyze the data. Mean and Standard Deviation were used to analyze the gathered data about

the sustainability performance and civic engagement of the informal microenterprises in Kabacan, Cotabato. Further, Kendall's tau-b correlation coefficient was used to determine the significant relationship between sustainability performance and civic engagement. Data obtained about the two concepts were ordinal data; thus, Kendall's Tau-b was appropriate (Khamis, 2008).

Results

Economic Sustainability

Table 2.1. presents the sustainability performance in terms of economic sustainability of informal microenterprises in Kabacan, Cotabato. The study revealed that informal microenterprises have good economic sustainability (4.82). The result is attributed to the respondents' perception that their work provides employment to them and others (5.05) and the economic performance of their work is at an acceptable level in terms of sales growth (4.89), profitability (4.85), income stability (4.74), and returns of investment (4.59), respectively.

Table 2.1 Economic Sustainability of Informal Microenterprises in Kabacan, Philippines, May 2023.

Statements	Mean	S.D.	Description	Interpretation
My work (and/or small business) is providing employment to us and others.	5.05	0.96	Agree	Good
My work's economic performance is at an acceptable level in terms of sales growth.	4.89	0.89	Agree	Good
My work's economic performance is at an acceptable level in terms of income stability.	4.74	0.94	Agree	Good
My work's economic performance is at an acceptable level in terms of returns on investment.	4.59	1.06	Agree	Good
My work's economic performance is at an acceptable level in terms of profitability.	4.85	0.92	Agree	Good
Overall	4.82	0.75	Agree	Good

Social Sustainability

Table 2.2. presents the sustainability performance in terms of social sustainability of informal microenterprises in Kabacan, Cotabato. The study revealed that informal microenterprises have good social sustainability (4.79). This corroborates with Chen & Lin (2016) indicating that informal microenterprises have good capacity in terms of being able to operate in an ethical and responsible manner and respecting the rights of their employees and customers. The result is attributed to the respondents' perception that their work enhances their social recognition in society (5.05),

ensures the basic needs of their family (5.03), improves their empowerment in society (4.91), provides freedom and control over the course of their own lifestyle (4.91), and is concerned about child labor (4.04), respectively.

Table 2.2 Social Sustainability of Informal Microenterprises in Kabacan, Philippines, May 2023.

Statements	Mean	S.D.	Description	Interpretation
My work (and/or small business) ensures basic needs for our family.	5.03	1.01	Agree	Good
My work (and/or small business) enhances our social recognition in society.	5.05	0.92	Agree	Good
My work (and/or small business) improves our empowerment in society.	4.91	1.01	Agree	Good
My work (and/or small business) provides freedom and control over the course of our own lifestyle.	4.91	0.86	Agree	Good
My work (and/or small business) is concerned about child labor.	4.04	1.43	Somewhat Agree	Slightly Good
Overall	4.79	0.71	Agree	Good

Environmental Sustainability

Table 2.3. presents the sustainability performance in terms of environmental sustainability of informal microenterprises in Kabacan, Cotabato. The study revealed that informal microenterprises have good environmental sustainability (4.79). The result is attributed to the respondents' perception that their work is concerned about hygienic factors (5.16), and their work uses utilities (e.g. energy and water) in an environmentally friendly manner (5.10), uses small space to set up and operate business (4.91), produces few wastes and emissions (4.52), and is concerned about waste management (4.28), respectively.

Table 2.3 Environmental Sustainability of Informal Microenterprises in Kabacan, Philippines, May 2023.

Statements	Mean	S.D.	Description	Interpretation
My work (and/or small business) uses utilities (e.g. energy and water) in an environmentally friendly manner.	5.10	1.08	Agree	Good
My work (and/or small business) produces few wastes and emissions.	4.52	1.25	Agree	Good
My work (and/or small business) is concerned about waste management.	4.28	1.38	Somewhat Agree	Slightly Good
My work (and/or small business) uses small space to set up and operate business.	4.91	1.15	Agree	Good
My work (and/or small business) is concerned about hygienic factors.	5.16	0.97	Strongly Agree	Very Good
Overall	4.79	0.81	Agree	Good

Overall Sustainability Performance of Informal Microenterprise

Generally, the results showed the informal microenterprises in Kabacan, Philippines had good sustainability performance (4.80) according to the three domains suggested by Quaddus & Khan (2015) in measuring the construct, namely economic sustainability, social sustainability, and environmental sustainability. Lastly, it was assessed that informal microenterprises equally observed social sustainability and environmental sustainability.

Table 2.4 Overall Sustainability Performance of Informal Microenterprises in Kabacan, Philippines, May 2023.

Domain	Mean	S.D.	Description	Interpretation
Economic Sustainability	4.82	0.75	Agree	Good
Social Sustainability	4.79	0.71	Agree	Good
Environmental Sustainability	4.79	0.81	Agree	Good
Overall	4.80	0.64	Agree	Good

Attitude

Table 3.1. presents the civic engagement in terms of the attitude of informal microenterprises in Kabacan, Cotabato. The study revealed that informal microenterprises have a good civic engagement in terms of attitude (5.96). The data suggest that informal microenterprises have strong personal experience, cultural and social factors, and cognitive processes shaping their civic engagement. The result is attributed to the respondents' belief that it is important to be informed of community issues (6.18); all citizens have a responsibility to their community (6.02); they should make a difference in the community (6.00); they should help the poor and the hungry (5.97); they have responsibility towards the community (5.94); it is important to volunteer; it is important to financially support charitable organizations (5.87); and, they are committed to serve the community (5.84), respectively.

Behavior

Table 3.2. presents the civic engagement in terms of behavior of informal microenterprises in Kabacan, Cotabato. The study revealed that informal microenterprises have a good civic engagement in terms of behavior (5.63).

The data is attributed to the respondents' practices of helping the members of the community (5.89), making positive changes in the community when working with others (5.80), being informed of the events in the community (5.69), contributing to charitable organizations

Table 3.1 Civic Engagement in terms of Attitude of Informal Microenterprises in Kabacan, Philippines, May 2023.

Statements	Mean	S.D.	Description	Interpretation
I feel responsible for my community.	5.94	1.16	Agree	Good
I believe I should make a difference in my community.	6.00	1.08	Agree	Good
I believe that I have a responsibility to help the poor and the hungry.	5.97	1.24	Agree	Good
I am committed to serve in my community.	5.84	1.08	Agree	Good
I believe that all citizens have a responsibility to their community.	6.02	1.17	Agree	Good
I believe that it is important to be informed of community issues.	6.18	1.02	Strongly Agree	Very Good
I believe that it is important to volunteer.	5.90	1.13	Agree	Good
I believe that it is important to financially support charitable organizations.	5.87	1.16	Agree	Good
Overall	5.96	0.89	Agree	Good

Table 3.2 Civic Engagement in terms of Behavior of Informal Microenterprises in Kabacan, Philippines, May 2023.

Statements	Mean	S.D.	Description	Interpretation
I am involved in structured volunteer position(s) in the community.	5.27	1.61	Somewhat Agree	Slightly Good
When working with others, I make positive changes in the community.	5.80	1.16	Agree	Good
I help members of my community.	5.89	1.09	Agree	Good
I stay informed of events in my community.	5.69	1.21	Agree	Good
I participate in discussions that raise issues of social responsibility.	5.54	1.27	Agree	Good
I contribute to charitable organizations within the community.	5.58	1.29	Agree	Good
Overall	5.63	1.00	Agree	Good

within the community (5.58), participating in the discussions that raise issues about social responsibility (5.54), and their perception that they are involved in structured volunteer position(s) in the community (5.27), respectively.

Overall Civic Engagement of Informal Microenterprise

Generally, the results showed the informal microenterprises in Kabacan, Philippines had good civic engagement (5.80) according to the two dimensions suggested by Doolittle & Faul (2013) in measuring the construct, namely attitude and behavior. The result is supported by Verba et al. (1995) implying that informal microenterprises have strong involvement in public life,

including volunteering, community organizing, political participation, and other forms of engagement promoting the public good.

Moreover, the data showed that attitude is more observed by informal microenterprises than behavior. This suggests that their perception toward the relevance of civic engagement for social change is stronger than their inclination to act upon it.

Table 3.3 Overall Civic Engagement of Informal Microenterprises in Kabacan, Philippines, May 2023.

Domain	Mean	S.D.	Description	Interpretation
I Attitude	5.96	0.89	Agree	Good
Behavior	5.63	1.00	Agree	Good
Overall	5.80	0.88	Agree	Good

Correlation between Measures

Table 4 presents the meaningful correlation between sustainability performance and civic engagement. The study determined that there is a significant relationship between sustainability performance and civic engagement as indicated by the p-value of .001. Hence, the first null hypothesis is not accepted. This suggests that informal microenterprises that exhibit better sustainability performance have a higher civic engagement than those that are not.

Table 4 Test of Relationship between Sustainability Performance and Civic Engagement.

	Correlation Coefficient	Probability Value	Description
Sustainability Performance and Civic Engagement	.248	.001	Significant

Dimensions of Sustainability Performance as Predictors of Civic Engagement

Table 5 presents the test of influence of domains of sustainability performance to civic engagement. The study determined that social sustainability and environmental sustainability significantly predict civic engagement as indicated by the p-value of .001 and .021, respectively. Hence, the second null hypothesis is not accepted. This suggests that in every unit increase in the social sustainability and environmental sustainability of informal microenterprises, their civic engagement will improve at 42.6 and 16.1%, respectively. Lastly, social sustainability has the highest Standardized Coefficient Beta than all of the domains of sustainability performance making it as the best predictor of civic engagement.

Table 4 Test of Influence of Domains of Sustainability Performance to Civic Engagement

Model	B	SEB	β	t	p	Ranking
Economic Sustainability	.079	.082	.067	.962	.337	3
Social Sustainability	.426	.094	.344	4.512	.001	1
Environmental Sustainability	.161	.069	.147	2.2329	.021	2

Discussion

Civic engagement is a fundamental component of a human society. It recognizes the role of every person in addressing socio-political, economic, and environmental issues and concerns to meet a progressive social change. The study described the sustainability performance and civic engagement of informal microenterprises in Kabacan, Cotabato, Philippines. In terms of sustainability performance, the study ascertained that informal microenterprises have a good level of economic, social, and environmental sustainability performance. Bacani & Baclagon (2016) and Chen and Lin (2016) demonstrated that informal microenterprises can thrive a myriad of challenges that threatens their sustainability including limited access to resources, lack of legal protection, and environmental degradation. The good economic sustainability performance of the respondents is validated by Bacani & Baclagon (2016) who indicated that the informal microenterprises essentially have good capacity in terms of access financing, acquiring skills and knowledge, and developing effective marketing strategies to improve their performance. Furthermore, the findings align with Bjerke (2007) assertion that informal microenterprises manifest sound economic sustainability through discernible increases in sales, revenues or employees.

Moreover, the study found that informal microenterprises have a good social sustainability performance. Chen & Lin (2016) justified that informal microenterprises can operate in an ethical and responsible manner and respect the rights of their employees and customers. Khan et al. (2012) added that social sustainability, in the case of informal microenterprises pertains to their ability to fulfill the basic requirements of their members and their family, help to address long-term poverty, and improve their quality of life which essentially consists of freedom or control, social recognition, and other empowerment indicators.

Further, the study revealed that informal microenterprises have a good environmental sustainability performance. Bacani & Baclagon (2016)

demonstrated that informal microenterprises are essentially good in adopting sustainable practices that minimize their impact on the environment and promote conservation of natural resources. Similarly, Patzelt & Shepherd (2011) emphasized that environmental sustainability is about enhancing natural conditions. Patzelt & Shepherd (2011) described it as a crucial development goal, particularly in societies facing challenges such as poor air quality, contaminated water, overexploited soil, dwindling forests, and diminished natural resources. Informal microenterprises in Kabacan, Cotabato support measures to protect the natural environment, encountering minimal issues like air pollution and contaminated water.

The study found that the informal microenterprises in Kabacan, Philippines had good civic engagement. The result is supported by Verba et al. (1995) implying that informal microenterprises have strong involvement in public life, including volunteering, community organizing, political participation, and other forms of engagement promoting the public good. The civic engagement of informal microenterprises is primarily attributed to their good attitude in dealing with community issues and their belief of the importance of civic responsibility. Schulz et al. (2023) indicated that the core of civic attitude is civic principles, perceptions of civic identities, roles, and issues surrounding the community.

Furthermore, the study assessed the informal microenterprises having good civic engagement in terms of behavior. This implies that they have a good sense of civic cooperation and includes themselves in various activities such as community involvement, religious and faith-based activities, contribution activities, political activities (such as voting, working for a candidate or party, running for public office etc.), discussion of politics and current events, news exposure, technology-based activities (such as use of chat rooms to discuss current events, e-mail use exclusive of work, Internet use for current event information, etc.), and informal socializing. Today, civic behavior is understood through cooperative behavior. Andolina et al. (2003) indicated that cooperative activity includes working with others in one's community to solve problems, either informally or through groups.

Lastly, the study also predicted civic engagement through the domains of sustainability performance of informal microenterprises. The study determined that there is a positively significant correlation between the sustainability performance and civic engagement. This

means that improving sustainability performance will lead to higher civic engagement among informal microenterprises. Although there is a lack of studies in the literature about the meaningful relationship between the concepts, it can be demonstrated that civic engagement is dependent with the social and environmental sustainability performance of the informal microenterprises. Choi & Chang (2023) added that civic engagement is rooted from a person's intention to connect to communities, governments, profit companies, or local organizations to achieve a social outcome. Relationships play an important role in the way people view social responsibility. Developing interest in local communities, projects, stakeholders, various supporters and civic partners is caused by one's desire to ensure that the people, the government, and businesses are responsible for their actions, may it be for environmental conservation and protection or initiatives to eradicate structural violence among communities (Carter & Jennings, 2000).

Summary of Findings

1. The informal microenterprises in Kabacan, Cotabato had a good sustainability performance in terms of economic sustainability, social sustainability, and environmental sustainability.

2. They have a good civic engagement in terms of attitude and behavior.

3. There is a positively significant relationship between sustainability performance and civic engagement.

4. Only two domains of sustainability performance were able to predict civic engagement, namely social sustainability and environmental sustainability. Among the three domains, social sustainability was found to best explain civic engagement.

Conclusion

Test of influence was done to determine which domain of sustainability performance predicts the civic engagement of informal microenterprises in Kabacan, Cotabato, Philippines. The study concluded that sustainability performance meaningfully correlates with civic engagement. This implies that the better sustainability performance of informal microenterprises show, the higher the civic engagement they will manifest. Nonetheless, it was inferred that only two domains of sustainability performance significantly explain civic engagement, namely social sustainability and environmental sustainability. Among the three domains

suggested by Doolittle & Faul (2013) in measuring the construct, social sustainability was determined to best explain civic engagement.

Recommendations

To improve sustainability performance, informal microenterprises should increase their awareness of the concept of child labor and its legalities and enhance their waste management since these were the descriptors of sustainability performance, particularly under social sustainability and environmental sustainability that were least manifested by the informal microenterprises. In order to increase their civic engagement, they should improve their behavior in participating in organized volunteer position(s) in their community and participating in discourse that raise issues of social responsibility. Furthermore, there is a need to mold their commitment in serving their community and strengthen their belief of the importance of charitable organizations.

Lastly, studies that explore other variables that significantly predict civic engagement are suggested for further study in the future. Scholars might look on the socio-economic profile and quality of life of informal microenterprises in predicting the degree of their civic engagement.

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