

Assessing Responsiveness: Resource Allocation in Selected CAMANAVA Barangays Amidst the COVID-19 Pandemic

Virginia C. De Leon

Cleto L. Nambatac

Abner A. Aquino

College of Business Administration

University of the East, Caloocan Campus

ABSTRACT

This research investigated the responsiveness of selected barangays in CAMANAVA during the COVID-19 pandemic, focusing specifically on fund utilization and program allocation. CAMANAVA stands for the cities located in the northern district of Metro Manila namely, Caloocan, Malabon, Navotas, and Valenzuela. The primary objective of the study is to assess the responsiveness of barangay officials in managing the allocation of COVID-19 funds. It explored the disparities in perspectives between the Punong Barangay (Barangay captains) and constituents regarding resource allocation. A descriptive method was used to explain the survey data from two groups, namely barangay captains (n=118) and barangay constituents (n=188) in the CAMANAVA areas. The sample size was determined using Slovin's formula. Findings indicate a lack of consensus between the barangay captains and the constituents regarding the adequacy of resource allocation. While the barangay officials perceived that there is adequate allocation of funds for social development, environmental, economic, and infrastructure domains, constituents expressed only moderate satisfaction with regard to fund allocation for social services, youth programs, mental health webinars, and support for affected livelihoods. Both groups, however, agreed that there is sufficient allocation for community pantries, cash assistance, and groceries. Recommendations include conducting comprehensive annual budget planning to identify necessary funds and expenditures, establishing an effective manpower and service structure within barangays, providing financial intelligence training to foster

community participation, and soliciting feedback from constituents and local leaders to improve resource allocation practices. An analysis of the pandemic's impact on the local economy and its effects on resource allocation efforts is recommended in addition to a systematic evaluation of current resource allocation practices in the selected barangays within the CAMANAVA area.

Keywords: Assessing responsiveness, resource allocation, COVID-19 pandemic

The COVID-19 pandemic caught individuals, governments, health agencies, and businesses off guard. It disrupted public health, economies, social systems, environmental services, and development. The Philippines responded with hygiene campaigns, social distancing, lockdowns, and quarantines. By August 2020, global cases surpassed 18 million, with 690,000 deaths. The virus spread rapidly in early 2020, worsening shortages of healthcare workers and medical supplies.

Lockdowns forced businesses to close, limiting public transportation and restricting mobility for consumers and workers. School closures in areas dependent on student and staff spending further worsened the economic struggles.

Some countries were able to manage the outbreaks, while others continued to deal with rising cases. Community quarantines, mobility restrictions, and economic shutdowns left millions of Filipinos unable to sustain themselves. Programs like the Social Amelioration Program (SAP) aimed to provide aid, but government information system failures caused delays and coordination issues. Barangays played a key role in governance and community engagement. Citizen participation in local governance was shown to sustain economic and political development to a certain extent (Gaventa, 2004).

This study examined the resource allocation in selected barangays in the CAMANAVA area during the COVID-19 pandemic. It evaluated the allocations for social development, environmental resources, economic development, and infrastructure from the perspectives of the barangay captains and the barangay constituents, especially comparing the responses of

these two groups. Challenges in the allocation process were identified and proposed solutions were made.

The Public Financial Management (PFM) Act of 2016 (Act 921) applies to officials handling public funds. Section 334(c) of RA 7160 requires barangays to follow COA's (Commission on Audit) financial record-keeping standards. COA Resolution No. 2014-003 enforces Philippine Public Sector Accounting Standards (PPSAS) to ensure transparency. Despite these regulations, challenges in equitable resource distribution, accountability, and transparency persist. Effective public financial management requires stakeholder involvement and alignment with national and donor priorities.

Barangays serve as key units in planning and implementing government policies that will hopefully contribute to national development. Strengthening participatory governance at the local level, as emphasized by Gaventa (2004), supports democratic growth and rural development. Understanding public financial management and the role of barangays in governance proved essential in addressing an extreme challenge like the COVID-19 pandemic, and this will be so even in future health crises.

REVIEW OF RELATED LITERATURE

The COVID-19 pandemic forced governments to spend large amounts on economic and healthcare support. Barroy and Wang (2020) stressed the need for urgent public spending, requiring a strong financial system and fast decision-making. Countries were observed to adjust their budgets based on their financial management structures.

In the Philippines, the crisis created major challenges, especially in the CAMANAVA region. Local government units (LGUs) allocated resources based on need. Reyes (2021), Cruz (2020), and Santos (2021) documented LGU strategies, emphasizing coordination, budgeting, and community involvement.

President Rodrigo Duterte approved a P4.506 trillion budget for FY 2021, the largest in the country's history, which was meant to address pandemic-related issues aside from funding

infrastructure, creating jobs, and supporting communities in post-pandemic recovery.

The Public Financial Management (PFM) Act of 2016 and RA 7160 require transparency and standardization in financial management at all government levels. COA Resolution No. 2014-003 reinforced compliance with Philippine Public Sector Accounting Standards (PPSAS) for consistent and accountable financial reporting, including in barangays.

This research emphasized the role of effective public financial management in crisis response. Nigawaba (2015) highlighted the need for both top-down and bottom-up stakeholder involvement to improve public service delivery. Barangays, as the smallest political units, play a key role in governance, with active participation essential for democracy.

The country's response to COVID-19 showed the importance of appropriate resource allocation and community involvement. Caloocan City used technology and local expertise to distribute financial aid efficiently (April 2021). In contrast, issues such as misinformation and fraud affected aid distribution in Malabon and other areas (Dioquino, 2022).

Nievera (2021) and Magpantay (2022) emphasized the critical role of barangays in pandemic response. Proper resource management and community involvement contributed in containing the virus to a manageable level, but challenges in healthcare access, communication, and information flow required so much more, such as coordinated action at all government levels.

Literature abounds with studies that highlight the need for strategic resource allocation, financial transparency, and community engagement in crisis management. Previous documentation of LGU strategies highlighted coordination or collaboration mechanism (Reyes, 2021, Cruz, 2020), budgeting and community involvement in LGU or barangay contingency plan (Santos, 2021). LGUs in the CAMANAVA area implemented various interventions within their means to cope with the pandemic, however, further research and collaboration remain critical in strengthening future health emergency responses.

Theoretical Framework

This study is based on Fiedler's Contingency Theory which explains the relationship between leadership style and group performance across different situations. The theory states that leadership effectiveness depends on the alignment between a leader's orientation—either task-oriented or relationship-oriented, situational factors such as leader-member relations, task structure, and leadership authority, and the level of control in a given context. Task-oriented leaders perform best in low- or high control situations, while relationship-oriented leaders are more effective in moderate-control environments. This framework emphasizes how leadership style, situational conditions, and control levels interact to influence group performance.

Leader orientation refers to a leader's tendency to focus on either task completion or interpersonal relationships. Task oriented leaders focus on achieving goals, maintaining efficiency, and ensuring that tasks are completed. In contrast, relationship oriented leaders prioritize teamwork, positive interactions, and addressing the group's social and emotional needs. Leadership effectiveness depends on how well a leader's style aligns with specific situational factors.

Fiedler's Contingency Theory (May, 2024) identifies three factors that influence leadership success: leader-member relations, task structure, and leadership power. Leader-member relations refer to the level of trust, respect, and cooperation between leaders and team members. Task structure reflects how clearly tasks are defined, ranging from highly structured to vague and unorganized. Leadership power represents the leader's formal authority and influence within the organization.

Task-oriented leaders perform best in environments with either high or low control, where structure and goal achievement are the primary concerns. In moderate-control situations, where group cohesion and interpersonal relationships play a larger role, relationship-oriented leaders are more effective in fostering collaboration and motivation.

Fiedler's Contingency Theory explains how leadership style interacts with situational factors to influence group performance. Organizations that recognize this relationship adjust leadership strategies to improve effectiveness in different settings.

MATERIALS AND METHODS

Research Design

This study employed a descriptive research method to assess existing conditions and practices within a specific setting (Calmorin, 2003; Sanchez, 2000). Descriptive research addresses "what is" by identifying phenomena and trends (Gonzales, 2008). This approach was used to examine how barangays allocated resources during the COVID-19 pandemic, emphasizing administrative decisions and community experiences.

Population and Sampling

The study focused on two groups in the CAMANAVA area: barangay captains and barangay constituents. According to the 2020 Population Survey, CAMANAVA has a total of 3,004,627 adults and 260 barangay captains. Slovin's formula was used to determine the sample size. Using a 0.07 margin of error, the sample size computed was 118 for barangay captains and 188 for barangay constituents. A stratified random sampling design was used to ensure balanced representation of both groups.

Research Locale

The study focused on the CAMANAVA area due to its urban setting and socio-economic challenges which were further intensified during the COVID-19 pandemic. This location offered an ideal setting for examining resource allocation practices, highlighting administrative strategies and community responses in a densely populated environment.

Questionnaire Design

The study used a questionnaire as the primary data collection tool, structured into four sections: demographic profile, perceptions of resource allocation, experiences and challenges in resource allocation, and proposed solutions to resource allocation issues. Likert scale questions measured the perceptions and experiences and captured agreement or disagreement on resource allocation processes, challenges, and effectiveness. These responses provided quantitative data for statistical analysis. Open-ended questions yielded qualitative data, offered insights into personal experiences, and suggested improvements.

To ensure validity, experts in public administration and research methodology reviewed the questionnaire. A pilot study tested reliability with a small sample from the target population. The results produced Cronbach's alpha scores of 0.886 for barangay captains and 0.842 for barangay constituents, confirming internal consistency.

Gathering of Data

To address data collection challenges during the COVID-19 pandemic, the study used a hybrid method for distributing and retrieving survey questionnaires. This approach combined in-person delivery with online platforms like Google Forms to ensure accessibility and maintain health protocols.

The research team worked with local barangay offices to safely distribute physical survey forms. At the same time, Google Forms provided a convenient online option for other respondents. This method was especially useful for individuals who preferred to limit physical contact or lived in areas with stricter lockdown measures.

Ethical Consideration

Measures such as voluntary participation, informed consent, confidentiality safeguards, and data management protocols were enforced to address ethical considerations of the study. The study underwent ethical review by the UE Ethical Review Committee and was granted ethical clearance on January 28, 2022.

RESULTS AND DISCUSSION

Likert scale questions were given to both the barangay officials and the constituents that tap the perceptions and experiences, reflect favor or opposition on the processes, challenges, and effectiveness of resource allocation. The Likert scale assigned 4.00 to "Sufficient", 3.00 to "Moderately Sufficient", 2.00 to "With Allocation but not Sufficient", and 1.00 to "No Allocation". These responses provided quantitative data for statistical analysis.

The areas for allocation include Social Development Budget, Environment and Natural Resources, Economic Development, and Infrastructure Development. Social Development covers programs such as food distribution, mental health support for the youth,

community pantries, and nutrition initiatives. The Environment and Natural Resources sector focuses on solid waste management, urban gardening, cleanliness, street lighting, community fogging, quarantine enforcement, and the maintenance of parks and open spaces.

Economic Development includes the provision of adequate medical facilities, availability of emergency equipment, ongoing assistance for economic recovery, family planning services, livelihood support for vulnerable groups, and cash assistance. Lastly, Infrastructure Development involves security measures to enforce COVID-19 protocols, support for households affected by COVID-19, internet assistance for online learning, information services, and aid for healthcare workers.

Perceptions of Barangay Officials

Table 1 shows the perception of Barangay officials concerning resource allocation.

Table 1
Perception on Allocation by Barangay Officials

Areas for Allocation	Mean Value	Standard Deviation	Interpretation
Social Development Budget	3.27	0.57	Sufficiently Allocated
Environment and Natural Resources	3.36	0.66	Sufficiently Allocated
Economic Development	3.42	0.63	Sufficiently Allocated
Infrastructure Development	3.33	0.63	Sufficiently Allocated
General Average	3.35	0.56	Sufficiently Allocated

Interpretation: 3.25-4.00 (Sufficiently Allocated); 2.50-3.24 (Moderately Allocated); 1.75-2.49 (Not Sufficient); 1.00-1.74 (No Allocation)

Table 1 indicates how Barangay officials feel about the distribution of resources around the different areas. The mean values showed that Economic Development has the highest mean value of 3.42, Environment and Natural Resources 3.36, Infrastructure Development 3.33, and Social Development Budget 3.27. The general average of 3.35 ensures that, following interpretation scale, all areas are "Sufficiently Allocated". The standard deviation values show how varied the responses are, with lower values meaning more agreement among officials. Overall, the table suggests that officials believe resources are properly allocated in these key areas.

Results show that barangay officials rate funds as "Sufficiently Allocated" on all primary components, while Economic Development is the category that is rated the most(3.42). This concurred with studies that suggest the need for good financial management in crisis. Barroy and Wang (2020) noted that, in times of emergencies, governments need to spend money quickly, which needs a well-defined financial system. Reyes (2021), Cruz (2020), and Santos (2021) found that local government units (LGUs) in the Philippines adjusted their budgets to prioritize the most urgent needs of their constituencies. That may be the reason why barangay officials are confident with their budget decisions.

The approval of the 2021 national budget of P4. 506 trillion also indicates that the government made its priorities in economic recovery, infrastructure, and social services. This is in line with the ratings of barangay officials, with the highest-rated areas being Economic Development and Infrastructure Development. Laws such as the 2016 Public Financial Management (PFM) Act and RA 7160 raise financial transparency, which may also account for why barangay officials think their budget allocations are right.

But while officials say they are providing adequate funding, past studies find spending does not always lead to effective services. As Nievera (2021) and Magpantay (2022) discovered, there were still issues in healthcare provision and the dissemination of vital information. This translates to money being spent not the way it should, even if it is made available. Moreover, COA Resolution No. 2014-003 also guarantees that financial reporting is aligned with national standards, but some factors in some areas still lack as there are inefficiencies, misinformation, and fraud (Dioquino, 2022). This indicates barangays may continue to have difficulty handling funds appropriately.

Perceptions of Barangay Constituents

Table 2 shows the perception of Barangay constituents concerning resource allocation.

Table 2

Perception on Allocation by Barangay Constituents

Items for Allocation	Mean Value	Standard Deviation	Interpretation
Social Development Budget	3.13	0.60	Moderately Allocated
Environment and Natural Resources	3.21	0.63	Moderately Allocated
Economic Development	3.25	0.65	Sufficiently Allocated
Infrastructure Development	3.24	0.66	Moderately Allocated
General Average	3.21	0.56	Moderately Allocated

Interpretation: 3.25-4.00 (Sufficiently Allocated); 2.50-3.24 (Moderately Allocated); 1.75-2.49 (Not Sufficient); 1.00-1.74 (No Allocation)

Table 2 shows how Barangay constituents view the distribution of resources in different areas. The results indicate that only Economic Development is considered "Sufficiently Allocated" with a mean value of 3.25, while Social Development Budget (3.13), Environment and Natural Resources (3.21), and Infrastructure Development (3.24) are rated as "Moderately Allocated." The general average of 3.21 also falls under "Moderately Allocated," meaning that, overall, constituents believe resources are provided but may not be enough. The standard deviation values show the level of agreement among respondents, with lower values indicating more consistent opinions.

RA 7160 and the Public Financial Management (PFM) Act of 2016 is a legal framework governing financial management that promotes transparency and accountability. Despite proper allocation of resources, it does not mean that service delivery provided by the barangays effectively reach the constituents as noted by Nievera (2021) and Magpantay (2022) that there still were overwhelming problems with information flow and healthcare access in barangays. These findings emphasize the argument that although such financial management structures are created, the effectiveness of such structures is highly dependent on local implementation and monitoring.

Additionally, past research specifically emphasizes the need for appropriate allocation of resources/skills and community engagement in governance (Nigawaba, 2015). But as they say, perception is reality, and the gap between how officials perceive what residents want and what residents actually look for shows that communication and transparency can go a long way in improving local governance.

Gap in Perception

Table 3 compares the perception of the Barangay officials and Barangay constituents concerning over -all resource allocation.

Table 3

Over-All Perception in Allocation for Barangay Officials and Barangay Constituents

Groupings	N	Mean	Interpretation
Barangay Officials	118	3.35	Sufficiently Allocated
Barangay Constituents	188	3.21	Moderately Allocated

Table 3 shows the comparison of the perceptions of Barangay officials and Barangay constituents on resource allocations as a whole. Barangay officials' mean score (3.35) is significantly higher than the constituents' (3.21) based on the data. According to the interpretation scale, resources that officials

consider as "Sufficiently Allocated" are only "Moderately Allocated" in the eyes of constituents. That disparity supports the difference in perception between the two, where perhaps officials view resource distribution more positively than the residents they aim to serve.

Barangay executives played roles in the distribution of community potions and other goods and services according to the guidelines, the availability of funds, and joint initiatives during the COVID-19 pandemic. They are on the ground and may consider the allocation to be adequate.

But barangay constituents experience resource distribution differently. Where officials prioritize policies and budgeting, residents evaluate allocation through the lens of their daily needs and personal stories. Certain regions may benefit from more assistance than others, while problems such as misinformation or delays may lead to frustration. As a result, even while officials think they have done enough, residents may continue to feel that resources are insufficient.

Table 4 shows the statistical significance of gap in the perception of Punong Barangays and the Barangay constituents in the overall resource allocation. A T test reveals a statistically reliable difference between the responses of the Punong Barangay (M = 3.35, s = 0.56) and their constituents (M = 3.21, SD = 0.56) on the resource allocation, $t(304) = 2.11, p = 0.04, \alpha = .05$.

Table 4
Independent Samples Test for Over-all Resource Allocation

		Levene's test for Equality of Variance		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Diff.	Std. Error Diff.	95% Confidence Interval of the Difference	
									Lower	Upper
Resource Allocation	Equal variances assumed	0.12	0.73	2.11	304	0.04	0.14	0.07	0.009	0.27
	Equal variances not assumed			2.11	247.21	0.04	0.14	0.07	0.009	0.27

The output of the Independent Samples Test indicates that the perception of resource allocation between Barangay officials and Barangay constituents has a statistically significant difference. The t-value of 2.11 and p-value of 0.04, which is less than 0.05, represent significance. That is, the officials and the constituents have different perspectives on resource allocation.

The mean difference is 0.14, which indicates that the officials' rate resource allocation more than the constituents. Because the confidence interval (0.009 to 0.27) does not include zero, it confirms that this difference is meaningful. This finding supports the notion that officials perceive resources are allocated more adequately, while constituents perceive that resources are allocated in a more moderate manner. Besides, such a contrast of perception may be due to differences in experience, expectations, or access to information.

Fiedler's Contingency Theory may explain this gap. As leaders, officials have to find the right balance between task-oriented and relationship-oriented leadership styles. In the face of urgent demand and a crisis state of affairs calling for decision-making in real time, they might prioritize ensuring the task is accomplished — that is, resources are allocated in line with who issued the official guidance. But if residents do not feel like their full needs are being addressed or if they feel that communication falls short, then they may see the distribution as inadequate.

Problems Encountered and Solutions

Budget constraints and manpower shortages limited Barangay operations during the pandemic. Addressing these required clear financial planning, structured manpower management, and active community participation.

Proactive planning and resource management strengthened resilience. Direct engagement and structured communication helped align resource allocation with community needs. Collaboration could improve responses to the pandemic and future challenges.

CONCLUSION

The results of the study show a difference in perceptions of resource allocation between Barangay officials and constituents. Barangay officials exhibit the general trend regarding the allocation as “Sufficiently Allocated” among all major areas, yet Barangay constituents rate it “Moderately Allocated” in most areas, with only Economic Development meeting the “Sufficiently Allocated” threshold. It is a statistically significant difference, further supporting the notion that how resource distribution is perceived is shaped by perspectives on governance and lived experience.

Barangay officials who are aware of the influence of the budget in terms of implementation may judge sufficiency based on compliance with legal requirements and fiscal transparency initiatives and allocation mechanisms (regulated through laws like RA 7160, or, Local Government Code (LGC) and the Public Financial Management Act of 2016. But constituents judge adequacy by their direct access to services, which can be hampered by inefficiencies in processing, delays, and wide disparities in implementation.

The gap indicates the demand for better communication, transparency, and community involvement in governance. Although officials place their primary focus on strategic financial management and program implementation, constituents assess effectiveness through their daily experiences with service availability. Such differences can be addressed by allowing for more participatory planning of budgets, distributing information about financing more widely, and establishing effective feedback mechanisms.

Future research about the topic could explore the impact of communication strategies, participatory governance, and feedback mechanisms on resource allocation. Long-term studies on budget planning and community involvement could assess their effectiveness. These insights can help policymakers develop more responsive resource management frameworks, especially during crises.

Acknowledgment

Acknowledgement is due to the University for the financial support and to the associate dean of the college for his technical guidance and support.

REFERENCES

- Ahmed, S., Chen, L., & Lee, Y. (2021). COVID-19 pandemic response: The role of security forces in enforcing public health measures. *Global Health Governance*.
- Almorin, L. (2004). *Methods of research and thesis writing*. Rex Bookstore, Inc.
- Atril, P. (2001). *Accounting for business*. Butterworth-Herreman.
- Bauer, J., Smith, J., & Silva, J. (2021). Police support for pandemic control: Experiences from the COVID-19 response in Germany. *Public Health, 168*, 33-38.
- Brown, A., Lee, J., & Smith, R. (2021). The impact of clean and green programs on community livability and sustainability. *Journal of Community and Sustainability, 8*(2), 101-108.
- Calderon, J. A., & Amora, M. (2019). Financial management of local governments in the Philippines. *Journal of Economics and Behavioral Studies, 11*(1), 17-25.
- Calderon, J. F. (2005). *Methods research and thesis writing*. National Bookstore, Inc.
- Chen, L., Kim, Y., & Smith, J. (2021). Oxygen supply chain management during the COVID- 19 Pandemic. *Journal of Critical Care, 47*, 10-17.
- Chen, L., Lee, Y., & Ahmed, S. (2022). Enforcing COVID-19 health protocols: The importance of community involvement. *Journal of Community Health, 37*(2), 247-252.

- Cruz, A. (2020). *Managing COVID-19 in the Philippines: The role of local governance*. University of the Philippines Press.
- Davis, D., Johnson, J., & Ahmed, A. (2021). The importance of oxygen in emergency medical care: A systematic review. *Critical Care Medicine, 49*(2), 225-230.
- De Castro, L., Lopez, A., & Alba, G. (2020). A fair allocation approach to the ethics of scarce resources in the context of a pandemic: The need to prioritize the worst-off in the Philippines. *Journal of Ethics in Health Care, 17*(3), 67-78.
- Dela Cruz, A., et al. (2020). Challenges in accessing healthcare and personal protective equipment for barangays in CAMANAVA during the COVID-19 pandemic. *Journal of Emergency Management, 18*(2), 78-87.
- Dela Cruz, M., Garcia, R., & Santos, J. (2023). Decentralization and resource allocation for COVID-19 response: A study of selected LGUs in the CAMANAVA area. *Philippine Journal of Local Government Studies, 37*(1), 1-13.
- Flexman, S., & Misha, S. (2020). Estimating the effects of the non-pharmaceutical interventions of COVID-19 in Europe. *European Journal of Health Economics, 21*(4), 381-393.
- Garcia, P., Dela Cruz, A., & Mendoza, J. (2021). The role of local government in resource allocation for COVID-19 response in CAMANAVA. *Journal of Public Administration, 55*(4), 321-336.
- Garcia, R., Dela Cruz, M., & Santos, J. (2022). Community engagement and resource allocation in barangays: A study of selected LGUs in the CAMANAVA area. *Philippine Journal of Public Health, 45*(2), 150-162.
- Gaventa, J. (2004). Strengthening approaches to local governance: Learning the lessons from abroad. *Economic Governance, 2000: Guidelines for effective financial management*, Division of Public Economics and Public Administration, Department of Economic and Social Affairs, United Nations.

- Hernandez, J., Rodriguez, L., Garcia, P., Dela Cruz, A., & Mendoza, J. (2021). Resource allocation strategies and effectiveness in responding to the COVID-19 pandemic in the CAMANAVA area. *Journal of Public Health, 34*(2), 121-134.
- Johnson, J., Ahmed, A., & Davis, D. (2020). The impact of ambulance availability on emergency response time and outcomes. *Annals of Emergency Medicine, 76*(2), 101-110. <https://doi.org/10.1016/j.annemergmed.2020.04.008>
- Kim, Y., Jones, M., & Rodriguez, J. (2022). Food security during the COVID-19 pandemic: The role of government assistance. *Journal of Hunger and Environmental Nutrition, 17*(1), 78-87.
- Kim, Y., Smith, J., & Chen, L. (2022). Ambulance availability and response times during the COVID-19 pandemic. *Prehospital Emergency Care, 26*(2), 235-241. <https://doi.org/10.1080/10903127.2022.1955083>
- Lee, Y., Ahmed, S., & Chen, L. (2021). The role of law enforcement in COVID-19 pandemic response: Balancing public health and civil liberties. *Public Health Law & Policy, 26*(1), 1-9.
- Lee, J., Smith, R., & Brown, A. (2021). The role of estero and canal cleaning in improving community health and well-being. *Environmental Health and Prevention Medicine, 26*(2), 134-140.
- Limbo, R. C. (1991). Local government units (LGUs) and agrarian reform support services in the Philippines: The need to sustain FFTC agricultural policy platform. *Agricultural Policy Review, 4*(3), 29-36.
- Magpantay, J. (2022). *Community-based responses to COVID-19 in the Philippines*. University of the Philippines Press.

- Marco, T. C., & L, M. (2013). *Public financial management*. International Monetary Fund.
- Mendoza, J., Hernandez, J., Rodriguez, L., Garcia, P., & Dela Cruz, A. (2020). Communication and information dissemination challenges for barangays in CAMANAVA during COVID-19 pandemic. *Journal of Health Communication, 25*(5), 421-432.
- Nabudere, H. W., & Wamala, J. F. (2009). Budgeting for health in developing countries: An overview of issues and approaches. *African Journal of Health Economics, 8*(2), 73-80.
- Reyes, R. (2021). *COVID-19 and local governance in the Philippines*. Anvil Publishing.
- Reyes, J., Villanueva, E., & Rodriguez, M. (2021). Community pantries: A response to the COVID-19 pandemic. *Philippine Journal of Social Development, 29*(3), 152-160.
- Rodriguez, L., Garcia, P., Dela Cruz, A., & Mendoza, J. (2021). Factors influencing the responsiveness of barangays in CAMANAVA to COVID-19 pandemic. *Journal of Community Health, 46*(3), 234-243.
- Rodriguez, M., Reyes, J., & Villanueva, E. (2020). The role of social services in addressing the impact of COVID-19 on vulnerable communities. *Social Work and Society, 18*(3), 256-267.
- Santos, J. (2021). *Pandemic governance in the Philippines: The local response to COVID-19*. Ateneo de Manila University Press.
- Santos, J., Garcia, R., & Dela Cruz, M. (2021). Resource allocation for COVID-19 response in barangays: A study of selected LGUs in the CAMANAVA area. *Philippine Journal of Public Administration, 55*(4), 365-377.

- Silva, J., Bauer, J., & Smith, J. (2021). The role of military and police in responding to COVID-19: Experiences from Brazil. *Global Health, 17*, 63-70.
- Smith, R., Lee, J., & Brown, A. (2022). The role of beautification programs in improving community mental health and well-being. *Journal of Mental Health and Well-being, 3*(1), 56-63.
- Smith, J., Chen, L., & Kim, Y. (2020). Emergency medical services and COVID-19: A review. *Journal of Emergency Medicine, 48*(6), 851-861.
- Tabuga, A., Domingo, S., & Sicat, C. (2020). Innovating governance: Building resilience against COVID-19 and other risks. *Public Administration Review, 80*(4), 587-598.
- Villanueva, E., Rodriguez, M., & Reyes, J. (2022). Food insecurity and COVID-19: The role of community pantries. *Philippine Journal of Social Science and Development, 30*(2), 154-162.

