MIGRANTS WITH DIGNITY:

IMPACTS OF CLIMATE CHANGE-RELATED DISASTERS AND ADAPTATION STRATEGIES ON THE U.S. FILIPINO MIGRANT COMMUNITY

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ABSTRACT

Migrants with Dignity:

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Climate change disproportionately impacts the most vulnerable and marginalized populations around the world. Some communities use migration as an adaptation measure in order to cope with or respond to climate change-related disasters. However, the migrant community is often left out of conversations around climate change adaptation and disaster risk reduction. This thesis examines the intersection between climate change-related disasters and migration adaptation strategies, specifically focusing on how the Filipino migrant community in the United States is impacted. By applying a climate justice perspective, this thesis critiques the social vulnerability framework, stating that it does not properly address the needs of the migrant community. The findings show that the U.S. government lacks substantial implementation of climate change adaptation and disaster risk reduction policies. Current climate change policy fails to consider the

U.S. Filipino migrant community. By acknowledging migration as adaptation, climate migration can be integrated into more holistic climate change policies.

Keywords: Asian Americans, climate change adaptation, climate justice, disaster risk reduction, equity, Filipino migrant community, social vulnerability framework

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LIST OF ABBREVIATIONS

BIPOC	Black, Indigenous, and people of color
CCA	Climate Change Adaptation
DM	Disaster Management
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
EPA	Environmental Protection Agency
GHG	Greenhouse gas
IPCC	Intergovernmental Panel on Climate Change
TEK	Traditional ecological knowledge
UNDRR	United Nations Office for Disaster Risk Reduction
UNFCCC	United Nations Framework Convention on Climate Change
UNISDR	United Nations International Strategy for Disaster Reduction

I. INTRODUCTION

In recent decades, climate change has become a notable topic of interest for both the scientific community and the general public. Rising sea levels and increasing storm intensities exacerbate the effects of climate change on communities around the world (Nurse et al., 2014). These often comes in the form of hazards and disasters, which disproportionately impact marginalized and more vulnerable populations. Increased vulnerability can overwhelm a community's ability to cope with or respond to a disaster, leading to a myriad of related issues, including climate-related migration (Adger et al., 2015). While climate-related migration can be considered an adaptation technique, there are concerns associated with the specifics of geographical location, resource scarcity, unemployment, and additional strains on communities.

The Philippines, one of the most disaster-prone countries in the world, is vulnerable to typhoons, storm surges, drought, sea-level rise, and tsunamis (de Leon & Pittock, 2017; Bohra-Mishra et al., 2017). While the Philippines is "environmentally linked to both the Western Pacific and Island Southeast Asia," the economic fortunes and the well-being of the people in the Philippines continue to be greatly impacted by Spanish, Japanese, and American colonialism and imperialism (D'Arcy, 2018, p. 4). The legacies of colonial and imperial rule have led to increased vulnerability of people living in the Philippines. In the context of a changing climate, it is vital to research the social impacts of climate change and how people are affected by them. Such concerns are voiced in arguments for climate justice, which examine the disproportionate impacts that climate change has on the most vulnerable and marginalized populations around the world (Jafry, 2019).

This thesis comes from the positionality of a second-generation Filipino American who has many lived experiences as a part of the Filipino community. I come from a place of privilege

as a university student in the United States and, therefore, I am using this privilege to bring attention to an issue that remains relatively invisible to the general public.

This thesis will focus on two distinct geographical locations: the Philippines and the United States. Disasters (e.g., typhoons) can prompt migration, which is often used as an adaptation technique by vulnerable individuals. In the context of this thesis, when a disaster impacts a community in the Philippines, some individuals choose to migrate to the United States in order to seek better opportunities. The U.S. is a primary destination for Filipino migrants as the Philippines remains politically, economically, and militarily dependent on the U.S. (San Juan Jr., 2011). This research analyzes the intersection between climate change-related disasters and migration adaptation strategies, examining their impacts on the Filipino migrant community in the United States. It applies a climate justice perspective to disaster risk reduction and migrants in the Pacific by critiquing the social vulnerability framework, emphasizing that it does not currently address the needs of the migrant community.

This research addresses multiple intersectional issues on various scales. First, a majority of studies about climate change impacts, adaptation, and disasters lack a necessary social science perspective related to relational well-being. Consequently, there is a gap in how climate change adaptation and disasters are understood. For example, disasters are often perceived as being "natural" when, in fact, they are determined by social factors. A natural "hazard" does not become a "disaster" until it affects a vulnerable or exposed population. The intersection of disaster risk reduction and climate change adaptation is often misunderstood or ignored, especially in the context of climate justice (Bettini, Nash, & Gioli, 2017; Davis & Vulturius, 2014; Van Aalst, Cannon, & Burton, 2008). While these concepts operate on different spatial and

temporal scales, it is becoming increasingly important to understand how they interact in terms of decision-making within the policy process.

Second, migrant needs are often left out of discussions about climate change, and migration tends not to be regarded as a form of adaptation. Such narratives are common within the social vulnerability framework, which focuses more on economic development and health rather than social or cultural needs. Thus, there is a gap in how migrants are addressed in climate change policy, and this gap must be addressed. While there are multilateral frameworks established, including the Paris Agreement, this thesis focuses on the bilateral aspect of policy (i.e., the ways that the U.S. can help the Philippines). In this case, a focus on bilateral policy is necessary due to the colonial relationship between the U.S. and the Philippines. Because the U.S. has benefitted from colonizing the Philippines, there is a greater value of responsibility for them to address the vulnerability of the Filipino peoples.

In order to achieve the objectives, this research addresses the following questions:

(1) How is the U.S. Filipino migrant community dealing with climate change-related disasters?

(2) To what extent do U.S. government adaptation policies reflect the needs of the migrant community? In what ways can the migrant community be better supported before and after climate change-related disasters?

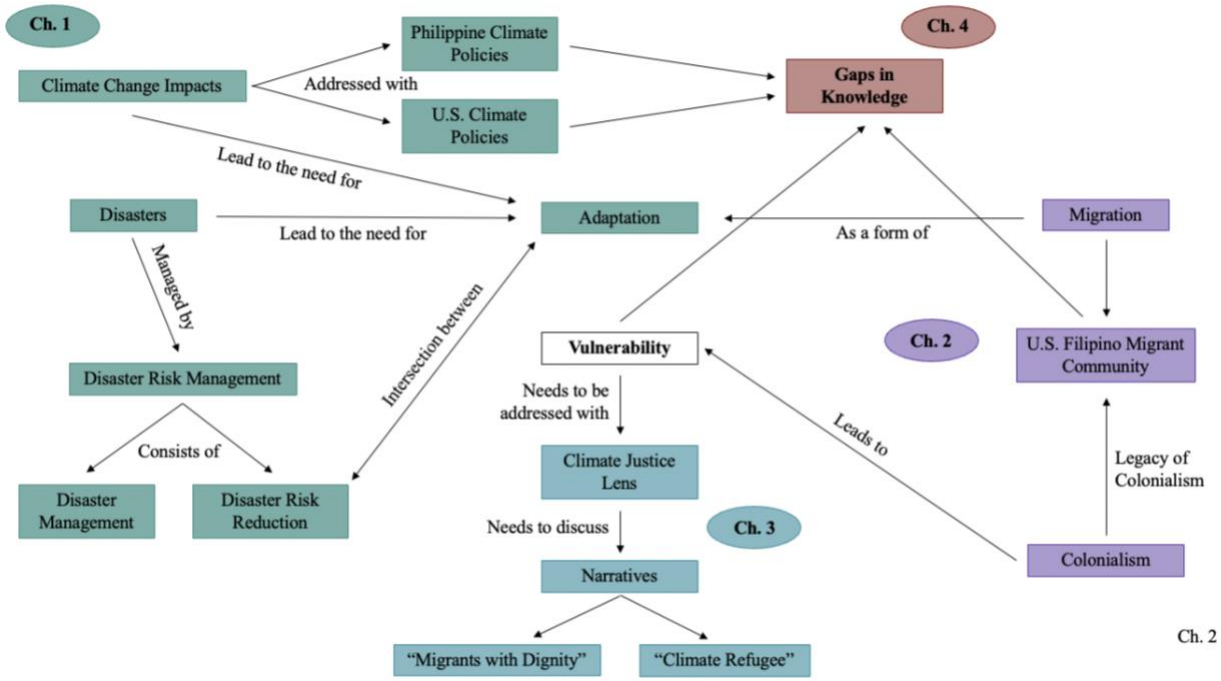
Through a literature review-based meta-analysis, this intersectional research analyzes three different topic areas: climate change adaptation and disaster risk reduction policies, the U.S. Filipino migrant community and diaspora, and the use of a climate justice lens. Various databases and library resources were used, including JSTOR, University of Washington Libraries, and Google Scholar, to search for journal articles, books, government publications, reports,

theses, and dissertations. Common key words used for the searches include “Asian Americans,” “climate change adaptation,” “climate justice,” “disaster risk reduction,” “equity,” “Filipino migrant community,” and “social vulnerability framework.”

Based on the research, a conceptual map was created to organize the different themes within the thesis. Figure 1 illustrates the general organization and structure. Chapter I will address climate impacts and vulnerability and disaster risk management, specifically examining climate policies in the Philippines and the U.S. and the intersection between climate change adaptation and disaster risk reduction. Chapter II focuses on migration, the colonial history of the Pacific, and the U.S. Filipino migrant community. Chapter III discusses the use of a climate justice lens, including the issues associated with using a “climate refugee” narrative. Chapter IV addresses gaps between current policies and the need for a climate justice approach.

Figure 1

Thesis Structure and Organization



II. CHAPTER I

This chapter focuses on climate change impacts and vulnerability, connecting it to resilience and adaptation measures. It defines hazards and disasters, as well as disaster risk management, which includes disaster management and disaster risk reduction. This chapter also discusses climate policies in the Philippines and the United States, and it concludes by identifying the intersections between climate change adaptation and disaster risk reduction.

Climate Change Impacts and Vulnerability

Climate Change

Climate change, as defined by the Intergovernmental Panel on Climate Change (IPCC), is "a change in the state of the climate that can be identified…by the changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer" ("Climate Change and DRR," 2008, p. 1). The United Nations Framework Convention on Climate Change (UNFCCC) provides further specifications, stating that climate change alters the composition of the atmosphere, and can be directly or indirectly attributed to human activity ("Climate Change and DRR," 2008). The process of climate change has already led to sea level rise, extreme weather events, water shortages, and increased health risks from airborne diseases (Briguglio et al., 2007).

In many coastal Indigenous communities, life revolves around the ocean, which is seen as the "sustainer of lives" (Nunn, 2012, p. 1). Because the ocean has been perceived as a good-natured provider to the people, climate change presents a significant barrier to their way of life. In 1988, President Amata Kabua of the Marshall Islands stated:

> It is truly frightening to think that our ocean will turn against us. We have been sustained by the ocean for two millennia. It has been bountiful and continues to yield to us its

bounty…[but] this harmony may be interrupted by the action of nations very distant from our shores (Nunn, 2012, p. 1).

Climate Change Impacts

Climate change-related sea level rise exacerbates the impacts of other natural hazards, presenting significant challenges for coastal areas. Low-lying lands experience most damage from coastal inundation, erosion, and storm surge (World Bank, 2000; Leatherman & Beller-Simms, 1997). Coastal inundation is predicted to worsen with rising sea levels. Increased coastline erosion will leave behind narrower and fewer sandy beaches. Because many economic activities and populations are concentrated in the coastal zone, climate change impacts threaten these industries. The tourism industry, in particular, makes up a large portion of the gross national product (GNP) in many small island nations and coastal communities and is expected to decline, which will negatively impact their economies (Leatherman & Beller-Simms, 1997). Additionally, flooding from storms and tropical cyclones will likely intesify in the coming years, increasing storm surge and the number of overwash events. Tropical regions, including island nations in the Pacific and certain parts of the U.S., are predicted to experience the greatest increases in coastal flooding frequency (Thomas et al., 2020).

Climate-sensitive health concerns rank among one of the largest problems that small island states face as the climate changes. One major concern is freshwater availability, as islands are experiencing rapid salinization due to saltwater intrusion and contamination (Field et al., 2012). As a result, drinking water is put at risk, presenting a problem for islands, especially coral reef atolls, which have limited freshwater supplies (Thomas et al., 2020). A lack of freshwater could fuel sanitation and hygiene issues, as well as food security issues (Nunn, 2012).

Vulnerability

Certain areas of the world are more vulnerable to climate change and natural hazards. In this context, vulnerability is defined as "the potential to experience harm or loss from some event or condition" and the ability to cope with the event if or when it occurs (McLeman & Smit, 2006). Certain individuals and communities are inherently more vulnerable due to their socioeconomic status (Ayers et al., 2013; Smith, 2006). In the context of climate change, it is likely that an individual's ability to survive will be dependent upon their socioeconomic conditions, including race, class, and ethnicity (Smith, 2006).

The most vulnerable and marginalized people are the ones that bear the brunt of climate change impacts. Therefore, an increase in the number of climate change-related disasters will disproportionately impact these communities (O'Brien et al., 2006). The most vulnerable are those whose livelihoods are dependent on natural resources, those living in squatter households, and those living in female-headed households (Thomas et al., 2020). Other populations with higher vulnerability include those experiencing higher poverty and unemployment levels, young and elderly populations, and disabled populations; the vulnerability of these populations is related to health, mobility, and the ability to communicate. Negative impacts are also often concentrated in BIPOC (Black, Indigenous, and people of color) communities. Awareness of risk is another factor, as vulnerability will be much higher for communities with little to no awareness of the area's risks (Boulter et al., 2013). Therefore, the aforementioned communities lack the capacity to adapt to the changing climate and increasing number of climate change-related disasters (McLeman & Smit, 2006). The Philippines, in particular, has a high level of vulnerability to climate change due to its high exposure and low adaptive capacity. Some factors that contribute to this high vulnerability include its geographic location and features, a low level of economic development, and exposure exacerbated by poor access to resources (Mosuela &

Matias, 2015). In the context of migration, vulnerability can be both increased or ameliorated as a result of relocation for improved opportunities (Adger et al., 2015).

Resilience and Adaptation

Throughout history, small islands have endured changes in human settlement and environmental and socioeconomic conditions. Island societies' long histories of resilience demonstrate their ability to survive and thrive in their continually changing environments. Traditionally, they are "sites of resilience" and "agents of knowledge production and territorial transformation" (Klöck & Frink, 2019, p. 1). By remaining resilient, island communities are able to better adapt to environmental changes, including those related to climate change. Adaptation involves the "decision-making [processes and actions taken] to better cope with or adjust to [a] changing condition, stress, environmental hazard, or risk" (Birk, 2014, p. 60). Climate change adaptation (CCA) is often concerned with adapting to and mitigating risks and usually involves one or more of the following:

(1) Reducing exposure of those at risk;

(2) Reducing the sensitivity of those at risk;

(3) Increasing the capacity of those at risk in order to avoid risks;

(4) Taking advantage of new opportunities created by a changing climate (Barnett, Mortreux, & Adger, 2013).

Historically, vulnerability and adaptation have been dominated by the systemic hazards approach, which focuses on technical solutions to problems relating to physical exposure. By contrast, the social vulnerability approach focuses on "human agency as critical for vulnerability," and it takes into account socioeconomic drivers of vulnerability (Klöck & Fink, 2019, p. 3).

Adaptation faces countless barriers, including inadequate access to various resources (e.g., financial, technological, human-caused); cultural and social factors; and institutional, political and legal constraints (Nurse et al., 2014). These barriers primarily fall within two categories: cultural and institutional. Cultural barriers may include the identities and values of communities at risk, social structures and processes, and perceptions of risk. The amount of trust in, attitudes towards, and public acceptance of climate change adaptation, science, and decision-makers also play a role; these factors act as barriers if a community has a lack of trust in or negative view of climate change adaptation measures (Barnett, Mortreux, & Adger, 2013).

Institutional barriers involve the decision-making process or how adaptation goals are defined by the community or society. Other barriers are related to the uneven distribution of risks and responsibilities, the varying forms of communication and cooperation methods between the public and private sectors, lack of leadership, and fragmented decision-making. Climate change adaptation is likely to be expensive; therefore, a lack of comprehensive, continued funding can also impede progress in climate change adaptation decision-making (Barnett, Mortreux, & Adger, 2013; Bierbaum et al., 2013). In some cases, the bureaucracy and the competing agendas of a national government and a regional organization may become a barrier (McGregor & Yerbury, 2019). Institutional capacity to cope with climate change at a local level often varies, creating further barriers between localities (McLeman & Smit, 2006).

For archipelagic island nations in particular, peripherality must be taken into account, as steep core-periphery gradients exist due to geographic gaps between islands (Nunn & Kumar, 2017). Barriers between different governmental levels can create gridlock, thus impeding a government's ability to adapt to current and future climate change impacts. Some nations may not prioritize climate change adaptation on their agenda. Schwebel (2018) states that the most

effective way to deal with this problem is to address a related issue, like flood or food shortages, thereby framing it in a way that does not specifically mention the words "climate change." However, there are limits to adaptation that fail to avoid climate change impacts, and these can occur if adaptations are technically feasible but are too expensive or if available technologies are not enough to cope with the impacts (Barnett, Mortreux, & Adger, 2013). Another limit to adaptation is maladaptation, which is an adaption measure that adversely impacts a community by increasing its vulnerability (Gemenne & Blocher, 2017).

Disaster Risk Management: Disaster Management and Disaster Risk Reduction

Hazards and Disasters

Climate change has become the source of many hazards (O'Brien et al., 2006). The most vulnerable populations include women, the elderly, children, ethnic and religious minorities, single-headed households, those engaged in marginal livelihoods, socially excluded groups (i.e., "illegal immigrants" whose rights are not officially recognized by the government), and individuals who lack access to economic and social capital. Developing countries are particularly impacted by natural hazard events and climate change because their economies are often reliant on climate-sensitive sectors. Extreme events can overwhelm the capacity of less-developed nations to cope, leading to delays in their long-term progress (Thomalla et al., 2006).

Many studies have indicated a correlation between the impact of climate change and the frequency of natural disasters. Instead of focusing on "natural disasters" themselves, we should direct our attention to the hazards that could lead to disasters. There is no such thing as a natural disaster; a natural event's location is what determines whether or not it is a disaster. A disaster's "naturalness" hides the fact that disasters have social aspects, including human impact, existing vulnerabilities, socioeconomic development, and preparedness (Boulter et al., 2013; Yonson,

Noy, & Gaillard, 2018). These natural causes cannot be separated from the social causes (Smith, 2006). A hazard event's scale of impact depends on its type, severity, geographical location and spread, timing, and location.

Disasters are defined as the "combination of an exposed, vulnerable, and ill-prepared population or community with a hazard event," meaning that it includes both natural and social factors ("Climate Change & DRR," 2008, p. 65). Climate change will likely continue to increase the frequency and intensity of hazard events and disasters, thereby increasing the vulnerability of countless communities. Low-lying areas are becoming susceptible to inundation and flooding, which may damage infrastructure making them unlivable or increasing outward migration. It is important to consider that "most…hazards that lead to disasters cannot be prevented" but the effects can be mitigated (O'Brien et al., 2006, p. 65).

In the event of a disaster, effective capacity to prepare and communicate risk and preparations depends on community awareness and knowledge of early warning systems and preparation procedures (Boulter et al., 2013). For example, villagers in the Pacific Islands emphasize the importance of warnings before an impending cyclone, with a preference for traditional signs and radio warnings as confirmation (Johnston, 2014). Additionally, communicating disaster risk becomes more challenging when factoring in climate change because while climate change is best observed at global and regional scales, other weather phenomena and vulnerabilities are measured at smaller scales (e.g., regional, national, local) (Thomson, 2013). Finding middle ground between the two scales is essential when approaching disaster risk.

Disasters create a "situation of collective stress" for both victims and outside helpers (Finau, 1987, p. 961). Victims are faced with loss of property, physical and psychological trauma,

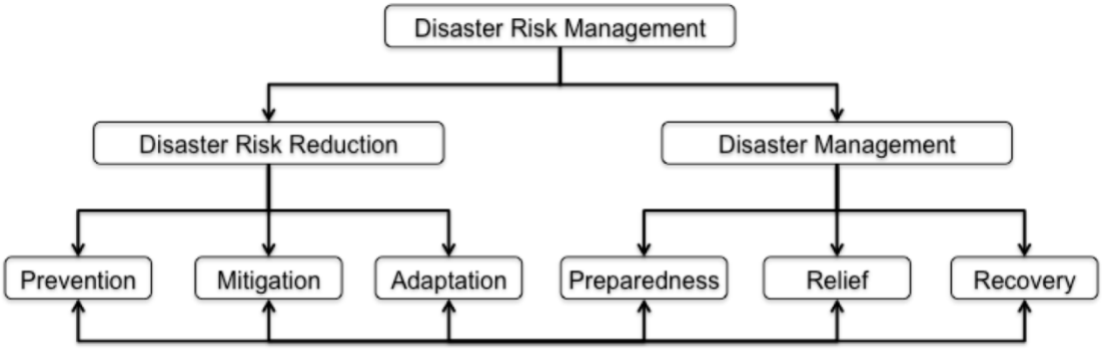
and higher health risks at the time of impact. National and international helpers must then decide how best to provide assistance. Disaster policy response to climate change is dependent on the community capacities to recover within the existing resource and institutional constraints (Finau, 1987; O'Brien et al., 2006). Oftentimes, immediate actions after a disaster are focused on "returning to the status quo as soon as possible" (Boulter et al., 2013, p. 246). While this may not always be ideal, the community and the media often see this as worthy resilience. Coping mechanisms and disaster response have also often turned to psychosocial support, which has a number of limitations including a lack of understanding of and linkage to traditional coping mechanisms, limited awareness, limited staff, insufficient delivery mechanisms, and a limited availability of high quality training programs. Furthermore, for less developed areas, technology is often unsuitable for local conditions, making it more difficult to sustain over a long period of time (Mahany & Keim, 2012).

Disaster Risk Management, Disaster Management, and Disaster Risk Reduction

It is important to distinguish between disaster risk management, disaster management, and disaster risk reduction, as each have their own specific foci. Disaster risk management (DRM) is comprised of both disaster management and disaster risk reduction, as presented in Figure 2.

Figure 2

Disaster Risk Management



Note. Diagram of the components of disaster risk management as defined by Hay (2013).

According to the United Nations Office for Disaster Risk Reduction (UNDRR), formerly referred to as the UN International Strategy for Disaster Reduction, or UNISDR, disaster risk management is defined as the "systematic process of using administrative directives, organizations, and operational skills and capacities to implement strategies, policies, and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster" through prevention, mitigation, and preparedness measures (Mahany & Keim, 2012, p. 415). One key aspect involves reducing vulnerability by focusing on both natural and human-caused hazards because climate-related hazards are only one part of the problem (Thomalla et al., 2006).

Disaster management (DM) involves reducing risk from potential and actual hazards through preparedness, relief, and recovery methods (Hay, 2013; O'Brien et al., 2006). Disaster risk reduction (DRR) is more focused on long-term measures, including prevention, mitigation, and adaptation (Cuthbertson et al., 2019; Hay, 2013). Currently, disaster risk reduction is largely a task for local actors with support from national and international organizations (Mahany & Keim, 2012). However, existing approaches become more insufficient as the climate changes,

especially because local knowledge and capacity are often overlooked in the planning process (O'Brien & Downing, 2013). With the increasing social and economic toll of disasters, there is a need for institutional change; local knowledge may provide a useful look into historical hazard events and management methods. Therefore, integrating local traditional knowledge with Western science would greatly benefit disaster risk reduction methods by encouraging an holistic approach (Cadag & Gaillard, 2012).

Plans and Frameworks

Due to the transformative nature of climate change, current disaster risk plans will be inadequate for future hazards and risks. More action needs to be taken in order to address underlying vulnerability, and initiative must come from government facilitation through increased political will and strong leadership (Cuthbertson et al., 2019). One of the first plans addressing vulnerability and risk was discussed at the 2002 World Summit on Sustainable Development. It primarily examined disaster management plans, claiming that sustainable development was essential in tackling vulnerability concerns (Mahany & Keim, 2012). The Hyogo Framework for Action 2005-2015 was adopted a few years later in 2005 with the overall goal of reducing disaster losses by 2015 (United Nations International Strategy for Disaster Reduction [UNISDR], 2005). This framework includes priorities for action that seeks to ensure the prioritization of disaster risk reduction in the international agenda, determine and monitor risks, enhance safety and resilience through education and improved early warning systems, reduce underlying vulnerabilities, and improve the effectiveness of disaster preparedness measures ("Climate Change & DRR," 2008; UNISDR, 2005). The Bali Action Plan, which was adopted in 2007 at the 13th Conference of Parties (COP13), followed a similar agenda, and also

emphasized the importance of systematically integrating disaster risk reduction and adaptation into countries' development strategies ("Climate Change & DRR," 2008).

Arguably one of the most well-known disaster-related frameworks is the Sendai Framework for Disaster Risk Reduction (2015-2030), which was the first major agreement addressing a post-2015 development agenda. Adopted in March 2015 at the Third UN World Conference on Disaster Risk Reduction, it works with other 2030 agenda agreements, including the Paris Agreement and the Sustainable Development Goals (SDGs), to provide member states with concrete actions to advance development in the face of disaster risk. According to the Sendai Framework, it is each state's primary responsibility to prevent and reduce disaster risk ("Sendai Framework for Disaster Risk Reduction," 2015). The Sendai Framework also specified lessons learned and gaps in knowledge from the Hyogo Framework for Action, including the link between effective disaster management and sustainable development. Additionally, this framework stated that climate change must be addressed as a driver of disaster risk in order to better anticipate, plan for, and reduce disaster risk, especially for more vulnerable populations ("Sendai Framework for Disaster Risk Reduction," 2015).

Philippine Climate Policies

The Philippines has been involved in CCA and DRR policy frameworks and introduced legislation calling for the integration of CCA and DRR. In 1992, the Philippines was signatory to UNFCCC, thereby supporting adaptation that is in line with development goals. Additionally, by being signatory to the Hyogo Framework for Action (2005-2015) and the Sendai Framework for Disaster Risk Reduction (2015), the Philippine government recognized the disaster risk associated with climate change-related hazards and committed itself to sharing responsibility for

reducing disaster risk (de Leon & Pittock, 2017; "Sendai Framework for Disaster Risk Reduction," 2015).

The Philippines has used these international frameworks to inform its own national adaptation and risk reduction agenda. For example, the 2009 Climate Change Act focused on emissions reduction as a form of climate change mitigation. The 2010 Philippine Disaster Risk Reduction and Management Act focused primarily on vulnerability reduction. The central issue facing the Philippines involves better articulating the practical steps required to address CCA and DRR (de Leon & Pittock, 2017). Currently, the Philippine government sees technical fixes, like promoting renewable energy, as the solution to adaptation. Furthermore, national legislation states that the local governments are responsible for CCA and DRR planning, implementation, and response. However, local governments "lack the institutional, technical, and financial capacity to deal with CCA and DRR initiatives" (de Leon & Pittock, 2017, p. 474).

Integration of climate change adaptation and disaster risk reduction in the Philippines is complex due to the large number of organizations involved and the remoteness of many communities. Communities, especially those that are found on the outer, more remote islands of island nations, are often left out of CCA and DRR research (Johnston, 2014). In the Philippines, key challenges center around lack of funding and poor leadership—one source describes Philippine climate policy as being "consistently inconsistent" (Algo, 2021). The Philippine government still primarily uses top-down approaches with very little bottom-up measures. Additionally, inadequately organized, fragmented funding is further hindered by lack of political will. In order to successfully integrate CCA and DRR management in the Philippines, changes must be made in the current decision-making structures that will support locally-led initiatives, build resilience, and reduce socioeconomic vulnerability (de Leon & Pittock, 2017).

U.S. Climate Policies

In contrast to the Philippines, the United States lacks substantial CCA and DRR policies and commitment to international frameworks, like the Hyogo Framework for Action (2005-2015) and the Sendai Framework for Disaster Risk Reduction (2015). However, the U.S. is also signatory to UNFCCC, thus supporting adaptation efforts that align with development goals. A majority of U.S. national climate policy has focused on addressing greenhouse gases (GHGs) and emissions reduction. Until 2010, the federal government addressed climate change primarily through voluntary, indirect, GHG-related approaches (U.S. Congressional Research Service [U.S. CRS], 2021). Additionally, U.S. climate policies today predominantly address mitigation rather than adaptation, and generally, there has been an overall lack of policies passed related to CCA and DRR. While almost 200 bills addressing adaptation to some extent were introduced in the 117th Congress as of September 27, 2021, only 18 of them were considered on the floor (U.S. CRS, 2021).

The U.S. faces significant barriers to climate adaptation, including lack of funding and policy and legal impediments. For example, fragmentation exists between different levels of government (e.g., federal, state, and local) and department overlaps occur within government agencies. Furthermore, while there has been a considerable amount of adaptation planning at all government levels in the public and private sectors, there has been little implementation or observable changes (Bierbaum et al., 2013).

According to the Biden Administration, the Environmental Protection Agency (EPA) will play a central role in implementing climate change adaptation policies. The EPA has, therefore, identified the following priorities to be incorporated into climate change adaptation policies:

(1) “Integrat[ing] climate adaptation into EPA programs, policies, rulemaking processes, and enforcement activities,”

(2) “Consult[ing] and partner[ing] with states, tribes, territories, local governments, environmental justice organizations, community groups, business, and other federal agencies to strengthen adaptive capacity and increase[ing] the resilience of the nation, with a particular focus on advancing environmental justice,”

(3) “Implement[ing] measures to protect the agency’s workforce, facilities, critical infrastructure, supply chains, and procurement processes from the risks posed by climate change” (U.S. EPA, 2021).

Additionally, the Biden Administration released the Fiscal Year (FY) 2022-2026 EPA Strategic Plan, which claims to address climate change and advance environmental justice and social equity. While the main priority remains the reduction of GHG emissions, this plan specifically identifies “strengthening climate governance and equity at all levels of government” as a key strategy (U.S. EPA, 2022, p. 18). These efforts will involve planning, monitoring, and managing strategies for local and national adaptation measures towards resilience. Furthermore, one of the EPA’s goals includes taking decisive action to advance environmental justice and civil rights, thereby integrating justice and equity into environmental protection measures (U.S. EPA, 2022).

A visualization comparison of the primary issues and policy implementation in the Philippines and U.S. is presented below (Table 1).

Table 2

Primary Issues and Government Policy Implementation in the Philippines and the U.S.

Country	Philippines	United States
Primary Issues	- Need for improved clarity in articulating the practical steps required to address CCA and DRR - Primarily top-down, technical solutions proposed/implemented - Fragmented organization between levels of government - Lack of local government capacity to implement policies - Lack of funding - Poor leadership	- Overall lack of CCA and DRR policies - Current implementation primarily only focuses on GHG emissions - Lack of funding - Fragmented organization between levels of government
Primary Levels of Government Involved	- National/federal government - Local governments	- National/federal government - State governments - Local governments
Current Implementation	- Hyogo Framework for Action (2005-2015) – signatory - Sendai Framework for Disaster Risk Reduction (2015) – signatory - UNFCCC	- UNFCCC - U.S. 2021 Climate Adaptation Action Plan - FY 2022-2026 EPA Strategic Plan

Intersection Between Climate Change Adaptation and Disaster Risk Reduction

Concerns have arisen about the significant gap between climate change adaptation (CCA) and disaster risk reduction (DRR); they have evolved separately with incongruities (Bettini, Nash,

& Gioli, 2017; Davis & Vulturius, 2014; Van Aalst, Cannon, & Burton, 2008). Climate change adaptation and disaster risk reduction have operated on different scales. Where climate change adaptation deals more with long-term trends on a global scale and is thought to be more abstract, disasters are often perceived to be singular events that occur on a local scale (de Leon & Pittock, 2017). Current policies tend to focus on climate hazard impacts rather than risk factors that may increase vulnerability and contribute to hazard impacts. Climate change adaptation and disaster risk reduction also experience a mismatch of norms that "determine the ability of the institution to respond to a given problem as influenced by scale" (de Leon & Pittock, 2017, p. 474). The pressure to return to the status quo after a disaster presents a challenge for both climate change adaptation and disaster risk reduction, which have many stakeholders with different resources, vulnerability ranges, and specific sets of norms (O'Brien & Downing, 2013). These cross-cutting sectors are what predominantly determine an institution's response to a hazard event or disaster.

Approaches used in CCA and DRR provide another point of contentions. Initially, climate change adaptation generally involved more top-down approaches, which come from the federal or international level. However, growing dissatisfaction with the ineffective outcomes of such approaches has led to a search for more bottom-up measures that are more suited for a local scale (Van Aalst, Cannon, & Burton, 2008). Disaster risk reduction, on the other hand, has long been more community-based (Thomalla et al., 2006). Despite the common goal of "reducing vulnerability to climate extremes, [CCA and DRR generally] operate as two separate fields of knowledge" with different rules and practices (O'Brien & Downing, 2013, p. 211). Integration of long-term CCA into DRR practices remains to be seen.

Typically, adaptation looks more at long-term well-being by helping people live with the changes posed by extreme events (Davis & Vulturius, 2014). Much climate change adaptation

work has been on developing hazard forecasting and early warning systems (Thomalla et al., 2006). Early framing presented CCA "in terms of 'what if' scenarios" and the vulnerability-first approach did not gain momentum until the IPCC Fourth Assessment Report (O'Brien & Downing, 2013, p. 218). A key issue of climate change adaptation is its lack of focus on equity; CCA has emphasized individual actors making decisions to change the environment rather than concentrating on the social and institutional constraints that influence vulnerability (Thomalla et al., 2006). In order to reduce vulnerability, there must be a greater understanding of the contributing factors that make one individual more at risk than another.

Conversely, disaster risk reduction focuses more on reducing current and near-term risks through preparedness, prevention, response, relief, and recovery. Consequently, DRR mainly concentrates on emergency management and preparedness rather than addressing the underlying drivers of risk. Technological or engineering solutions that tend to dominate the proposed solutions (Davis & Vulturius, 2014; O'Brien & Downing, 2013). These technological solutions lack a solid connection between the victims' expressed needs post-disaster and external assessed needs. To improve this connection, both external assessors and community needs should be addressed in a needs assessment (Finau, 1987).

Despite their incongruities, there are numerous overlaps between disaster risk reduction and climate change adaptation. The underlying causes of social vulnerability that contribute to both are "still not yet well-understood or addressed in policy or practice," but there is a growing realization of the connections between development and sustainability (Davis & Vulturius, 2014, p. 2; Johnston, 2014). Furthermore, risk analysis is increasingly becoming more relevant to the assessment and management of global climate change impacts. Climate change is expected to exacerbate disaster risk by increasing intensity and frequency of hazards and "extreme events"

(Davis & Vulturius, 2014). Therefore, DRR and CCA efforts must be better aligned in order to "lesson the likelihood that extreme weather events become disasters in the first place" (Johnston, 2014, p. 123).

III. CHAPTER II

This chapter addresses climate-related migration, including the use of migration as adaptation. It also discusses the colonial history of the Pacific with a geographical focus on the Philippines. Finally, Chapter II describes the U.S. Filipino migrant community, its history, and its current identity as a diaspora.

Migration

According to Kelman (2019), there are two truisms of population movement: (1) "Mobile, sedentary, and mixed lifestyles are and always have been part of humanity" and (2) There are many factors that have influenced and continue to influence human migration and non-migration decisions, whether forced or voluntary (p. 2). In general, migration decisions are usually made at the individual or household level, though these decisions can occur at a larger scale (McLeman & Smit, 2006). It is often assumed that migration decisions are typically voluntary and motivated by push and pull factors. Push factors prompt individuals to migrate and include high unemployment, economic declines, underdevelopment, demographic growth, political repression, wars, and persecution. Pull factors motivate individuals to migrate to a certain area, including improved socioeconomic conditions, political freedom, land availability, employment, development, peace, and family (re)unification (McLeman & Smit, 2006; Reuveny, 2007; Chan, 2016).

Migration can either be international or internal. International migration is defined as a "temporary or permanent move of individuals of groups of [people] from one [nation] to another" (Chan, 2016, p. 7). Three main theories and approaches explain international migration: (1) economic theories, (2) the historical-structure approach, and (3) the migration systems theory. Economic theories use supply and demand to explain international migration; however, this

theory does not recognize migrants as human agents who chose where, when, and why they plan to migrate. The historical-structure approach centers around the idea that economic and political power are unequally distributed but does not take into account the differences in agency and status of migrants who migrate for different reasons. The migration systems theory claims that there is a number of countries that exchange large quantities of migrants with each other, establishing informal social networks by migrants to discuss their migration and settlement in their host countries (Chan, 2016). Internal migration, rather than international migration, is likely to represent the majority of climate and environmental change-related migrations (Bettini & Gioli, 2016). Unfortunately, policymakers tend to focus on international migration, which makes it difficult to tackle the issue of climate-related migration.

Climate-Related Migration

Climate-related migration has become more relevant as climate change has impacted an increasing number of communities around the world. According to a study conducted by Cecelia Tacoli (2009), "the number of people forced to move because of climate change will range between 200 million and 1 billion" by 2050 (p. 513). These estimates operate under the assumption that communities will continue to fail in adapting to climate and environmental changes, and therefore it appears likely that migrants will continue to move to what they deem are "safer" areas. Climate-induced mobilities are the "result of various socioeconomic drivers embedded in an array of governance issues that are eroding the coping capabilities of populations affected by climate change" (Munoz, 2021, p. 3). Mobility is said to increase resilience and reduce vulnerability to environmental and non-environmental risks (Tacoli, 2009). At the same time, factors that drive mobility (e.g., resource scarcity, overpopulation, unemployment) can put a strain on communities. Whether climate-related or not, migration should not be considered an

automatic response to a risk because there are many factors that an individual considers before deciding to migrate (McLeman & Smit, 2006). The idea that "human settlement patterns may respond to climate is not new;" human settlement and migration patterns throughout history can be linked to changes in climate (McLeman & Smit, 2006, p. 32). Furthermore, labels like "climate refugees" are used to describe individuals "fleeing" from a climate change apocalypse, presenting climate-induced migration as a *future* crisis rather than a present problem (Bettini, 2013).

Adaptation by Migration

Some studies suggest that since 2008 around 26.4 million people, on average, have been displaced by disasters (Gemenne & Blocher, 2017). In such cases, migration is often used as an adaptation measure in order to maintain an individual's basic needs. Adaptation via migration is often dependent on an individual's pre-existing socioeconomic vulnerabilities and the post-disaster responses that are provided (Hartmann, 2010). In the event of extreme environmental stress or a hazard-induced disaster, some households even remain immobile because they lack the resources to migrate and instead choose to prioritize their basic needs by remaining in place (Gemenne & Blocher, 2017).

When analyzing adaptation by migration it is important to discuss three main population groups: (1) the migrants themselves, (2) the community of origin, and (3) the community of destination. For the migrants, migration can be considered a step towards improved socioeconomic status through greater access to employment opportunities and services. Migration can also serve as a rite of passage into adulthood or an affirmation of personal success or prestige (Gemenne & Blocher, 2017). However, migrants often experience lower socioeconomic statuses in their migratory destination as opposed to their location of origin. They

face additional barriers when trying to obtain access to suitable living conditions and employment, but are still pressured to succeed. The community of origin is also impacted by the absence of the migrants or by migrant ties that remain. Migration can negatively impact the workforce and families left behind can experience isolation and the burdens of caring for the elderly and children, while often wondering whether their migrant loved ones will return. On the other hand, financial, social, and intellectual transfers of capital between migrants and their communities of origin can promote adaptation. In the community of destination, migration can lead to tension, competition, and conflict. Due to the current political environment, migrants are often viewed negatively, especially as the number of migrants and asylum seekers have increased due to unrest, conflict, or hazards. Even so, migrants bring diverse culture, knowledge, and technologies that can stimulate growth and development in their community of destination (Gemenne & Blocher, 2017).

Public Opinion, Policies, and General Conditions

Policymakers and the public often perceive migration as problematic. Most policies attempt to limit the number or type of migrants entering a nation or regional body (Tacoli, 2009). Much of this can be attributed to the alarmist rhetoric present in today's society, which fuels "xenophobic reactions in the West and [minimizes] the agency of affected peoples" (Munoz, 2021, p. 7). Public opinion has become increasingly polarized as conservative and right-wing parties have risen, taking elections in Europe and North America. Rhetoric speaking of "invasions" or "waves" of migrants creates the perception of migrants and refugees as a security threat or an "Other." This language is reinforced by the media, which uses descriptors like "boat people," "illegal immigrants," or "bogus refugees" (Munoz, 2021, p. 3). Due to this perception of migrants and refugees, "international climate-related movement will become increasingly

difficult for vulnerable populations as immigration laws harden in Western countries" (Munoz, 2021, p. 9). Additionally, poor migrants tend to be more disadvantaged in small cities because a greater number of civil society organizations and supports are present in larger urban centers. In most circumstances, migrants are paid less by their employers than non-migrants, and this willingness to accept lower wages can pit migrant employees against non-migrant employees, further marginalizing the migrant population (Tacoli, 2009). Despite the limited knowledge of human migration responses to climate change by small islands, climate change and other environmental changes have impacted land use and availability in the Pacific, becoming drivers of migration (Nurse et al., 2014).

As climate change impacts escalate, policies that support mobility and migration will be vital for adaptation and development. Migration has become a key policy issue in many nations, but many policymakers attempt to oversimplify migration, labeling it as a tension-related issue (Gemenne & Blocher, 2017). Current policies have mainly involved top-down approaches because local governments often lack the capacity, resources, and support to implement certain policies (Tacoli, 2009). Previous studies have mainly focused on case studies of single events or natural resources and the analyses compared "before" and "after" situations. This weakness in the literature needs to be addressed, as it only captures "snapshots of movement rather than incremental migratory responses" (Gemenne & Blocher, 2017, p. 337). Furthermore, the majority of studies and discussions have approached this topic with a natural science lens. While useful, key challenges for future planning and implementation require the utilization of social science and interdisciplinary perspectives in order to determine the exact relationship between migration and adaptation in relation to climate change.

Colonial History of the Pacific

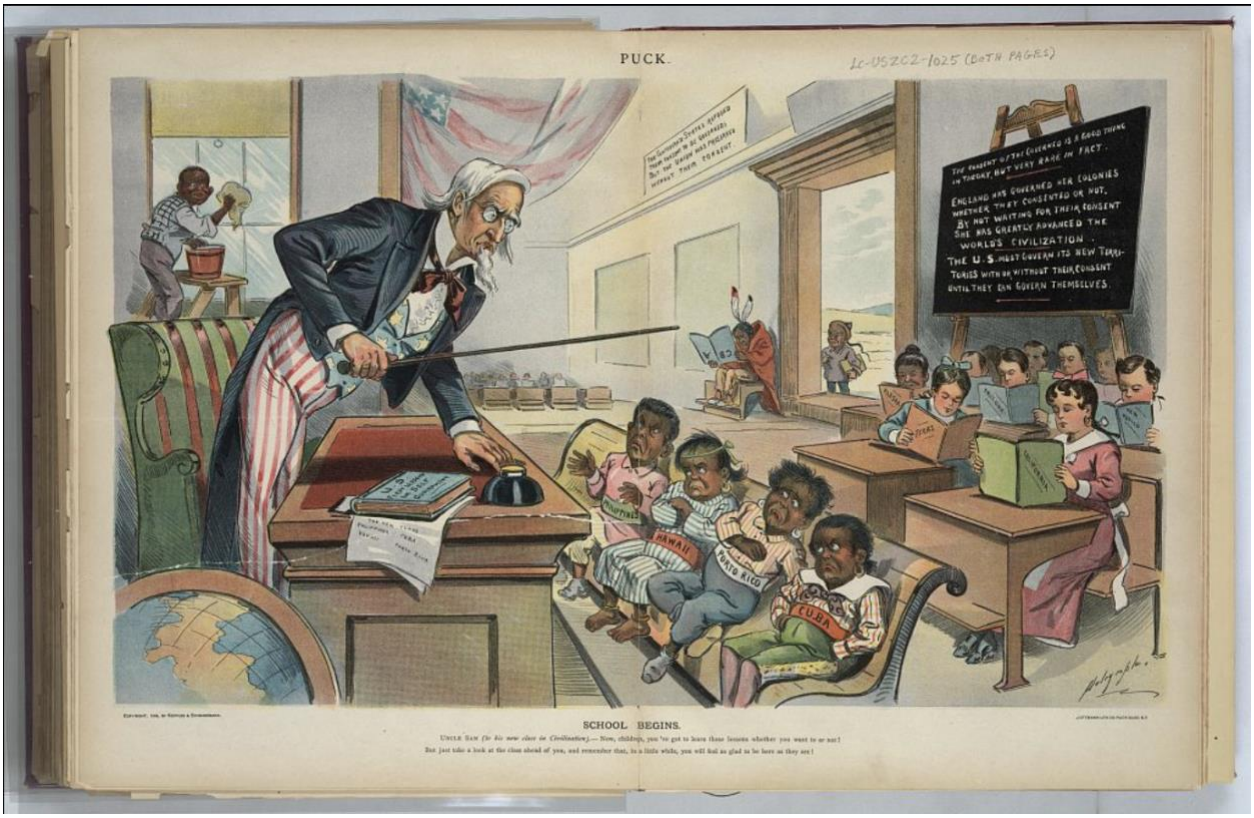
Environmental risks and impacts across the globe are inequitably distributed, largely a result of the legacy of colonialism, imperialism, and institutional racism and capitalism. During the 19th and 20th centuries, all Pacific Island groups, with the exception of Tonga, were colonized by European powers. Most island groups only became independent within the last 40 years (Spencer et al., 2020). To the Pacific Island peoples, imperialism and capitalistic attitudes drove destruction, obsessing over domination and exploitation for material gain. The relationship between the Pacific Island peoples and the environment was damaged as colonialism changed both the landscapes and people's way of life (Spencer et al., 2020). European powers exploited the islands' natural resources for mining or agriculture through industrial means and militarization—creating injustices through the destruction of land (Nunn, 2012; Whyte, 2015). Such actions illustrate the attitudes that European powers had towards Pacific Islanders whose lives were seen as insignificant and expendable (Spencer et al., 2020).

Colonialism and imperialism did not solely affect the past; for many island groups, impacts are ongoing because historical exploitation created or exacerbated vulnerabilities that remain identifiable today. Colonial impacts on the Pacific Islands were innumerable, including—but not limited to—invasion, seizure, occupation, internal and external warfare, slavery, rebellion, epidemics, inward and outward forced migration, and "development" (Lewis, 2009). Islands and island groups in the Pacific like Guam, the Philippines, and Hawai'i, were viewed as geographically strategic locations for the United States. As shown in Figure 3, the U.S. government and military saw itself as superior and claimed that its duty was to defend and protect its citizens by establishing formal diplomatic ties with Asia and the Pacific Islands; it continues to defend the economic interests of settlers (Pobutsky & Neri, 2018; Spencer et al., 2020). Furthermore, the strategic significance of these island groups became more important to

the United States during World War II, when numerous islands were transformed into naval bases or airstrips (Lewis, 2009). Militarization and occupation by the United States only exacerbated pre-existing vulnerabilities and will continue to impact residents in the future.

Figure 3

U.S. Colonialism and Imperialism



Note. By L. Dalrymple, 1899, political cartoon, located in the Library of Congress.

History is primarily written by the colonizers and settlers, often resulting in environmental hazards being described as "tragedies," which misrepresents how islanders historically lived with these hazards for many years. The traditional methods of island populations are quite resilient against natural hazard exposure. However, human-caused hazards, as opposed to natural hazards, remain a higher risk for these communities (Lewis, 2009).

The Philippines

"Filipino history is often summarized by […] '300 years in the convent and 50 years in Hollywood'" (David, 2013). The Philippines experienced colonialism and imperialism under Spain, the United States, and Japan. Around 40 years after Ferdinand Magellan's death in 1521 at the hands of tribal chieftain Lapu-Lapu, Spanish conquerors returned to colonize the Philippines (Schirmer & Shalom, 1987). Under Spanish rule, the Filipino peoples—known as the Indigenous Tao (pronounced: Ta-oh)—experienced corruption, injustice, exploitation, abuse, rape, slavery, and brutality (David, 2013). The Spanish colonizers used Catholicism to assert that the Spanish ways of life were more civilized and therefore superior to those of the Indigenous Tao.

In 1898, with the signing of the Treaty of Paris, Spain ceded control and handed over the Philippines to the U.S. As a result, the U.S. annexed the Philippines as a territory against the wishes of the Filipino people; thus, the Philippine-American War began (Allen, 1977). The U.S. saw it as an opportunity to establish a strategic military base for trade with China, a geopolitical outpost in the Asian-Pacific region, and a source of raw materials to be used for U.S. industry (Schirmer & Shalom, 1987). Then-President William McKinley justified this decision to colonize the Philippines using the policy of benevolent assimilation, which became the official ideology of the U.S. takeover of the Philippines (David, 2013; Ileto, 2001). Republican Senator Albert Beveridge of Indiana stated:

> We must remember that we are not dealing with Americans or Europeans. We are dealing with Orientals. We are dealing with Orientals who are Malays. They mistake kindness for weakness, forbearance for fear. It could not be otherwise unless you could erase hundreds of years of savagery, other hundreds of years of Orientalism, and still other hundreds of

> years of Spanish character and custom…They are not capable of self-government. How could they be? They are not of a self-governing race…Savage blood, Oriental blood, Malay blood, Spanish example – are these the elements of self-government? [...] We must never forget that in dealing with the Filipinos we deal with children (David, 2013, p. 83).

Governor Hazen Pingree of Michigan insisted upon applying the Monroe Doctrine to the Philippines and telling Europe, "Hands off, this is our foster-child" (Ileto, 2001, p. 5). Such racist and condescending rhetoric was common in the U.S. during this time, reflecting notions of white savior syndrome and perceived racial superiority in order to justify the Philippine-American War under paternalistic and moral obligations.

During World War II, Japanese troops conquered the Philippines. The U.S. eventually forced Japan out in 1946 and "granted" independence to the Philippines (Campbell, 1987). In reality, this independence was nominal; the Philippines remained dependent on the U.S. as the Philippines' political, economic, and military institutions were controlled directly or indirectly by the U.S. government. Even today, they continue to cater to the geopolitical interests of the United States. The Philippine Army often acts as an extension of the U.S. Department of Defense with its conflicts and strategies overseen by the Pentagon through executive agreements and treaties. While both nations officially deny this connection, the U.S. has influenced and Americanized the Philippines to the point that many Filipinos pursue the "American Dream" of upward mobility in society through dedication and hard work (San Juan Jr., 2011). The American Dream promises freedom and equality for all, which completely disregards systemic racism and inequities that make this dream unattainable for many.

U.S. Filipino Migrant Community

Filipino Migration Mentality

Due to the strong colonial legacy in the Philippines, many Filipinos see the United States as an escape from poverty through hard work. The desire to achieve the "American Dream" serves as a motivator for Filipinos to migrate to the U.S. The Philippines could be said to have a culture of migration because of how deeply it is ingrained into people's lives; migration has greatly impacted the lives of Filipino citizens and has transformed Philippine society throughout history. Thus, emigration from the Philippines is accepted, and often encouraged, especially in the context of international labor migrants—the "new heroes" of the Philippines (Chan, 2016). The colonial miseducation of Filipinos and an exposure to an Americanized way of life have led to a form of internalized oppression in which Filipinos instinctively reject Filipino culture in favor of anything American (Andresen, 2013). This internalized oppression caused (and continues to cause) Filipinos to see their own culture as ethnically or culturally inferior to "American" culture.

Migrant History

Because the Philippines is the second largest labor-exporting country in the world, migration, especially for temporary work, is a common practice and socially accepted practice (Bautista, 2002). The U.S. stands as a favored destination for work and migration, whether temporary or permanent. Filipinos have been emigrating to the United States since colonial times, marked by the annexation and colonization of the Philippines by the U.S. in 1898 during the Spanish-American War. Before then, there was "no significant group of [Filipino migrants on] the North American continent (or anywhere else)" (Juan, 2001, p. 259).

In the past century, there have been three main periods of migration to the United States from the Philippines. The first migration period was categorized by the Immigration Act of 1917,

which created an “Asiatic Barred Zone” that denied entry to Asians and Pacific Islanders; the one exception included individuals from the Philippines and Guam, who were defined as U.S. nationals because the areas were under U.S. control (Baldoz, 2004; Chan, 2016). Until 1934, migrants generally included young, single, and unskilled males. Pinoys, or Filipino peasants, were primarily recruited for work in Hawai’i and California or enlisted as stewards in the U.S. Navy. Most workers during this period ended up permanently settling in the U.S. mainland rather than returning to the Philippines (Juan, 2001). Additionally, Pensionados, or higher-class Filipino students, were sponsored by the American government to be political or cultural apprentices in the U.S. (Campomanes, 1993).

The second period falls between 1934 and the mid-1960s, categorized by a severe reduction in migrant numbers due to the establishment of a quota system under the 1924 Immigration Act, or the Johnson-Reed Act (Allen, 1977; Baldoz, 2004; USHMM, n.d.). Additionally, the Tydings-McDuffie Act of 1924 restricted migration to just 50 Filipinos per year (Salinas & Garcia, n.d.). Most Filipino migrants during this period were non-quota immigrants; their status as U.S. nationals meant that they were legally qualified as neither citizens nor aliens (Baldoz, 2011). Under this ambiguous status, Filipinos were able to travel freely within the territorial borders of the U.S. (Baldoz, 2011).

The third period began with the passage of the Immigration and Naturalization Act of 1965, which replaced the quota system and became fully effective in 1968. Rather than basing immigration on national-origin quotas, this Act focused on family reunification and occupation (Le Espiritu, 1996). Consequently, the number of Asians immigrating to the U.S. began to greatly increase; the Filipino American community became 70 percent foreign-born and 60 percent female (Campomanes, 1993). Immigrant visas were approved on a first come, first

served basis, and they were commonly allotted to relatives of family members already present in the United States (Allen, 1977). These early waves of immigrants "reinforc[ed] the desire to migrate to the 'land of opportunity' and the ideal of the 'American dream'" (Chan, 2016, p. 23).

The "mass exodus" of Filipino laborers occurred partly as a result of the depressed economic conditions in the Philippines, illustrating a direct consequence of American imperialism across the Pacific Ocean (Campbell, 1987, p. 16; Baldoz, 2004). Filipino laborers were driven to leave the Philippines due to high unemployment levels and displacement among the rural working class, especially within the agricultural sector. Furthermore, incomes abroad are two to twenty times greater than incomes in the Philippines, motivating Filipino migrant laborers in the U.S. to send money back to relatives living in the Philippines (Bautista, 2002; Allen, 1977). The Marcos dictatorship in the 1970s and 1980s brought the Philippines under martial law, worsening the already underdeveloped conditions of the country. Structural issues, ranging from unemployment and inflation to foreign debt and widening social inequalities, were in full force—"symptoms of the persisting U.S. stranglehold" (San Juan Jr., 2011, p. 10).

As a large population of Filipinos sought to pursue better opportunities abroad, the Philippine government attempted to prevent a "brain drain" caused by professionals immigrating to the U.S. To counteract the outward migration, the government began to require most professionals to serve an internship in the Philippines after completing their schooling, often in rural areas that needed the skills. Only after completing an internship were professionals were allowed to apply for visas to immigrate to the U.S. However, the immigrant visas were difficult to obtain, prompting Filipinos to acquire temporary visitor visas instead. After five consecutive years of residence in the U.S., immigrants were eligible to apply for citizenship, though many married a U.S. citizen or served in the military to accelerate the process (Allen, 1977).

Until 1938, U.S. Filipino immigrants were classified as nationals, which allowed them to pursue an education, work, and travel freely within the U.S. However, the annexed territory status of the Philippines did not entitle Filipino immigrants to American constitutional rights or protections, meaning that they were ineligible for naturalized citizenship. Filipino immigrants would not gain eligibility for citizenship until WWII and, even then, it was only extended to those serving in the military (Baldoz, 2004).

As non-white immigrants, Filipinos were categorized by the U.S. as inferior, further constructing the country as a "racial state" that served the interests of the white elites. By employers, Filipinos were typified as "inexpensive, pliable migrant labor who could be disposed of easily after the crop harvest," though that label has since transformed into a community of "uneducated housekeepers and […] morally loose entertainers" (Baldoz, 2004, p. 972; Bautista, 2002, p. 5). As a large Filipino immigrant community developed along the West Coast in the early 1930s, anti-Filipino sentiments became increasingly common because immigrants were seen as a threat to "American" jobs. By the 1950s and 1960s when economic growth had generated better jobs for white Americans, Filipinos were denied the same opportunities; the anti-immigration sentiments targeted the migrants who served as one of the "most visible symbols of [global and economic change]" (Allen, 1977; Bautista, 2002, p. 5).

Asian immigrants, in general, were targeted under three different categories of discrimination and segregation in the U.S. The first involved the enforcement of federal naturalization laws with racial barriers against Asian immigrants seeking U.S. citizenship. The second category comprised of federal immigration laws that limited Asian and Pacific Islander migration, including the 1924 Immigration Act. The third category involved discriminatory laws against Asians at the state and local levels due to their ineligibility for citizenship (Baldoz, 2004).

Moreover, anti-miscegenation laws reinforced racial segregation measures by preventing inter-racial unions. Undoubtedly, the impacts of the legacies of U.S. colonialism on Filipinos led to the continued vulnerability of the Filipino migrant community in American society today.

Current Community: Diaspora

Almost 10 million Filipinos are currently living outside of the national borders of the Philippines, and around 3,400 Filipinos leave the Philippines daily for work abroad, totaling over 1 million per year (San Juan Jr., 2011). With such a large number of Filipino migrants working abroad, whether legally or illegally, the Filipino community and migration patterns have been called a diaspora (Bautista, 2002). A diaspora is defined as a "minority ethnic group of migrant origin which maintains sentimental or material links with its land of origin" (San Juan Jr., 2011, p. 17). Historically, diasporic groups have been identified by a homeland that is often characterized by myths and memories and the desire of that community to eventually return to the homeland. However, this is not the case for the Filipino diaspora. The Filipino homeland has "long been conquered and occupied by Western powers (Spain, United States) and remains colonized despite formal or nominal independence" (San Juan Jr., 2011, p. 19). The Philippine government is highly dependent on migrant workers, as they contribute greatly to the country's economy. The Filipino diasporic community includes over 7 million migrant workers, many of which are female domestic workers. Many of these migrant workers are categorized as Overseas Contract Works (OCWs) or Overseas Filipino Workers (OFWs), who are primarily driven by poverty and injustice to find work abroad (Juan, 2001; Mosuela & Matias, 2015).

Decisions to migrate specifically to the U.S. are greatly influenced by U.S. immigration policies that focus on family reunification. Guam, because it is the "closest point of entry to the U.S. and its services and opportunities," is often used as a stepping stone in order for migrants to

"achieve their final goal of entering the U.S. mainland" (Owen, 2010, p. 311; Chan, 2016, p. i). As a result, Guam has accepted a large number of Filipino immigrants and migrants. Though Filipinos make up a small portion of the total population in the U.S., Filipino communities can be more visible in areas of larger cities. San Francisco and Los Angeles, for example, are two cities in which Filipinos are relatively highly concentrated albeit often in low-income areas (Allen, 1977). However, even in such cases, Filipino communities remain more or less invisible—"very much a function of the lack of [mass media coverage]" (Allen, 1977, p. 206).

Identity

The history of U.S. colonialism in the Philippines, which remains invisible in U.S. history books and society, "raises new conceptual issues about how the worldwide context of differential power and inequality shape migrant identities" (Le Espiritu, 1996, p. 30). The collective Filipino identity has been rooted in crisis and resistance, often related to its unique past as colonial migrants under U.S. colonialism and imperialism (Baldoz, 2004). Filipino migrants have faced alienation, isolation, dissatisfaction, racism, and apprehension upon arrival in the U.S. (Bautista, 2002; San Juan Jr., 2011). Alienating attitudes towards migrants and immigrants led to a common belief among Filipinos that assimilation was the desired, or even expected, pathway to fit into American society (Chan, 2016). They are united by their shared history of racial and colonial marginalization and their struggles to maintain their culture and survive Americanization and assimilation (Juan, 2001). The community is further connected through language, religion, kinship, neighborhood rituals and common experiences in school or the workplace (San Juan Jr., 2011). Filipino diasporic consciousness is also unique in the sense that it is not completely focused on a physical return to the homeland; instead, it is related more to a symbolic homeland defined by traditions, regions, localities, and kinship of communities.

Under the colonial mindset that resulted from U.S. colonialism in the Philippines, "Filipinos see U.S. culture, society, political system, and way of life as superior to their own" (Le Espiritu, 1996, p. 40). The alienating attitudes that migrants experienced led to a common belief among Filipinos that assimilation was the desired, or even expected, pathway to fit into American society (Chan, 2016). Assimilation, Americanization, and the "model minority" stereotype continue to serve as significant barriers to Filipino migrants and their descendants' identity. As a result, (re)establishing identity remains an ongoing process for the Filipino community, and it continues to be heavily shaped by the relearning history and unlearning of the colonial mentality. Ethnic studies programs, often taught within higher education, may facilitate the relearning process by fostering a sense of community among the Filipino youth and connecting them to a culture that persists in the face of erasure (Allen, 1977). These conditions and histories set the stage for current and projected environmental inequities experienced by Filipino migrants in the U.S.

IV. CHAPTER III

This chapter will focus on knowledge and the incorporation of climate justice approaches into climate change adaptation (CCA) and disaster risk reduction (DRR) policies in the U.S.

Knowledge and Epistemology

Epistemology and power relations determine what is considered "science" and it often stems from Eurocentric or Western points of view. This concept, referred to as the coloniality of knowledge, sees the world as having a center and periphery; the center, or the developed world, generates expert knowledge solutions for the periphery, or the developing world (Jafry, 2019). Consequently, Indigenous voices are silenced and their knowledge is deemed inconsequential to Western developed nations. However, considerations of local knowledge and traditional ecological knowledge (TEK) are vital in understanding engagement with climate change issues. Local and traditional ecological knowledge provides better resource and social management methods as climate change causes environmental disturbances because it is dynamic, place-specific, and related to lived experiences in local environments (Hingley, 2017). Central to TEK is the relationship between humans and the environment, which involves sustaining the environment for future generations (Spencer et al., 2020). However, in situations where Indigenous understandings of the environment and climate do not align with Western scientific climate data, researchers often disregard Indigenous knowledge, thereby reinforcing settler colonialist narratives (Smith, 2018). As a result, traditional approaches used by Pacific Islander communities have either been forgotten or abandoned due to the overwhelming presence of colonialism, development, and globalization (Nurse et al., 2014).

Engagement with multiple forms of knowledge is important because Western scientific expertise is not the only valid understanding of climate change. Indigenous and environmental

justice communities also produce knowledge in climate change governance by connecting it to historical and current environmental justice aspects, including environmental racism, equity, and socioeconomic factors (Méndez, 2020). As Jill Finnane, coordinator of the Pacific Calling Partnership (PCP), stated, "We should never lose sight of the fact that this is about more than just science. It's about people, their cultures, and their right to a just and secure future" (McGregor & Yerbury, 2019, p. 128). In order to incorporate multiple forms of knowledge into climate and disaster risk reduction policies, both bottom-up and top-down strategies will be needed. In the U.S. this will require the cooperation of federal, state, and local agencies. The federal government could facilitate climate adaptation by providing financial support, building public awareness, or facilitating information. State governments could incorporate adaptation measures into current or planned climate policies or develop new policies that reduce vulnerability or include both climate adaptation and disaster risk reduction. Local, regional, and tribal governments encompass the majority of adaptation efforts to date (Bierbaum et al., 2013). Meaningful participation from all groups can increase public support, promote sustainable development, and improve the protection of rights in order to create a more effective effort in response to climate change (Robinson & Shine, 2018).

Using a Climate Justice Lens

Climate Justice

Climate justice is an intersectional approach that considers local impacts, experience, and equity concerns to recognize that climate change disproportionately impacts more vulnerable and marginalized populations (Jafry, 2019; Thomas et al., 2020; Schlosberg & Collins, 2014). It originated in the environmental justice movement, which emerged as a response to disproportionate environmental impacts on certain communities or people of color (Jafry, 2019).

The environmental justice movement "demanded that [the] environment be understood as where people 'live, work, and play'" (Schlosberg & Collins, 2014, p. 360). The climate justice movement incorporated ideas from the environmental justice movement into the mainstream climate change movement, initially addressing the root causes of climate change by holding corporations accountable for their actions (Jafry, 2019). Climate justice is especially applicable for Small Island Developing States (SIDS) and less-developed areas, which contribute little towards climate change but bear the brunt of its effects. Today, climate justice encompasses a broader focus that includes equity concerns of adaptation and mitigation alongside more technical perspectives of climate change impacts. Essentially, climate justice seeks to answer the question: what is owed to whom and why? (Adelman, 2016).

Approaches to Address Climate Justice

Various approaches have been used to address climate justice, some of which are shown in Table 2.

Table 2

Climate Justice Approaches

Approach	**Description**
Social Vulnerability-Based Perspective	- Looks at risk assessment - Shifts emphasis towards local situations
People-Centric / Human-Centered Approach	- Sees humans as the center of climate justice - Promotes community empowerment through action, leadership, and ownership of risks and risk assessment
Bottom-up / Community-Based Approach	- Centers collective action from the local level - Aims to incorporate empowerment and responsibility - Emphasizes equity and justice

Human Rights Approach	- Focuses on need to take human rights into account - Often used by those studying SIDS

Narrative approaches, in particular, can help to reshape discourse around climate justice, reflecting concrete experiences rather than abstract reasoning (Jafry, 2019). For example, the social vulnerability-based perspective looks specifically at risk assessment, shifting its emphasis towards local situations and conditions rather than purely climate change impacts (Ayers et al., 2013). The people-centric, or human-centered, approach sees humans as the center of climate justice, linking together human rights and development (Jafry, 2019). This approach promotes community empowerment through action, leadership, and ownership of risks and risk assessment (Cuthbertson et al., 2019).

The bottom-up, or community-based, approach centers around collective action mobilized at the local level through community organizations and social movements. This approach aims to incorporate empowerment, or the process of taking responsibility for or ownership of disaster management, to ensure that local needs are met (Field et al., 2012). Supporters of the bottom-up approach believe that policy changes should be driven by the agendas and priorities of grassroots efforts (Jafry, 2019). Michael Méndez, a professor at the University of California, Irvine, refers to this approach as "climate change from the streets," and states that it emphasizes equity and justice and should evaluate climate solutions on the ability to address environmental disparities and the prioritization of communities located near sources of pollution (Méndez, 2020).

The human rights approach developed out of the idea that climate actions need to take human rights into account in order to prevent significant negative impacts on humans (Robinson

& Shine, 2018). This framing has often been used for those studying SIDS, declaring that they must be addressed in terms of human rights rather than stating that they are just "instrumental 'proof' of climate change" (Dreher & Voyer, 2015, p. 67). While this approach involves a less explored and less understood aspect of climate justice, many believe that human rights are already being threatened by climate change impacts. For example, the risk of extreme weather events is affecting poverty levels and the ability to maintain an adequate standard of living (Robinson & Shine, 2018).

Justice and Responsibility

Climate justice also involves determining who is responsible for undertaking adaptation and mitigation actions. Some believe that developed countries should be ethically obligated to take responsibility or compensate SIDS and less developed states for loss or damages that they have experienced due to climate change. By addressing responsibility related to migration and human rights concerns, climate justice introduces certain mechanisms and procedures that can protect migrants or displaced peoples (Bettini, Nash, & Gioli, 2017).

The question of responsibility has been most commonly addressed using three principles: (1) historical responsibility, (2) beneficiary pays, and (3) ability to pay, or the "fair shares," principle (Adelman, 2016). Historical responsibility is based on the polluter pays principle and involves assigning moral responsibility to states (disproportionately industrialized nations) based on historical pollution trends (Jafry, 2019; Bettini, Nash, & Bioli, 2017). However, this principle raises issues of equity; a common objection states that past generations were unaware of industrialization's impacts on the earth and are therefore their past emissions "morally excusable" (Adelman, 2016; Jafry, 2019, p. 31). According to the beneficiary pays principle, states that have benefitted from carbon-based industries should be take responsibility. The ability to pay, or "fair

shares," principle assumes that individuals who can afford to pay for climate change costs should do so. While the historical responsibility and beneficiary pays principles have been more avidly pursued by climate justice experts, they are not generally legally enforceable (Adelman, 2016).

"Climate Refugee" Narrative

Perception of Vulnerability

Island vulnerability discourse presents islands as being "at the mercy of climate change," misrepresenting reality by presenting islands as the sole focal point of climate change impacts (Walshe & Stancioff, 2018, p. 13). Narratives emphasizing remoteness and isolation have exacerbated the vulnerability of small islands because they make incidences seem irrelevant or unimportant. These narratives are being replaced with images of "disappearing islands" and portrayals of small islands as "canaries in the coal mine" (Walshe & Stancioff, 2018, p. 14). Such simplistic tropes should be avoided because they can lead to an eco-colonial gaze; lumping all small islands into a box ignores each island nation's uniqueness and diversity and categorizes them as unchanging, isolated, or peripheral (Walshe & Stancioff, 2018).

"Climate Refugee" Narrative and Resistance to Labels

The "climate refugee" narrative has been used when referring to certain communities that are vulnerable to climate change impacts and face related relocation and migration issues (Munoz, 2021). Namely, the label of "climate refugees" has often referred to victims of climate-induced displacement primarily from the global South looking to relocate to other areas in the global North (Bettini, Nash, & Gioli, 2017). Presenting individuals as "climate refugees" depicts them as "helpless" or incapable of dealing with the situation (Hingley, 2017). This narrative involves a loss of agency as vulnerable populations are exploited through victim or security threat framings. Victim framing portrays vulnerable populations as "victims" that require

salvation, putting a focus on the ability of "more powerful" countries to respond rather than the communities' welfare (Munoz, 2021; Gemenne & Blocher, 2017; Dreher & Voyer, 2015; Hingley, 2017). The "climate refugee" narrative is often seen within the alarmist approach, which is generally the most dominant framing in academic work, policy arenas, and the media (Bettini, Nash & Gioli, 2017). The narrative as a whole "fails to acknowledge the historical and cultural importance of migration in the lives of [countries in the Pacific]" (Dreher & Voyer, 2015, p. 70).

Establishing the "climate refugee" narrative as the dominant framing silences and marginalizes vulnerable communities, deepening power inequities and reducing these communities to just "people who can't help themselves," or victims who need to be rescued (Bettini, Nash, & Gioli, 2017; Hingley, 2017; Munoz, 2021, p. 7). Vulnerable communities are disproportionally impacted by a number of climate change impacts and socioeconomic inequities and, therefore, their resilience and adaptive capabilities cannot be captured by a single label (Munoz, 2021). Thus, the "'climate refugee' label seems idealistic and inappropriate to deal with the political and migratory realities of affected communities" because it does not take into account community resilience and strength (Munoz, 2021, p. 10). Labelling peoples as "climate refugees" takes away their agency, ignoring their wealth of knowledge and resilience (Hingley, 2017; Munoz, 2021).

Islanders, in particular, have resisted the refugee status due to its implications of disempowerment and victimhood. They argue that "resettlement should be regarded as a right," not a privilege (Adelman, 2016, p. 44). The "climate refugees" label does not "grant [islanders] the level of dignity [that] they deserve" (Munoz, 2021, p. 8). Instead, other labels like "migration with dignity," "forced climate migrants," "climate change-related displacement," or

"resettlement" uphold islanders' agency and honors their resilience (Dreher & Voyer, 2015, p. 70; Munoz, 2021).

Victimization and de-individualization only reinforces postcolonial illusions of an "other" that presents a security threat to the Western world (Bettini, 2013; Munoz, 2021). "Climate refugees" are often described as a potential danger to the global North, using descriptions like "warning," "destabilize," threat," and "fear" (Hingley, 2017; Bettini, 2013). Photos depict low-income peoples in large numbers, threatening to "destabilize society" (Hingley, 2017, p. 236). In 2007, media outlets reported a "growing concern" about threats that "climate refugees" and "climate conflict" could pose to international security (Hartman, 2010, p. 233). Use of the security threat framing and widespread, "deep-seated [xenophobic] fears and stereotypes" resulted in the "climate refugee" narrative's gain in momentum and further reduces vulnerable populations to the status of victims (Hartmann, 2010, p. 238; Hingley, 2017). However, referring to "climate refugees" as a security threat is likely to weaken climate change adaptation efforts that foster equity (Hartmann, 2010).

Moreover, labelling islander migrants as "climate refugees" is counterproductive, as there is no legal obligation for other countries to accept them under this terminology. Under the 1951 Convention Relating to the Status of Refugees, islanders will not be protected when fleeing their home country because they do not fit the definition of "refugees" (Adelman, 2016). No international agreement exists to protect islander migrants; this reflects the "global unwillingness to prioritize climate refugees in an international framework" (Hingley, 2017, p. 228). Regardless of the lack of legal action to protect those affected by climate change, climate change impacts are "intimately [tied] with issues of development, population growth, and economic and social

policy choices" (Hingley, 2017, p. 228). Ignoring these connections means that islanders and migrants continue to be placed at risk to climate change-related disasters.

V. CHAPTER IV

This chapter will focus on the gaps between current climate change adaptation and disaster risk reduction policies in Philippines and the U.S., illustrating how Filipino migrants are often caught within and between these two systems.

Gaps Between Current Policies

Chapter I discussed vulnerabilities and resilience associated with climate change, relating them to climate change adaptation and disaster risk reduction policies in the U.S. and the Philippines. In response to a hazard event or disaster, migration becomes a coping mechanism, or a form of adaptation. The U.S. experiences higher levels of migration from countries that face greater damage from hurricanes or tropical cyclones (Mahajan & Yang, 2020). However, current U.S. and Philippine policies do not address Filipino migrants in relation to climate change-related disasters.

Chapter II discussed the relationship between migration and the colonial history of the Philippines as a framework to conceptualize Filipino migrant vulnerability. Historically, the migrant relationship with the U.S. and the Philippines has been predominantly exploitative, and the Philippines remains tied with the U.S. through economic exchange of labor (Vox, 2020). There is an overall lack of public knowledge of Filipino history and the colonial history of the U.S. because the dominant colonial and imperial narratives in the U.S. prevail. Consequently, Filipino history and vulnerability, particularly in relation to climate change, continues to be invisible in U.S. policies.

Chapter III discussed the importance of a climate justice lens and the use of a framework that rejects the "climate refugee" narrative. Thus far, climate change policy in the Philippines and the U.S. has centered around economic development and health concerns. Cultural ties of the

Filipino migrant community are not addressed. Therefore, there is a missing link between climate change policy and migrant concerns to address the community, especially in relation to hazards and disasters.

Social Vulnerability Framework

The social vulnerability framework is an approach that serves to address socioeconomic vulnerabilities related to disasters. In contrast with the dominant technocratic approach, the social vulnerability framework centers around a community-based, bottom-up approach. Rather than solely utilizing technological or engineering solutions, this framework incorporates local knowledge and community in efforts to address vulnerabilities. The social vulnerability perspective seeks to understand how social, economic, and political aspects influence the impact of hazards. This approach also emphasizes the capabilities and capacities of local populations to cope with a hazard event or disaster (Thomas et al., 2009).

The Need for a Climate Justice Approach

When examining the intersection of climate change literature and the Filipino American migrant community, the impacts of climate change on humans must be addressed. Certain populations are more vulnerable to climate change, including those whose livelihoods depend on natural resources, those experiencing higher poverty and unemployment levels, young and elderly populations, disabled populations, and BIPOC communities (Thomas et al., 2020; Boulter et al., 2013). Migrants are one of these vulnerable communities due to their level of mobility, health, and social and economic status. As shown in Table 3, there are gaps between the social vulnerability framework, current policies, and the needs of the migrant community.

Table 3

Gaps Between Social Vulnerability Framework and Current Policies

Gaps with Migrants	**What is Needed**
- Does not consider Filipino migrant community or their needs (particularly their cultural agency) - Filipino history and vulnerability (particularly in relation to climate change) continues to be invisible in the U.S. context - Little knowledge of ties between the Philippines and the U.S. through economic exchange of labor - Filipino migrants impacted by climate change-related disasters not addressed in current U.S. and Philippine policies - More cohesive communities can foster resilience (Pendley et al., 2021)	- Government consideration of the needs of climate migrants and their destination communities (Blake, Clark-Ginsberg, & Balagna, 2021) - Migration must be seen as adaptation, and this needs to be reflected in climate policy - Climate mobility policies focused on social protections, physical adaptation to the built environment, planned relocation, and mobility control (Blake, Clark-Ginsberg, & Balagna, 2021) - Integration of climate migration into other policies (i.e., climate-specific policies) (Blake, Clark-Ginsberg, & Balagna, 2021)

Social vulnerability refers to an individual or community's resilience and ability to withstand negative impacts of external stressors, such as climate change-related disasters. One's level of vulnerability is determined by a variety of social indicators, ranging from income and social capital to access to basic services and social protection and attitude towards risks and disasters (United Nations Development Programme [UNDP], n.d.). This thesis critiques the social vulnerability framework using the case study of the Filipino migrant community in the U.S. The current social vulnerability framework does not consider the Filipino migrant community or their needs. Migrants are more vulnerable, particularly in the context of climate change-related disasters, given that they do not remain in the same place. Oftentimes they have lost some cultural connections within their new communities, especially if these new communities lack significant Filipino populations.

The social vulnerability framework needs to be modified in order to connect climate change literature and the Filipino migrant community in the U.S. The current social vulnerability framework does not take into account migrant needs and, thus, a climate justice approach must be used to account for cultural agency. As stated in Chapter III, in contrast to the "climate refugee" narrative, migrants have their own agency and should not be exploited through victim or security threat framings. The "climate refugee" narrative of migrants as victims fails to acknowledge the cultural and historical importance of Pacific migration. Instead, this narrative silences and marginalizes vulnerable communities, like the Filipino migrant community in the U.S. Terminology must also be carefully addressed within policy and international law. While the "refugee" label may be useful for the purposes of international law, it allows for certain issues to be ignored. It can also be harmful to migrants who do not wish to be labeled as victims in need of saving by primarily Western nations. Additionally, the term "refugee" often has negative connotations today, especially due to the current political environment. Therefore, it is important to center ethics and community dignity within conversations in order to give voice to vulnerable populations like the migrant community.

The social vulnerability framework also needs to take into account how more cohesive communities are better positioned to foster resilience because they have stronger social ties and commitments to place (Pendley et al., 2021). The idea of migration as adaptation, and this needs to be reflected in climate policy. Once the social vulnerability framework is connected to climate change literature and the Filipino migrant community in the U.S., it can then be used to assess U.S. climate policies and better align them with the climate justice approach.

Currently, there are few direct climate change policies but there are some piloted relocation projects related to climate change. For example, Isle de Jean Charles, Louisiana has

implemented relocation projects due to the impacts of sea level rise and flooding (Blake, Clark-Ginsberg, & Galagna, 2021). Policy discussions tend to focus on international, or cross border, migration despite the greater number of climate migrants who take part in internal migration. Regardless, policies that greatly restrict either internal or international migration discourage vulnerable individuals from migrating to or within a particular country.

There is no one right way to implement climate policy. However, it is important that policies to take into account the needs of migrant communities, especially in the context of vulnerability. Due to the wide range of climate change impacts, climate policies should be more broad or holistic in their focus. Climate change is not a single subject issue; it has many far-reaching impacts on a range of different sectors from health concerns to the economy and the environment. Holistic policies need to consider resilience, migrant needs and rights, security, and cultures and customs. Migrants may have less security in their home countries after climate change-related hazards and disasters, and this may lead them to migrate to other nations that they perceive to have more opportunities. When considering migrants in climate change policies, their cultures and customs, including place-based attachments and importance, should be taken into account. Additionally, climate policies should focus on the social impacts of climate change-related migration, as these affect the vulnerability of the migrant community. In order to do so, the U.S. government could integrate climate mobility and migration strategies into other climate-related policies, and steps can be taken towards dismantling harmful narratives by uplifting the voices of marginalized peoples.

VI. DISCUSSION AND CONCLUSION

The United States continues to erase Indigenous histories and cultures, ignoring the country's roots in colonialism, imperialism, and white supremacy. In current research, there is a lack of social science perspectives on topics related to climate change-related disasters. Within climate change research and policy, there is a need for integrated climate change adaptation and disaster risk reduction. Scarce funding and fragmented organization act as significant barriers for both the Philippine and U.S. governments. For the U.S. government in particular, there is an overall lack of implementation of substantial climate change adaptation and disaster risk reduction policies. The U.S. is not signatory to certain international frameworks, like the Hyogo Framework for Action and the Sendai Framework for Disaster Risk Reduction and, as a result, they have not officially recognized the disaster risk associated with climate change-related hazards and have not committed to sharing responsibility for reducing disaster risk.

This research illustrates how risk is socially produced and is not inherently connected to a particular hazard event. Once the social aspects are considered alongside the impacts of a hazard event, the event can be deemed a disaster in accordance with the severity of the impacts. However, within the policy-making process, efforts to reduce vulnerability and risk are often only addressed after disaster occurs. Vulnerability occurs, in part, due to the social systems in which individuals and communities exist. A considerable amount of the U.S. Filipino migrant community, for example, remains vulnerable in the United States because they send most of their wages back to family in the Philippines in the form of remittances (Muncada, 1995). Thus, the social vulnerability framework emerges and serves to address socioeconomic conditions related to disasters through a bottom-up approach. This approach should be used in opposition to the

dominant view that focuses more on the physical impacts of hazards through a top-down approach.

Furthermore, this research found no specific policy implementation focused on the migrant community related to climate change. Migrants are predominantly labeled as a national security issue rather than a justice or decolonization issue. Migrants needs to be considered in climate change policy, especially in the context of vulnerability. The “refugee” narrative may be deemed useful in some contexts, as the term “international refugee” poses ethical obligations for nations bound by international law. However, this narrative allows for certain issues to be ignored. Discourses of dignity and a climate justice lens can be used to address gaps in knowledge by shifting narratives towards resilience and greater awareness. The “migrants with dignity” narrative opposes the “climate refugee” narrative and helps ensure that migrants will not be solely classified as “victims” of climate change. However, using the “migrant” narrative can take away the sense of urgency present with the use of the “refugee” narrative. Additionally, climate migrants are not explicitly addressed in international law and, therefore, it begs the question: Are there other legal instruments available to address this issue, and how do we translate this concept to international policies that can aid climate migrants?

Migration also needs to be seen as a form of adaptation. By acknowledging migration as adaptation, climate migration can be integrated into other climate policies. Addressing the impacts of climate change-related disasters on the Filipino migrant community, for example, involves thinking critically about U.S. education and its framing of history and colonialism. Asians, particularly migrant workers, have been labelled as racialized subjects of the U.S. empire, thereby reducing them to objects rather than individuals who have agency.

While this research provides a detailed overview about the vulnerability of the Filipino migrant community, there are opportunities for future research. Above all, future research should involve speaking directly with the Filipino migrant community. This would include listening to them share their lived experiences, which would provide great insight into how climate change-related disasters and adaptation strategies impact their daily life and vulnerability.

Rather than speaking *for* the migrant community, this research seeks to uplift the voices of migrants about their lived experiences. This thesis emphasizes that literature must elevate marginalized voices that are continually left out of conversations surrounding climate change adaptation and disaster risk reduction. We must change the narrative and public perception on climate change and migrants. In doing so, steps can be taken towards dismantling the legacy of settler colonialism.

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