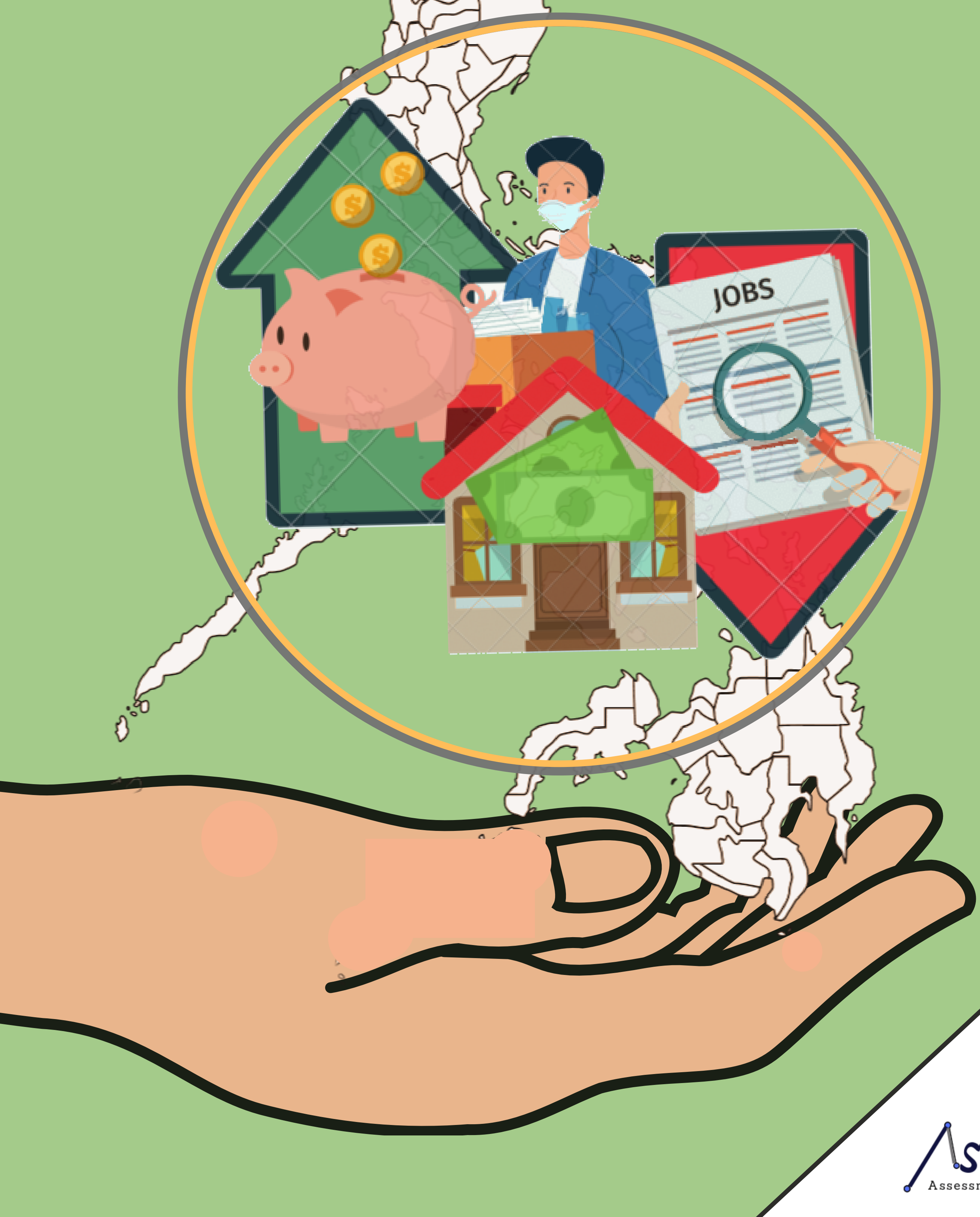
Loaning Under a Budget

Examining the Financial Capacity of the CMP Member-Beneficiaries to Pay for the Monthly Amortizations Amid the COVID-19 Pandemic



Assessment Monitoring Department

In March 2020, the Settlements Management Group (SMG) was established to sustain the material, economic, and social benefits that can be derived bythe communities from living together in a new housing project. It focuses on three aspects, namely: *Property Management*, which involves the management, maintenance, and repair of housing unit, common areas, and community facilities; *Organizational Development,* which concerns with the development and strengthening of the capacity and governance as a whole; and *Community Developmen,* which focuses on the general welfare of the community members through unimpeded access to basic services and resources, and active engagement wtih the community organizations and social institutions. All of these are intended to help ensure the members' safety and security, their rersiliene to climate change, as well as to aid in the protection of the environment.

Generally, the SMG seeks to improve the overall well-being of the members, especially of the most vulneralbe sectors, which include women, children, senior citizens, persons with disabilities (PWDs), and members of the LGBTQIA+ community.

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ABSTRACT

Despite being hailed as one of the most effective and responsive government housing programs in the Philippines, the Community Mortgage Program (CMP) of the Social Housing Finance Corporation (SHFC) is still facing issues on affordability especially to its core target demographic. With this ongoing issue at hand exacerbated by the economic repercussions brought about by the COVID-19 pandemic, this study aims to have a closer look at the current financial conditions of the member-beneficiaries all over the country to determine and examine the effects of the pandemic on the livelihood and their propensity to pay for their housing monthly amortizations.

Using a multi-stage sampling technique to ensure proper representation across all selected CMP hubs, a total of 384 member-beneficiaries from the qualified community associations were randomly selected to form the set of respondents for this study. Descriptive analysis was employed to describe the distribution, proportion, and frequencies of households regarding certain economic conditions such as labor movement, household income, and household spending pattern.

The results of the study showed that there was a substantial decrease in employment during the pandemic, which, in turn, had an effect on the total household earnings. While the unemployed individuals began to gradually secure jobs again as the lockdown restrictions imposed were eased, the level of recovery in terms of household income was much slower, as many workers had to resort to taking up jobs that pays considerably low just to make ends meet. There was also an exhibited downward trend among households who managed to save money, while, in contrast, households began to receive more remittances during the pandemic. Households also prioritze essential goods such as food, water, and electricity more than other items for the budget allocation. Spearman Correlation analysis showed that different hubs showed significant relationship with different economic factors (i.e., employment, income change, spending pattern). Ultimately, however, no singular economic variable was found to explain the rate of payment in all hubs because it differs based onthe local context of the communities.

It is recommended for SHFC to provide micro-level interventions to each community because different external factors outside of the immediate effects of the pandemic may also play a role on the propensity of the members to pay for the monthly amortization. The correlation results of this study may also be used s a reference for crafting more targeted interventions in each hub based on the communities' resulting significant relationship with monthly amortization payment. Further, it is recommended to improve the accessibility of the existing oline payment channels to the target beneficiaries through wider information dissemination and system upgrading.

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ACRONYMS

AMVA-MC – Alyansa ng Mamamayan ng Valenzuela Multipurpose Cooperative

CA – Community Association

CDO – Cagayan de Oro

CMP – Community Mortgage Program

COCA – Certificate of Completion and Acceptance

DILG – Department of Interior and Local Government

HDH – High-Density Housing

HDH-LAD – High-Density Housing-Loan Administration Division

ISFs – Informal settler families

LGU – Local Government Unit

LPA – Lease-Purchase Agreement

MBs – Member-beneficiaries

MBLA – Masterlist of Beneficiaries and Loan Apportionment

NHA – National Housing Authority

NCR – National Capital Region

SHFC – Social Housing Finance Corporation

DEFINITION OF TERMS

Building construction	Refers to the process of building or assembling of infrastructure, primarily those used to provide shelter
Community Association	An organization composed of officers and member-beneficiaries registered with HLURB for loans availed under the Community Mortgage Program (CMP) of the SHFC
Community Mortgage Program	A financing scheme wherein informal settlers, slum dwellers, or community members of blighted areas are assisted in purchasing the land they occupy or the land they will be relocated to through the community association (CA)
National Housing Authority	Another socialized housing program by the SHFC to ensure safe and flood resilient permanent housing solutions for the ISFs living in the danger zones of NCR; it is designed to address the decreasing availability of parcels of land in the key cities and their increasing prices by constructing multi-story housing units
Lease Purchase Agreement	Lease contract under which a portion of the lease payment or rent is applied to the purchase price of the leased asset or property
Member-beneficiaries	Refer to members of a community association of CMP projects who have individual shares in the community loan
National Housing Authority	One of the key shelter agencies engaged in low-cost housing production and development, settlement, and sourcing of home financing
Social Housing Finance Corporation	One of the key shelter agencies created through Executive Order No. 272 (E.O. 272) mandated to propagate housing programs for formal and informal settlers in low-income groups
Substitute	Refer to the assignees or transferees who have assumed the original loan of the member-beneficiary as supported by legal documents duly approved by SHFC
Site Development	Refers to the improvement of the project site on the establishment of roads, construction of drainage and sewerage system, and installation of water and electrical system

INTRODUCTION

The Social Housing Finance Corporation (SHFC) is one of the key shelter agencies of the Department of Human Settlements and Urban Development (DHSUD) mandated to provide affordable quality housing to thousands of informal settler families (ISF) in the Philippines. In order to fulfill its mandate, the Community Mortgage Program (CMP) was launched as a financing scheme “to assist residents of blighted or depressed areas to own the lots they occupy, or where they choose to relocate to, and eventually improve their neighborhood and homes to the extent of their affordability" (RA 7279 Section 31 Article VIII). Under the CMP, ISFs are enabled to avail loans for lot acquisition and housing development in order to secure lands for their own use that are relatively safer compared to their previous settlements.

Since its inception, the CMP has gone on to be considered as the most innovative and responsive government housing program in the Philippines. It is the most-availed program by ISFs and the most receptive to the housing needs of the low-income group in the country (Porio et al., 2004) and it shows higher collection efficiency rates (CER) compared to other government programs that extend loans for socialized housing (Ballesteros, Magtibay, & Ramos, 2017). As of 2020, about 16,737 ISFs across the country have been assisted by the CMP housing developments.

Despite the relative success of the CMP, there are still some issues that hinder it from becoming fully efficient, one of which is its affordability. Though it may be deemed by many as a reasonably priced scheme, for those belonging to the lowest income deciles, the repayment terms may still pose a serious constraint on their current financial capacities. This burden is exacerbated if the loan amount is not sufficient to cover the selling price of the land and the beneficiaries are required to shell out substantial cash equity for the land purchase to take place (National Economic Development Authority [NEDA], 2018). The issue of affordability is further magnified in the HDH program which has loans that include the full cost of housing (i.e., land, site development, and housing construction) and are thus more expensive than the CMP. This current financial strain may inadvertently exclude the poor households from participating, which raises concerns about the program’s actual effectiveness.

As the collection efficiency rate (CER) is currently being used as the main indicator of efficiency in the CMP, it is crucial for the program to achieve a high cumulative CER because it is one of the main avenues of SHFC to offset its incurred non-recoverable costs which have been steadily increasing through the years. Although Ballesteros et al. (2017) remarked that a CER of 85% is estimated as the level of recovery needed for SHFC to sustain its operations, past figures shown by Cacnio (2009) revealed that from 1994 to 2007, the CER has not reached at least 85%. In fact, going beyond 2007 up until 2019 would show that it only achieved an 85% CER in one year (2011) only. This poses concerns over the financial sustainability of the program in the years to come.

INTRODUCTION

In 2020, the COVID-19 pandemic has compelled the national government to impose various lockdowns and other social restrictions throughout the country. This action has resulted in several economic repercussions, particularly to the households belonging to the lowest income groups. There has been a significant employment shock and earnings loss among many families which only compounded the financial difficulties that were already experienced by many members before the pandemic. According to a World Bank study (2020), the employment ratio of the low-income households declined by almost 45% and the labor earnings fell by half from PHP 2,000 to PHP 1,000 (US$40 to US$20) per week during the onset of the ECQ. While employment has since recovered significantly by August—when some quarantine restrictions have been lifted—the total household earnings were slower to rebound and is still much lower than pre-crisis. The same study also estimates the poverty level in the Philippines to increase to 22.4% from 20.5% in 2019, reversing the trend of steady decline in recent years (World Bank, 2020). As Dumas (2015) has remarked that there is a strong and positive correlation with the Philippines' economic cycle and the CER of CMP projects, the current economic condition of the country may have an effect on the capacity of the members to pay for their monthly amortizations.

Given the longstanding affordability concerns surrounding CMP projects compounded by the ongoing economic strain caused by the pandemic, this paper aims to look at the general economic status of the households living in CMP projects in order to glean insights on their capacity to pay for their monthly amortizations.

OBJECTIVES

This study will be done to provide the socioeconomic background of the SHFC communities for the development of an appropriate collection strategy at the time of the COVID-19 pandemic and the period of ‘new normal’ that follows after.

Specifically, the study aims to achieve the following objectives:

- To identify the economic impact of the COVID-19 pandemic on the households in the communities;
- To determine the spending pattern of the households in the communities; and
- To serve as a reference for creating a strategic approach for collecting amortization dues.

SCOPE AND LIMITATIONS

The study will examine the general financial conditions of the CMP communities in three main areas: labor and employment, household income, and spending pattern. The scope of examination will only cover the period between January 2020 until March 2021, which covers the point before the pandemic started and after the lockdown restrictions have been put in place.

The following are the limitations of this study on several areas in data collection that may affect the results and findings.

Selected community associations

The community associations in this study were selected based on the following parameters:

- Onsite or off-site projects that have been taken out between 2015 and 2019; and
- Have an occupancy rate of more than 50%

From the initial parameter, only the CAs with the highest probability to be selected were contacted for the study. The large subpopulation of CMP hubs dwarfed the small subpopulation of the High-Density Housing (HDH) program to be included in the study.

Data Collection

Due to the health concerns amid the ongoing pandemic, the study chose to use phone interviews as the medium of data collection to ensure the safety of both interviewers and respondents. The interviews were then susceptible to external factors (e.g., signal quality, time constraints of respondents, etc.) which may have an effect on the responses.

Recall bias

The information about the respondents' previous economic activities is self-reported and based on recall. Recall bias is to be expected, especially for events that occurred more than a year ago. Thus, the respondent may either overreport or underreport their income and expenditure that may affect the data on labor income and the labor movement.

Financial conditions

The examination of the financial conditions in this study is only limited to three main areas which are as follows:

1. Labor and employment - type of employment, periods of unemployment (if any);
2. Income - household income, savings, and remittances received
3. Expenses - these include their expenses such as but not limited to monthly amortization, food and groceries, alcoholic beverages, tobacco, clothing and footwear, appliances, house repair and maintenance, water and electricity, gas and other fuels, monthly dues, transportation, communication, recreation, education, medical expenses, debt repayment and capital expenditure

REVIEW OF RELATED LITERATURE

The Coronavirus (COVID-19) outbreak has plunged global economies, including emerging markets and developing countries, such as the Philippines into an economic slump (United Nations Development Programme [UNDP], 2021). In the Philippines, while concerted efforts around urgent health concerns were intensified, the response measures, including an enhanced community quarantine (ECQ), had caused disruptions across various economic and social sectors; endangering employment and livelihood and causing urgent issues around food security and safety, nutrition, and income-generation (United Nations Industrial Development Organization [UNIDO], 2020). Different regions in the country were subjected to the unprecedented challenges of the pandemic since the announcement of the World Health Organization (WHO) on March 11, 2020. Significantly, it has posed devastation to different social classes, especially families belonging to the lower-income deciles.

Economic Impact of COVID-19 in the Philippines

The COVID-19 has caused a very sharp turn of unexpected challenges globally. The health sector from affluent and developing countries alike shared similar setbacks at first, but have been dichotomized by competence and resilience by the last quarter of the year. As experts apprehensively released early findings of the SARS-CoV-2 or the 2019-nCov, the delay of information cannot be helped due to the new variant of the known SARS-CoV-1 in the medical field. Simultaneously, each country has imposed its own cease and desist action plans to prevent the spread of the virus. As a consequence, many countries have ordered a travel ban and local precautions in isolating the virus from the populace within their jurisdiction. It is undeniable that the economic and social disruption caused by the pandemic is devastating: tens of millions of people are at risk of falling into extreme poverty, while the number of undernourished people, currently estimated at nearly 690 million, could increase by up to 132 million by the end of the year (WHO, 2020). The pandemic turned a blind eye to any division existing in our society such as religion, social classes, work industries, and regions, social classes, work industries were pulled to a drawback.

The relationship between economic factors and housing demand has become more important (Aden, 2014). The Coronavirus (COVID-19) outbreak has not only created an unprecedented health crisis but triggered serious economic downturns globally (UNDP, 2020). A study from the Technical Education and Skills Development Authority (TESDA) in 2020 reported the industry trends in the Philippines since the declaration of President Rodrigo Duterte to put the country in a state of calamity. The Enhanced Community Quarantine (ECQ) was enforced in Luzon to “flatten the curve” however, the nation remained afflicted with the crisis.

Several measures were taken by the local government units per region, yet the healthcare system was still overwhelmed with the increasing cases, high occupational risks, and a seemingly endless marathon against the pandemic. By the time the ECQ was lifted, the masses were clamoring about their financial conditions or economic statuses. Containment of the virus through quarantines and lockdowns has caused major disruptions in economic activities all over the country (TESDA, 2020). The crisis has prompted numerous studies in assessing the impact of the COVID-19 and the changes in the work sector. Some of the reports were the following:

- NEDA estimates that GDP growth is estimated at 2.0% for 2020, but is expected to recover with an estimated 6.5% growth in 2021. The Asian Development Bank (ADB) (ADB), however, estimates that the containment of COVID-19 will result in a loss of -0.79% to -1.62% of Philippine GDP.
- The Philippine Institute for Development Studies (PIDS) estimates the Philippine economy may lose between 276.3 billion (best case) and PHP 2.5 trillion (worst case) due to COVID-19. With the ECQ extended, through a modified one, in Metro Manila, Laguna, and Cebu City, from May 16 to 31, it is anticipated that more losses will be incurred.
- The ADB estimates total employment to be reduced from -0.82% up to - 1.69%. NEDA estimates employment losses to be at 116,000- 1,800,000.

Industry Trends

The overall trend in the business sector forecasted how each industry had been detrimentally stricken by the COVID-19 pandemic. The Technical Vocational Education Training (TVET) classified the sectors into seven classifications namely: high risk, medium-high, medium, low-medium, low, and other affected sectors.

The high-risk sector consists of wholesale and retail trade, repair of motor vehicles and motorcycles which were estimated to have lost PHP 93.2 to 724.8 billion. The manufacturing sector was estimated to have PHP 82.1 to 8.55.2 billion losses because the major trading partners of the Philippines (Japan, USA, China, Hong Kong, and Singapore) are also the most affected countries by the pandemic. Still in the high-risk group were the real estate, renting, and business activities which lost PHP 10.7 to 79.7 billion (PIDS, 2020). Last were the accommodation and food services, hotel and restaurants, and other personal services due to non-operation during the ECQ. Next is the medium-high sector where transport, storage, communication, tourism, arts, and entertainment industries were classified. The restriction for land, air, and sea travel including mass transport and domestic flights during the ECQ lead to loss of income and unemployment to workers belonging to the sector including those who work in establishments related to its operations.

Mining and quarrying, financial intermediation, and construction industries were classified as medium risk. On the other hand, those in agriculture, forestry, and fishing or agribusiness were included in low-medium risk sectors which garnered PHP 9.2 to 110.3 billion approximated losses. While those who work under human health, social work, and utility sectors were grouped as low-risk industries.

Besides the aforementioned industries, the informal sector was among the most vulnerable sectors due to their lack of social protection, no access to health care services, and are on a no-work-no-pay work arrangement (TESDA, 2020). Working in the informal sector is one of the common employment themes in developing countries such as the Philippines.

The Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) is a great reference to meet the objective of this study. The BARMM Government has learned to pivot because of the crisis by addressing some pressing concerns it has brought (UNDP, 2020). Furthermore, the pandemic has demanded the BARMM government to be responsive and adaptive. The pandemic required the BARMM Government to be responsive and adaptive in appropriating their programs and government strategies. With this essence, the study aims to present the sociodemographic backgrounds of SHFC communities for the development of an appropriate collection strategy at the time of the pandemic.

Poverty amidst COVID-19 pandemic

Vulnerability has been particularly recognized in the wake of the impact of the COVID-19 that is likely to yield declines in incomes because of reduced economic activities; given the likely drop in incomes and expenditures of households as well as businesses, we would expect a worsening of poverty conditions (PIDS, 2020). The Philippines based the profile of the poor on a person or a family's monetary situation. Fundamentally, the poverty line or poverty threshold remained the sole divider of the poor and nonpoor. The Philippine Statistics Authority (PSA) defined poor as "individuals and families whose income fall below the poverty threshold as defined by the National Economic and Development Authority (NEDA) and/or cannot afford in a sustained manner to provide their minimum basic needs of food, health, education, housing and other essential amenities of life" (Section 3 of Republic Act 8425 of 1997 or the Social Reform & Poverty Alleviation Act). The netizens voiced their subjective notion of decent living conditions when NEDA released the ₱10, 481 minimum income for a family to afford basic necessities. It has led to a backlash and reflected the poor communication of the institution to the confused masses way before the pandemic took place. Even so, the PSA uses the Family Income Expenditure Survey (FIES) to collect data determined by monthly income and expenditures of a household.

There are several methodologies available in measuring poverty. One of the approaches is classifying the poor based on their income segment. These would entail that those whose income falls under the 30% of income deciles (under the poverty threshold) are impoverished families and 70% belong to the low-income to upper classes. It is important to note that this approach is also the basis for CMP's socialized rates and targeting strategy for its beneficiaries.

The question then lies in the capacity of the MB to pay for monthly amortization given that they are most likely experiencing added financial difficulties since the pandemic. As stated by PIDS (2020), "to develop the proper policy framework and instruments for reducing poverty, countries need a credible poverty measurement system." Thus, it is crucial for a national statistics organization such as the PSA to revisit its methodology in measuring poverty, especially now that the country's poverty landscape has shifted. Subsequently, housing institutions like the SHFC should re-examine their initiatives in providing socialized housing and helping the poor to sustain their well-being.

Impact of COVID-19 on Philippine Housing Sector

Housing is a basic need and forms part of critical human rights (Aden, 2014). The Social Housing Finance Corporation (SHFC) as an armed institution in financing and providing socialized housing was mandated to develop innovative programs that will uplift the housing conditions of its target beneficiaries in the formal and informal sectors. Together with its mandate, the SHFC adopted a subsidized housing program such as the Community Mortgage Program (CMP) which aids the legally organized underprivileged and homeless citizens to purchase and develop a tract of land and provide them the security of tenure through community ownership. The initiatives of the program have led several studies to regard the CMP as the most responsive and most availed program of the informal settler families. Additionally, it is one of the government's responses to the longstanding ISF problem (Ballesteros et al., 2016).

The CMP's financing scheme is advantageous as it promotes the empowerment and participation of organized communities through a housing strategy. This will encourage the ISFs to form community associations to benefit from the program. In other words, this will establish governable constituents expected to foster with the program. Although it is the quintessence of the plan, several factors diluted this outcome.

Even before the COVID-19 pandemic, adequate and decent housing was considered a universal problem of the middle-income, low-income, and those below the poverty threshold. Families who live in slum areas are often propelled by high hopes in urban job hunting. As Habitat for Humanity (2017) stated, "[urban poor households] choose the places they settle according to a city's economic status and to where they believe they can find a better livelihood." This is one of the common themes of the informal settlement in the Philippines, which places the CMP in constant combat with the adverse situation to capacitate the ISFs through land acquisition and community building.

Previous studies looked at the affordability issues in the CMP. For instance, the study of Ballesteros et al. (2016) questioned whether the CMP practices a pro-poor approach. One of the scenarios mentioned is when the equity share of the CA exceeds the maximum loanable amount of the SHFC. Consequently, the members of the CA are compelled to provide the required equity. This situation raises concerns for some ISFs and pushes them to depart from the program. At this point, those targeted beneficiaries are ostracized from availing their benefits. Moreover, it is important to note that CMP projects have the highest volume in NCR due to the high-density communities in urbanized areas. Ballesteros et al. (2017) said that informal settlements have been pervasive in the Philippines, specifically in cities where the lack of affordable housing—whether rental or for purchase—has caused informal forms of housing settlements to proliferate. The problem of the high selling price of land in developed cities has a toll on the financial conditions of the member-beneficiaries (MBs). Since there is a maximum loanable amount from the SHFC, the ISFs or the CA members are often left to pay for the excess equity. This leads to the withdrawal of the poorer families in continuing their participation in the program or opting for eventual substitution. Hence, those who are poor are vulnerable to the program that should have helped them in the first place. As pointed out by the researchers, the downside of this arrangement is that poor households can be excluded from the program because they are unable to raise the equity or they may be forced to borrow, resulting in accumulated debts that are beyond their capacity to pay (Ballesteros et. al, 2017).

Collection Efficiency Rate (CER)

The Philippine Board of Investments (BOI, 2018) mentioned that the Philippine housing industry believes that every Filipino family has the right to live with dignity in the comfort of one's own home regardless of economic status. It aims to eliminate the housing backlog by 2030. To manage and hold to this aim, a social housing institution like SHFC needs to ensure its sustainability and effectiveness through its performance indicators—one of which is the Collection Efficiency Rate (CER). Thus, the collection rate must be acquired from its subsidized programs to achieve growth and retrieve its unrequited costs. Ideally, this is amicable for the SHFC to perform their financing scheme and continuously provide long-term assistance to more ISFs.

The Collection Efficiency Rate (CER) is one approach to measure the efficacy of the CMP program throughout its process based on the accrued payments of the MBs. As such, it is crucial for the community associations to achieve a high cumulative CER because it is one of the main avenues of the SHFC to offset its non-recoverable costs that have been steadily increasing through the years. Ballesteros et al. (2017) estimated that at least 85 percent repayment collection is the needed level of recovery for SHFC to sustain its activities.

This problem has not received any idyllic solution so far, which calls for further studies that examine the capacity of MB to meet their loan obligations without added drawbacks to their living situations. Such studies are in demand particularly during the pandemic and the new normal to yield insights on the appropriate response to the concurrent circumstances of the MBs. This is a reactive move to address the low-living condition of the ISFs, aside from solving their housing problems—an integral part of its purpose embedded in empowering the communities benefiting from the CMP.

From this review, we have a clear understanding of the intended program beneficiaries of the CMP. Now, it can be inferred that the capacity of the member-beneficiaries to pay for monthly amortization is in question, especially during the height of the COVID-19 pandemic depicted in the change of their income before and after the strict quarantine protocols nationwide. The member-beneficiaries might be widely affected by the COVID-19 economic impact, more so as the households intended to be covered by the RP of NHA and CMP of SHFC are those belonging to the lowest three deciles or lowest 30% of households (NEDA, 2018). Unlike other countries that improved their conditions by the later part of 2020, the Philippines, as estimated by the ADB will resume growth by the year 2021 and will continuously rebound until 2022. By this prediction, responsive interventions are demanded. As an institution that constantly juggles the role of a financing agency and promoter of overall well-being to its constituents, SHFC shall look into consideration the disposition of the MBs in strategizing its collection efficiency rate through this study. This, in principle, can prevent added malaises from the destitute members of society in this time of new normal and hereafter.

“[To] empower and uplift the living conditions of underprivileged communities...through the provision of flexible, affordable, innovative and responsive shelter solutions in strong partnerships with the national and local government, as well as the civil society organizations and the private sector” (SHFC, 2018).

Socialized Interest Rates of CMP under a Graduated Amortization Payment Scheme, 2020

Income Decile	Average Family Monthly Income	Interest Rate	Repayment Term
1st Decile	16,292.00	2%	35 years
2nd Decile	21,630.50		
3rd Decile	25,190.58	4%	30 years
4th Decile	29,627.00	4.5%	30 years
5th Decile	34,521.25		
6th Decile	41,255.67		
7th Decile	48,984.75		
8th Decile	60,602.92	6%	30 years
9th Decile	78,643.92		
10th Decile	148,931.50		

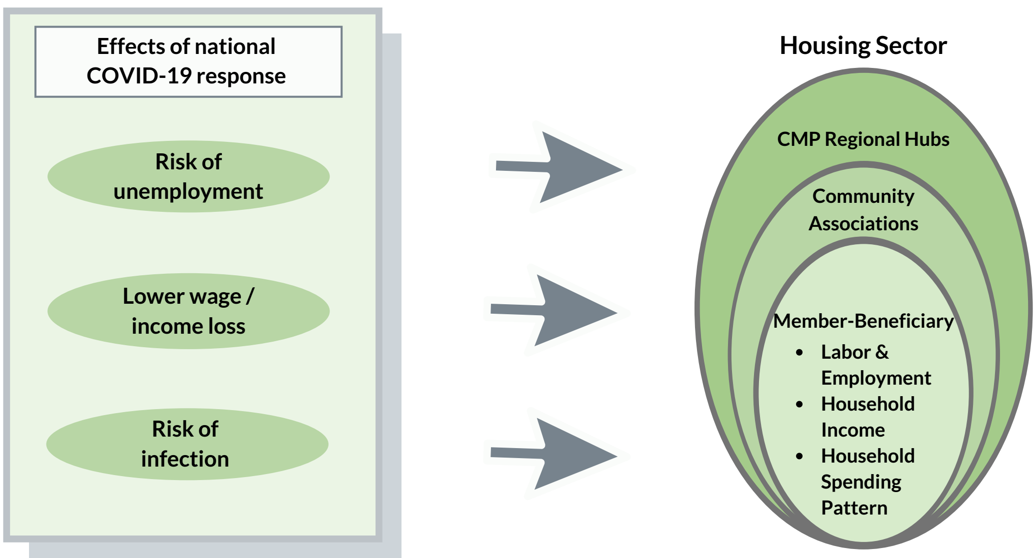
This study delves into the general economic impact of the global health crisis on the social housing sector that finances affordable housing loans to low-income Filipino households. It examines the changes in the socio-economic condition of the Community Mortgage Program (CMP) beneficiaries as a result of the battered economy and weakened healthcare system due to the COVID-19 pandemic.

The literature review shows that among other health policies, the stringent imposition of lockdown disrupted economic activities, which eventually changed the trend in the labor and employment industry. As a result of this major economic shift, the formal and informal economy—where the income segment of most CMP beneficiaries is classified—is at risk of reduced income, or worse, job loss. In addition, the increased price of goods in the market also means that household spending has also increased. However, the low-income beneficiaries are burdened with meeting the demand of increasing household expenditures.

The principal cause of poverty in the pandemic era, while it is still subject to further study, may be associated with income inequality. Income inequality breeds affordability issues, which, when applied in the social housing context, affect the financial capacity of a housing beneficiary to pay the mortgage arrears while spending other basic needs (e.g., food and water, medical expenses, education, etc.).

With the negative impact of the pandemic perpetuated by the inadequate national pandemic response, the security of housing tenure, however, may reduce the risk of the low-income households reverting or moving down to the poverty threshold. It is the positionality of this research study to understand the effects of the pandemic response to the changes in the socio-economic condition of the CMP beneficiaries and to recommend strategies in the collection that is pro-beneficiary.

Figure 1. *Conceptual framework, Impact of pandemic on the financial capacity of CMP member-beneficiaries*



Sampling Technique

This study employed a multistage sampling technique to ensure better representation among the different CMP hubs across the country, as well as to better assess significant differences or similarities among the hubs regarding the current economic climate. Under the multistage technique (see Figure 2), the selection of population elements is not done individually. Rather, it is done in aggregates which, for this study's case, are the regional hubs for CMP projects. For this study, the nine most populous hubs were chosen as the primary sampling unit for data collection. Under these hubs, several community associations were considered for selection based on the following initial parameters:

1. Occupied off-site or on-site projects that have been taken out between 2015 and 2019; and
2. Associations with an occupancy rate of more than 50%

From this initial selection, the list of qualified community associations were further narrowed down by hub based on the probability proportionate to size (PPS) selection procedure. The principle behind such a procedure, based on the assumption that units belonging to larger population clusters are more likely to be selected in a random sampling than smaller ones, allows for giving communities that have relatively bigger populations a greater probability of selection, while less populous communities have a lower probability.

The last level in the multistage technique is the individual respondents belonging to different community associations. Using Slovin's formula, a sample size of 384 people was derived which were distributed proportionally by hub based on the hub's relative total population. As such, more members will be selected from hubs that have the biggest population (see Table 3). Similar to the selection of community associations, the selection of individual respondents were also based on several parameters, namely:

1. Member-beneficiaries listed in the selected community masterlist that have been residing in the said community for at least six months;
2. Member-beneficiary who has been paying monthly amortization regardless of whether he or she has already transferred to the community association or not;
3. Member-beneficiary who has been occupying the house/lot but has not been paying the monthly amortization

In the absence of the selected member-beneficiary, the selection of the next eligible family member/representative may be arranged in lieu of the respondent, provided that chosen family representative must have knowledge about the income and expenditure of the household. Once the distribution and parameters have been set, the individual participants in each community will be selected randomly through simple random sampling in order to avoid bias.

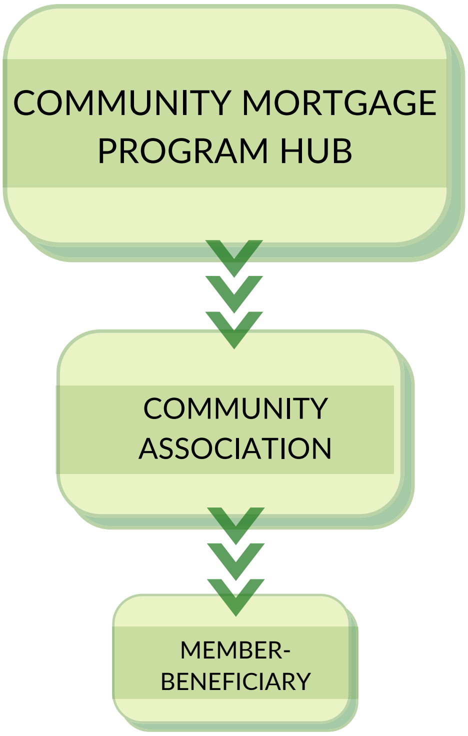


Figure 2: Multistage Technique for Sample Selection

Data Collection

The data was collected using a 4-part questionnaire. The first part of the questionnaire asked for the socio-demographic information that constitutes the basic household characteristics. The second part contained questions that seek to determine the periods of unemployment among the members during the pandemic to identify possible patterns and shifts in the labor movement. The third part determined the sources of income in each household and how much has their total income changed since the pandemic started. The last part identified the spending pattern of each household by determining their item expenditures and the levels of priority that they place on such.

Due to safety precautions brought about by the ongoing COVID-19 pandemic, the medium for conducting the survey was through phone interviews. The account officers of the selected communities were contacted to request the contact number of the selected communities' officer/s, from whom the contact numbers of the individual participants were obtained.

Prior to the survey proper, a pretest was conducted to evaluate the robustness and validity of the questionnaire as a tool for data collection. The pretest ran in June 2021 and was participated by 30 randomly selected members of ISEFA Homeowners Association—the association with the highest population among the selected communities—in Camarines Sur.

Table 1: *Selected Community Associations*

Name of Community Association	Hub	Number of Respondents
Milagrosa Villa CMP HOAI	North Luzon	15
Pinag-isang Magkakapitbahay ng Miranda Compound Phase III	Central Luzon	9
Lakas Pagkakaisa ng Bantug Norte HOAI	Central Luzon	17
Villa Rosario HOAI	Mega Manila I	14
Dominador Asis HOAI	Mega Manila I	12
Greenville HOAI Phase I	Mega Manila I	9
Samahang Magkakapitbahay sa De Gulas Compound Inc. (SAMAKA)	Mega Manila I	10
Ruby Minahan HOAI	Mega Manila I	13
United Libis HOAI Phase I	Mega Manila I	6
Samahang Magkakapitbahay ng Rose Packing HOAI Phase I	Mega Manila I	9
Rodriguez Compound HOAI Phase III	Mega Manila II	11
Centerland HOAI	Mega Manila II	22
Richville HOAI	Mega Manila II	8
Aratiles HOAI Phase I	Mega Manila II	17
La Vista Ville HOAI	Mega Manila II	11
Rodriguez Compound HOAI Ph. IV-B	Mega Manila II	5
Executive Ville HOAI	Mega Manila II	15
Villa Patukod HOAI	Mega Manila II	17
Holy Grace Ville HOAI	Mega Manila II	7
Rodriguez Compound HOAI Ph. I	Mega Manila II	6
ISEFA HOAI	South Luzon	24
Earl Amane Ciudad Village HOAI	Western Visayas	8
Pawa HOAI	Western Visayas	22
Villa Plan HOAI	Eastern Visayas	20
Asuncion Mangaya-ay HOAI	Northwestern Mindanao	14
Mindanilla HOA	Northwestern Mindanao	14
Indangan Highlands	Southeastern Mindanao	9
Ocean View HOAI	Southeastern Mindanao	14
Ocean View Phase 1-B HOAI	Southeastern Mindanao	10
Ocean View Phase II HOAI	Southeastern Mindanao	16

Table 2: *Sample Size Distribution Among Hubs*

Hub	Population	Percent Distribution	Sample Size
North Luzon	9879	3.368200694%	21
Central Luzon	16780	5.721065659%	22
Mega Manila I	54771	18.67392653%	72
Mega Manila II	86472	29.48224015%	113
South Luzon	18213	6.209640575%	24
West Visayas	30972	10.55976434%	40
East Visayas	15003	5.115205488%	20
NW Mindanao	18021	6.144179037%	24
SE Mindanao	36931	12.59145863%	48
HDH	6260	2.134318893	8
TOTAL	293302	100	384
Sample size from Slovin's formula = 384			

Data Analysis

Descriptive statistics was used to provide a general picture of the current financial condition of the SHFC communities at the time of the COVID-19 pandemic. Results to be analyzed include the labor employment shifts, household income change, and spending pattern of the households. The results to be analyzed only cover the months of January 2020 until March 2021, divided into three main periods:

1. Before Lockdown - The period of time before the COVID-19 pandemic started;
2. During Lockdown - The period encompassing the duration of the Enhanced Community Quarantine (ECQ), the strictest form of lockdown imposed for at least 3 months on regions; and
3. After Lockdown - The general period that follows after the ECQ has been reduced to less severe lockdowns

Analysis will be performed at each cluster (hub) in order to detect patterns, trends, and differences in each hub regarding the aforementioned economic variables. The proportion of households belonging in a hub that experiences a particular economic phenomenon will be calculated in order to gauge the extent of the said phenomenon in a hub.

Inferential statistics were also used to determine if the changes observed in the descriptive summaries of the three economic variables are statistically significant, and if these changes have a relationship with the monthly amortization payment of the respondents. Friedman's ANOVA was used to determine if there is a significant change in the level of household income, savings, and remittances across the three study periods. Spearman Correlation analysis was used to determine if there is a significant relationship between either of the three variables (e.g., Employment, Income Change, Spending Pattern) and the respondents' level of monthly amortization payment. For both tests, the p-value is set at 0.05 (confidence interval of 95%), wherein any values less than this value results to having the null hypothesis rejected (Ho = there is no significant change relationship).

Data Visualization

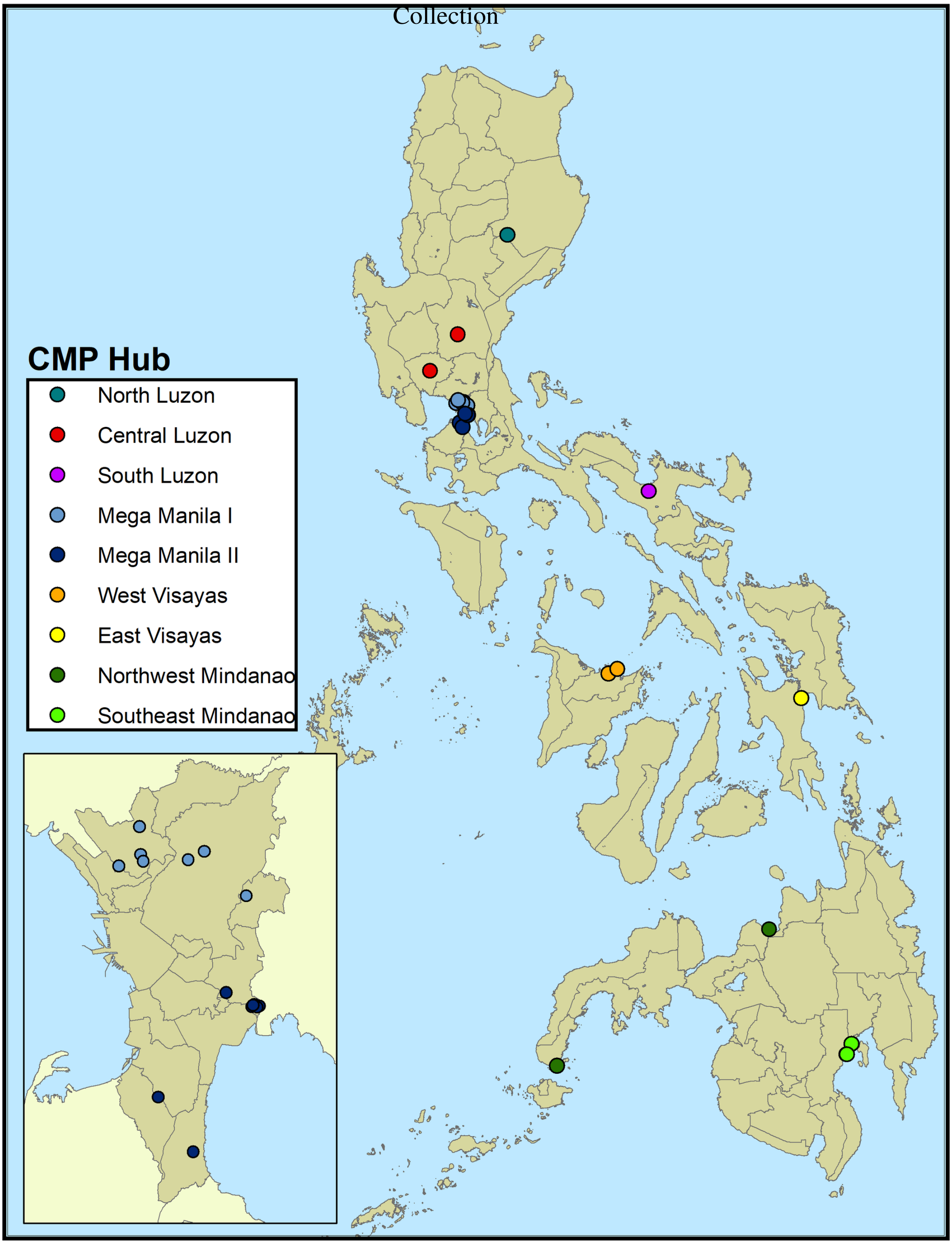
To help aid in conveying the information more effectively, data visualization will be done to some parts of the results where it is applicable. Because the data gathered have a time component to it (i.e. results are aggregated between three general periods), a temporal visualization in the form of line graphs was applied in results particularly involving labor movement, savings, remittances, and monthly amortization payment to better see the general trend or pattern exhibited by the households over time, if there are any. Boxplots were used to visualize the change in income distributions aggregated by each hub during the three general periods. Through R programming, the boxplots were generated and arranged in a way that would help compare the distributions over time.

Ethics

According to most professional codes of ethics, the five ethical responsibilities towards survey participants are as follows: (1) voluntary participation, (2) informed consent, (3) no harm, (4) confidentiality anonymity, and (5) privacy (De Vaus, 2002). Orientations for the various CA officers involved in the data collection were held prior to the start of the data collection. The purpose of the survey, the use of the data collected from them, and the benefits that they will derive from the research were all discussed during the orientation. The contact information of the survey respondents, as well as their schedule of availability for the survey, was also obtained from their respective CA officers.

The phone interview was used to collect data for this study, which presents a number of ethical challenges in terms of consent, confidentiality, representativeness, data quality, and respondents' privacy but these ethical challenges were addressed for this study. Before conducting the survey via phone call, the interviewers texted respondents to request permission to call and conduct the survey. Before the interview, the interviewers stated a confidentiality agreement in order to gain the respondents' trust in providing their information. Also, the names of the respondents will not be revealed in the study in order to protect their anonymity. Moreover, the collected data was handled and processed in an ethical manner. To ensure security, the data were collected and stored in an online database to which only the researchers have access. Appropriate software and statistical methods were also used to correctly present and visualize the results while minimizing errors. Lastly, in this study, ethical research writing practices such as presenting limitations, proofreading the paper, and citing sources were applied.

Figure 3: Location of the Selected Community Associations by Hub for Data Collection



Labor and Employment

Table 3 shows the number of individuals in a household that were actively earning money from employment before and during the pandemic, aggregated by hub. As seen in the table, most households on average have one or two income earners, with Central Luzon having the highest average and West Visayas having the lowest. On some instances, there are households—most notably in Central Luzon, East Visayas, and Mega Manila—where there are more than three income earners. Especially now at the time of the pandemic where economic stability is fickle, having multiple income earners in a household helps in providing an extra level of financial security because it assures that households would still have a source of income in the event that one member gets unemployed.

Table 3: *Number of Income Earners in a Household by Hub*

Hub	Number of Income Earners per Household					Average
	1	2	3	4	5	
Central Luzon	30.77%	42.31%	15.38%	11.54%	0	2.1
East Visayas	35%	45%	15%	5	0	1.9
North Luzon	43.75%	37.5%	18.75%	0	0	1.6
Mega Manila I	41.54%	38.46%	15.38%	3.08%	1.54%	1.8
Mega Manila II	41.59%	41.58%	12.87%	2.97%	1%	1.8
SE Mindanao	36.96%	50%	6.52%	4.35%	2.17%	1.8
NW Mindanao	52%	44%	0	0	4%	1.6
South Luzon	54.17%	37.5%	8.33%	0	0	1.5
West Visayas	62.07%	37.93%	0	0	0	1.4

Table 4 then shows the type of employment of the identified income earners before the onset of the pandemic. With the notable exception of North Luzon and Mega Manila II, majority of the hubs' households rely on income generated from self-employment. Most of the self-employed activities in the households surveyed fall under the retail (e.g., sari-sari store owners, food vendors) and transportation (e.g., tricycle and pedicab drivers) industries. Among the self-

Table 4: *Type of Employment Among Income Earners Before Pandemic*

Hub	Type of Employment		
	Regular	Self-Employed	Contractual
North Luzon	**60.71%**	21.43%	17.86%
South Luzon	37.84%	**54.05%**	8.11%
SE Mindanao	32.94%	**42.35%**	24.71%
Mega Manila I	26.67%	**40%**	33.33%
Mega Manila II	26.37%	31.87%	**41.76%**
East Visayas	21.05%	**47.37%**	31.58%
Central Luzon	20.37%	**55.56%**	24.07%
NW Mindanao	15%	**50%**	35%
West Visayas	10%	**67.5%**	22.5%

employed people, an emerging business activity that is quickly gaining traction comes in the form of online selling. The mobility restrictions imposed by the lockdowns has prompted some people to relaunch their business through online platforms where physical mobility and safety issues do not matter for the most part.

Only North Luzon showed a majority of surveyed income earners that have regular type of employment. When comparing the proportion of individual regular workers with contractual workers, data showed that North Luzon, South Luzon, and Southeastern Mindanao have higher proportion of regular workers, while the rest of the hubs have more contractual ones. Regular employment are generally more stable sources of income because these do not rely on irregular project or season shifts that often characterizes contractual jobs and are thus less likely to be affected by sudden adverse economic conditions.

At the onset of the pandemic, many individuals have lost their jobs and sources of income as a result of the imposed lockdown restrictions. As shown on Table 5, more than half of the income earners surveyed in Mega Manila II and Central Luzon hubs were unemployed during the pandemic, closely followed by Northwestern Mindanao, Southeastern Mindanao, and South Luzon hubs with more than 40% unemployment rate. As the hub with the highest unemployment rate, it is significant to note that Mega Manila II was also the hub with the highest share of contractual workers before the pandemic, shown in Table 4. Conversely, North Luzon—the hub with the highest share of regular workers—was shown to also be the hub with the lowest unemployment rate during the pandemic.

The proportion of unsteady income sources on the household level—where there can be multiple income earners—was also identified on Table 5. For this study, unsteady income source can also refer to erratic work schedule changes and not just total unemployment. Led by East Visayas hub, data showed that on a household level, many of the families suffered from the unanticipated economic shock during the onset of the pandemic, resulting into the destabilization of their income sources. While the presence of employment, regardless of type, certainly helps to assuage the

Table 5: *Household Labor Movement During the Time of Pandemic*

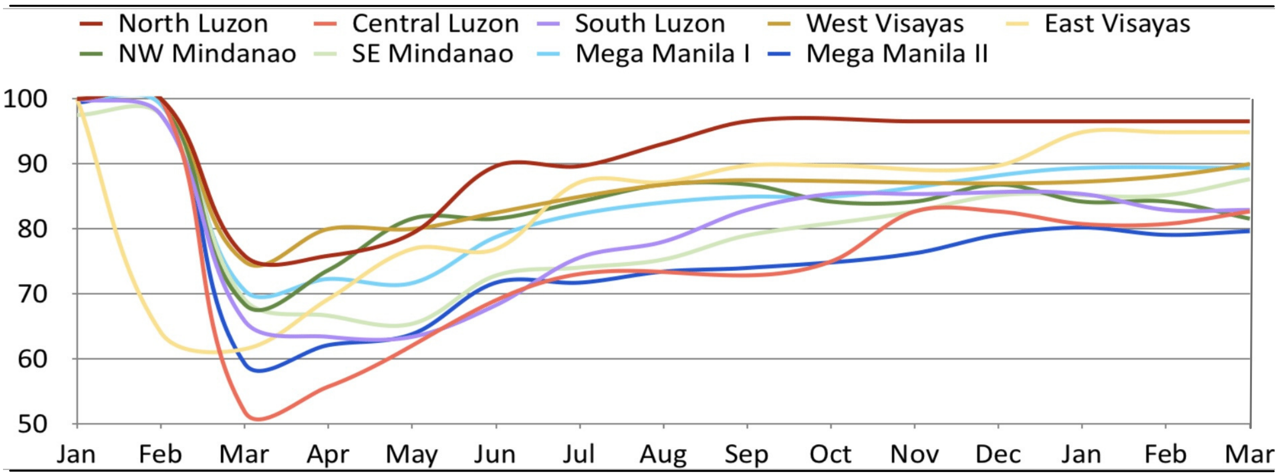
Hub	Individuals unemployed during the pandemic	Re-employed individuals	Households with unsteady sources of income during pandemic
Mega Manila II	54.14%	69.41%	43.33%
Central Luzon	51.92%	77.77%	37.5%
N.W. Mindanao	44.74%	64.7%	52.17%
S.E. Mindanao	43.21%	74.29%	45.45%
South Luzon	41.46%	64.7%	45.83%
East Visayas	38.46%	93%	55%
Mega Manila I	36.28%	78.05%	29.63%
West Visayas	27.5%	81.82%	48.15%
North Luzon	24.12%	85.71%	50%

refer to erratic work schedule changes and not just total unemployment. Led by East Visayas hub, data showed that on a household level, many of the families suffered from the unanticipated economic shock during the onset of the pandemic, resulting into the destabilization of their income sources. While the presence of employment, regardless of type, certainly helps to assuage the economic effects of the pandemic, the casual employment's nature of uncertainty over job security at this time also affects the lifestyle decisions of the households.

The table also shows the proportion of the previously unemployed individuals who were able to regain employment at some point during the survey period either from the same previous company or from an altogether different one. All of the selected hubs have a at least 50% reemployment rate, which signifies that economic activities all over the country are starting to rebound gradually as the lockdown restrictions begin to ease and businesses begin to operate again. Eastern Visayas hub had a significantly higher reemployment rate compared to the other hubs, while, in contrast, Northwestern Mindanao hub had the highest percentage of individual unemployment and one of the lowest reemployment rates.

Figure 4 shows a temporal visualization of employment across all surveyed communities. On average, many of the previously unemployed respondents across all hubs took about four to six months to find employment again. This mainly coincides with the transition of lockdown restrictions last year from being under the Enhanced Community Quarantine (ECQ) for about three to four months into the more moderate Modified Enhanced Community Quarantine (MECQ). The cessation of business operations or operating at only 50% capacity, resulting in worker displacement or layoffs, and the adoption of a skeletal workforce system are all consequences of the imposed lockdown or Enhanced Community Quarantine (ECQ).

Figure 4: *Employment Rate During the Time of Pandemic*



Among the hubs, Central Luzon had the highest (48.08) percentage decrease in the percentage of employed workers from January to March, owing to the fact that the majority of respondents are self-employed and rely on transportation services, which have been affected by the suspension of public transportation during the ECQ but it also the highest (22.81) percentage increase in the percentage of employed workers from March to June. Since the change in quarantine classifications, public transportation has been permitted.

North Luzon, as mentioned before, experienced the smallest decrease in the percentage of employed workers (24.12) from January to March, owing to the fact that the majority of workers already have permanent or regular work. While South Luzon with majority of respondents are self-employed had the smallest increase in employed workers (3.22%) from March to June. This could be because small businesses are suffering from lack of working capital and are unable to resume operations just after the lockdown.

Change in Household Income

Table 4 shows the proportion of households in each hub that experienced a decrease in their total income, regardless of quantity, during the period of the pandemic. With all hubs exhibiting a p-value of less than 0.05 from the Friedman ANOVA test, there was a significant change in the level of income among the households surveyed during the pandemic. It is evident that majority of the households across all hubs had their earnings affected by the pandemic, as even those who did not lose their jobs still experienced the economic repercussions of this pandemic period in the form of salary decreases. Looking at the proportion of households with a more than 50% income decrease, however, will show substantially lower figures, which indicates that although the majority has experienced income decrease, many of these decreases fall below 50%.

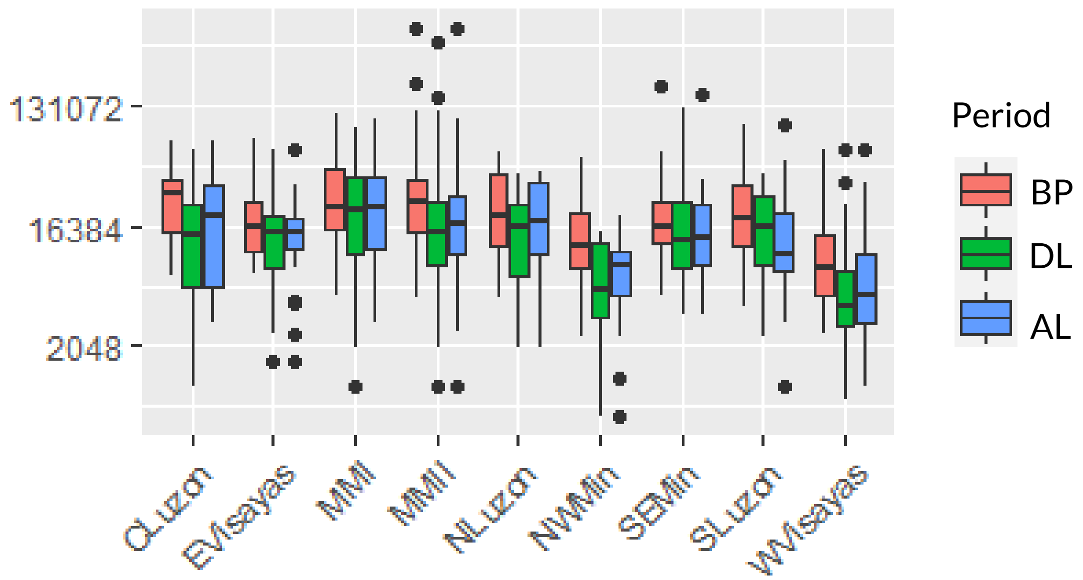
Table 6: *Household Income Change During the Time of Pandemic*

Hub	Households with total incomes decreased during pandemic	Households with total incomes decreased by >50% during pandemic	Average Change	Friedman ANOVA p-value
N.W. Mindanao	90 %	65 %	-63.12 %	0.000
Central Luzon	83.33 %	54.17 %	-49.72 %	0.000
Mega Manila II	78.02 %	31.87 %	-31.61 %	0.000
South Luzon	77.78 %	38.89 %	-46.43 %	0.000
East Visayas	75 %	56.25 %	-44.71 %	0.000
S.E. Mindanao	75 %	28.57 %	-22.18 %	0.000
West Visayas	66.67 %	37.5 %	-38.66 %	0.000
Mega Manila I	64.7 %	37.25 %	-37.01 %	0.000
North Luzon	56.25%	37.5%	-36.67%	0.001

In many cases, the high income drop in hubs coincides with the respective high unemployment rate shown in the previous table, which further reinforces the relationship between employment and income. In some instances, however, such as the case of Eastern Visayas, the decrease in income remains high even when its unemployment rate is conversely one of the lowest. Findings such as this further corroborate the aforementioned World Bank 2020 study showing the difference in the rate of recovery between labor employment and labor earnings.

The box plot in Figures 5 shows how wide the gap of income change is within each hub and across all regions from before the pandemic started (BP), to when the pandemic lockdown started (DL), up till the the period when the strictest lockdown was lifted (AL). With the exception of a few outliers in the distribution, most of the total household incomes of the CMP communities range from 10,000 up to 50,000 pesos per month. On average, the income change varies overall

Figure 5: *Income Distribution Change in Households During the Time of Pandemic*



across all hubs from before to during lockdown, but there was a general decreasing trend exhibited in all hubs. The cluster of hubs in Luzon (North and South) fall at the lower quartile range that is far from the median, which means that above 25% of the income earners in these regions receive wages lower than the average during the lockdown. Eastern Visayas, with one outlier, is also found to have a significant income change along with the Luzon hubs. The average income of Northwestern Mindanao and Western Visayas is relatively lower than the average income across the other hubs. With the exception of Mega Manila I, all hubs had a considerably high income change from before to during lockdown.

Comparatively, only Mega Manila I among all hubs exhibited an almost symmetric income distribution across the three general periods, which means that the income falls within the normal range during the lockdown period. This can be attributed to its low unemployment rate, coupled with a high reemployment rate as individuals shifted to a stable work-from-home arrangement that requires access to digital and internet connectivity. Conversely, in Visayas and Mindanao hubs, where there is a low prevalence of internet access to afford shift to work online, there was a considerable income change before to during the lockdown period as indicated by the shorter and higher range of the box plot. It must be noted that these regions are heavily agricultural to keep abreast of the emerging industry online.

After lockdown, the change in income distribution of the households varies by hub. Many hubs have households that showed a positive increase in total incomes after lockdown, as businesses began to operate again and mobility restrictions are lifted. Some hubs, like in the case of Southeastern Mindanao, have incomes that remained at stagnant levels showing minimal improvement when compared during the pandemic. On the other end, South Luzon had a noticeable decrease in household income even well after period of extreme lockdown, thereby deviating from the general pattern of slight income increases observed in other hubs after lockdown.

Aside from examining the income change of households in absolute numerical figures, the general perception of the households regarding their income level across the three periods where also gauged. The perceptions of individuals regarding their finances are also important to take into account since it also play a role in shaping their behavior and actions. As shown in Table 7, most of the hubs have an increased proportion of households that perceived a change in their income during the pandemic, compared to the actual calculated income change based on numerical figures. This implies that there are households who felt that their incomes were considerably affected by the pandemic, even when their incomes seemed stable numbers-wise.

Table 7: *Comparison of Actual Income Change and Income Change Perception*

Hub	Households with total incomes decreased during pandemic	Households with Perceived Income Change
N.W. Mindanao	90 %	95.65%
Central Luzon	83.33 %	92.31%
Mega Manila II	78.02 %	84.46%
South Luzon	77.78 %	79.17%
East Visayas	75 %	85%
S.E. Mindanao	75 %	84.09%
West Visayas	66.67 %	85.19%
Mega Manila I	64.7 %	62.96%

Table 8 shows the proportion of households that have savings or are able to save money during any of the three general periods. There was an observable downward trend in savings among households in all hubs when the pandemic started, as also exhibited in a temporal visualization shown in Figure 6. With the notable exception from Mega Manila 1, there was a significant change in the level of savings among most households surveyed during the pandemic, with almost all hubs exhibiting a p-value of less than 0.05. The p-value from Mega Manila 1 ($p = 0.06$) indicates that the difference there was not statistically significant.

These results are tied up with the previous figures on labor movement and income change. Since a decrease in income brought about by shifts in labor activities will naturally put a strain on the capabilities of the households to save. With the insubstantial inflow of money compounded by other external factors such as an increase in the price of market goods, households are left with no other option but to use up the savings that they had accumulated before the start of the pandemic up to the point where it becomes completely exhausted.

Table 8: *Households With Savings Before and During Pandemic*

Hub	Households that Have Savings			Friedman ANOVA p-value
	Before Pandemic	During Lockdown	After Lockdown	
South Luzon	62.5%	33.33%	25%	0.000
East Visayas	55%	35%	30 %	0.001
Central Luzon	41.67%	16.67%	12.5%	0.001
Mega Manila II	40.59%	15.84%	12.87 %	0.000
N.W. Mindanao	39.13%	13.04%	8.7%	0.000
North Luzon	37.5%	0%	0%	0.001
S.E. Mindanao	34.88%	16.28%	16.28%	0.000
Mega Manila I	26.79 %	17.86%	17.86%	0.06
West Visayas	18.52%	3.7%	3.7%	0.002

Even when the strictest period of lockdown was lifted and people began to find employment again, the number of households with savings still remained stagnant and even decreased on some hubs. Even with a source of income, many households find it hard to save money during the pandemic as most of their earnings are already reserved for essential expenditures. This further reinforces previous observations that increase in employment does not necessarily equate with improvement of household income.

Figure 6: Households with Savings Duirng the Time of Pandemic

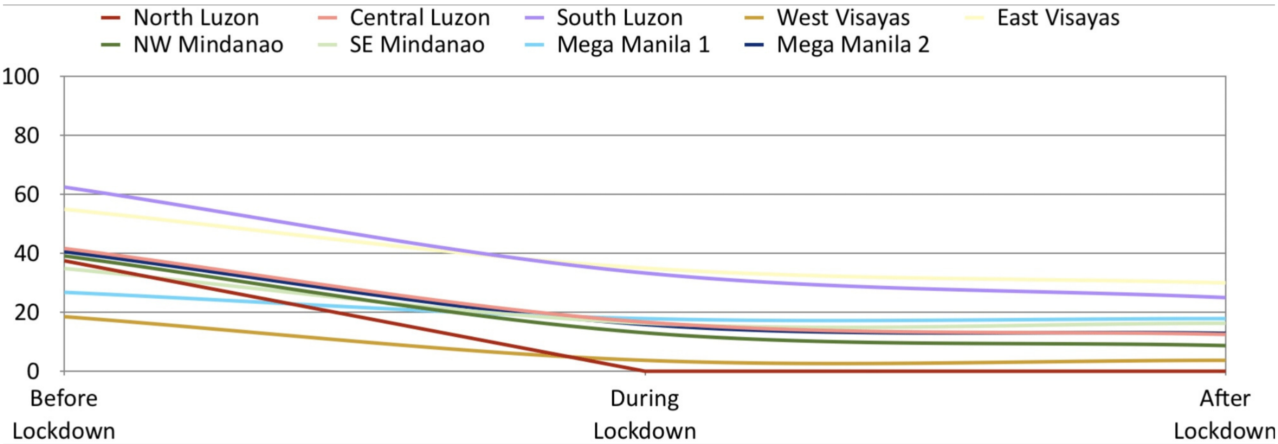


Table 9 shows the proportion of households that receive remittances—either regularly or intermittently—during the same three periods. For this study, any household that receives money from outside relations within or outside the country is considered as receiving remittances. In contrast with the trend in savings, almost all hubs exhibited an increase of households receiving remittances during the onset of the pandemic. At the point of time where households were unable to reserve a portion of their income for savings, they resorted to other means of financing to sustain their everyday household expenditures. However, compared with the level of savings, fewer households received remittances even during the strictest period of lockdown. This is reflected in the resulting p-value of all hubs ($p > 0.05$) from the Friedman ANOVA test, which indicated that the number of households receiving remittances are too low on all three periods to constitute a significant difference. With the COVID-19 outbreak affecting most of the families' economies nationwide regardless of class and social status, well-off relatives may find it hard to shell out money to provide financial assistance for those in need of such.

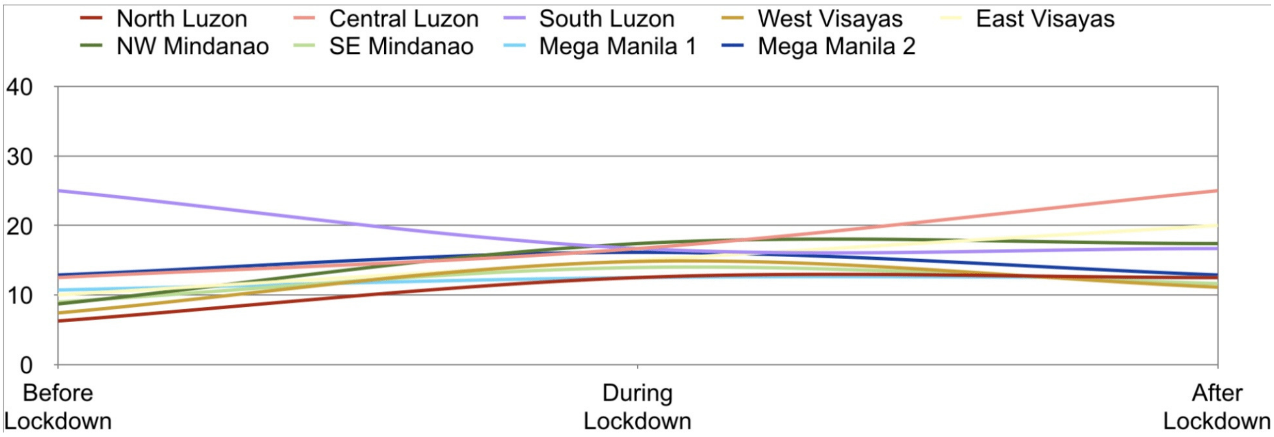
Table 9: *Households Receiving Remittances Before and During Pandemic*

Hub	Households that Receive Remittances			Friedman ANOVA p-value
	Before Pandemic	During Lockdown	After Lockdown	
South Luzon	25%	16.67%	16.67%	0.143
Mega Manila II	12.87%	16.13%	12.87%	0.257
Central Luzon	12.5%	16.67%	25%	0.196
Mega Manila I	10.71%	12.5%	12.5%	0.115
East Visayas	10%	15%	20%	0.472
S.E. Mindanao	8.98%	13.95%	11.63%	0.504
N.W. Mindanao	8.7%	17.39%	17.39%	0.247
West Visayas	7.41%	14.81%	11.11%	0.368
North Luzon	6.25%	12.5%	12.5%	0.368

Figure 7 visualizes the tabular data in Table 9 in order to better show the existing pattern of remittance flow across time. Before the outbreak of the pandemic, most of the households rarely receive any form of remittance from relatives since their income sources back then were relatively higher and more stable. It was during the onset of the pandemic where some previously self-sufficient households began to ask financial assistance in order to offset their sudden loss of income. After the strictest period of lockdown, some households began to stop receiving remittances altogether as people began to gradually regain their sources of income, which explains the slight drop in the trend for some hubs.

There are two noticeable exceptions to the aforementioned trend in remittances. While most of the hubs displayed an increasing trend, many households in South Luzon showed quite the opposite, having the highest receiving rate before (25%) which considerably decreased during the pandemic. On the other hand, an even higher proportion of households in Central Luzon hub continued to receive remittances even well after the period of ECQ, which was supposed to be the transitional period of economic recovery where some households in other hubs began to stop receiving cash remittances.

Figure 7: *Households Receiving Remittances During the Time of Pandemic*



Expenditures

The level of payment of monthly amortization among households may be partly explained by their general spending pattern for household expenditures. It is important to acknowledge that, aside from their housing needs, there are other essential needs that a family must procure for their wellness and everyday survival. Even before the pandemic, the meager earnings of some households were not sufficient enough to cover all their basic needs. As such, families choose to prioritize certain expenditures that they deem to be the most indispensable at the expense of other trivial things. Table 11 shows the top 5 expenditures of most households during the period of pandemic, aggregated by each hub.

Most of the hubs exhibited a similar spending pattern of expenditures at the topmost priority level. All of the hubs selected have majority of households placing priority on food, followed by water and electricity bills, in their budget-making decisions. These items are basic essential commodities that are needed by the people in order to survive on an daily basis. As such, even when the total household incomes were significantly decreased, these items will most likely still have an allocation in the family budget, albeit at a lower degree of consumption. Other items such as recreation, appliances, and clothing are the more trivial things that, even on the absences of such, will constitute little to no effect on the household's survival. Thus, they are considered expendable in comparison to other items and are mostly omitted on the household priority lists.

The placement of priority for monthly amortization payment varies across all hubs, but in general, most hubs reported that this is the next-in-line priority after the essential items. It implies that, on a budget-constrained scenario, consideration for paying the monthly housing bill will only be entertained if the budget is sufficient enough to cover the items with higher priority. With the significant drop in the level of household incomes discussed in the previous section, it presents a choice constrain to many households which may ultimately lead to nonrepayment of amortization bill in favor of other priorities.

Table 10: Top *Priority Expenditures of Households During the Pandemic*

Hub	Top 1	Top 2	Top 3	Top 4	Top 5
North Luzon	Food	Water & Electricity	Medical Expenses	**Monthly Amortization**	Communication
Central Luzon	Food	Water & Electricity	Gas & Other Fuels	Medical Expenses	Communication
South Luzon	Food	Water & Electricity	Education	Gas & Other Fuels	Communication
Mega Manila I	Food	Water & Electricity	**Monthly Amortization**	Education	Communication
Mega Manila II	Food	Water & Electricity	**Monthly Amortization**	Gas & Other Fuels	Medical Expenses
West Visayas	Food	Water & Electricity	**Monthly Amortization**	Medical Expenses	Debt Repayment
East Visayas	Food	Water & Electricity	Capital Expenditure	**Monthly Amortization**	Monthly Dues
NW Mindanao	Food	Water & Electricity	**Monthly Amortization**	Capital Expenditure	Medical Expenses
SE Mindanao	Food	Water & Electricity	**Monthly Amortization**	Transportation	Gas & Other Fuels

Correlation with Monthly Amortization Payment

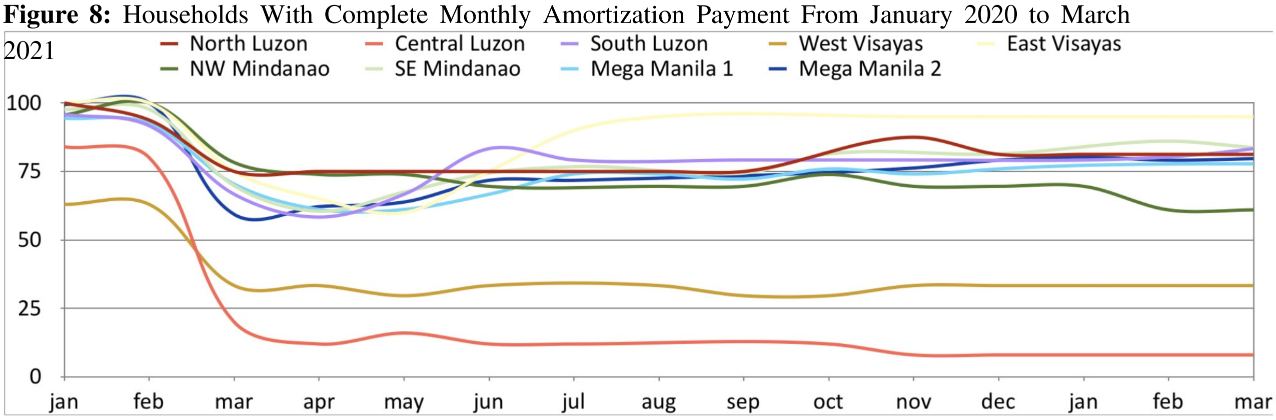
Table 10 shows the proportion of households without unpaid months during the period of pandemic. More than half of the households in North Luzon, Northwestern Mindanao, East Visayas, and Southeastern Mindanao were able to pay for all of the months included in the survey period. As previously discussed, North Luzon had the lowest unemployment rate among all hubs, East Visayas had the highest reemployment rate, while Southeastern Mindanao had the least change in income among all hubs. These economic factors may or may not play a role on the propensity of the households in these hubs to pay for their monthly amortizations. On the other hand, Central Luzon and West Visayas had strikingly low payment rates when compared with the other hubs.

Table 11: *Correlation of Spending Pattern, Employment, and Income Change with Monthly Amortization Payment*

Hub	Households without unpaid MA	Spending Pattern		Employment		Income Change	
		Spearman coefficient	p-value	Spearman coefficient	p-value	Spearman coefficient	p-value
North Luzon	62.5%	0.18	0.5661	0.35	0.2423	0.35	0.2316
N.W. Mindanao	62.5%	-0.28	0.1743	0.42	**0.0377**	0.09	0.6710
East Visayas	60%	0.08	0.7452	0.38	0.1122	0.36	0.1292
S.E. Mindanao	51.16%	-0.27	0.0823	0.28	0.0671	0.33	**0.0284**
South Luzon	45.83%	-0.15	0.4971	0.44	**0.0289**	0.57	**0.0035**
Mega Manila I	44.44%	-0.41	**0.0011**	0.33	**0.0093**	0.45	**0.0003**
Mega Manila II	40.59%	-0.53	**0.0001**	0.24	**0.0204**	0.09	0.3758
West Visayas	22.22%	-0.44	**0.0226**	0.16	0.4312	0.22	0.2776
Central Luzon	4%	-0.42	**0.0314**	0.02	0.9448	0.08	0.6853

Figure 8 shows a temporal visualization of monthly amortization payment across each hub selected for this study. As seen in the figure, there was a sharp downward trend in the recorded number of households who paid their monthly amortization. It is important to note that, in consideration to the disposition of the beneficiaries, the SHFC granted a three-month moratorium on the payment of the monthly amortization to the beneficiaries starting on March 16 to June 15, 2020, which ostensibly had an effect on the time graph. The moratorium period allowed some households to resume their monthly payments while other hubs maintained their collection performance since July 2020. Through the Bayanihan 2, another two-month grace period was implemented last September 16, 2020. After these moratorium periods ended, however, some households who were financially capable began resuming payments not only for the proceeding months, but also for the months covered during the moratorium period. As such, while the graph clearly shows a decreasing trend during this period, the level of decrease was not uniform among all hubs, with Central Luzon showing the most striking decrease. Unlike the other hubs, the rate of payment in this hub did not show any signs of recovery even well after the moratorium. It is worth noting, however, that these two hubs had lower payment rates than the other hubs even before the pandemic started, which suggests that other factors outside of the immediate effects of the pandemic may also be playing a role in the general propensity to pay.

Figure 8: Households With Complete Monthly Amortization Payment From January 2020 to March 2021



To give more meaning to the observed descriptive proportions in the three economic areas (Employment, Income, Spending Pattern) and its possible relationship with monthly amortization payment rates, a Spearman correlation test was run for each economic area. The results (in Table 10) show that there are hubs with significant relationships with different economic factors. NFor instance, households in Northwestern Mindanao, South Luzon, Mega Manila I, and Mega Manila II all show significant positive correlation with monthly amortization payment. This implies that, in these areas, higher employment rates also coincides with higher monthly amortization payments. Southeastern Mindanao, South Luzon, and Mega Manila I, on the other hand, showed significant positive correlation with change in income, implying a higher payment rates with higher positive income change (or lesser negative income change). Lastly, Mega Manila I, Mega Manila II, West Visayas, and Central Luzon showed a significant positive correlation with pending priority of households. For these areas, households where monthly amortization is among their top priority expenditures are more likely to consistently pay for it.

All in all, different hubs have significant relationships with different economic factors. There are hubs that show relationship with one or two areas, while there some e.g., North Lzuon) that show no significant relationship with either of the three. Ultimately, there is no singular economic variable that can explain the rate of payment in all hubs because it differs based on local context.

These results may provide useful insights when crafting for possible interventions to increase the collection efficiency rate, especially at this time of pandemic.

Recognizing the mobility and accessibility problems brought about by the pandemic restrictions, SHFC has formed partnerships with a variety of digital payment channels to ensure that payment platforms are available and accessible to SHFC's beneficiaries even without leaving their homes. Member beneficiaries can access their statement of account and generate a payment reference number in Electronic Commerce Payments (ECPay), Landbank of the Philippines via Link.BizPortal, Paymaya, and GCash via the SHFC Zeus Portal. This payment option was added with the target of making amortization payments easier for the member-beneficiaries in mind. However, the results revealed that the majority of the hubs were actually unable to make use of the said services. As such, it can be seen in Table 12 that the online options are largely underutilized by its target users. Only 1% of Mega Manila II residents were able to use the aforementioned online payment services.

Table 12: *Proportion of Households using online payment services*

Hub	Households Using Online Payment Services
North Luzon	0%
Central Luzon	0%
South Luzon	0%
Mega Manila I	0%
Mega Manila II	1%
West Visayas	0%
East Visayas	0%
Northwestern Mindanao	0%
Southeastern Mindanao	0%

The problem over the nearly nonexistent usage rate of online payment platforms seem to stem from the lack of general awareness from the member-beneficiarues about the very existence of such option. When talking about the delayment of amortization payments, one particular respondent said,

> "*Nasa list of priority po namin ang monthly amortization, kaso lang po yung sitwasyon po namin sa office pa po nagbabayad. Kasi ang layo layo po namin, kaya kung minsan yung nasa mindset po namin after 5 months na lang po kami magbabayad. Pero kung may online po pwede po kami magbayad kahit every month.*"

When mentioned that an online payment does, in fact, already exist. the respondent exclaimed,

> "Thank you so much, big help *po itong* online payment services *niyo para makapagbayad na kami*."

SUMMARY & CONCLUSION

The COVID-19 pandemic has caused unprecedented aftermaths to the economy and housing sector of the Philippines derived from the strict quarantine protocols by the national and local government units alike. These aftermaths have especially caused severe loss for the communities of the CMP, with its target beneficiaries belonging to the lower income deciles. Consequently, the CER of the program was strained due to amounting factors faced by the majority of households whose source of income came from affected sectors in the labor industries. The broad implications were demonstrated with the percentage decreases in the workforce, labor movement, change of household income, and increase in household expenditure resulting in an incapacity for the beneficiaries to sufficiently provide for their necessities and meet their monthly obligations. More generally, the income inequality faced by the households whose source of income belonged to the formal and informal sectors has been dealing with this living situation even before the outbreak of Covid-19. Thus, they are further pushed back to a seemingly inescapable corner of financial constraints, especially those who are financially incapacitated.

The present findings affirm that providing the socio-economic background of the SHFC communities is crucial in crafting strategies that adhere to the mandate of the CMP while accounting for the disposition of the communities in the time of the pandemic and hereafter. In doing so, the SHFC has the upper hand to address the challenges experienced by its communities and for planning innovative and hub-specific interventions in addressing the low collection rate.

In conclusion, the presented data from this study addressed the following:

- At least 50% of the households who experienced unemployment due to the stringent quarantines were reported to obtain reemployment. This is a follow-up on the estimated recovery of the country by the ADB, which forecast that the Philippines will resume economic activities and experience a rebound by 2021 until 2022.
- The majority of households across all hubs have been affected by a decrease in their total family income regardless of whether they had unemployment during the lockdowns or not. This is reflected in different forms such as salary decreases and lessened workdays. Moreover, the said salaries for many households fall below to less than 50% compared to their monthly income before the onset of the pandemic, further corroborating the 2020 World Bank study saying that income and employment do not recover at the same level especially for low-income households.
- The spending pattern for household expenditures of the member-beneficiaries affects the propensity of the member-beneficiaries' to defer from paying monthly amortization to prioritize their day-to-day needs such as food, water bills, electricity bills, and medical expenses to cite a few.
- All in all, economic factors such as employment, income change, and spending pattern have, in many cases, significant effects on the payment of monthly amortizations in each hub. Ultimately, however, these factors on their own are not sufficient enough to explain the general behavior of each households on paying their housing loans as there are other exogenous factors present in each locality that also play a role in shaping payment behaviors.

RECOMMENDATIONS

Given the findings on the economic impact of the pandemic on the households in the CMP communities, the following are recommended to input for the possible strategy in the collection of SHFC.

Provision of micro-level interventions for resolving factors of non-repayment

While the COVID-19 pandemic had a significant effect on the financial capabilities of the member-beneficiaries, the non-payment of monthly amortization is also affected by other context-dependent factors that are unique to each hub. It is important to realize these contextual differences and recognize that there are other external factors that exist even outside of the immediate economic effects of the pandemic. Thus, it is recommended that possible interventions should be patterned based on the issues that actually exist and apply at the local level.

In the case of Miranda Compound from Central Luzon, some members felt discouraged from continuing their monthly payments because it turned out that their lots would be affected by the proposed railway extension's eminent domain. With the threat of displacement compounded by uncertainties about their future, many members of the community no longer feel the need to be compliant with their payment. In Southeastern Mindanao's Indangan Highlands, members are also experiencing a similar concern over an impending threat of demolition caused by another government project. This concern over land security reflects on their overall disposition towards monthly amortization payment, as observed by the low payment rates and low priority placements. Some communities cite geographical barriers to accessibility as a significant influence for nonrepayment. Respondents from Earl Amane in West Visayas noted that it is hard for them to consistently pay for their amortizations because their local officers are not accepting payments, while the location of the branch office—where payments are to be delivered—are too far from the communities. Clearly, there is need to address these underlying issues first before the MBs can be encouraged to pay their obligations again.

An example of a context-based strategy from the Northwestern Mindanao hub can be modeled in developing a hub-specific course of action in collecting monthly amortization. According to one officer, even with the economic impact of the pandemic, their collection strategy is governed by their mindset of adding their loan obligations as top priority.

The results of the correlation analysis in this study can also provide a useful guide for the implementation of particular interventions in each communities. For the hubs with significant correlation with employment, provision of livelihood programs suitable to each community may prove to be beneficial for the improvement of payment rates. For those with significant correlation with income change, communities can be capacitated to better handle their finances through financial literacy trainings. For hubs correlating with the household's spending priority, workshops can be conducted to each community with the goal of instilling more appreciation towards consistent payment of monthly amortizations.

Wide information dissemination on the use of SHFC online payment

The CAs involved in this study were found to be generally unfamiliar with SHFC's online payment channels. As a result, it is recommended that information on the existence of alternative payment channels be disseminated more effectively. This can be accomplished by conducting orientations for CA officers—particularly the treasurer—on the process of using payment channels. The CA officers or treasurer will then tasked to disseminate the information to their respective MBs via online platforms such as group chats as a safety precaution this pandemic to limit interaction with one another and limit the spread of the virus. In the absence of group chats, the treasurer or whoever collects the payment can inform the MBs about the option of paying online.

For this activity to be effective, the officers themselves must be capacitated first with adequate knowledge about the alternative payment platforms. A training for the treasurers of all SHFC communities should be conducted to inform them on the proper use of online payment (e.g., GCash, ECPay, etc.) channels so information can be better cascaded to the member-beneficiaries. As an addition, financial literacy training should also be conducted in all communities to capacitate them to better handle their household finances. In line with with there should the be a proper budget allocation for purchasing of online video conferencing premiu account to ensure a smooth and successful conduct of these trainings.

Improvement of online platform user experience

One possible reason behind the nonexistent usage of online payment channels may be because it is still not user-friendly to its target audience, many of which are not tech-savvy and not inclined to learn about the additional mechanisms for online payment in the first place. Aside from information dissemination, steps must also be taken to ensure that the platform itself is conducive for payments. The Information and Communication Department (ICTD) of the SHFC can possibly make a mobile application or online platform that will enable MBs to monitor their payment status in a faster and more transparent way. The said application should also be linked with existing online payment channels for the convenience of both MBs and SHFC branch offices. Furthermore, online channels can also be utilized for payments of arrears with the additional option of sending alert messages to MBs to remind them of their payment balances.

Priority hubs for collection

A key highlight of the findings show that there is a significant decrease in the average income range across all CMP regional hubs from before to after lockdown. Thus, it is recommended to focus the collection on the hubs with an average income range that slightly decreased after lockdown. The hubs that must be prioritized for collection are Mega Manila I and II, Southeastern

Mindanao, and North Luzon. However, the poor income hubs such as Northwestern Mindanao, South Luzon, and Western Visayas must be considered for a revamp in the collection since there is a significant drop in their average income after lockdown. It is also recommended that the member-beneficiaries who remain unemployed must be connected to the local government units for job interventions.

A federation of communities with high collection efficiency rates can also be established, where their best practices can be shared to encourage and inspire other communities to also achieve higher collection rates. In addition, incentives may be given to these communities to motivate them to be consistent in their performances.

Additionally, the following recommendations—in consultation with the various branch representatives—are also worth considering for its feasibility in the future:

Community gardening and green livelihood

Urban gardening can be promoted in the communities so MBs can have sustainable and accessible sources of food that would enable them to spend less for their daily food budget, while also instilling social cohesion by encouraging rapport with all members.

Examination of social fabric in community associations

There is a need to examine the trust and confidence of MBs to their community association treasurers, as there had been cases where members were dissatisfied with their respective treasurers (due to incompetence, personal grievances, etc.) which then affects their predisposition to pay. Before the implementation of a possible community intervention, it is also important to look first into the capacity of the members as one community to receive such intervention.

Promotion of individualization of titles

As a response to the issue of trust for community treasurers (and officers in general), one possible resolution for this is to promote the individualization of titles, so individual member-beneficiaries can directly pay for their monthly amortizations without needing the endorsement of their treasurer, while also encouraging MBs to pay as it enhances a sense of ownership.

Reexaminination of the Collection Servicing Agreement

There may be a need to revisit the current provisions under the collection servicing agreement to gauge its effectiveness given the current economic and social climate in SHFC communities.

Possible revisions and updates should be made where it is applicable (e.g., possible suspension of endorsement from CA treasurers at the time of the pandemic, etc.)

Updating of the status of livelihood programs

The SHFC website should reflect real-time updates on the application progress and availability of livelihood programs that can be availed by the communities. A study should also be conducted on the provision of livelihood programs that are suitable in the different social contexts of each community.

Loan Restructuring Program

There is a need to reassess if the implementation of the loan restructuring program, which was indefinitely halted due to the pandemic, can now proceed this time.

Allocation of Vehicles

Vehicles should be available to all branches for a faster transport of statement of accounts and other pertinent payment documents to communities, especially given the current mobility restrictions in this time of pandemic.

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