

in Different
PERSPECTIVES:
Rebuilding
Lessons
after a Crisis

Dr. Rodrigo M. Velasco Dr. Karen Joyce G. Cayamanda editors

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# Preface

The world is in chaos. The emergence of COVID-19 pandemic created the havoc that all parts of the globe had to deal with. In addition, there are still other personal and social crises that everyone endures.

Rebuilding Lessons after a Crisis attempts to present the whys, whats and hows of humanity's risk perception across the world as we embark on this challenging journey and help define the most appropriate and most effective risk-related behaviors for survival.

The current pandemic has brought about the abrupt shift in all sectors of the society in different parts of the world. It has resulted to immediate adjustments and development of coping mechanisms to transcend beyond the challenges of this pandemic. Like any other crisis, the current situation taught us to reflect and manage its overwhelming effects.

This book compiles articles that reflect the different perspectives in varied concerns such as health, economy, education, and social transformations. Its impact to the physical, emotional, psychological and financial conditions of humanity across the world are also presented.

Part I as the opening chapter attempts to describe the situation in terms of how a crisis has been evaluated in different lenses as to the risk perception and the risk related behaviors as to how various sectors have adapted to the situation.

Part II describes the varied effects of the pandemic and the adjustments and coping responses manifested by the different sectors.

Part III offers the strategic actions and coping mechanisms that can help recover and sustain ways of life in these challenging times.

## About the editors

**Dr. Rodrigo M. Velasco** has a multi-cultural perspective of education and research having worked as a professor and administrator in the Philippines, CNMI, USA and Sultanate of Oman. His orientation on multiculturalism and diversity trained him to cope with different cultural and geographical settings. He is



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# **Resilience in Community Urbanization**

Pauline B. Malabanan & Emilia S. Visco, PhD

#### Introduction

The word urbanization has been defined in many ways as it gathered the interest of various researchers from different fields. In the Philippines, the level of urbanization is measured through the number of population residing in urban areas. The urbanization rate recorded last 2015 was 51.2% which means around 51.73 million people are residing in urban classified barangays (Philippine Statistic Authority, 2019). It is estimated that half of the country's population is residing in 7,437 urban barangays and the rest are in 34,599 rural barangays. The process has benefited the country such as better health services, increase in job opportunities, and increased overall income of the population (Ling Ooi, 2007). If not handled properly, the process imposed negative effects in the area as it cause uncertainties due to rapid population growth.

One area of interest is Cabuyao City, Laguna. The area has the largest population and secondly dense populated region in the Philippines (Mojares, 2013). It was declared a city in 2012 and considered the youngest city in the province of Laguna. It was listed as "entirely urban" in 2015 even it is only on its 3<sup>rd</sup> year since declaration of cityhood. Its situation is an interesting one as it has almost, if not completely, transitioned to an urban center. The paper will look into two barangays namely Barangay Sala which is considered as Category 1 Urban Barangay and Barangay Casile, considered as Category 2 Urban Barangay. As stated by the National Statistics office in 2010, there are three classifications of urban barangays in the Philippines.

Category 1 – has a population of more than 5,000.

**Category 2** – an area with at least one establishment employing 100 persons.

Category 3 – Five establishment present employing 10-99 persons and having five or more facilities in the two-kilometer radius from the barangay

The research assessed the perceived resilience of Barangay Casile and Barangay Sala of Cabuyao City on urbanization The specific objectives are; (1) to discuss the vulnerability context to urbanization of Cabuyao City, Laguna; (2) to examine the effects of the trends and shocks of urbanization to the barangays in terms of (a) human capital, (b) social capital, (c) financial capital, (d) physical capital, and (e) natural capital; and, (3) to present the innovation of the public officials through policies, programs, and projects to alleviate the negative effects of urbanization. The study could also enlighten researchers on how the sustainable Livelihood Framework (SLF) could be practiced in the concept of resilience and how resilience can be applied to study of urbanization. Furthermore, it only aims to assess resilience based on the indicators and components of Sustainable Livelihood Framework.

# Urbanization in Region IV-A

Region IV-A or CALABARZON comprises of 5 provinces namely Cavite, Laguna, Batangas, Rizal, and QueZON. Its total population (14.4 million) is 1.53 million higher than the National Capital Region. Furthermore, it has experience in-migration, high birth rate and increasing life expectancy especially to highly industrialized province such as Laguna, Cavit and Rizal. Due to this, developments in the region is seen such as improvement of roads, railroads and water transportation. However, adverse effects are also experienced such as increase in poverty incidence, increase in informal settlers, and evident environmental degradation (Mojares, 2013).

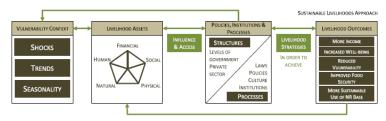
# Sustainable Livelihood Framework as tool for Resiliency

The concept of resiliency is generally defined as the way of a system to plan, resist, and recover in stress and change (Bodland and Granberg, 2018). According to Chandra, et.al (2010), there are five areas to focus on the study of community resilience. First is the psychological and physical wellbeing of the

population. Then, it should be correlated socially and economically. Furthermore, the community shall use various tools and infrastructure to improve preparedness and recovery and policy makers and government should be involved. Lastly, social networks shall be engaged.

With this, one could infer that there are three main components in the study of resilience; (a) the shock or trends of hazard, (b) community networks or the capacities of community to recover from impact of hazard, and (c) innovation through policies and programs of the government to mitigate the negative effects of hazard. These components are present in the Sustainable Livelihood Framework (SLF) which is popularly used in the assessing community livelihoods. As stated by Osman-Elasha, et.al (2005), the framework can also be used in the study of resilience for it provide holistic approach on how intervention affects the community through various data collection methods. In addition, the changes in five community assets could give picture of its adaptive capacity.

Figure 1
Sustainable Livelihood Framework

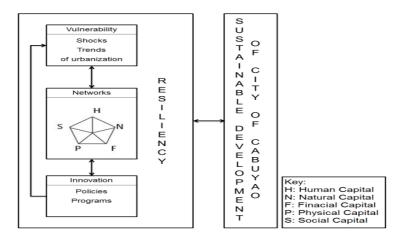


Source: Department for International Development (n.d.)

For the study's theoretical framework, this paper used modified sustainable livelihood framework taking into consideration three main areas in the study of resilience namely (1) 1) vulnerability context, (2) networks or capabilities, and (3) innovation.

Figure 2

Modified Sustainable Livelihood Framework



The effects, shocks and trends of urbanization are the vulnerability context of the community. This could affect the community assets of the system. The assets are the resources and means of the community to manage the vulnerability context of urbanization. These are categorized into five – human, finance, social, physical, and natural. The innovations are the policies and programs of the community that will improve community assets and mitigate the negative effects of urbanization. As the community becomes more resilient, sustainable development is more attainable.

# Methodology

The study employed key informant interview with the City Mayor to understand the shocks and trends of urbanization felt by Cabuyao City. Focus Group Discussion was conducted to the barangay officials of Barangay Sala, classified as Category 1 Urban Barangay and Barangay Casile, classified as Category 2 Urban Barangay. This is to identify the changes in community assets of each barangay and list the programs, projects and activities. Before implementing the data gathering, an informed consent was establish educating the participants of the steps that will take place during the FGDs and KIIs. Furthermore,

anonymity of individuals participating in the research is ensured taking into account the confidentiality.

Sematic Differential scale was used to rate the indicators of changes in community assets. This scale, developed by US psychologist Charles E. Osgoos, is popularly used to capture perception, affective and cognitive competencies of the respondents meaning to certain ideas. Descriptive analysis was employed to interpret the changes of community assets and understand the perceived resilience of the two barangays. Same data analysis method was used in the analysis of the innovations of the leaders of barangays.

# **Findings and Discussion**

Vulnerability Context of Cabuyao City, Laguna

One of the trends of urbanization felt be the community is the increase in their community budget. Cabuyao City was tagged as the richest municipality in 2014. This, however, did not benefit the community as per the City Mayor. The community outperform its nearby areas such as Sta Rosa City, Calamba City, and Binan City with a budget of Php 600 – 700 million in 2010. Being tagged as richest municipality is not a good indicator in the internal revenue allotment (IRA) of the community because its community income will be divided into the total number of municipalities in the Philippines which is 1,488. The community has contributed higher share of income but received a lower budget. The declaration of its cityhood as contributed positively to the IRA as their income will be shared and divided into 140 component and highly urbanized city in the Philippines. This will increase its budget for the betterment of its services.

Its cityhood declaration has brought another positive impact which is independence due to institutionalization. As a component city, the local government code of the Philippines mandated LGUs to increase their departments which resulted to increase in social services and available jobs for the residents. This also brought independence in terms of political decision making of its official. As a city, the leaders can decide solely

without consulting its provincial government. For example, For example, in terms of tax amnesty and tax incentive, municipalities in the Philippines need the approval of Provincial Government before granting to the investors. Meanwhile, in a city, the officials have the liberty to approve and permit tax amnesty and incentives which can bring more private companies in the area. With this, the city government has positive partnership with the private sectors in the area. The community leaders can tap industries to supply health supplies and medicines to community pharmacy and hospitals. Furthermore, these industries can provide job for the residents.

Urbanization was also accompanied by influx of population due to migrants. Because of numerous job opportunities available in the area, rural people try their luck in the City. With the increase of working age population, this adds to the income in the city. However, this posed challenges as the number of jobs were not enough to cater the unemployed population as some may not be qualified due to low educational attainment which resulted in a high unemployment rate. Furthermore, the increase in population means an increase in provision of basic services. AS per the City Mayor, the city has no sufficient number of hospitals and schools to cater the 330,000 population. With no available hospitals, sick constituents are referred to nearby public hospital outside Cabuyao or nearest provincial hospital. To mitigate this, the government officials have approved the building of another government-run hospital with 300 bed capacities. However, the traffic congestion becomes a problem as population increases. Curative approach is used by the city government to mitigate this widening such as road and strict implementation. In addition, environmental problems are evident in the community from the water pollution of Laguna lake to air pollution due to vehicles and industries. Land conversion can also be seen with the building of residential lands.

# Perception on Community Assets

# A. Barangay Casile

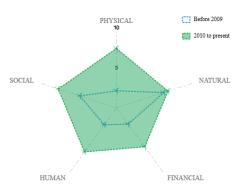
As perceived by the officials of Barangay Casile, a Category 2 Urban Barangay, the process of urbanization was felt during 2010 due to the development of roads, electricity and water lines. As seen in Figure 3, the physical asset of the community improved due to increase of residential houses and buildings and development of electrical, water and communication lines. Enhancement of roads and increase in vehicles are also evident in the community. However, due to its location, there is a specific time where the residents can access water and some houses still do not have electricity.

Furthermore, the community improved its natural asset due to the enhancement in handling of community waste and solid waste management. As per the officials, no notable change can be seen in the water, air, and soil quality. The financial asset of community also increased due to low poverty incidence and increase of barangay budget and livelihood. Though, the community has limitation in money transactions due to low financial establishments. The residents will need to go to city proper if they need to send money.

For the human assets, the community population and the working age population increased as well as the health status and educational attainment. Furthermore, unemployment decreased by 4 points. The community also experienced increased its social asset due to improvement of educational and health services. The number of people's organization and the connection of the barangay to these organizations also improved. However, increase in crime rate is noted in the area due to increase of migrants/dayo.

Figure 3

Changes in community assets of Barangay Casile due to urbanization



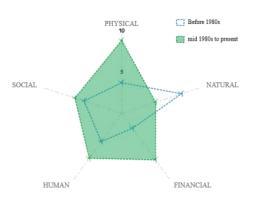
### B. Barangay Sala

In the case of Barangay Sala, a Category 1 Urban Barangay, the officials noted the development on the 1980s due to the increase in industries and factories. The number of residential subdivisions and buildings increased in the area. Water, communication, and electricity line increased also to meet the demand of increasing population. Furthermore, there is also developments of road systems and increase in vehicles. This contributed to the increase of community's physical assets. However, its natural asset decreased due to the conversion of agricultural land. Water is still drinkable but now treated with chemical. A decrease in the presence of trees is also noted.

The community financial, human and social assets also increased. This is due to the improvement in the quality of life of the residents and increase in livelihood and available jobs brought by the private industries. The working age population almost tripled. However, the health status of the residents worsened, and the unemployment rate is still the same. Furthermore, like Barangay Casile, the community's education and health services increased. The connection of barangay to other organization improved. However, there is a drastic change in the presence of traffic and crime.

Figure 4

Changes in community assets of Barangay Sala due to urbanization



# Community Innovations

# A. Barangay Casile

The barangay officials implemented curfew, anti-drug campaign, oplan sita, and barangay census to solve the problem on crimes and incidents. To improve its natural assets, various program such as Oplan Kalinisan (Tapat mo, Linis mo), Aso mo, Itali mo, No littering beside the streets, No cutting of trees, Tree planting, Training and seminars during disaster, and No construction of building at danger zone were executed. The barangay is also strict in implementing tax ordinances and videoke ordinance to resorts present in the area to reduce noise pollution. While the social assets were also enhanced due to scholarship programs, feeding programs, medical missions, and presence of barangay doctors and tanods.

# B. Barangay Sala

To mitigate the traffic, the officials implemented parking ordinance. The officials also constructed tents to enhance livelihood programs for the residents. The notable decrease in natural asset was alleviated by the participation of barangay to DRRM activities. The LGU also provide seeds and fertilizers to promote agriculture in the area. The presence of barangay tanod/police is implemented to ensure safety and security of the residents. To enhance the social assets, the community give medicines and school supplies. Furthermore, it implemented curfew, liquor ban and videoke ban.

#### Conclusion

The linkages in the three variables of modified sustainable livelihood framework namely vulnerable context, community assets and innovation can be seen in the study. The effects that urbanization brought to Cabuyao city are increase in community budget, independency brought by institutionalization and increase in population due to migrants. These trends and shocks were felt by Barangay Casile and Barangay Sala differently. This could be seen in the changes in their community assets. The noticeable various community effects were due to the difference

in the time when they felt the process of urbanization and the over-all impact of the vulnerability context in the community due to its location. With this, the two barangays planned and implemented numerous programs to improve their assets and mitigate the effects of urbanization in their respective community. Barangay Casile and Barangay Sala are still in the process to be resilient to mitigate the negative effects brought by urbanization and improve their ability and strength as a community.

#### References

- Bodland, T., & Granberg, M. (2018). *The community resilience* challenge a case study from Sweden. Reframing Urban Resilience Implementation.
- Chandra, A., Acosta, J., Meredith, L., Sanches, K., Stern, S., Uscher-Pines, L., Yeung, D. (2010). *Understanding Community Resilience in the Context of National Health Security: A Literature Review.* Santa Monica, CA: RAND Corporation, DOI: https://doi.org/10.7249/WR737
- Department for International Development. (n.d.). Sustainable Livelihoods Guidance Sheet.
- Ling Ooi, G., & Hong Phua, K. (2007). Urbanization and Slum Formation. *Journal of Urban Health*. 84 (Suppl 1): 27–34. doi: 10.1007/s11524-007-9167-5
- Mojares, J. G. (2013). Urbanization and Its Effetcs in the CALABARZON Area, Philippines. *Journal of Global Intelligence & Policy*, 24-40.
- Osman-Elasha, B., Goutbi Elhassan, N., Ahmed, H., & Zakieldin, S. (2005). Sustainable livelihood approach for assessing community resilience to climate change: case studies from Sudan. Assessments of Impacts and Adaptations of Climate Change. AIACC Working Paper No.17
- Philippine Statistics Authority. (2019, March 21). Philippine Statistics Authority. Retrieved from Urban Population in the Philippines (Results of the 2015 Census of Population): https://psa.gov.ph/content/urban-population-philippines-results-2015-census-population

