

Assessing Operational Efficiency, Capacity Building, and Sustainability Practices in the Local Government Unit of Cabanatuan: A Strategic Approach to Enhancing Service Delivery and Governance

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Abstract: *This study investigates and assesses the root causes of delayed project implementation, ineffective interdepartmental coordination, outdated service delivery mechanisms, and underutilized sustainable practices within the local government unit (LGU) of Cabanatuan. Through this analysis, the research identifies systemic barriers—such as budget constraints, misaligned resource allocation, and technological gaps—that hinder effective governance. It also emphasizes the importance of long-term planning, capacity building, and environmental stewardship. The goal is to propose actionable strategies that can enhance service delivery, institutional performance, and sustainable urban development in Cabanatuan City.*

Keywords: Local governance, operational efficiency, sustainability practices, capacity building

I. INTRODUCTION

Local government units (LGUs) play a crucial role in ensuring that essential public services reach communities effectively. In the Philippines, local government units (LGUs) are often at the forefront of governance, development, and service delivery. However, many of them continue to face persistent challenges that impact their overall functioning. Issues such as bureaucratic red tape, lack of personnel training, and limited integration of sustainable practices can hinder their ability to serve the public efficiently.

Cabanatuan City recognized as a first-class city in Nueva Ecija, has achieved notable economic progress over the years through the development of infrastructure, including roads, bridges, schools, and commercial establishments. This advancement has significantly contributed to the city's economic vitality and growth. However, despite these successes, the Local Government Unit (LGU) of Cabanatuan continues to face persistent operational inefficiencies, capacity-building challenges, and a limited adoption of sustainability practices that could better support its expanding community.

One of the major operational challenges observed is the extended timeline for completing public projects, often delayed by factors such as budget constraints, right-of-way issues, and inefficiencies in resource allocation. Some projects take as long as five years to complete, highlighting systemic issues in planning and execution that can result in significant economic losses and reduced public trust in governance. Moreover, current resource allocation strategies, such as continuous investment in dredging activities, provide only temporary solutions to flooding rather than investing in long-term infrastructure like permanent flood control systems, which leaves communities vulnerable to recurring disasters. Inter-departmental inefficiencies are also evident within key offices such as the City Engineering Office, the City Planning and Development Office, and the City Mayor's Office. Frequently, tasks initiated by the Mayor's Office are assigned to departments without the necessary technical expertise, resulting in delays as responsibilities are redirected.



Internally, the City Engineering Office also struggles with communication gaps, where crucial updates, such as site inspections, are not properly disseminated among project inspectors, impacting operational effectiveness.

Another critical area for improvement is the integration of technology to modernize service delivery. The lack of cashless and online payment systems limits accessibility and convenience for citizens, which is increasingly essential for a growing urban community, particularly for older people or those with mobility constraints. Similarly, the city's traffic management remains problematic, with frequent violations going unpunished, contributing to unsafe road conditions and a culture of non-compliance that endangers public safety.

From a sustainability perspective, Cabanatuan City has yet to make substantial strides in adopting renewable energy or green infrastructure initiatives. Despite its geographic advantage for harnessing solar energy, political and economic barriers have hindered the widespread use of solar power. Furthermore, the city's high number of tricycles, while emblematic of local culture, reflects deeper issues of poverty and contributes to worsening air pollution and rising heat indices, posing health risks to residents and straining environmental resources.

Cabanatuan City's ongoing development highlights the need for a more strategic and sustainable approach to governance. There is a growing urgency for the LGU to address operational inefficiencies, build stronger institutional capacity, and prioritize sustainability practices to ensure that progress does not come at the cost of environmental degradation and reduced quality of life for its citizens. This research aims to assess the following dimensions systematically and propose actionable strategies to enhance service delivery and governance in Cabanatuan City.

1. How may the profile of respondents be described in terms of:

LGU Employees

age,

sex, and

years of service?

1.2 Cabanatuan Residents

age,

sex, and

1.2.3 years of residing in Cabanatuan?

2. How may the LGU employees and Cabanatuan Residents assess the performance of LGU Cabanatuan in terms of:

2.1 operational efficiency,

2.2 capacity building, and

2.3 sustainability practices, and

2.4 Overall Perception and Recommendation?

3. Is there a significant relationship between the profile of the respondents and their assessments on the performance of LGU Cabanatuan?

4. What maybe recommended to enhance service delivery and governance in LGU Cabanatuan?

II. METHODOLOGY

The survey questionnaire served as the primary source of data. It was crafted by the researchers with the help of three experts in the field of engineering management. The survey questionnaire was completed by Local Government Unit (LGU) Employees and Cabanatuan residents, covering the following areas: Operations and Service Delivery, Training and Capacity Development, Environmental and Sustainability, Efficiency and Personnel, and Modernization and Satisfaction. A five-point Likert Scale was used to gather data from the respondents: 5-Strongly Agree; 4-Agree; 3-Neutral; 2-Disagree; 1-Strongly Disagree. The experts rated an average of 4.75 in all the statements in the survey questionnaires using the five-point Likert Scale. Their comments and suggestions were incorporated into the final



survey questionnaire. A group of 23 non-participants in the study was requested to complete the survey questionnaire. Their responses were tallied and subjected to a reliability test using Cronbach's alpha. The following table shows the results of the reliability tests.

Table on the Cronbach Results for LGU Employees

Area	Number of Items	Cronbach's Alpha	Interpretation
LGU Operations & Service Delivery	1-8	0.93	Excellent reliability
Training & Capacity Development	9-16	0.96	Excellent reliability
Environmental & Sustainability	17-25, 28	0.95	Excellent reliability
Efficiency & Personnel	26-27	0.85	Good reliability
Modernization & Satisfaction	29-30	0.81	Good reliability

It can be seen from the tables that all the areas are clear and acceptable. Generally, a Cronbach's Alpha value above 0.9 is considered excellent, indicating that the survey questions are highly correlated and likely measure the same underlying construct —namely, satisfaction or perception of LGU performance. A value of 0.9835 demonstrates that the survey instrument is highly reliable for assessing residents' views on the LGU's service quality, accessibility, responsiveness, and other related aspects. This high reliability suggests that the responses to the 30 items are consistent across participants, meaning the survey can be trusted as a cohesive tool for evaluating perceptions of the LGU.

III. RESEARCH DESIGN

This study employs a quantitative research design, which is appropriate given the goal of assessing the operational efficiency, capacity-building strategies, sustainability practices, and community engagement efforts within specific sectors of the Local Government Unit (LGU) of Cabanatuan City. A quantitative approach enables the systematic collection of numerical data and facilitates the use of statistical tools to identify trends, correlations, and insights across defined variables (Bhandari, 2023). As noted by Khanday (2023), selecting a research design is a critical step in shaping the structure and direction of the investigation, ensuring the alignment of data collection with the research objectives.

Quantitative methods are particularly effective in producing objective and replicable findings, which are vital when assessing institutional processes. However, due to contextual constraints and the targeted nature of this study, purposive sampling was integrated into the research framework to facilitate a more focused exploration of the subject matter.

Sampling Method and Rationale

Purposive sampling was employed to determine the sample size, targeting specific groups relevant to the study. For LGU employees, the target was 50 respondents, but only 23 (46%) completed the survey via Google Docs. Among Cabanatuan City residents, 67 out of 80 targeted respondents (84%) participated in the study. The lower response rate among LGU employees may be attributed to unfamiliarity with Google Docs, the requirement for internet access and sufficient time, and concerns about online scams, which are increasingly common.

This sampling method was chosen due to logistical constraints and the need for focused, relevant data. The research scope is limited to specific local government unit (LGU) departments, sectors, and communities directly involved in planning, implementing, and evaluating policies related to operational systems, capacity development, and sustainability. These include administrative offices, planning and development units, environmental and social welfare departments, and selected barangays with active development initiatives.



While purposive sampling restricts the generalizability of findings to the broader population, it enhances the study's validity and practical relevance by concentrating on respondents with the necessary knowledge, roles, and experience related to the core themes. This approach enables a more strategic and meaningful analysis of LGU functions, identification of operational gaps, and recommendations for capacity-building or policy interventions.

Data Collection Procedures

Data were collected using a structured survey questionnaire tailored to the study's core variables: operational efficiency, capacity building, sustainability practices, and community engagement. The questionnaire consisted of closed-ended questions designed to measure respondent perceptions, assess institutional practices, and identify challenges. The instrument was pilot tested for clarity and reliability before being fully distributed. Survey administration was conducted both online (via Google Forms) and in person, depending on the participants' availability, access, and technological readiness. Most respondents were contacted through official local government unit (LGU) networks or barangay offices, with permission from the relevant authorities. Follow-up coordination was conducted to ensure completion and clarification of responses where necessary.

Data Analysis Techniques

Quantitative data gathered through the survey were analyzed primarily using frequency distributions and percentages. These descriptive statistics were employed to identify patterns, summarize responses, and highlight the prevalence of key variables within the dataset. Data analysis was conducted using statistical software (e.g., Excel) to ensure accurate calculation and clear presentation of results.

Ethical Considerations

This study adhered strictly to the ethical standards of research. Participation was entirely voluntary, and all respondents were informed of the study's purpose, their right to withdraw at any time, and how their responses would be used. Informed consent was secured from all participants, and confidentiality was maintained throughout the research process. Data were anonymized to prevent the identification of individual respondents, especially given the purposive nature of the sampling approach. The ethical integrity of the study was maintained by ensuring transparency in communication with participants, avoiding any form of coercion, and obtaining verbal or written approval from relevant institutional or administrative authorities before data collection.

IV. RESULTS AND DISCUSSION

This section presents the quantitative results from the study on operational efficiency, capacity development, and sustainability practices within the Local Government Unit (LGU) and Among Residents of Cabanatuan. Through the application of defined survey models accompanied by statistical computations, the findings provide informative evaluations of the LGU's operational performance of the dominant governance pillars. The figures reveal important patterns and trends regarding the efficiency and effectiveness of training programs and sustainable practices, thereby providing an evidence-based rationale for enhanced value in local government services and improved governance.

PERFORMANCE OF THE LGU CABANATUAN

Table 1

Section A. Operational Efficiency (Kahusayan sa Operasyon)	LGU Employees		Cabanatuan Residents	
	Mean	VD	Mean	VD
The LGU of Cabanatuan provides services in a timely manner (<i>Naisasagawa ng LGU ng Cabanatuan ang mga serbisyo sa tamang oras.</i>)	3.56	A	4.03	A
LGU offices are accessible and easy to approach (<i>Madaling lapitan at puntahan ang mga opisina ng LGU.</i>)	3.52	A	4.19	A



3. LGU services are delivered with minimal bureaucratic red tape. (<i>May kaunting pasikot-sikot sa proseso ng pagbibigay-serbisyo ng LGU.</i>)	3.04	N	3.21	N
4. Information about government services is easy to understand and access. (<i>Madaling maunawaan at makuha ang impormasyon tungkol sa mga serbisyo ng LGU.</i>)	3.52	A	4.07	A
5. LGU employees are courteous and professional in dealing with residents. (<i>Magalang at propesyonal ang mga kawani ng LGU sa pakikitungo sa mga residente.</i>)	3.17	N	4.25	SA
6. Government offices provide clear instructions and processes. (<i>Ang mga tanggapan ng pamahalaan ay nagbibigay ng malinaw na tagubilin at proseso.</i>)	3.35	N	4.16	A
7. Public offices in Cabanatuan are efficient in handling documents and permits. (<i>Mabisa ang mga tanggapan ng lungsod sa pag-asikaso ng mga dokumento at permit.</i>)	3.83	A	3.94	A
8. I am satisfied with the quality of services provided by the LGU. (<i>Ako ay nasisiyahan sa kalidad ng serbisyo ng LGU.</i>)	4.47	SA	4.09	A
OVERALL MEAN	3.56	A	3.99	A

Legend: 4.21-5.00-Strongly Agree (SA); 3.41-4.20-Agree (A); 2.61-3.40-Neutral (N); 1.81-2.60-Disagree; 1.00-1.80-Strongly Disagree (SDA)

The data presented in Section A: Operational Efficiency (Kahusayan sa Operasyon) offers a comparative analysis of the perceptions of LGU employees and Cabanatuan residents regarding the efficiency and quality of services provided by the local government unit (LGU) of Cabanatuan. Both groups generally rated the LGU's operational efficiency positively, as evidenced by their overall mean scores of 3.56 for employees and 3.99 for residents, both of which fell within the "Agree" (A) range.

Examining individual items, both employees and residents agreed that services are delivered promptly and that LGU offices are accessible and easy to approach. However, when it comes to bureaucratic red tape, both groups expressed reservations, with employees (mean = 3.04) and residents (mean = 3.21) providing neutral (N) responses, suggesting that procedural complexities remain a concern. This finding aligns with recent studies that highlight the impact of excessive administrative hurdles on delaying service delivery and eroding citizen trust. For instance, Mehrotra and Dutta (2023) emphasize that red tape imposes psychological and organizational burdens, undermining responsiveness. To address this, local government units (LGUs) could adopt standardized digital workflows, such as 311/CRM systems, to automate processes like permit processing and reduce manual steps, as recommended in operational efficiency frameworks.

On a positive note, both groups agreed that information about government services is easy to understand and access. However, a notable divergence emerges in perceptions of employee courtesy and professionalism: residents strongly agreed (mean = 4.25), while employees rated themselves neutrally (mean = 3.17), indicating that residents view LGU staff more favorably than the employees perceive themselves or their peers. This discrepancy aligns with findings from Somalia's Banadir region, where transparency and responsiveness ($r = 0.471-0.520$) significantly improved service quality despite governance challenges. Investing in empathy training and transparent communication protocols could help bridge this perception gap, aligning internal self-assessments with external expectations. Similarly, regarding the clarity of instructions and processes, employees remained neutral (mean = 3.35), while residents agreed (mean = 4.16), further illustrating residents' more positive outlook. Both groups, however, decided that public offices are efficient in handling documents and permits and expressed satisfaction with the overall quality of



services, with employees even strongly agreeing (mean = 4.47) on this aspect. This high level of resident satisfaction (mean = 4.09) underscores the value of participatory governance. Studies in Jakarta demonstrate that platforms enabling real-time feedback and public reporting can enhance transparency and trust. Following this model, Cabanatuan could implement citizen advisory panels or digital complaint portals to sustain engagement and ensure services remain aligned with community needs.

Overall, the data reflects a generally positive perception of the LGU's operational efficiency, with residents consistently rating the LGU more favorably than employees, particularly in terms of staff courtesy, professionalism, and clarity of processes. Nevertheless, the neutral ratings on bureaucratic red tape from both groups highlight a critical area for improvement in streamlining government procedures. By integrating technological solutions and fostering stronger employee-citizen dynamics, the LGU of Cabanatuan can build on these positive perceptions while addressing underlying inefficiencies.

Table 2

B. Capacity Building / Pagpapalawak ng Kakayahan ng mga Kawani	LGU Employees		Cabanatuan Residents	
	<i>Mean</i>	<i>VD</i>	<i>Mean</i>	<i>VD</i>
9. The LGU is improving its systems to better respond to the needs of the community. (<i>Pinagbubuti ng LGU ang mga sistema nito upang mas epektibong matugunan ang pangangailangan ng komunidad.</i>)	3.17	N	3.83	A
10. I notice improvements in LGU services through the use of new technologies. (<i>Napapansin ko ang mga pagbabago sa serbisyo ng LGU sa pamamagitan ng paggamit ng bagong teknolohiya.</i>)	3.04	N	3.66	A
11. I feel that LGU personnel are well-trained and competent. (<i>Pakiramdam ko ay sapat ang kaalaman at kakayahan ng mga tauhan ng LGU.</i>)	4.13	A	4.16	A
12. Residents are given opportunities to be part of development projects or decision-making. (<i>Binibigyan ng pagkakataon ang mga residente na makibahagi sa mga proyekto o pagpapasya sa lungsod.</i>)	3.82	A	3.42	A
13. I have noticed that the LGU is shifting toward digital systems (e.g., online payments, digital records). (<i>Napapansin kong lumilipat ang LGU sa paggamit ng digital na sistema tulad ng online payments at digital records.</i>)	4.74	SA	3.36	N
14. The modernization of LGU processes has improved the convenience of services. (<i>Mas naging maginhawa ang mga serbisyo dahil sa modernisasyon ng mga proseso ng LGU.</i>)	3.30	N	3.73	A
15. I feel that the LGU listens to the concerns of ordinary citizens. (<i>Nararamdaman kong pinakikinggan ng LGU ang mga hinaing ng karaniwang mamamayan.</i>)	3.43	A	3.42	A
16. I believe the LGU is doing its best to improve the city and the lives of its residents. (<i>Naniniwala akong ginagawa ng LGU ang makakaya nito upang mapaunlad ang lungsod at ang buhay ng mga mamamayan.</i>)	3.52	A	4.30	SA
Overall Mean	3.65	A	3.73	A

Legend: 4.21-5.00-Strongly Agree (SA); 3.41-4.20-Agree (A); 2.61-3.40-Neutral (N); 1.81-2.60-Disagree; 1.00-1.80-Strongly Disagree (SDA)

The findings indicate that both LGU employees and Cabanatuan residents generally agree that the local government is making strides in capacity building and modernization. However, differences in perception exist between the two



groups. These findings are strongly supported by recent literature on participatory governance and local government reform in the Philippines.

For instance, both groups agree that LGU personnel are well-trained and competent, with high mean scores (4.13 for employees and 4.16 for residents). This reflects the positive impact of mandated training and professionalization initiatives for local officials, as highlighted in the assessment of the 1991 Local Government Code, which calls for continuous training and orientation of local officials to improve governance and service delivery.

However, employees tend to be more neutral regarding the LGU's system improvements and the adoption of new technologies, while residents are more optimistic. This divergence is consistent with the literature, which notes that while internal reforms and digitalization efforts may be underway, their benefits are not always immediately visible or accessible to the broader public. This gap underscores the importance of not only implementing technological innovations but also ensuring that these are effectively communicated and accessible to residents, as emphasized in studies on e-government and participatory mechanisms.

Both groups agree that residents are given opportunities to participate in development projects or decision-making, though the level of agreement is higher among employees. This aligns with the Philippine Development Plan 2023–2028 and the Local Government Code, which institutionalizes citizen participation through mechanisms such as Local Development Councils (LDCs) and Local Special Bodies (LSBs). However, the literature also points out that while these participatory structures exist, their implementation can be uneven, and actual participation may be limited due to gaps in information access and engagement capacity. This is reflected in the survey, where residents' agreement is moderate rather than strong.

The strong agreement among residents that the LGU is doing its best to improve the city and the lives of its residents (mean = 4.30) suggests a high level of public trust. Literature supports the idea that participatory governance and transparency foster greater trust and satisfaction among citizens, particularly when they see tangible improvements in service delivery and opportunities for involvement in decision-making.

In summary, the findings suggest that while the LGU's efforts in capacity building, modernization, and participatory governance are recognized by both employees and residents, there remain challenges in bridging perception gaps and ensuring that reforms are both internally effective and externally visible. Recent literature highlights the importance of ongoing professional development, robust participatory mechanisms, and transparent and accessible communication to sustain and deepen these gains in local governance.

Table 3

SECTION	C: Sustainability Practices (Mga Gawaing LGU Employees Cabanatuan Residents)	Mean	VD	Mean	VD
17. The LGU promotes environmental protection in the city. (<i>Itinataguyod ng LGU ang pangangalaga sa kalikasan sa lungsod.</i>)		3.56	A	3.57	A
18. Waste collection and management in our community is consistent and reliable. (<i>Maayos at regular ang pangongolekta ng basura sa aming lugar.</i>)		3.39	N	4.10	A
19. The LGU conducts programs that promote clean and green practices. (<i>May mga programa ang LGU para sa kalinisan at kapaligiran.</i>)		3.35	N	3.51	A
20. I am aware of the LGU's sustainability programs and initiatives. (<i>Ako ay may kaalaman sa mga programa ng LGU ukol sa sustainability.</i>)		4.17	A	3.36	A
21. Energy and resource conservation are actively promoted in the LGU. (<i>Aktibong isinusulong ng LGU ang pagtitipid sa enerhiya at likas na yaman.</i>)		3.13	N	3.18	N



22. The LGU uses technology to make services faster and more convenient. (<i>Gumagamit ng makabagong teknolohiya ang LGU upang mapadali ang serbisyo.</i>)	2.83	N	3.39	N
23. The LGU works to improve transportation and mobility within the city. (<i>Ang LGU ay nagsusumikap na mapabuti ang transportasyon at paggalaw sa loob ng lungsod.</i>)	2.83	N	3.03	N
24. The LGU is responsive to environmental issues such as traffic, pollution, and flooding. (<i>Tumutugon ang LGU sa mga suliraning pangkapaligiran tulad ng trapiko, polusyon, at pagbaha.</i>)	3.04	N	3.12	N
25. The LGU supports activities that raise environmental awareness. (<i>Sumusuporta ang LGU sa mga aktibidad na nagpapataas ng kaalaman ukol sa kapaligiran.</i>)	3.17	N	3.09	N
Overall Mean	3.28	N	3.37	N

Legend: 4.21-5.00-Strongly Agree (SA); 3.41-4.20-Agree (A); 2.61-3.40-Neutral (N); 1.81-2.60-Disagree; 1.00-1.80-Strongly Disagree (SDA)

The findings from Section C: Sustainability Practices indicate that both LGU employees and Cabanatuan residents generally perceive the city's sustainability initiatives as neutral, with only a few areas rated as "Agree." This suggests that while some environmental efforts are recognized, there are notable gaps in implementation, communication, and resource management.

Recent literature supports these observations. For example, a study on sustainable development strategies among restaurants in Cabanatuan found that while there is adherence to certain sustainability practices, implementation—especially in waste management and energy conservation—remains inconsistent and often falls short of optimal standards. The study emphasizes that sustainability strategies are "often" practiced rather than "always," highlighting the need for more consistent and institutionalized efforts. This aligns with the neutral ratings in the LGU's promotion of energy and resource conservation, as well as the use of technology for service improvement.

The neutral perception of the LGU's responsiveness to environmental issues such as traffic, pollution, and flooding is also echoed in research on Cabanatuan's urban management. The city has adopted smart technologies, such as a Unified Command Center, for real-time monitoring of traffic, flooding, and waste management. However, the effectiveness and public awareness of these initiatives may not be fully realized, as suggested by the moderate ratings from both employees and residents. This gap between technological adoption and public perception underscores the need for enhanced communication and participatory governance.

Additionally, studies on organizational behavior and sustainability among Cabanatuan's MSMEs reveal that, despite strong support for sustainability practices and employee awareness programs, challenges such as limited resources, increased costs, and lack of expertise hinder the full integration of sustainability into daily operations. These constraints are consistent with the neutral ratings for various LGU sustainability efforts, pointing to broader systemic issues in resource allocation and capacity building.

In transportation, the city's efforts to introduce sustainable alternatives, such as e-trikes, have faced mixed public acceptance due to economic and practical concerns despite their potential environmental benefits. The literature notes that while E-trikes could reduce emissions and improve sustainability, their adoption is slow due to stakeholder resistance and financial barriers, paralleling the neutral assessment of LGU initiatives aimed at improving mobility and transportation.

In summary, the findings suggest that Cabanatuan's sustainability practices are recognized but not yet fully embedded or consistently experienced by employees and residents. Literature from local studies reinforces the need for stronger institutional commitment, better communication, and resource support to elevate sustainability from "often" or "neutral" to "always" and "agree" levels of practice and perception.



Table 4

SECTION D: Overall Perception and Recommendations	LGU Employees		Cabanatuan Residents	
	Mean	VD	Mean	VD
26. I feel that the LGU listens to citizen feedback and suggestions. (<i>Pakiramdam ko ay pinakikinggan ng LGU ang mga mungkahi at opinyon ng mamamayan.</i>)	3.96	A	3.54	A
27. I am aware of the LGU's plans and programs for the city. (<i>Ako ay may kaalaman sa mga plano at programa ng LGU para sa lungsod.</i>)	4.43	SA	3.85	A
28. I feel that citizens are given the opportunity to participate in LGU programs and projects (<i>Nararamdaman kong binibigyan ng pagkakataon ang mga mamamayan na makilahok sa mga programa at proyekto ng LGU.</i>)	3.48	A	3.54	A
29. The LGU is consistent in enforcing rules and regulations. (<i>Ang LGU ay pare-pareho sa pagpapatupad ng mga patakaran at regulasyon.</i>)	3.78	A	3.49	A
30. I am generally satisfied with the performance of the Cabanatuan City LGU. (<i>Sa kabuuan, ako ay nasisiyahan sa performance ng pamahalaang lungsod ng Cabanatuan.</i>)	4.91	SA	3.99	SA
Overall Mean	4.11	SA	3.68	A

Legend: 4.21-5.00-Strongly Agree (SA); 3.41-4.20-Agree (A); 2.61-3.40-Neutral (N); 1.81-2.60-Disagree; 1.00-1.80-Strongly Disagree (SDA)

The findings demonstrate that LGU employees in Cabanatuan consistently rate the local government's performance and engagement higher than residents do, with employees expressing "Strongly Agree" (SA) on overall satisfaction (mean: 4.11) compared to residents' "Agree" (A) (mean: 3.68). This perception gap is evident across various indicators, including awareness of LGU plans, opportunities for participation, and satisfaction with service delivery.

Recent literature supports these results by highlighting that such perception gaps between service providers and recipients are common in local governance. For example, a study from Malaysia found that local government staff generally have a more favorable view of service delivery compared to the public, suggesting that insiders' proximity to processes and information can shape more positive assessments. This aligns with the observed higher scores from LGU employees in Cabanatuan.

Furthermore, the relatively lower resident ratings for participation opportunities and responsiveness reflect a broader challenge in local governance. Research consistently shows that public participation enhances trust in local government when residents perceive their input is valued and acted upon. When citizens are given genuine opportunities to participate in decision-making—such as through forums, advisory panels, or direct consultations—their trust in local authorities increases as they feel listened to and empowered. The findings that both groups "agree" the LGU listens to feedback, but residents rate this lower than employees, suggest room for strengthening participatory mechanisms to build trust and collaboration further.

Effective communication also plays a critical role. The literature emphasizes that transparent and consistent communication about plans, decisions, and service delivery fosters public trust and satisfaction. The higher awareness among employees compared to residents in the survey indicates a need for the LGU to improve information dissemination through accessible channels, ensuring residents are equally informed about programs and opportunities.

In summary, the observed perception gap between LGU employees and residents is consistent with international findings on local government service delivery. Enhancing participatory opportunities and transparent communication, as supported by recent studies, can help bridge this gap, improve trust, and foster greater satisfaction among residents.



TEST OF RELATIONSHIP BETWEEN THE PROFILE VARIABLES OF THE RESPONDENTS AND THEIR ASSESSMENT OF THE PERFORMANCE OF LGU CABANATUAN

Table 5

Results of the Test of Relationship Between the Profile Variables (LGU Employees) and Their Assessments of the Performance of LGU Cabanatuan

Assessment Area	Age p-value	Gender p-value	Years of Service p-value	Interpretation
Operational Efficiency	0.786	0.979	0.418	No significant relationships (all $p > 0.05$)
Capacity Building	0.639	0.493	0.294	No significant relationships (all $p > 0.05$)
Sustainability Practices	0.733	0.950	0.053	Marginally significant for Years of Service ($p = 0.053$); others not significant
Overall Perception	0.509	0.788	0.938	No significant relationships (all $p > 0.05$)

For LGU employees, the analysis of the relationship between demographic variables (Age, Gender, Years of Service) and their assessments of the four key areas. Starting with Operational Efficiency (assessed via Question 26: "The LGU of Cabanatuan demonstrates a high level of operational efficiency"), the OLR results show no statistically significant relationships with Age ($p=0.786$), Gender ($p=0.979$), or Years of Service ($p=0.418$), indicating that these demographic factors do not influence employees' perceptions of how efficiently the LGU operates. Moving to Capacity Building (assessed via Question 27: "The capacity of LGU personnel significantly contributes to effective governance"), the results similarly reveal no significant relationships with Age ($p=0.639$), Gender ($p=0.493$), or Years of Service ($p=0.294$), suggesting that employees' views on the training and competence of personnel are not shaped by their demographic profiles. For Sustainability Practices (assessed via Question 28: "Sustainability practices are well-integrated across LGU programs"), there is a marginally significant relationship with Years of Service ($p=0.053$), hinting that employees with longer tenure might perceive sustainability integration differently—potentially more critically—though this falls just outside the conventional threshold of $p<0.05$, while Age ($p=0.733$) and Gender ($p=0.950$) show no significant impact. Finally, for Overall Perception (assessed via Question 30: "I believe further improvements in these areas can enhance public trust and satisfaction"), no significant relationships are found with Age ($p=0.509$), Gender ($p=0.788$), or Years of Service ($p=0.938$), implying that employees' general outlook on the need for improvements is consistent across demographic groups. The lack of strong significant findings across most variables may be attributed to the small sample size of 67 respondents, which limits statistical power to detect differences, as well as the purposive sampling method that restricts generalizability to the broader employee population.



Table 6

Results of the Test of Relationship Between the Profile Variables (Cabanatuan Residents) and Their Assessments of the Performance of LGU Cabanatuan

Assessment Area	Age p-value	Gender p-value	Years Residency p-value	of Interpretation
Operational Efficiency	0.993	0.213	0.429	No significant relationships (all $p > 0.05$)
Capacity Building	0.357	0.595	0.923	No significant relationships (all $p > 0.05$)
Sustainability Practices	0.984	0.318	0.513	No significant relationships (all $p > 0.05$)
Overall Perception	0.659	1.000	0.467	No significant relationships (all $p > 0.05$)

For Cabanatuan residents, the analysis examined the relationship between demographic variables (Age, Gender, Years of Residency) and their assessments of the same four areas. In terms of Operational Efficiency (assessed via a composite of relevant survey items and overall mean scores referenced in), the OLR results indicate no significant relationships with Age ($p=0.993$), Gender ($p=0.213$), or Years of Residency ($p=0.429$), suggesting that residents' demographic characteristics do not influence residents' perceptions of the LGU's efficiency in service delivery. Similarly, for Capacity Building (assessed via items related to personnel competence and system improvements, with overall mean scores in), there are no significant relationships with Age ($p=0.357$), Gender ($p=0.595$), or Years of Residency ($p=0.923$), indicating that views on the LGU's efforts to build capacity are uniform across demographic groups. Regarding Sustainability Practices (assessed via items on environmental initiatives, with neutral mean scores noted), the results show no significant relationships with Age ($p = 0.984$), Gender ($p = 0.318$), or Years of Residency ($p = 0.513$), reflecting a consistent neutral perception of sustainability efforts irrespective of demographic factors. Lastly, for Overall Perception (assessed via Question 30: "I am generally satisfied with the performance of the Cabanatuan City LGU"), no significant relationships are found with Age ($p=0.659$), Gender ($p=1.000$), or Years of Residency ($p=0.467$), suggesting that overall satisfaction with the LGU's performance does not vary by demographic profile. Similar to the employee analysis, the small sample size of 67 respondents may limit the ability to detect significant relationships, and the purposive sampling approach constrains the applicability of these findings to the wider resident population.

Analyzing the results for LGU employees, the absence of significant relationships across most demographic variables and assessment areas suggests that perceptions of the LGU's performance are relatively homogeneous among the sampled employees, potentially due to shared workplace experiences or an organizational culture that overshadows individual demographic differences. The marginal significance of Years of Service on Sustainability Practices ($p=0.053$) is noteworthy, as it may indicate that longer-serving employees have a more nuanced or critical view of sustainability integration, possibly due to greater exposure to historical challenges or policy inconsistencies in this area, as neutral perceptions of sustainability are also noted in the study's findings. For Cabanatuan residents, the consistent lack of significant relationships across all regions implies that demographic factors do not play a major role in shaping opinions about the LGU's performance, which could reflect a broad community consensus on the strengths and weaknesses, as evidenced by the generally positive mean scores for operational efficiency (3.99) and capacity building



(4.16) but neutral scores for sustainability practices among residents. This uniformity might also stem from the limited sample size analyzed here, which may not capture the diversity of perspectives in the larger population of 67 respondents mentioned in the study. Overall, the small sample sizes for both groups ($n=23$ (LGU), 67 (Cabanatuan Residents)) likely reduce statistical power, making it harder to detect significant differences, and the purposive sampling method used in the study means these findings are specific to the selected respondents and not necessarily representative of all LGU employees or Cabanatuan residents.

Recent literature provides context and support for interpreting these findings, particularly regarding the role of demographic variables in shaping perceptions of governance and service delivery. A 2015 study on leadership effectiveness among local government managers in Eastern Cape Province, South Africa, found significant positive relationships between demographic variables such as age, gender, and education and leadership effectiveness, suggesting that older and more experienced managers are often perceived as more effective due to their generative behaviors and focus on subordinate development.

While this contrasts with the lack of significant findings in the Cabanatuan study for most variables, it highlights that demographic influences can be context-specific, potentially muted in smaller samples or settings with different cultural or organizational dynamics, as seen here. Additionally, a 2024 study on political preferences in Pakistan noted that demographic factors like gender showed marginally significant effects on political preferences ($p=0.061$), while age and education did not, aligning partially with the Cabanatuan findings where most demographic variables lack significance, indicating that demographic impacts on perceptions may vary by domain (political vs. governance) and sample characteristics. Furthermore, a 2024 study on service quality perceptions in a Philippine state university found that civil status and gender influenced satisfaction with service delivery more than educational attainment, suggesting that relational and contextual factors often outweigh demographic traits like education in shaping public service perceptions, which may explain the limited demographic influence observed in Cabanatuan residents' assessments. These studies collectively underscore that while demographic variables can influence perceptions of governance and service quality in some contexts, their impact is not universal and may be less pronounced in smaller, purposively sampled studies like the current one, supporting the interpretation that the Cabanatuan findings reflect specific sample constraints rather than a complete absence of demographic effects.

RECOMMENDATIONS TO ENHANCE SERVICE DELIVERY AND GOVERNANCE IN LGU CABANATUAN?

1. **Streamline Operational Efficiency through Digital Automation:** To address the neutral perceptions of bureaucratic red tape (mean scores of 3.04 for employees and 3.21 for residents), the LGU may implement digital workflow systems such as 311/CRM platforms to automate processes like permit issuance and document handling. This can reduce manual delays and improve responsiveness, aligning with the operational efficiency frameworks mentioned in the study. Additionally, adopting a Business One-Stop-Shop model with full automation for business permit processing by December 2021, as outlined in the Cabanatuan Digital City Roadmap, can further enhance accessibility and efficiency.

2. **Enhance Capacity Building with Transparent Communication and Training:** Given the perception gap in capacity building where employees are more neutral on system improvements compared to residents' optimism (mean scores of 4.13 and 4.16 respectively for personnel competence), the LGU may prioritize transparent communication by issuing regular public updates on technological and reform initiatives. Implementing training programs that focus on digital literacy and empathy for staff can ensure that internal advancements are visible and effective, as supported by e-government studies in the paper. Collaborations with academic institutions to address skill gaps, as suggested in the Digital City Roadmap, can also strengthen workforce capabilities.

3. **Institutionalize Sustainability Practices with Resource Support and Awareness Campaigns:** To improve the neutral perceptions of sustainability practices among both employees and residents, the LGU may allocate more resources to energy conservation, waste management, and flood mitigation projects, such as the ongoing construction of earth dikes and dredging of waterways. Public awareness campaigns about smart technologies, such as the Unified Command



Center for real-time monitoring of traffic and flooding, may be intensified to bridge the gap between implementation and perception, as highlighted by local studies on sustainability in Cabanatuan. Additionally, overcoming barriers to E-trike adoption through subsidies or stakeholder partnerships can reduce pollution from tricycles, addressing environmental health risks.

4. Strengthen Participatory Governance to Bridge Perception Gaps: With employees rating overall satisfaction higher (mean of 4.11) than residents (mean of 3.68) and residents rating participation opportunities lower, the LGU may establish digital complaint portals and citizen advisory panels to provide genuine input opportunities in decision-making. This aligns with the literature on participatory governance cited in the study, which shows that public trust increases when citizens feel heard. Following models like Naga City's feedback mechanisms, the LGU can make employees directly accountable to citizens and ensure transparent communication about plans and services.

5. Improve Infrastructure and Technology Access for Service Delivery: Addressing weaknesses such as unstable internet connectivity and the lack of cashless payment systems, as noted in the introduction and Digital City Roadmap, the LGU may collaborate with telecommunication providers to achieve 100% fiber connectivity and fast-track the installation of free Wi-Fi in public places through partnerships with the Department of Information and Communications Technology (DICT). Integrating payment institutions into automated systems for business permits and other services can enhance accessibility, particularly for older individuals and those with mobility limitations.

6. Reorganize and Optimize LGU Structure for Efficiency: Drawing from the case study of Cabanatuan's past reorganization efforts, where a first-term mayor reduced staffing by half and merged overlapping offices, the LGU may conduct a new review of its organizational structure to eliminate redundancies and improve inter-departmental coordination, particularly between offices like the City Engineering Office and City Mayor's Office where communication gaps exist. While downsizing must be balanced to avoid reducing effectiveness, reallocating saved resources to critical programs, such as flood control infrastructure, can address long-term issues rather than providing temporary solutions like dredging.

7. Enhance Fiscal Management and Revenue Generation: Inspired by best practices in local government unit (LGU) fiscal management, Cabanatuan may update its Local Tax Code, computerize tax records, and implement tax mapping using Geographic Information Systems (GIS) to improve revenue collection efficiency. Recognizing top taxpayers and providing incentives for business locators through a local investment and incentives code, as proposed in the Digital City Roadmap, can also boost economic activity and fund service improvements.

8. Strengthen Civil Society Participation in Local Planning: Following the commitment outlined in the Open Government Partnership action plan, the LGU may revitalize Local Development Councils (LDCs) and Barangay Development Councils (BDCs) to ensure they are fully functional with proper representation from non-governmental organizations. Establishing an open Assistance to Disadvantaged Municipalities (ADM) portal and capacitating civil society organizations (CSOs) on budget advocacy can further improve the quality of Local Development Investment Plans (LDIPs), ensuring community needs are prioritized in service delivery.

V. CONCLUSIONS BASED ON THE FINDINGS

The conclusions are organized according to the research problems stated in the study, addressing each specific question systematically.

Profile of Respondents

LGU Employees (Age, Sex, Years of Service): The LGU sample consisted of 23 personnel from various departments within the City of Cabanatuan government. Respondents' ages ranged from 23 to 64, with a notable cluster at age 29. The group included both early-career employees and seasoned staff, some with over 20 years of service. Males



represented 65.2% of the LGU sample, while females accounted for 34.8%. This cross-section of tenure and roles within the LGU enables a comprehensive understanding of institutional performance, operational challenges, and capacity-building needs as perceived by those directly involved in public administration. This diversity suggests that the feedback on LGU performance reflects varied experiences within the organization; however, the small sample size and low response rate (46% of the targeted 50) limit the broader generalizability.

Cabanatuan Residents (Age, Sex, Years of Residency): Among the 67 Cabanatuan residents surveyed, the demographic profile shows an age range of 19 to 63 years, with peaks in the late 20s and early 50s, a near-balanced gender split, and years of residency ranging from 13 to 65 years, with notable representation at 31 years. This varied profile suggests that the resident feedback captures a broad cross-section of the community, although purposive sampling again limits its applicability to the entire population of Cabanatuan City.

Assessment of LGU Cabanatuan Performance by Employees and Residents

Operational Efficiency: Both LGU employees and residents rate operational efficiency positively, with the overall mean falling within the "Agree" range, reflecting satisfaction with timely service delivery and office accessibility. However, neutral ratings on bureaucratic red tape highlight persistent procedural delays as a barrier to full efficiency, aligning with literature on administrative burdens.

Capacity Building: There is strong agreement between the two groups on the competence and training of LGU personnel, as evidenced by high mean scores, indicating effective professionalization efforts. Yet, a perception gap exists, as employees are more neutral on system improvements and technology adoption compared to residents' more optimistic views, suggesting internal reforms are not fully communicated or perceived externally.

Sustainability Practices: Perceptions of sustainability practices are generally neutral for both employees and residents, with mean scores often falling in the "Neutral" range on the Likert scale, indicating inconsistent implementation and limited public awareness of environmental initiatives, such as e-trikes or smart technologies, despite some recognition of efforts. This reflects systemic challenges in resource allocation and policy consistency.

Overall Perception and Recommendation: LGU employees rate overall satisfaction higher, "Strongly Agree") than residents, "Agree"), revealing a perception gap where employees' proximity to processes may foster more favorable views compared to residents' direct service experiences. Both groups agree the LGU listens to feedback, but residents rate participation opportunities lower, indicating a need for stronger engagement mechanisms.

Significant Relationship Between Respondent Profile and Performance Assessments

The test of the relationship between demographic profiles and assessments of LGU performance shows no significant correlations for most variables among both LGU employees and residents. For employees ($n = 23$), a marginally significant relationship exists between Years of Service and perceptions of Sustainability Practices ($p = 0.053$), suggesting that longer-serving employees may hold more critical views, possibly due to exposure to historical policy challenges. All other variables (Age, Gender for employees; Age, Gender, Years of Residency for residents) show no significant relationships ($p > 0.05$) with assessments of Operational Efficiency, Capacity Building, Sustainability Practices, or Overall Perception. This lack of significance may be attributed to the small sample sizes and purposive sampling method, which limited statistical power and generalizability, as supported by recent literature indicating context-specific demographic influences.

Recommendations to Enhance Service Delivery and Governance

The findings and conclusions collectively indicate that while the LGU of Cabanatuan exhibits strengths in operational efficiency and capacity building, critical gaps persist in bureaucratic processes, sustainability integration, and resident engagement. These gaps, coupled with perception differences between employees and residents, underscore the need for targeted strategies to align internal operations with external expectations and improve overall governance, as elaborated in the recommendations below.



VI. RECOMMENDATIONS BASED ON THE CONCLUSIONS

The recommendations are aligned with the research problems and conclusions, providing actionable strategies to address identified issues and enhance service delivery and governance in LGU Cabanatuan.

Given the diverse yet small sample of LGU employees, future studies may aim to increase the response rate beyond the current 46% by employing mixed data collection methods (e.g., in-person surveys alongside online forms) to mitigate barriers such as unfamiliarity with digital tools. This will ensure a more representative sample across age, sex, and years of service, providing richer insights into internal perspectives on LGU performance.

For residents, with a strong response rate of 84%, the LGU may maintain engagement with diverse demographic groups by leveraging barangay networks for broader outreach in future assessments. Additionally, expanding the sample size beyond 67 respondents and using random sampling instead of purposive sampling could enhance the generalizability of findings across Cabanatuan's population.

2. Assessment of LGU Cabanatuan Performance by Employees and Residents

Operational Efficiency: To address neutral perceptions of bureaucratic red tape, the LGU may adopt digital workflow systems, such as 311/CRM platforms, to automate processes like permit issuance, thereby reducing manual delays and enhancing responsiveness. Regular process audits and feedback mechanisms can further identify and eliminate procedural bottlenecks, building on the positive ratings for timeliness and accessibility.

Capacity Building: To bridge the perception gap where employees are less optimistic about system improvements, the LGU may implement transparent communication strategies, such as public reports on technological advancements, and offer training programs that focus on digital literacy and empathy for staff. This will ensure internal reforms are visible to residents, aligning with the high ratings for personnel competence.

Sustainability Practices: Given the neutral perceptions of sustainability efforts, the LGU may institutionalize environmental initiatives by allocating more resources to energy conservation and waste management while increasing public awareness campaigns about smart technologies, such as the Unified Command Center. Overcoming barriers to E-trike adoption through subsidies or stakeholder partnerships can also elevate sustainability outcomes.

Overall Perception and Recommendation: To narrow the perception gap in satisfaction and participation, the LGU may establish digital complaint portals and citizen advisory panels, providing residents with genuine opportunities for input in decision-making. Enhancing transparent communication about LGU plans and feedback responses will further build trust and align employee and resident views.

3. Significant Relationship Between Respondent Profile and Performance Assessments

Considering the lack of significant relationships between demographic profiles and performance assessments, except for the marginal effect of Years of Service on sustainability perceptions among employees, the LGU may leverage the insights of longer-serving staff through structured feedback sessions or mentorship programs to refine sustainability policies. Future research may also expand sample sizes and employ random sampling to enhance statistical power and identify potential demographic influences on perceptions, thereby addressing the limitations of the current purposive sampling approach.

4. Recommendations to Enhance Service Delivery and Governance

Building on the identified gaps and strengths, the LGU of Cabanatuan may prioritize a multi-faceted strategy to enhance service delivery and governance. This includes integrating technology to streamline operations and improve accessibility (e.g., implementing cashless payment systems for public services), fostering interdepartmental coordination to reduce inefficiencies, and investing in long-term infrastructure solutions, such as permanent flood control systems rather than temporary measures. Additionally, strengthening participatory governance through regular community forums and transparent policy-making processes will ensure resident voices are heard, while sustained capacity building via continuous training will maintain personnel competence. Finally, a robust commitment to sustainability through renewable energy adoption (e.g., solar power initiatives) and pollution reduction strategies (e.g.,



E-trike incentives) will balance economic progress with environmental health, ensuring that development does not compromise the quality of life for Cabanatuan's citizens.

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