



**TECHNIUM**  
SOCIAL SCIENCES JOURNAL

[www.techniumscience.com](http://www.techniumscience.com)



**Vol. 75/2025**  
**A New Decade for Social Changes**

**PLUS**  
**COMMUNICATION P**



**International**  
Communication & PR

## **Implementation and Challenges of Resettlement Program in a Component City in Northern Negros Occidental, Philippines**

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**Abstract.** Worldwide, people are displaced for various reasons contributing to their struggle to get out of poverty; in ASEAN, governments are committed to the implementation of sustainable housing, but challenges remain. In the Philippines, the government has enacted laws to support the sustainability of housing programs, but there is still a high rate of displacement, particularly in cities due to migration. Although local government units in the province are implementing housing programs, challenges in implementation turn out to be a priority. This study investigates the implementation of a housing resettlement program among implementers and beneficiaries. It aims to provide baseline data and address the critical research gap in the local resettlement programs in local government units. The locale of this study which is a component city was granted 1,992 housing units by the national government for the typhoon-affected families. As of July 2022, 1067 families were awarded the units, or only 53.6 percent. Within this framework, this study was conducted to determine the extent of implementation of the beneficiaries of the resettlement program when they are grouped according to the type of ownership and number of households. Based on the results and findings, an action plan to enhance the implementation of the resettlement program was designed. This is a descriptive-comparative study using a survey questionnaire to gather primary data to measure the extent of implementation of the housing programs of the city in terms of sustainability indicators and the challenges encountered by the beneficiaries, with over 350 respondents. A comparative research design examines the differences and similarities within and across cases with different contexts using the designation of the respondents and the number of households. The overall extent of implementation was rated very great in practically all variables, with implementers rating it as very great while beneficiaries rated it as great; there were no significant differences in terms of the number of households or the type of ownership, although challenges were encountered in the implementation. Findings suggest the need for enhancement of implementation, which is contained in the action plan.

**Keywords.** Public administration, resettlement program, descriptive-comparative, Philippines

### **1.0 Introduction**

In recent years, many people worldwide have moved from their homes due to displacement from their communities due to infrastructure development and environmental disasters, among others [1]. To respond to this concern, resettlement housing was conceived by the government with the help of the private sector. Resettlement housing is identified in the UN Sustainable Development Goals as one of the indicators for poverty reduction. Resettlement housing contributes to the aim of government on poverty alleviation (SDG 1); the need for

quality education can likewise be responded since informal settlers can focus on sending their children to schools (SDG 4) and resettlement housing can also respond to the goal of sustainable cities and communities as a way of contributing to the welfare and well-being of the informal settlers (SDG 11) [2].

The Association of Southeast Asian Nations leaders committed to the New Urban Agenda (NUA), which envisions cities should provide resilient housing, fostering the development of national and local housing policies. However, the region still suffers from severe environmental challenges like air and water pollution and traffic congestion [3]. Despite numerous policies, ineffective implementation often hampers progress, leading to unsustainable urban growth. Access to adequate housing remains a critical issue, further complicating efforts to achieve sustainable development [4]. Informal settlement illustrates urban poverty and social disenfranchisement. Informal settlers faced substantial barriers to essential services. The authors recommend improving living environments while ensuring access to necessary services to elevate living standards and establish supportive systems for residents [5].

In the Philippines, the Department of Human Settlements and Urban Development (DHSUD) is focused on delivering more housing units in 2025 under President Ferdinand R. Marcos Jr.'s flagship Pambansang Pabahay para sa Pilipino (4PH) Program. So far, more than 1,000 applications under 4PH are being processed by Pag-IBIG Fund at four project sites, Pag-IBIG Fund is supporting 4PH projects in Palayan City and Bacolod City, Bocaue in Bulacan, and others. Currently, 56 ongoing projects under 4PH are in various stages of construction across Luzon, Visayas, and Mindanao. In addition to 4PH, DHSUD, through its shelter agencies, continues its regular housing programs. Under 4PH, DHSUD is prioritizing condominium buildings to maximize the use of government land for housing. (DHSUD, 2025). Despite these programs, a persistent shortage of resettlement housing remains a significant issue. Laws such as the Urban Development and Housing Act (UDHA) or RA 7279 and the Local Government Code (RA 7160) aim to provide affordable housing, and the DHSUD addresses these housing needs [6].

While the province of Negros Occidental, to address the housing gap, initiated a public-private partnership with Habitat for Humanity and the Hilti Foundation known as the Negros Occidental Impact 2023 (NOI2023), which aims to construct 10,000 disaster-resilient housing units using innovative cement bamboo frame technology [3] [7]. While this component city received 8,423 typhoon-resistant houses from the National Housing Authority (NHA). But 9,082 households need tenurial upgrading. They comprise 25.39% of the housing stock. Likewise, there are households needing upgrading of various basic services; as follows: 2,923 households or 7.92% of the housing stock needs upgrading of power facility, 3,018 households or 8.44% of the housing stock needs upgrading of water facility; 11,578 households or 32.36% of the housing stock needs upgrading of sanitary facility; 5,237 households or 14.64% of the housing stock needs upgrading of roads; 1,173 households or 3.28% of the housing stock needs upgrading of drainage and 4,342 households or 12.09% of the housing stock needs upgrading of garbage disposal services (Local Shelter Plan, Cadiz City, 2020-2028). However, only two of the ten resettlement sites managed by the city government are fully operational. However, facing challenges like beneficiary selection and payment terms that affect program sustainability.

Several studies have examined related issues, including the World Bank Group's housing affordability initiatives [7], the livelihood impacts of resettlement [8], and housing affordability in the Philippines. Furthermore, Villanueva-Golez et al. [10] explored the satisfaction and challenges faced by beneficiaries of the Yolanda Housing Program. However,

there remains a gap in the literature concerning the implementation and challenges of resettlement programs in a component city in Negros Occidental.

This study assessed the implementation of resettlement programs in this city, focusing on sustainability and the challenges encountered by housing beneficiaries. The findings were used to develop an action plan to enhance the implementation of the housing programs.

## 2.0 Methodology

**2.1 Research Design.** This study utilized a descriptive-comparative research design which is appropriate for this study, as it generated data needed to measure the extent of implementation of the housing programs of the city and the challenges encountered by the beneficiaries using a survey questionnaire and a checklist to gather primary data. The comparative research approach analyzed how the extent of implementation of the resettlement program varies across these levels, in different contexts using the number of households and type of ownership. [11].

**2.2 Locale of the Study and Participants.** The respondents of this study were 314 out of the 1,700 beneficiaries of the resettlement program of a component city in northern Negros Occidental, and 22 out of 53 were housing implementers. They were identified using stratified random sampling. Table 1 presents the distribution of the respondents, computed using the Raosoft sample size calculator with a 95% confidence interval and a 5% margin of error, drawn from the respondent's population.

**Table 1.**Distribution of Respondents

<b>Respondents</b>	<b>N</b>	<b>n</b>	<b>%</b>
Implementers			
SP Members	14	6	1.79
City Housing Authority	26	14	4.17
City Planning & Dev. Officers	3	1	0.30
Legal Office	2	1	0.30
Sub-total	53	22	6.55
Beneficiaries			
Site A	700	129	38.39
Site B	1000	185	55.06
Sub-total	1700	314	93.45
Grand Total	1753	336	100.00

**2.3 Instrument and data collection process.** The study utilized a researcher-made questionnaire designed to gather primary data. It is based on the guidelines of RA 7279 (The Urban Development and Housing Act) and RA 7160 (The Local Government Code of 1991) for resettlement program implementation. It has three sections.

Part I captured the profile of the respondents, focusing on the type of ownership (1) original, (2) subsequent, and the number of households.

Part II assessed the program implementation from both implementers' and beneficiaries' perspectives in the areas of (1) access to basic services, (2) health and sanitation, (3) livelihood opportunities, (4) transportation, (5) education, and (6) safety and security.

Part III is the checklist of challenges encountered by the beneficiaries in the areas of (1) application and document processing, (2) relocation and transfer, (3) occupancy, and (4)

livability. The questionnaire was adopted after consent was given from the study of Villanueva-Goles et al. [10].

To ensure validity, the instrument underwent Lawshe's [12] Content Validity ratio (CVR) process, with ten experts from different sectors including the National Housing Authority, National Home Mortgage Finance Corporation, Negros Economic Development Foundation, Inc. and Silay City Housing Authority rating each item as "essential," "useful but not essential," or "not necessary"; only essential items will be retained. The rating resulted in a 0.62 rating with six items rejected.

The reliability test was done through Cronbach's Alpha to assess the consistency of the set of items in a pilot study with 30 non-participating residents who were not included in the actual respondents. The results showed a 0.9831 score, verifying that the instrument is strongly reliable.

The Resettlement Program Implementation Scale (RPIS) is organized into six main categories with specific subcategories to evaluate essential community services and facilities. Using a Likert-type scale from "Very Great Extent" (4) to "Very Poor Extent" (1), each survey item targets specific services within distinct domains, allowing respondents to share perceptions based on their community experiences.

The first category, Basic services and facilities, includes social welfare services and community infrastructure. Livelihood opportunities cover economic activities like job creation and cooperatives. Transportation assesses accessibility, focusing on system reach and effectiveness. Health and sanitation include healthcare services, medical supplies, and facilities, addressing access to resources and clean water. Education evaluates educational infrastructure, such as schools and daycare centres. Finally, safety and security examine community safety measures, including a safety management system.

The survey instrument was translated into the local dialect to ensure respondents fully comprehend the questions. The following rating scale was used to interpret the responses.

*2.4 Data Analysis.* Data analysis involved descriptive and comparative approaches and utilized appropriate statistical tools to address the survey questions. Data were analyzed using standard deviation, frequency, and percentage distribution to assess the extent of implementation of housing programs and understand the typical responses and their variability.

On the other hand, comparative analysis identified differences in implementation levels among respondents grouped according to the number of households and the type of ownership, with appropriate statistical tools selected after the normality tests.

A Kolmogorov-Smirnov test was conducted to assess the normality of the data for the implementation variable. The result indicated a significant deviation from normality, with a statistic of 0.137 ( $p=0.000$ ). The non-parametric methods will be considered for testing subsequent hypotheses. Hence, the Mann-Whitney U test was used.

### **3.0 Results and Discussion**

#### ***3.1 Extent of Implementation of the Resettlement Program***

Table 2A presents the demographic profile of the respondents. Most were beneficiaries, accounting for 91.8% ( $n=335$ ), while only 8.2% ( $n=30$ ) were implementers. A greater proportion resided in Site B with 59.7% ( $n=200$ ), compared to 40.3% ( $n=135$ ) in Site A. In terms of household size, 64.2% ( $n=215$ ) had big households ( $\geq 5$  members), while 35.8% ( $n=120$ ) had small households (1–4 members). With regard to ownership, 98.5% ( $n=330$ ) had original ownership, and only 1.5% ( $n=5$ ) were subsequent owners.

The table below shows that the majority of respondents are beneficiaries, while the number of implementers is minimal, and the number of beneficiaries in the two sites is almost the same. In terms of household size, the majority had big households, while as to ownership, the resettlement sites are predominantly occupied by original owners.

The findings indicated that a greater number of beneficiaries had big households, which means that even if the children got married and raised their own families, they remained in the same household. This situation affirmed that informal settlers have not risen out of poverty, failing to achieve the goal of the SDGs. Further, it affirms that some beneficiaries have transferred their rights to subsequent owners, which challenges the LGU.

This finding supports the study, which discovered that resettlement sites face issues related to household formation, where newly married couples continue to reside in the same house and relocation area with their parents, highlighting a relationship between household size and housing affordability [13]. Also, UN Habitat [3] outlines that affordability encompasses adequate living space among others, sufficient for more than three people to share a habitable room because more often even if the children got a family of their own, they still reside in the same household as their parents which means that provision of housing sites to vulnerable households is crucial. They reside in the same house and relocation area with their parents, highlighting a relationship between household size and housing affordability. Also, UN Habitat [3] outlines that affordability encompasses adequate living space among others, sufficient for more than three people to share a habitable room because more often even if the children got a family of their own, they still reside in the same household as their parents which means that provision of housing sites to vulnerable households is crucial [14].

**Table 2A.** Extent of Implementation of the Resettlement Program

Variable	<u>Basic Services and Facilities</u>			<u>Health and Sanitation</u>			<u>Livelihood Opportunities</u>		
	M	SD	Int	M	SD	Int	M	SD	Int
Role									
Implementer	4.00	0.00	VG	4.00	0.00	VG	3.97	0.10	Very Great
Beneficiary	3.50	0.24	VG	3.24	0.20	Gr	2.74	0.28	Great
Location									
Site A	3.63	0.22	VG	3.31	0.18	VG	2.94	0.24	Great
Site B	3.42	0.21	VG	3.19	0.20	Gr	2.61	0.22	Great
Number of Households									
Small (1-4)	3.46	0.27	VG	3.20	0.19	Gr	2.78	0.28	Great
Big ( $\geq 5$ )	3.52	0.21	VG	3.26	0.21	VG	2.72	0.28	Great
Type of Ownership									
Original	3.50	0.24	VG	3.24	0.20	Gr	2.75	0.28	Great
Subsequent	3.36	0.22	VG	3.13	0.18	Gr	2.52	0.27	Great
<b>Whole</b>	<b>3.50</b>	<b>0.24</b>	<b>VG</b>	<b>3.24</b>	<b>0.20</b>	<b>Gr</b>	<b>2.74</b>	<b>0.28</b>	<b>Great</b>

**3.1.1 Basic Services and Facilities.** In terms of basic services, the overall extent of implementation of the resettlement program was rated as very great (M=3.50, SD=0.24). Implementers rated the implementation to a very great extent (M=4.00, SD=0.00), as did beneficiaries (M=3.50, SD=0.24). Respondents from Site A (Daga) (M=3.63, SD=0.22) and Site B (Tinampaan) (M=3.42, SD=0.21) both reported a very great extent. Similarly, both small

( $M=3.46$ ,  $SD=0.27$ ) and big households ( $M=3.52$ ,  $SD=0.21$ ) perceived the implementation as very great. This perception was also consistent between original ( $M=3.50$ ,  $SD=0.24$ ) and subsequent owners ( $M=3.36$ ,  $SD=0.22$ ).

Interpretation of this finding means that basic services are very satisfactorily provided in the two resettlement sites, attested by big and small households, and also consistent among original and subsequent owners. Basic services in this study include social welfare services, community-based rehabilitation programs, information services, playgrounds, sports facilities and equipment, a public market, and power and electricity. It further means that the provisions of RA 7160 and RA 7279 have been implemented as far as basic services are concerned.

The findings emphasize that the local government unit understands that affordable and adequate housing is fundamental to promoting sustainable development, that housing projects should align with the specific needs of low-income families, and that the government should incorporate relevant and sustainable initiatives, foremost in its housing policies.

This great extent of implementation is supported by the study of the UN-Habitat [3] that effective housing policies should integrate essential services vital for fostering thriving communities and enhancing overall quality of life recommending for a holistic approach to housing designs to ensure that it serves as a foundation for social and economic inclusion, supporting physical well-being, social mobility, and resilience. However, it is negated by the study [14], which documented frequent power interruption, inadequate water supply, and poorly maintained public amenities within resettlement sites, information services, playgrounds, sports facilities and equipment, public market, and power and electricity.

**3.1.2 Health and Sanitation.** In terms of health and sanitation, the overall extent of implementation of the resettlement program was rated as very great ( $M=3.24$ ,  $SD=0.20$ ). Implementers perceived the implementation to a very great extent ( $M=4.00$ ,  $SD=0.00$ ), while beneficiaries rated it as great ( $M=3.24$ ,  $SD=0.20$ ). Respondents from Site A (Daga) reported a very great extent ( $M=3.31$ ,  $SD=0.18$ ), while those from Site B (Tinampaan) indicated a great extent ( $M=3.19$ ,  $SD=0.20$ ). Households with fewer members (1–4) perceived the implementation as great ( $M=3.20$ ,  $SD=0.19$ ), whereas those with more members ( $\geq 5$ ) perceived it as very great ( $M=3.26$ ,  $SD=0.21$ ). Both original ( $M=3.24$ ,  $SD=0.20$ ) and subsequent owners ( $M=3.13$ ,  $SD=0.18$ ) rated the implementation to a great extent.

This finding of a very great extent of implementation, as far as health and sanitation are concerned, means that all indicators of sustainability on health and sanitation are implemented. These are primary healthcare services such as maternal and child health care, treatment of communicable diseases, treatment of non-communicable diseases, immunizations, and health education, which include access to secondary and tertiary health services, medicines and medical supplies, health centers and clinics, access to potable water, and access to recreation facilities.

The finding communicates that the social and physical dimensions of sustainability are considerations for planners and government officials aiming to create sustainable environments in suburban settings such as component cities. The preparation of local shelter plans for local government units is one piece of evidence, as it is a framework for a settlement policy for LGUs. A study [15] affirmed this finding that the concept of sustainability is linked to the principles of smart development that foster an active environment. It is likewise aligned with the Philippine Development Plan 2023-2028, which integrated public health goals into the design of human settlements, and the findings [16] highlighted the importance of local shelter plans for cities and municipalities.

**Table 3B.** Extent of Implementation of the Resettlement Program

Variable	<u>Transportation</u>			<u>Education</u>			<u>Safety and Security</u>		
	M	SD	Int	M	SD	Int	M	SD	Int
Role									
Implementer	3.97	0.08	VG	3.96	0.12	VG	3.58	0.06	Very Great
Beneficiary	3.33	0.32	VG	3.06	0.30	Gr	2.62	0.30	Great
Location									
Site A	3.61	0.21	VG	3.35	0.15	VG	2.86	0.25	Great
Site B	3.14	0.21	Gr	2.86	0.21	Gr	2.46	0.21	Great
Number of Households									
Small (1-4)	3.36	0.32	VG	3.07	0.29	Gr	2.77	0.30	Great
Big ( $\geq 5$ )	3.31	0.31	VG	3.05	0.30	Gr	2.54	0.26	Great
Type of Ownership									
Original	3.33	0.32	VG	3.06	0.30	Gr	2.62	0.30	Great
Subsequent	3.32	0.11	VG	3.17	0.29	Gr	2.60	0.32	Great
<b>Whole</b>	<b>3.33</b>	<b>0.32</b>	<b>VG</b>	<b>3.06</b>	<b>0.30</b>	Gr	<b>2.62</b>	<b>0.30</b>	Great

**3.1.3 Transportation.** In terms of transportation, the overall extent of implementation of the resettlement program was rated as very great (M=3.33, SD=0.32). Implementers perceived a very great extent of implementation (M=3.97, SD=0.08), while beneficiaries shared the same interpretation (M=3.33, SD=0.32). Respondents from Site A (Daga) reported a higher rating (M=3.61, SD=0.21) compared to those from Site B (Tinampaan) (M=3.14, SD=0.21), though both indicated very great and great levels respectively. Households with fewer members (1-4) and those with more members ( $\geq 5$ ) both rated transportation services as very great (M=3.36, SD=0.32; M=3.31, SD=0.31, respectively). Likewise, both original owners (M=3.33, SD=0.32) and subsequent owners (M=3.32, SD=0.11) perceived transportation support to a very great extent.

Findings of a very great extent of implementation for access to transportation mean that all indicators of transportation sustainability as provided under RA 7160 and RA 7279 are implemented, such as access to primary roads and city roads, access to jeepneys and tricycles, the availability of road signs, and the availability of other transportation facilities.

The finding communicates that local government units are aware of the needs of their constituents and have shown their concern by providing the needed transportation network, as revealed in this study. It demonstrates that LGUs are committed to helping their constituents attain a better quality of life. A study [16] affirmed this finding, identifying transportation networks as the most critical factor influencing residents' satisfaction. Also, the findings [17] found that transportation is paramount to families living in resettlement sites [18] found that informal settlers have greater demand for transportation networks to reduce transportation costs to their previous livelihoods as confirmed by Villanueva-Goles et al. [10] that absence of transportation is a strain to financial resources of the informal settler families.

**3.1.4 Livelihood opportunities.** The overall extent of implementation of the resettlement program was rated as great (M=2.74, SD=0.28). Implementers perceived the implementation to a very great extent (M=3.97, SD=0.10), whereas beneficiaries rated it as great (M=2.74, SD=0.28). Respondents from Site A (Daga) reported a higher perception (M=2.94, SD=0.24) than those from Site B (Tinampaan) (M=2.61, SD=0.22), though both fell

within the great range. Households with fewer members (1–4) rated the implementation as great ( $M=2.78$ ,  $SD=0.28$ ), as did those with more members ( $\geq 5$ ) ( $M=2.72$ ,  $SD=0.28$ ). Similarly, both original owners ( $M=2.75$ ,  $SD=0.28$ ) and subsequent owners ( $M=2.52$ ,  $SD=0.27$ ) viewed the provision of livelihood opportunities as great.

Great implementation of livelihood opportunities means that some of the following livelihood opportunities are available in the resettlement sites: livestock and poultry, vegetable seed farms, medicinal plant gardens, nurseries and demonstration farms, cooperatives, new employment opportunities, and available livelihood loans. It further means that the need for livelihood is addressed by the LGU.

The findings imply that economic factors related to livelihood significantly affect the relocation process because economic satisfaction is influenced by the availability of livelihood opportunities in the relocation sites and the distance of the resettlement site from the original livelihood locations. The finding demonstrates that local policymakers should develop policies that maintain economic opportunities and social ties of the informal settler families.

This finding affirmed the study of Arcilla [6] that to increase sustainability, housing programs must incorporate interventions for livelihood assistance and income-based subsidies, further suggesting that LGUs should integrate income restoration mechanisms, poverty reduction programs, and employment generation initiatives in their resettlement strategies. It also aligned with the study [19] that when resettlement sites lack provision for livelihood restoration, beneficiaries struggle to cope with negative consequences, thus recommending innovative housing transformation and economic motivations such as home-based economic activities in the resettlement sites, such as operating retail shops, sewing, and creating income-generating spaces on their homes.

**3.1.5 Education.** The overall extent of implementation of the resettlement program was rated as great ( $M=3.06$ ,  $SD=0.30$ ). Implementers reported a very great extent ( $M=3.96$ ,  $SD=0.11$ ), while beneficiaries rated it as great ( $M=3.06$ ,  $SD=0.30$ ). Respondents from Site A (Daga) perceived a very great level ( $M=3.35$ ,  $SD=0.15$ ), whereas those from Site B (Tinampaan) rated it as great ( $M=2.86$ ,  $SD=0.21$ ). Households with small ( $M=3.07$ ,  $SD=0.29$ ) and large ( $M=3.05$ ,  $SD=0.30$ ) numbers of members both reported a great extent of implementation. Similarly, both original ( $M=3.06$ ,  $SD=0.30$ ) and subsequent ( $M=3.17$ ,  $SD=0.29$ ) owners assessed the educational support provided through the program as great.

The great extent of education implementation in resettlement sites means that not all the provisions of the laws were implemented. The presence of some of the following indicators, such as elementary and high school, day care centre, public school library, and access to communication facilities, some of which may not have been implemented in the relocation site.

This finding implies that the government failed to understand the role of education in the lives of informal settlers; that absence of educational facilities in the resettlement sites is one of the greatest blunders of the government as education is the pathway to employment thereby attaining the goal of getting out of poverty and allowing the other members of the family to attain their own goals thus helping the informal settler families create a favorable and healthy living standards where later on very few households still lives in resettlement sites.

The study [20] that sustainability in housing should include accessibility to educational facilities; where Nunag added that training courses and vocational programs focus on skills development such as pottery making, soap production, crafts such as bags, baskets, and decorative items complement the availability of educational institutions in the resettlement sites ensuring that elementary and high school students have access to livelihood training and formal

education. Access to adequate housing remains a critical issue, further complicating efforts to achieve sustainable development [4]. According to Suhartini and Jones [5], informal settlements illustrate urban poverty and social disenfranchisement. Informal settlers faced substantial barriers to essential services.

**3.1.6 Safety and Security.** In terms of safety and security, the overall implementation of the resettlement program was rated as great (M=2.62, SD=0.30). Implementers perceived the implementation to be very great (M=3.58, SD=0.06), whereas beneficiaries rated it great (M=2.62, SD=0.30). Respondents from Site A (Daga) reported a great extent (M=2.86, SD=0.25), while those from Site B (Tinampaan) also rated it as great (M=2.46, SD=0.21). Both small (M=2.77, SD=0.30) and big households (M=2.54, SD=0.26) assessed the safety and security services as great. Similarly, original (M=2.62, SD=0.30) and subsequent (M=2.60, SD=0.32) owners perceived the extent of implementation to be great.

Implementation in terms of safety and security was rated great, which indicates that not all provisions of RA7160 and RA 7279 were implemented by the LGU. The indicators for safety and security are the availability of police outposts, fire substations, a solid waste disposal system, an environmental system, a flood control system, drainage and sewerage, and the presence of disaster rescue teams.

This finding communicates that the LGU overlooked some very critical indicators for the sustainability of resettlement sites. Thus, the local government unit needs to employ urban planners and engage the services of the private sector, especially in the construction of the units, to make them disaster-resilient.

Safety and security were highlighted in the study of Villanueva-Goles et al. [10], confirming the outcomes of this study. Additionally, Cao et al. [17] affirmed that air quality and energy production capacity are essential to disaster prevention, which is necessary in resettlement sites.

**Table 3C.** Extent of Implementation of the Resettlement Program

Variable	Implementation		Int
	M	SD	
Role			
Implementer	3.92	0.03	Very Great
Beneficiary	3.09	0.19	Great
Location			
Site A	3.29	0.09	Very Great
Site B	2.95	0.09	Great
Number of Households			
Small (1-4)	3.11	0.19	Great
Big (≥5)	3.08	0.18	Great
Type of Ownership			
Original	3.09	0.19	Great
Subsequent	3.03	0.15	Great
<b>Whole</b>	<b>3.09</b>	<b>0.19</b>	<b>Great</b>

### 3.2 Difference in the Extent of Implementation of the Resettlement Program

A Mann-Whitney U test was conducted to examine whether there were significant differences in the extent of implementation of the resettlement program based on the number of households and type of ownership.

The results showed no significant difference in implementation based on the number of households, [U=11554.500, p=0.113], which means that whether the number of family members is big or small, their perception of safety and security provided in the housing sites is the same. Although it was already rated great, some safety and security measures were installed. Similarly, there was no significant difference based on the type of ownership, [U=638.500, p=0.385], which suggests that whether the owners are original or subsequent, these groups both perceived that safety and security implementation has been partially implemented already. There are no significant differences in terms of the number of households or the type of ownership. However, those beneficiaries with a smaller number of households have a very great rate on the extent of implementation. In terms of type ownership, the majority of which are original owners, and a very minimal subsequent owners, both have no significant difference overall. However, challenges were encountered in the implementation.

These findings suggest that neither the number of households nor the type of ownership significantly influenced the extent to which the resettlement program was implemented.

**Table 4.** *Difference in the Extent of Implementation of the Resettlement Program*

Variable	U	z	P
Number of Households	11554.500	-1.586	0.113
Type of Ownership	638.500	-0.869	0.385

Note: \*the difference is significant when  $p \leq 0.05$

### 4.0 Challenges encountered by the Resettlement Program Beneficiaries

Table 3 presents the challenges encountered by beneficiaries of the Resettlement Housing Project, categorized into four key areas: application and document processing, relocation and transfer, occupancy, and livability. In general, the top challenges encountered by the beneficiaries are the long waiting time for approval or disapproval (96.7%), under relocation transfer, all identified items were unanimously cited (100%), and the lack of or the absence of fire safety facilities (100%)

In the area of 4.1 *application and document processing*, challenges in document processing covers unclear criteria for selection of beneficiaries; too many documentary requirements for application, long procedure in processing of application, it is costly, long waiting hours for approval/disapproval, and there is no agreement between the LGU and the beneficiaries on their roles, duties, and responsibilities where the most frequently reported challenge was the *long waiting time for approval or disapproval*, cited by more respondents. At the same time, the least reported challenge is too many requirements and costly.

This indicates a significant delay in processing, which may contribute to dissatisfaction and uncertainty among beneficiaries. Conversely, the least reported challenges were *too many documentary requirements* and *costly processing*, both suggesting that the application process, while delayed, was not perceived as burdensome in terms of paperwork or cost. Both identified challenges demonstrate that the policy makers at the LGU level failed to address the root cause of the problems of beneficiaries, and that they should propose solutions that are politically viable for the majority.

These findings are elucidated in the study [21], citing that this crisis affects low-and moderate-income households, which is further complicated by strict land use regulations. Also, there are obstacles due to deficiencies in the contracting and tendering process and an insufficient legal framework adopted [22]. Also cited is the program's awkward structure and a recommendation for collaboration with private sector stakeholders [23].

In the area of *4.2 relocation and transfer*, 100% of the respondents unanimously cited all identified items as major challenges. These include a lack of guidance and assistance from responsible officers, absence of information about the relocation site, inadequate support during and after the transfer, loss of income without compensation, absence of community leaders to welcome beneficiaries, and lack of activities to promote comfort and adaptation.

The uniformity of responses indicates widespread and severe shortcomings in the relocation process, with no single aspect perceived as less problematic than the others. The finding demonstrates a housing crisis in the LGU, which can lead to dissatisfaction and indicate a lack of sustainability in the housing program. It further indicates the adverse impact beyond physical relocation and disruption of livelihood and community support.

Nikuze et al. [8] affirmed that the change in livelihood following relocation is a critical concern that demands urgent attention from authorities since it is a common disadvantage faced by informal settler families. Also, the research by Foishal et al. discovered that when resettlement occurs without provisions made by authorities, beneficiaries struggle to cope with the negative consequences because assistance is essential for an equitable and sustainable resettlement program.

In terms of *4.3 occupancy*, the most significant challenge was the *absence of fire safety facilities*, such as fire extinguishers and nearby fire hydrants, which were reported by all respondents (100.0%). In contrast, the least cited challenges were *defective doors* and *defective walls*, both reported by respondents. While still notable, these issues appear less widespread compared to other structural deficiencies, such as *defective roofs* and *floors*, which were each reported by the participants.

This finding raises serious safety concerns within the housing units. It implies that resettlement sites are not safe, that staying in the relocation cannot help alleviate poverty and impoverishment, and that the quality of beneficiaries is compromised. It also suggests that it's much better to stay in previously occupied areas because there is less danger than staying in a site where one has to pay and yet suffer consequences due to the non-provision of the bare necessities for a housing program.

Habitat for Humanity [3] affirmed the findings that provision of affordable and adequate housing is fundamental to promoting sustainability by providing essentials for aligning housing projects with the specific needs of low-income families; of Arcilla [6] that sustainability in social housing transcends mere affordability but should provide community resilience and social equity. The study [24] strengthens this finding that sustainable housing strategies involve providing dwellings suitable for a healthy living environment, resilient against natural and human defects.

Lastly, in the area of *4.4 livability*, the most critical issue was the *lack of maintenance of community facilities*—including roads, drainage systems, and recreational spaces—reported by all respondents. On the other hand, the least reported challenge was *poor power supply or lighting*, indicating that electricity was generally sufficient and not a primary concern among the surveyed beneficiaries.

This underscores significant neglect in sustaining the livability and environmental quality of the relocation site. This finding implies that resettlement sites in LGUs failed to

provide necessary facilities and utilities for the beneficiaries. That necessities for maintaining livelihoods and quality of life are wanting; that beneficiaries in the resettlement sites are deprived of the necessary facilities for their use and enjoyment.

The findings find support [25] [26], who all claimed that resettlement results in losing vital livelihood resources, leading to destitution and suffering among displaced households. The authors recommended that effective housing policies integrate essential services like water, electricity, healthcare, education, and transportation networks. Other scholars such as Nunag, Pormon et al. [27], Cao et al. [17], Gou et al. [19], Tarmidi et al. [29], and Piggot-McKellar et al. [1], who all contributed to the enumeration of challenges that are defective in the resettlement sites, are also mentioned in this study.

**Table 3. Challenges Encountered by Beneficiaries of the Resettlement Housing Project**

<b>Challenges</b>	<b>F</b>	<b>%</b>
<b>Application and Document Processing</b>		
Unclear criteria for beneficiaries' selection	290	86.6
Too many documentary requirements for the application	0	0.0
Long procedure in the processing of the application	8	2.4
Costly processing (fees, charges, and incidental expenses)	0	0.0
Long waiting time for approval/disapproval	324	96.7
No document that will form an agreement between LGU and beneficiary stating their respective roles, duties, and responsibilities as the implementor and qualified beneficiaries.	279	83.3
<b>Relocation and Transfer</b>		
No guidance and assistance from the office/officer in charge of YPHP	335	100.0
No information about the site and the Yolanda project prior to relocation	335	100.0
No support during relocation, such as transportation/hauling	335	100.0
No support after relocation, such as follow-up and monitoring activities	335	100.0
No provision for the loss of income during the time of transfer	335	100.0
No presence of barangay/community leader/s to welcome beneficiaries upon arrival	335	100.0
No activities to ensure the beneficiaries' comfort and to make them feel at home at the relocation site	335	100.0
<b>Occupancy</b>		
Housing unit too small for the family/household	281	83.9
No occupancy permit or document to attest the status of occupancy (permanent or temporary)	326	97.3
Windows are defective	30	91.9
Doors are not adequate for use as a passageway	8	
Roofs are defective	122	36.4
Walls are defective	314	93.7
	122	36.4

Floors are defective	314	93.7
Lacks or no fire safety facilities, such as at least one (1) unit fire extinguisher in the house, a fire hydrant within a 25-meter radius from the housing unit, etc.		100.0
<b>Livability</b>		
Lack of livelihood opportunities	210	62.7
Difficulty in transportation	8	2.4
Inadequate communication facilities (no or bad phone, internet signal, etc.)	10	3.0
Poor quality and/or low supply of water	202	60.3
Poor power supply/lighting facilities within the area	4	1.2
No security guards (civil security/tanods)	135	40.3
No maintenance of facilities (roads, drainage, open spaces, parks, playgrounds, or leisure areas)	335	100.0

The findings of the study reveal that the overall extent of implementation of the resettlement program was rated to a very great extent by implementers and to a great extent by beneficiaries. While most indicators aligned with the sustainability provisions of RA 7160 and RA 7279, some gaps remain, particularly from the perspective of the beneficiaries. Statistical analysis indicated no significant differences in implementation when grouped by number of households or type of ownership.

Specifically, in the areas of access to basic services and facilities, health and sanitation, and transportation, the beneficiaries rated the extent of implementation as very great. However, they have a poor rating on the extent of implementation in some specific areas of livelihood opportunities due to a lack of financial assistance, loans, and subsidies. Also, in the area of education, there is no physical access to learning hubs. Lastly, in the area of safety and security, closed-circuit television (CCTV) is not available at the housing site.

Despite the generally favorable implementation ratings, several challenges were identified in key areas of application and document processing. Beneficiaries find it not challenging, although a long waiting time for approval or disapproval is frequently reported as a challenge. The respondents unanimously cited all identified items as major challenges in the area of relocation; no transportation and hauling were provided, and there was a lack of financial assistance during transfer. Likewise, the absence of fire facilities such as fire hydrants and fire extinguishers was a major challenge to occupancy. It is followed by inadequate and no maintenance of community facilities like the drainage, sewerage, and disposal. To address these implementation challenges, it is essential to consider the impact of government structures and processes at both national and local levels, meaning fostering collaboration between sectors is crucial. These issues highlight areas where local government units must improve implementation processes and reinforce sustainability measures.

The study supports the Sustainable Development Theory, emphasizing that effective implementation of resettlement programs contributes significantly to long-term sustainability by balancing environmental, social, and economic dimensions. The results underscore the importance of responsive housing policies, adequate basic services, and livelihood opportunities in resettlement areas to ensure beneficiaries can rebuild their lives with dignity and security.

The findings serve as a foundation for a proposed action plan to address identified gaps and enhance the resettlement program's overall implementation to align with national development goals and international sustainability standards. In fact, the World Health

Organization suggested in 2020 that local governments should develop interventions tailored to local conditions to promote healthy housing programs, establish standards for monitoring, and encourage multi-sectoral advocacy and financing. Findings suggest the need for enhancement of implementation, which is contained in the action plan.

### **5.0 Conclusion**

The implementation of resettlement programs led to achievement of sustainability and thereby validates the Sustainable Development Theory, which advocates a holistic approach to development, that is, balancing social, economic, and environmental needs to meet the essential needs of the present that do not negatively impact the ability of the future generations to thrive by ensuring a healthy environment, promoting social equity, and fostering sustainable economic growth.

The provision of affordable and adequate housing in the local governments is fundamental to promoting sustainable development in the country, to contribute to the Sustainable Development Goals (SDGs) of the United Nations, since the country has enacted laws such as RA 7279 or the Urban Development and Housing Act (UDHA). Yet, there is still a high rate of displacement, particularly in cities, due to migration.

### **6.0 Limitation of the Findings**

The study has a few limitations; it was conducted in one component city only. Hence, the results cannot apply to all local government units. The respondents were chosen based on stratified random sampling; thus, the views and concerns of all beneficiaries were not taken into consideration. While the reliability of this study has been secured by providing detailed documentation on the entire process of the study, from the search to the analysis and categorization of data, the replicability of the results is not as compelling as for systematic literature reviews, where the process is entirely falsifiable. The researcher utilized an old checklist permitted from a similar study. Thus, it might not reflect a current standard or accurately capture the necessary data or information relevant aspects being assessed for the subject being studied.

### **7.0 Practical Value of the Findings**

Enhanced implementation through interventions that anchor more structured strategies and urge local government units to be percipient will redound to the benefit of beneficiaries and contribute to their welfare and well-being, thereby attaining the objective of sustainability of resettlement programs. Results will be beneficial to the concerned local government unit, to the DILG in their monitoring functions, to the National Home Mortgage Finance Corporation (NHMFC), to PAG-IBIG as the financing arm of the government, and to the officers and staff of the Housing Authority of the local government unit concerned. It will provide them with ideas on the views of the informal settlers and can guide them in implementation.

This study serves as a challenge to architects, builders and urban planners to assist local government units in joint effort to humanize socialized housing in a contemplation towards encouraging participatory management in the relocation sites, respecting the rights of each family settlers as the basic structure of society by considering the socio-cultural and economic factors which go into their lifestyle. Whereby, implementing indicators of sustainability and fostering growth towards a maintainable urbanization thereby contributing to

the attainment of the sustainable development goals. It also encourages local governments to employ urban planners.

### **8.0 Direction for Future Research**

The authors wish to encourage other researchers to conduct studies on the following future subjects as trends of research: integration of quality and management systems in implementation; long-term impacts of housing interventions, housing satisfaction, sustainable post-disaster resettlement housing, and compliance with standards set by the National Building Code. Further, to encourage the conduct of qualitative studies to capture the actual discussions from the beneficiaries on what they have undergone to avail of housing programs.

### **9.0 Declaration of Conflict of Interest**

The authors hereby certify that this study do not have any personal conflicts of interest. No affiliation or involvement in an entity with a financial interest discussed in the subject matter discussed in the manuscript. All the data-gathering course of action were conducted with the participant's consent.

### **10.0 References**

- [1]PIGGOT-MCKELLAR, A. E., PEARSON, J., MCNAMARA, K. E., & NUNN, P. D. (2020). A livelihood analysis of resettlement outcomes: Lessons for climate-induced relocations. *Ambio*, 49, 1474-1489.
- [2] UNITED NATIONS (2023). What is sustainable development? *Webtv.un.org*. <https://www.un.org/sustainabledevelopment/blog/2023/08/what-is-sustainable-development/>
- [3] UNITED NATIONS – HABITAT. (2020). *The New Urban Agenda Illustrated Handbook* [Review of *The New Urban Agenda Illustrated Handbook*]. <https://unhabitat.org/the-new-urban-agenda-illustrated>
- [4] ELDER, M., & ELLIS, G. (2023). ASEAN countries' environmental policies for the Sustainable Development Goals (SDGs). *Environment, Development and Sustainability*, 25(10), 10975-10993.
- [5] SUHARTINI, N., & JONES, P. (2023). Informality and Responding to the Challenges of Informal Settlements. *The Urban Book Series*, 17–36. [https://doi.org/10.1007/978-3-031-22239-9\\_2](https://doi.org/10.1007/978-3-031-22239-9_2)
- [6] ARCILLA, C. A. C. (2023). Ensuring the Affordability of Socialized Housing: Toward Livable and Sustainable Homes for the Filipino Poor. In *A Better Metro Manila? Towards Responsible Local Governance, Decentralization and Equitable Development* (pp. 259-289). Singapore: Springer Nature Singapore.
- [7] WORLD BANK GROUP. (2019). Technical Deep Dive: Affordable Housing. <https://www.worldbank.org/en/events/2019/06/10/tdd-affordable-housing>
- [8] NIKUZE, A., SLIUZAS, R., FLACKE, J., & VAN MAARSEVEEN, M. (2019). Livelihood impacts of displacement and resettlement on informal households-A case study from Kigali, Rwanda. *Habitat International*, 86, 38-47.
- [9] BALLESTEROS, M., RAMOS, T. P., & ANCHETA, J. A. (2022). *Measuring Housing Affordability in the Philippines* (No. 2022-22). PIDS Discussion Paper Series.
- [10] VILLAUEVA, A., ALO, E. B., & BUAL, J. M. (2024). Satisfaction and challenges of beneficiaries of the Yolanda Permanent Housing Program in a component city of the Philippines. *Technium Soc. Sci. J.*, 54, 292.

- [11] GOODRICK, D. (2014). *Comparative case studies: Methodological briefs-Impact evaluation No. 9* (No. innpub754). <https://ideas.repec.org/p/ucf/metbri/innpub754.html>
- [12] LAWSHE, C. H. (1975). A quantitative approach to content validity. *Personnel Psychology*, 28(4), 563–575. <https://doi.org/10.1111/j.1744-6570.1975.tb01393.x>
- [13] ALHAJIRI, M. F. (2022). Housing challenges and programs to enhance access to affordable housing in the Kingdom of Saudi Arabia. *Ain Shams Engineering Journal*, 13(6), 101798.
- [14] NUNAG, G. (2023). Life In Resettlement Communities: The Case of Tarlac City. *International Journal of Creative Research Thoughts*. <https://ijcrt.org/papers/IJCRT2308701.pdf>
- [15] ABASS, Z. I., & TUCKER, R. (2020). Measuring Accessibility in low density Housing: The Role of neighbourhood design. In *IOP Conference Series: Materials Science and Engineering* (Vol. 737, No. 1, p. 012182). IOP Publishing.
- [16] COLLADO, Z.C. and OROZCO, N.M.-i.G. (2020). From displacement to resettlement: how current policies shape eviction narratives among urban poor in the Philippines. *Housing, Care and Support*. Vol. 23 No. 2, pp. 49-63. <https://doi.org/10.1108/HCS-01-2019-0001>
- [17] CAO, J., WU, X., & LU. Exploring the importance of transportation infrastructure and accessibility to satisfaction with urban and suburban neighborhoods: An application of gradient boosting decision trees. *Transport Findings*. <https://doi.org/10.32866/7209>
- [18] ZHAO, M., & WANG, Y. (2018). Measuring segregation between rural migrants and residents in urban China: An integrated spatio-social network analysis of Kecun in Guangzhou. *Environment and Planning B: Urban Analytics and City Science*, 45(3), 417–433.
- [19] GOU, Z., XIE, X., LU, Y., & KHOSHBAKHT, M. (2018). Quality of Life (QoL) survey in Hong Kong: Understanding the importance of housing environment and needs of residents from different housing sectors. *International Journal of Environmental Research and Public Health*, 15(2), 219.
- [20] FOISHAL, I. H., VAN EERD, M., AL-TANBIN, S. H., & AL NOMAN, A. (2023). Restoring and Improving Livelihoods in Resettlement Sites Through Housing Transformation: Evidence from Gopalganj, Bangladesh. *American Journal of Civil Engineering and Architecture*, 11(3), 94-101.
- [21] TARMIDI, Z., MAINUM, N. H. A., HASSAN, N., NASIR, A. N. M., SIDEK, A., & CHE'YA, N. N. (2022, July). Assessing the Suitability of Affordable Housing Based on Demand Criteria. In *IOP Conference Series: Earth and Environmental Science* (Vol. 1064, No. 1, p. 012045). IOP Publishing.
- [22] HILBER, C., & SCHONI, O. (2022). *Housing policy and affordable housing*. Centre for Economic Performance, London School of Economics and Political Science.
- [23] OFORI, P. (2024). Mortgage Financing and Affordable Housing Nexus: Evidence from Developing Countries. *International Journal of Real Estate Studies*, 18(1), 26–44.
- [24] NOVIKOVA, G. Y., BELIAEV, M. K., & KARPUSHOVA, S. E. (2020). Analysis of the effectiveness of the implementation of regional housing programs in the context of globalization. In *SHS Web of Conferences* (Vol. 74, p. 06022). EDP Sciences. <https://doi.org/10.1051/shsconf/20207406022>
- [25] ALIU, I. R. (2022, August). Achieving Sustainable Housing in Nigeria: A Rethink of the Strategies and Constraints. In *Applied Research Conference in Africa* (pp. 1164-1179). Cham: Springer International Publishing.

- [26] MATHUR, V., & SIKKA, G. (2021). Rethinking Resettlement as a Development Opportunity: Need for Good Practices. *Resource Management, Sustainable Development, and Governance: Indian and International Perspectives*, 135-142.
- [27] FRANCO, I. B., CANO, N., YEISON, YESID DIAZ SORACA, IGNACIO, R., MARTINEZ L. G., & LAMONT, S. (2022). Sustainable Communities in Resource Regions: Exploring the Case of the Mining Industry Resettlement in Colombia. *Science for Sustainable Societies*, 151–160. [https://doi.org/10.1007/978-981-16-6421-2\\_10](https://doi.org/10.1007/978-981-16-6421-2_10)
- [28] PORMON, M. M. M., YEE, D. K. P., & GERONA, C. K. O. (2023). Household condition and satisfaction towards post-disaster resettlement: The typhoon Haiyan resettlement areas in Tacloban City. *International Journal of Disaster Risk Reduction*, 91, 103681. <https://doi.org/10.1016/j.ijdrr.2023.103681>