



# Analyzing Stakeholder Engagement in Cebu, Philippines during Typhoon Odette



Ma Christina Gabrielle Kang, Candidate for B.A. in Environmental Studies

Project Mentor: Dr. Simon Richter | Instructors: Dr. Jane E. Dmochowski & Jimil Ataman

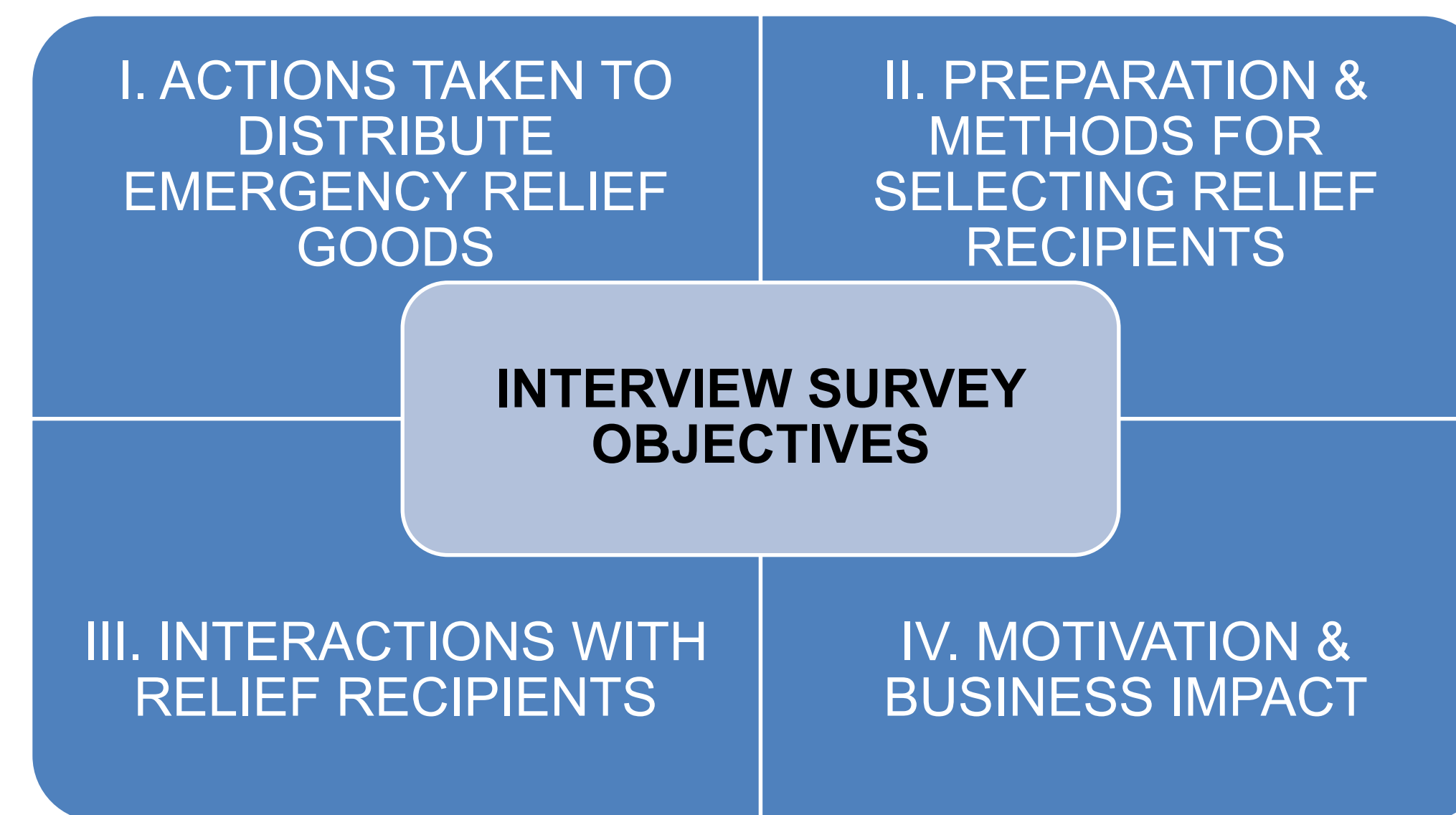
With Funding from the Penn Institute for Urban Research's Undergraduate Urban Research Colloquium, supported by Yining Lei & Travis Decaminada

## Abstract

Over the last decade, the province of Cebu, Philippines has emerged as one of the most vulnerable regions to climate change impacts<sup>1,2,3</sup>. In 2013, Cebu was victim to super Typhoon Yolanda and the Bohol Earthquake, and more recently in 2021, Cebu was hit by super Typhoon Odette<sup>1,4</sup>. Given the growing severity of climate-related risks and disasters, as well as the significant role of private sector actors in Cebu's disaster risk management and reduction, this research seeks to characterize the contribution of private sector actors in the immediate relief operations following the 2021 super Typhoon Odette within the province's capital of Cebu City. Over the course of five months, we conducted and analyzed 17 semi-structured interviews with private relief providers to identify the risks and benefits of private sector-led climate resiliency within the context of limited public resources. This analysis indicated the primary role that private sector business networks play in facilitating the short-term collection, delivery, and distribution of immediate relief goods to high-risk communities. We identified the necessity for future research regarding the long-term impacts of these immediate relief operations, as well as the integration of aid recipient perspectives to evaluate the effectiveness of these initiatives.

## Methodology

The research question is addressed through the implementation and analysis of **semi-structured interviews**<sup>5,6</sup> with private sector immediate relief providers. A snowball approach<sup>7</sup> was utilized to identify and engage with interview participants abroad.



Note: In cases where public-sector stakeholders were interviewed, the survey was modified slightly to address the policy and partnerships underlying public action.

## Analysis

The sample includes **19 audio recordings**, **17 of which consisted of dialogue encompassing the survey questions in its entirety**. Eight interviews were conducted in an online capacity, while nine were conducted on site in Cebu City, Philippines. The interviews cover 13 relief distribution initiatives: nine private-led during Typhoon Odette, one public-led during Typhoon Odette, and two private-led during Typhoon Yolanda.



Figure 2: On-site Data Collection - Records for Public Assistance



Figure 3: On-site Data Collection - Visit to the Rotary Club office



Figure 4: On-site Data Collection - Interviewing Individuals

### Collaborations Among Private & Government Entities

- **Private-private collaborations:** to organize resource accumulation and distribution methods.
- **Public-private partnerships:** to deliver relief goods the island of Cebu and to identify need.

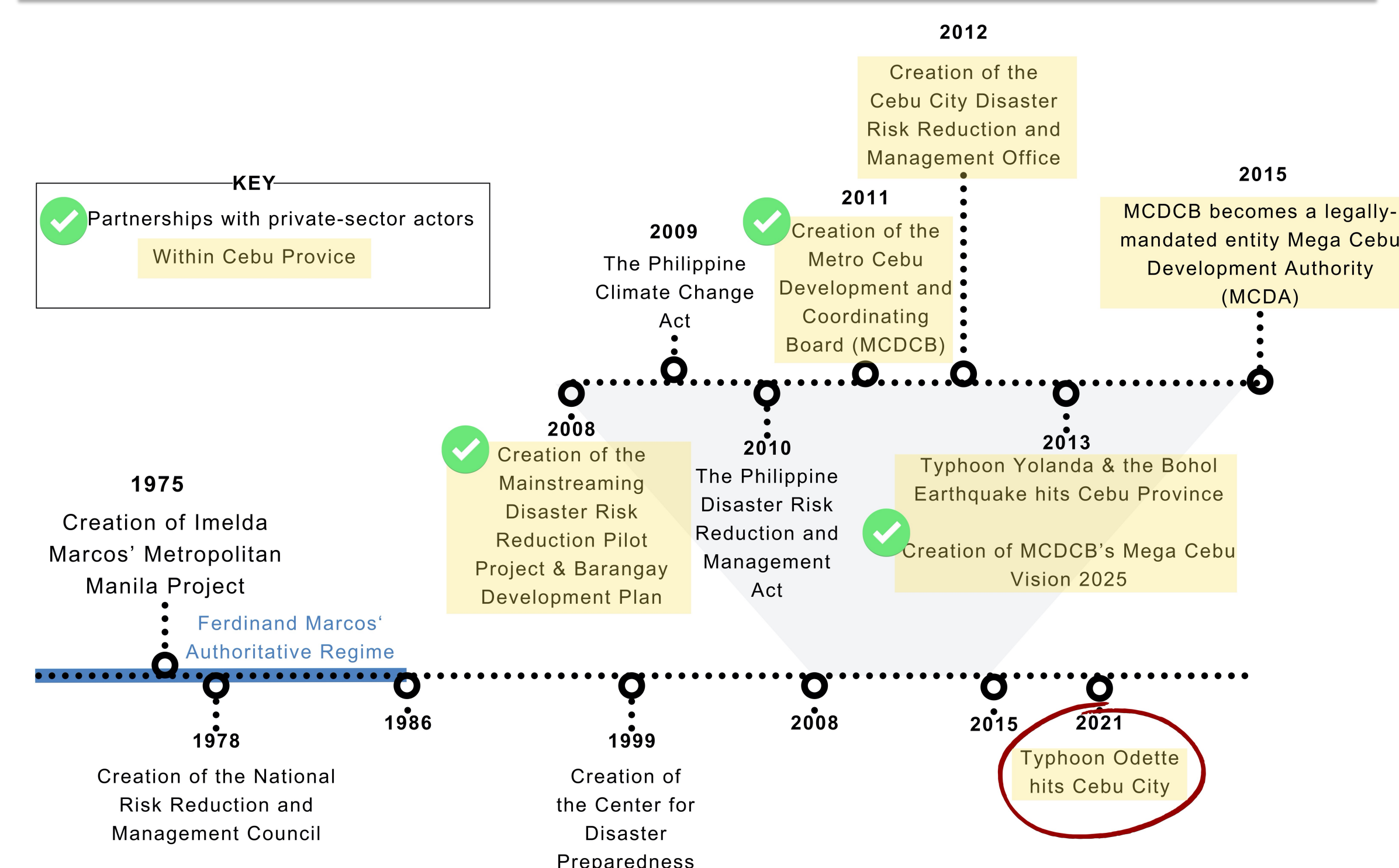
### Addressing Major Distributional Challenges

- **Logistical complications** due to infrastructural damage and the Covid-19 Pandemic.
- Maintaining **political neutrality** during distributions to overcome the perception of political bias within the public relief distribution system.

### Sentiments Motivating Involvement

- **Religious motivation, familial ties** with specific organizations, and **community expectation**.
- **Action-driven cultural upbringing** was the primary basis of most answers to this question.

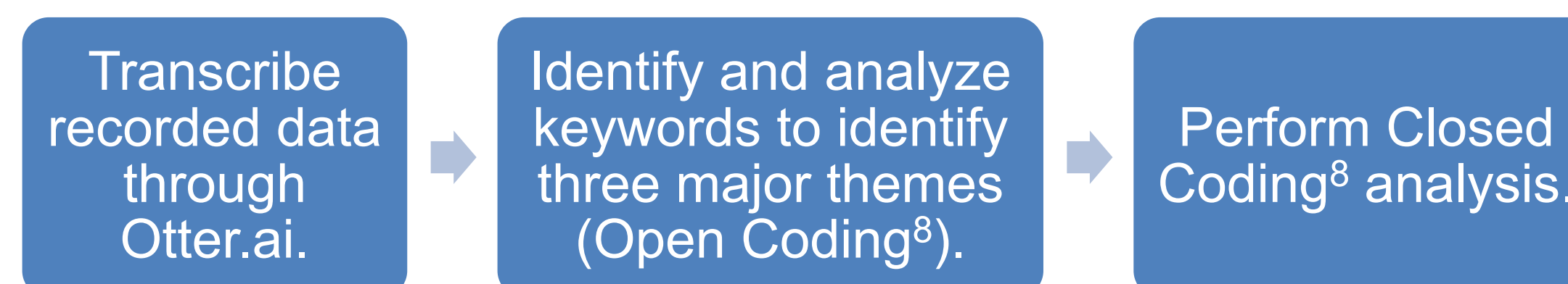
## Background



## Research Guidelines

- Interviews were conducted both in person and via Zoom.
- One-on-one interviews were preferred, but group interviews were conducted in cases where the primary interviewee felt more comfortable sharing their perspectives with a group of their peers.
- Each interview was scheduled to fit within a 30-to-45-minute time frame.
- Each interview was conducted in English. *Bisayat* was used where interviewees did not know the English translation for a word. In these cases, we consulted a native translator and used context clues for interpretation.

## Analysis Process



## Works Cited

<sup>1</sup>Cebu, Philippines. 2018. In *Building Resilient Cities*, by OECD, 103-17. OECD Green Growth Studies. OECD. <https://doi.org/10.1787/9789264305397-9-en>

<sup>2</sup>Matsunoto, Tadashi. 2020. "Strengthening Urban Resilience/Disaster Risk Management in Asian Cities." In *Resilient Policies in Asian Cities: Adaptation to Climate Change and Natural Disasters*, edited by Mitsuru Tanaka and Kenichi Baba, 195-204. Singapore: Springer. [https://doi.org/10.1007/978-981-13-8600-8\\_9](https://doi.org/10.1007/978-981-13-8600-8_9)

<sup>3</sup>Dickella Gamaralalage, Premakumara Jagath, Toshizo Maeda, and Simon Gibby. 2020. "Enhancing Capacities for Building Climate and Disaster-Resilient Cities in Asia: Case Study of Cebu, Philippines and Northaburi, Thailand." In *Resilient Policies in Asian Cities: Adaptation to Climate Change and Natural Disasters*, edited by Mitsuru Tanaka and Kenichi Baba, 105-30. Singapore: Springer. [https://doi.org/10.1007/978-981-13-8600-8\\_8](https://doi.org/10.1007/978-981-13-8600-8_8)

<sup>4</sup>Many Rose Sagamin, Morette Marie Enram. 2022. "A Year After Odette: Things Return to Normal but Emotional Scars Still Remain." December 16, 2022. <https://cebu.dailynews.inquirer.net/489400/a-year-after-odette-things-return-to-normal-but-emotional-scars-still-remain>

<sup>5</sup>Bernard, H. Russell. 2005. *Research Methods in Anthropology: Qualitative and Quantitative Approaches*. Fourth. AltaMira Press.

<sup>6</sup>Esteban, Theresa Audrey O., and Julian Edelebos. 2023. "The Politics of Urban Flood Resilience: The Case of Malabon City." *International Journal of Disaster Risk Reduction* 88 (April): 103604. <https://doi.org/10.1016/j.ijdrr.2023.103604>

<sup>7</sup>Sharma, Gaganpreet. n.d. "Pros and Cons of Different Sampling Techniques."

<sup>8</sup>Saldana, Johnny. 2012. *The Coding Manual for Qualitative Researchers*. Second Edition. Sage Publications, Inc.

## Conclusion & Future Discussions

As climate change impacts have continued to grow in severity, Cebu City continues to be extremely vulnerable to natural disasters. Amidst the localization of disaster management within the country and given the strength of the city's local private sector, these stakeholders play an essential role in providing short-term aid to target communities, specifically as private networks facilitate the collection, transit, and dissemination of short-term relief goods. **Future research** may expand the population of interest to compare the perceived contributions of private sector relief providers with that of aid recipients and explore the long-term impact that these providers may have in the creation of climate resiliency.

## Cebu & Climate Vulnerability

- Susceptible to "slow-onset climate change impacts"<sup>1</sup> but most vulnerable to **flood risk, landslide risk, and fire risk**, exacerbated by inadequate sewage drainage systems and energy supply. <sup>1, 3</sup>
- Informal settlement dwellers (30 percent of households in the city) are at highest risk.<sup>3</sup>