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Paraisong Nawala: Exploring Sustainable Ecotourism in the Philippines

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ABSTRACT

Ecotourism, environmentally responsible travel to natural areas, is a growing industry that has the ability to bring invaluable tourism revenue to countries with flourishing natural environments. The Philippines has the potential to be an ecotourism hotspot, and if implemented correctly, ecotourism could enable the alleviation of poverty in the Philippines as well as contribute to the conservation of the Philippines' natural resources. By examining three destinations in the Philippines and their ecotourism viability as well as the challenges that these areas face, this thesis explores how the Philippines can benefit greatly from well implemented sustainable ecotourism strategies. Management of ecotourism in the Philippines is currently fragmented and many stressors inhibit successful implementation, including the high rates of poverty and corruption that the country faces. The Philippines is also extremely vulnerable to the effects of the impending climate crisis, which further exacerbate environmental issues in the country and threaten the developing country's growth. Looking at other countries in Southeast Asia and how they manage over-abundance of tourists can help develop a framework of how the Philippines can change the way they view and engage with tourism.

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Chapter 1: Introduction

When I close my eyes and think of paradise, I imagine sandy white beaches, crystal clear water, and lush tropical sceneries. It evokes feelings of warm sand and water as I wet my feet, small fish darting around my toes. I think of sunny, bright skies that turn into vibrant, cotton candy sunsets, settling on the skyline of palm trees in purple and pink waves that reflect on the ocean. The people there are kind, vibrant, and excited to share their world with me. There are boundless opportunities to be immersed in nature and culture. It is easy for me to visualize paradise because I am certain I have already been there.

In 2011 when I was in the eighth grade, my family visited our relatives in the Philippines. Together we went island-hopping, exploring the places my parents were raised as well as the many wonders that the Philippines has to offer. We ended our trip at the island of Boracay in the Aklan province of the Philippines, which was known for its stunning natural beauty. It had vastly grown in popularity as one of the most beautiful islands in the world. We quickly discovered that all of the praise was well-deserved when we saw the powder-white beaches and luxurious seaside resorts to accommodate the ever-growing number of guests. We were purely tourists here, enjoying all that the island had to offer: boulevards with small shops selling unique trinkets, water sports for the adventurous, fresh seafood caught and cooked right in front of us. Our Christmas card that year featured the five of us, ankle-deep in the azure waters, smiling brightly in paradise.

Boracay is a tiny island, only about four miles in length and .6 miles in width, but its small size does not limit its countless attractions and natural wonders. In the 1970s, it was put on the map when German writer Jens Peter called it “paradise on Earth,” and a wave of Western backpackers came to see the island (Guzman, 2017). By the 1990s, it was receiving endless

praise for having the best beaches in the world (Grele, Yousry-Jouve, 2004). It was only a matter of time until the entire world discovered this little island and wanted a piece of it. It has been named the best island in the world by Travel and Leisure (Malig, 2012), named as the best beach in Asia by TripAdvisor (TripAdvisor, 2014), and in 2018 it was ranked number two of the top five islands in Asia by international travel magazine *Conde Nast Traveler* (Marino, 2018). Boracay became the perfect destination for tourism geared towards coastal activities as well as nature expeditions.

Figure 1 Boracay is known for its super fine white sand and azure waters. Reprinted from "Boracay Island to Open 26th October" by Helen Coffey. From Getty Images/iStockphoto. From https://www.independent.co.uk/travel/news-and-advice/boracay-island-reopens-october

The island has also been known for its laid-back party culture and vibrant nightlife, with casinos, clubs, and relaxed rules for drinking and smoking on the beach (Ellis-Petersen, 2018). The Philippine Department of Tourism (DOT) advertises Boracay by highlighting the island's relaxed atmosphere, "At daytime, tourists having a soothing massage under the shade of a coconut tree beside the shoreline is a common sight. And from dusk to dawn, Boracay turns into one big party place where everyone is welcome to join in" (DOT, n.d.). In 2017, Boracay

generated more than one billion dollars and was visited by 2 million tourists, a record-breaking amount of visitors in the Philippines (Haynes, 2018). The island is considered the crown jewel of the Philippines and is largely responsible for the rise in tourism throughout the country.

Unfortunately, the boatloads of tourists and the many millions of dollars that come with them are a double-edged sword. As early as 1997, the little island was suffering from plastic waste issues, severe water pollution, coral reef deterioration, rapid over-development, and outbreaks from coliform bacteria due to the massive rush of tourism and poor waste management (Felongco, 2018). The coliform outbreak was a result of 716 out of 834 businesses and residences not properly connecting to the underground sewage system, instead discharging their waste directly into the ocean (Coca, 2019). Between 1995 and 1996 there was an incredible 100 percent increase in visitors to Boracay. However, after the coliform outbreak was announced, there was a rapid 70 percent decline in visitors (Trousdale, 1998). Although a potable water supply system, sewage treatment plant, and solid waste disposal system were built, a large majority of the businesses and residences still did not properly install pipelines connecting to the centralized sewage treatment plant. Seven years later, the Department of Environment and Natural Resources (DENR) reported that the coliform crisis was not mitigated fully, and resurfaced in 2004, 2009, and 2015 (Felongco, 2018), and reported "The coliform bacteria levels reached 47, 460 mpn (most probable number) per 100 millimeters. The safe level for swimming and other human contact activities is 1,000/ mpn/100ml" (Inquirer, 2018). The culture of corruption that exists on the island has exacerbated these environmental issues. Though many resorts disobey environmental standards, they are still granted building permits. Maria Ela Atienza, a professor of Political Science at the University of the Philippines-Diliman states, "The issue of too many tourists and its impact on the environment are a result of years of neglect and

bad governance... There were cases of corruption at resorts who were able to get building permits even though they were violating standards, so what is really needed are accountability mechanisms to stop this from happening" (Haynes, 2018).

But what was Boracay like before tourism took over the island? Before Boracay was under the spotlight, it was populated by a small group of indigenous Ati people. They resided in fishing villages throughout the island, content to roam on foot across the small island and to farm and fish for their food. When the influx of tourism began to demand more of Boracay's resources and land, the Ati people were displaced and abused, and essentially forgotten as the island became overrun with sightseers (America, 2013).

Today, native Ati people are disrespected and marginalized because of the rapid growth of tourism. In addition to their land being crammed with hotels and resorts to accommodate the millions of tourists, the Ati face high unemployment rates and require the help of the church and non-profit organizations to find work. For those that do manage to find work, they are often discriminated against for their darker skin. Those that are unable to work are forced to beg on the beaches. The Ati culture of non-aggression prevents the Ati people from protesting or asserting their place, often retreating to avoid conflict. The president of the Philippines' Episcopal Commission on Indigenous Peoples, Bishop Sergio Utleg, expressed that the extensive tourism is threatening the rights and lives of the Ati people, and voiced the church's support for the indigenous people. He stated, "Due to extensive tourism marketing, these tribal people...are threatened, abused, deprived of their rights. Their land is occupied, and the goal is to expel them altogether" (America, 2013).

In one instance, a hotel security guard was charged with the murder of Ati leader and spokesperson, Dexter Condez. His death brought national attention to the injustices the Ati

people face, and some Ati believe that the local government only became concerned about their struggles after they received widespread media attention. An Ati community teacher, Lourdes Tamboon, expressed that island officials used to drive the indigenous people away from tourist spots, stating "Wala silang pakialam sa amin" or "They don't care about us" (Angan, 2013). After Condez's death, the local government began to aid the Ati people, placing a police outpost in front of the Ati settlement and having members of the army help construct houses and facilities for them (Angan, 2013). There is hope that the Ati people will be accepted into the day to day Boracay culture that exists now, but there is still much healing to be done.

This is not the only instance where the damaging effects of the rapid tourist sprawl take a toll on the people of the island. Boracay has been forced to grow as its fame has grown, rapidly and profoundly. Modest bamboo huts and wood-framed inns were the only options for guests before transforming into massive hotel resorts. Hotels violated laws and local regulations by building structures too close to the water. Shopping centers with American fast-food chains like McDonald's, KFC, and Starbucks were built to appeal to the many visitors from Western countries (Villamor, 2018). In addition to this accelerated urbanization, Boracay's population has grown drastically. Many Filipino people from other islands have moved to Boracay in search of work in hospitality and tourism, and competition for employment is a source of immense tension between locals and migrants. Safety is also a fairly new concern, as the population grew from a small community to a massive tourism hub. Now, the sense of security that came in a place where everyone knew one another is no longer attainable. Issues of preserving cultural practices are also a new point of conversation, as traditions and values of Boracay have been vanishing throughout the past years. The artisan products being sold in the shops on the island are from other parts of the country or Indonesia, not Boracay. Business owners and residents have noticed

the environmental degradation occurring due to the rapid sprawl, noting issues of air pollution, traffic congestion, and excessive construction (Ong, 2011).

The Department of Tourism has attempted to keep Boracay's natural resources intact and help regulate the rush of visitors. The DOT created a formal Boracay Plan in 1990, but it was halted when the responsibility for managing Boracay was transferred to Boracay's local government unit (LGU[1]) in 1991, due to nation-wide decentralization programs. Under the LGU, the plan was not implemented due to a lack of financial resources and personnel. Because of this, the administrative control over Boracay shifted back to the national level in 2006, when the national government gave the DOT executive control over Boracay once more. After this, more sustainability programs were enacted. There were several plans created, like the Boracay Solid Waste Management Master Plan in 2007, the Boracay Environmental Master Plan in 2008, and the Comprehensive Land Use Plan in 2008. Millions of Philippine pesos were provided to help with issues of illness, solid waste management, and clean-up programs. Many projects worked in partnership with non-governmental organizations (NGOs) that allowed greater environmental education, but a large number of these efforts were focused on the beautification and appearance of the beaches rather than the livelihood of the residents affected by rapid development and growth on the island (Ong, 2011). Now, the island is co-managed by the national government through the DOT and the DENR, as well as the local government of Malay.

These important efforts have not been enough to protect Boracay from the overpowering effects of rapid over-development. In May 2018, Philippine President Rodrigo Duterte described Boracay as a "cesspool," and he directed that the island be closed to tourism for 6 months

[1] "In the Philippines, the local government units are comprised of provinces, cities/municipalities (towns), and barangays (villages)" (Cuevas, 2017).

(Haynes, 2018). This was an unprecedented decision for the Philippines and prompted the entire country to reconsider its sustainable tourism practices or lack thereof. Beginning April 26, 2018, the island stopped hosting tourists and began a rigorous rehabilitation process to reduce the number of visitors by two-thirds, or down to 19,200 tourists at any one time, rather than the previous limit of 40,000 visitors at peak times (Ellis-Petersen, 2018).

Figure 2. A polluted Bulabog Beach on Boracay. Reprinted from "Philippines temporarily closes popular holiday location to tourists due to pollution" by Johnny Lieu. Mashable, April 2018. From https://mashable.com/2018/04/05/boracay-philippines-garbage-closure/

While all believed that Boracay was in desperate need of environmental repair, residents and workers whose livelihoods depended on tourism in Boracay had mixed reactions to the shut-down. A large majority of the 40,000 residents of Boracay are dependent on tourism for their income. Some believed that it was a necessary step in rebuilding Boracay to its former glory. David Zerna, a hotel security manager on the island stated: "The closure of Boracay is also for the people working here. As they say, endure the pain now, and enjoy the gain later" (Haynes, 2018). Others regarded the shut-down as the end-of-days for tourism in Boracay and their local

businesses. A resort owner and president of an alliance of Boracay businesses, Nenette Graf, stated "You close us down, and we will likely not recover from it. Tourism in Asia is very competitive" (Villamor, 2018). Some believed that closing the entire island was a drastic decision and that only certain businesses were the cause of the severe environmental degradation, including Boracay's Chamber of Commerce and Industry, who asked President Duterte to reconsider closing the island (Villamor, 2018). Some were under the impression that the island was only being repaired to attract wealthy visitors, while the poor residents were forced to do the dirty work of cleaning and repairing the mess. Gina Ruedas, a resident of Boracay who owns a keychain souvenir shop with her husband, stated: "There is no assurance for us residents and the marginalized. They are beautifying the island only for the purpose of attracting big investors and making the island exclusive for the rich" (Haynes, 2018). Others believed that the shut-down happened too quickly, as the government abruptly announced the closure only weeks before it went into effect, without regard to the workers there whose livelihood and income were halted for six months. Mark Gupo, an operations manager at Boracay's popular pub crawl said, "There just wasn't enough time in telling all the establishments to prepare. I've got a family and a baby to care for, so it's a good thing I had a couple of months of savings" (Haynes, 2018). Gupo was forced to relocate to Manila to continue making money. For those unable to relocate, life was much more difficult. The workers themselves were expected to help with the island's clean-up efforts, and some were given a small salary that was insufficient to sustain them. Others were left unemployed, waiting through six months with no income. Some homes that were located in areas that were in need of environmental rehabilitation were demolished with only days' notice and no alternative housing available. The government offered financial assistance for transportation off the island but the demand largely exceeded what the government was able to offer. After a

stampede of residents rushing to apply for aid on May 1st, the government halted the program (Haynes, 2018). The island's shutdown halted 17,000 jobs and cost an estimated $1 billion in lost tourism revenue (Mahtani, 2018).

Six months later, Boracay had its soft re-opening on October 26, 2018, following a significant overhaul of the island. Clean-up programs made the beaches spotless once again. Old sewage and drainage systems underwent a much-needed upgrade (Mahtani, 2018). Now the beaches are no longer home to typical Boracay sights of masseuses, bonfires, and sand-castle builders. Nearly 400 businesses have been closed for violating local environmental laws (Ellis-Petersen, 2018). Tourists and residents that wish to enjoy the new and improved Boracay will also need to comply with a new list of restrictions that limit their impact on the rehabilitated island. These restrictions include ensuring that all businesses and hotels were properly connected to the sewage systems, banning single-use plastics, creating and enforcing fines on those who litter, limiting watersports to a zone 100 meters offshore, inhibiting any partying on the beach including all beachside drinking and smoking, and even prohibiting "unregulated" sandcastles. Some believe that these new rules are removing the fun from the previously bustling, lively beaches. All casinos have been permanently closed and the beaches are quiet due to the lack of booming music from nearby clubs and bars. The island is being rebranded as "a haven for health wellness, soft adventure and authentic Filipino cuisine" rather than a party beach (Coffey, 2018).

Figure 3. Signage for Boracay's New Rules and Regulations. Reprinted from New Boracay's dos and don'ts *by Pamela Ramos, ABS-CBN News, October 15, 2018, from https://news.abs-cbn.com/focus/multimedia/infographic/10/15/18/new-boracays-dos-and-donts*

Some residents are concerned that while Boracay looks aesthetically beautiful once more, the socio-cultural effects of the rapid development have not been addressed, as well as some of the more serious underlying environmental issues. For example, because of the intensive sewer work necessary to connect all resorts to a cohesive sewer system, underground pipes are exposed and construction has worsened traffic. Although the beaches look idyllic and the waters look pristine once again, the full rehabilitation of Boracay is expected to take up to two years (McKirdy, 2018). The island shut down emphasized improvement and clean-up of the visual environment, but still lacked social and cultural sustainability practices that dig deeper than what a tourist's eye can see.

Figure 4. Drivers maneuver past construction on Boracay. Reprinted from Philippines reopened 'paradise' after six-month cleanup. So why isn't everyone happy? *by Noel Celis, The Washington Post, December 3, 2018, from https://www.washingtonpost.com/world/asia_pacific/philippines-reopened-paradise-after-six-month-cleanup-so-why-isnt-everyone-happy/2018/12/02/3af02f92-f038-11e8-8b47-bd0975fd6199_story.html*

Boracay is only one of the 7,107 islands in the Philippines, and it is certainly not the only island being faced with increased attention from mainstream tourism and traveling culture. If these other islands are unable to handle a rapid influx of tourists, they too will face dire environmental consequences, and it cannot be the norm to shut down entire islands after severe degradation of natural resources has occurred. The ideal situation would be to never reach the same level of environmental damage, but there are structures in place that put the Philippines at increased risk. As an archipelago, the Philippines is extremely vulnerable to the effects of the global climate crisis. Sea-level rise, diminished biodiversity, and increasing natural disasters are just a few of the many threats that the Philippines must take into account. The Global Climate Risk Index created a list of the countries most affected by climate change determined by the total number of deaths, deaths per 100,000 inhabitants, absolute losses in million US$ purchasing power parities, and losses per unit GDP in percentage. Of the top ten countries, the Philippines was ranked fifth in 2017 and historically has ranked in the top 5, even listed as the number one most affected country in 2015 (Global Climate Risk Index, 2017). All of these risks encourage travel trends like last-chance tourism, "the commercial visitation of disappearing destinations, changing environments or cultures, and seriously endangered species due to the perceived risk of them vanishing forever" (Mallory, 2016). As last-chance tourism is becoming an increasingly popular buzzword for travelers, the Philippines is a perfect destination: fragile and remarkable.

Now that Boracay has limited the number of visitors allowed to the small island, other islands in the Philippines are gaining more tourist attention. The increase in tourists across the country and the intensity of the case in Boracay calls for an increased commitment to sustainable ecotourism practices, especially in a place already so delicate and in danger. How can public perception of Boracay's narrative shift from a simple cautionary tale to a reality that reflects on

the Philippines' ecosystem, socio-economic status, and foreseeable future? How can we build toward a more resilient, sustainable, and equitable future in the Philippines?

These issues set the framework for this thesis, which will explore the most prevalent questions of sustainable ecotourism in the Philippines as well as how to best remedy the damage that has already been done. Chapter Two will examine how the government is currently managing ecotourism initiatives and policies. Chapter Three will look at popular tourist destinations of the Philippines and their ecotourism appeal, and how they have coped with growing numbers of visitors. Chapter Four will focus on how climate change poses an immense threat to this fragile country and what the consequences of climate change will mean for the future of tourism in the Philippines. Chapter Five will conclude by offering potential solutions for the Philippines, looking at other Southeast Asian countries that have dealt with an overabundance of tourism and their experience with preserving their natural resources as well as regions of the Philippines that have implemented successful ecotourism practices.

Chapter 2: Sustainable Ecotourism Management in the Philippines

What is sustainable ecotourism?

Sustainable tourism is defined as tourism that takes full account of its current and future economic, social and environmental impacts, and addresses the needs of visitors, the industry, the environment, and host communities (UNEP, 2005). Ecotourism is a form of sustainable tourism that conserves the environment, sustains the well-being of the local people, and involves interpretation and education (TIES, 2015). The International Union for Conservation of Nature (IUCN) defines ecotourism as "the environmentally responsible travel and visitation to relatively undisturbed natural areas in order to enjoy and appreciate nature (and any accompanying cultural features both past and present) that promotes conservation, has low negative visitor impact, and provides for beneficially active socio-economic involvement of local populations" (IUCN, n.d.). Ecotourism as a whole encourages conservation and education. It requires that visitors minimize their impact on the environment and only positively influence the local population, as well as following a standard of environmental and cultural respect (TIES, 2015). Part of this cultural respect is honoring the beliefs and rights of the resident indigenous people. Visitors must contribute financially to the conservation efforts of the environment they are visiting and to the local economies. Ecotourism involves positive experiences that visitors can bring back to their host countries as memories that instigate positive political, environmental, and social change (TIES, 2015). The IUCN called ecotourism the fastest-growing sector in the tourism industry (Goldsmith, 2018), but without mitigating measures, ecotourism can cause harmful impacts to these communities and natural environments. The Bohol Ecotourism Congress of 1999 defines ecotourism as "a form of sustainable tourism within a natural and cultural heritage area where community participation, protection and management of natural resources, culture and

indigenous knowledge and practices, environmental education and ethics, as well as economic benefits, are fostered and pursued for the enrichment of host communities and satisfaction of visitors" (National Ecotourism Strategy and Action Plan, 2014).

Studies in tourism began to shift perspectives from focusing solely on the marketable and economic aspects of tourism to expanding analyses to include the cultural and social dimensions that tourism inevitably impacts. This shift was marked as the "critical turn" in Tourism Studies and brought about new insights into the tourism discourse (Bianchi, 2009). For ecotourism to succeed in the Philippines, the nation needs to consider all areas that tourism impacts. The shutdown of Boracay should be considered a new "critical turn" for Philippine tourism that forces the country to consider new ways of thinking about and engaging with tourism. Though there have been significant efforts to implement ecotourism, the emphasis has largely still been focused on the economic impact rather than the protection of the natural land.

Ecotourism in the Philippines

Ecotourism has been a consistently growing aspect of the Philippine tourism industry, in several regions and islands. Puerto Princesa and Bohol are only a few examples of areas where ecotourism is beginning to thrive in the Philippines, but the nation is overflowing with natural attractions that appeal to tourists from all around the world. In 1991, the Department of Tourism collaborated with the United Nations Development Program and the World Tourism Organization to create the Philippine Tourism Master Plan. A year later, ecotourism was introduced at the National Tourism Congress and regional seminars discussing sustainable ecotourism concepts took place through the next few years. In 1999, Executive Order 111 was issued, which promoted the development of ecotourism in the country and created the National Ecotourism Development Council (Eugenio, et. al, 2012). Then, in 2002 the National Ecotourism

Strategy was enacted. This plan offered guidelines for the development of ecotourism in the Philippines as well as helped foster the partnership between the Department of Tourism and the Department of Environment and Natural Resources with additional stakeholders (Pleno, 2006).

The Philippines as a nation has very high rates of poverty, low levels of education, and widespread governmental corruption, which is why economic stability and development are the main priorities for the country. This means that issues of the environment are not always placed at the forefront of importance. Tourism, however, is considered one of the priority areas for development by the Philippine government, because of its growth potential and economic contribution. In 2011, more than almost 3.4 million Filipinos were employed in the tourism industry, "meaning for every tourist that arrived, one Filipino had a job" (Eugenio, et.al. 2012). The National Ecotourism Strategy stated that the potential market size for ecotourism ranges up to 14,174,500 Eco-tourists and potential earnings from ecotourism were projected to up to reach 157 Philippine pesos, or 3 billion USD, by 2016 (National Ecotourism Strategy and Action Plan, 2014). Ecotourism works to capitalize on the natural beauty of the Philippines while also protecting the environment and local culture, assuring that this income is not just confined to short-term benefits but can be relied upon far into the future.

Ecotourism offers invaluable opportunities to the Philippines, but there is also the possibility of it bringing threats to the country's environment and culture if not implemented correctly. For instance, ecotourism can generate revenue, open up employment opportunities, and strengthen the Philippine economy, but it can also cause economic instability with an increase in supply-demand and a growing gap between businessmen and residents. Ecotourism can also help provide environmental education for local people and the visitors as well as shine a light on beautiful spaces that need conservation. On the other hand, the flocking of thousands of

tourists to these destinations will inevitably affect the environmental state of the places they are drawn to, and contribute to the degradation through littering, changing animal behavior, increased waste and transportation, etc. Lastly, ecotourism can drastically alter the sociocultural climate of the Philippines. Large numbers of visitors can encourage a local pride of heritage and place, and ecotourism can provide women with more prominent roles in leadership and business. However, an overabundance of tourists can cause crowding for space and accessibility as well as rapid and excessive development (Eugenio, 2012).

For ecotourism to succeed, the nation needs proper regulation and management to prevent the degradation of the environment by the very people who come to admire it. Policies must be set in place to ensure that the benefits of sustainable ecotourism are focused on the local population and conservation of the environment. The Philippines created a National Ecotourism Strategy and Action Plan (NES) that spans from 2013-2022 prepared by the National Ecotourism Steering Committee and the Ecotourism Technical Working Group in February 2014. The NES consolidates all of the ecotourism efforts of the Philippines and creates an ecotourism agenda for the development, management, and protection of identified ecotourism sites, funding and marketing for the sites, benefits for local communities, and sustained tourism practices. The previous NES and Action Plan for 2002-2012 was a part of the National Ecotourism Project (NEP) which is credited for improving sustainable resource management, bringing income to disadvantaged groups by expanding employment opportunities, developing training modules in ecotourism, the development of the Department of Tourism's Ecotourism standards, and implementing ecotourism-focused marketing initiatives by the DOT. The NEP also managed a program helping local governments, young people, indigenous people, and women in the community become more involved in ecotourism. The NES was created to concentrate the

efforts of the government, private sector, non-government organizations, civil society, and the host communities to focus on cohesive goals (National Ecotourism Strategy and Action Plan, 2014).

> *The vision of the NES is: 'The Philippines as a globally competitive ecotourism destination with its wealth of natural beauty and cultural richness, conscious of the need to conserve, enhance, sustain and develop these assets and ensure equitable sharing of benefits among its people.'*
> *The goal of the NES is: 'Environmentally and socially responsible ecotourism development that safeguards the integrity and diversity of its natural resources, provides education and enjoyment to visitors and delivers larger and more widely distributed income and employment opportunities to the local communities and their constituents, especially the women, youth, indigenous peoples, and other vulnerable groups.'*
> *-National Ecotourism Strategy and Action Plan, 2014*

Some key impediments prevent the Philippines from effectively continuing with ecotourism strategies as efficiently as possible. First would be the high levels of inequality in Philippine society and the vast culture of corruption that enables the wealthy elite to monopolize power. The Philippine government is largely controlled by a small group, mainly concerned with their personal power and networks, so oftentimes the needs of the local people, many of whom live in poverty, are regularly ignored. It was found that "the assets of the 25 richest people equal the income of the 73,808,000 poorest" (Yamada and Galat, 2014). More issues that have constrained the implementation of the National Ecotourism Strategy in the past include "inadequate funds; lack of carrying capacity studies, development plans, and business plans; nondissemination of NES; and the need to translate the NES into regional action plans" (National Ecotourism Strategy and Action Plan, 2014).

> *[The] problem in... the Philippines is not a lack of political will but a political will that represents elite ... interests. Policy failure on environmental grounds needs to be grasped for what it is- not an oversight, nor as a faulty judgment. The direction of public policy...is too often shaped, both directly and indirectly,*

by those with a vested interest in the continued mismanagement of natural resources. In other words, one cannot accurately label these as general policy failures or as mismanaged resources. Rather, they are political successes in managing natural resources for the benefit of the controllers.
-Robin Broad, "The Political Economy of Natural Resources: Case Studies of the Indonesian and Philippine Forest Sectors." 1995

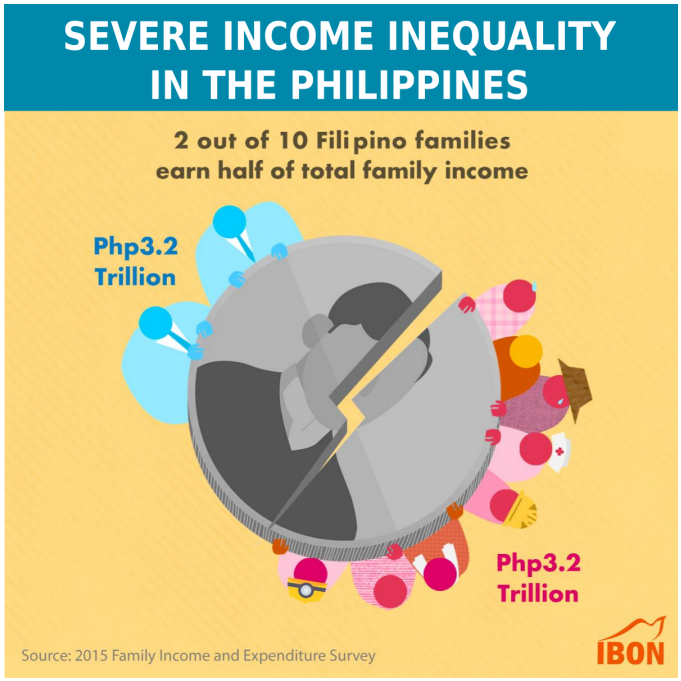

Figure 5. Infographic illustrating the income inequality in the Philippines. Reprinted from Severe Income Inequality in the Philippines *by IBON Media. 2018. From https://www.ibon.org/severe-income-inequality-in-the-philippines/*

Issues of the Philippine government and the environment can be seen when analyzing how the Philippines preserves its natural parks and protected areas. While the Philippines is one of the most biologically important countries in Southeast Asian, it is also one of the most degraded and under-protected (Urich, et. al., 2001). The Philippines set aside protected areas to conserve natural resources in the early 1900s and designated the first National Park in 1940, but these areas have slowly been deteriorated due to poor management and human-caused degradation. This is mainly because several agencies (including the Department of Environment and Natural Resources) manage this land, and often have conflicting and contradicting views on how the parks should be operated, leaving the parks with fragmented leadership (Urich, et.al., 2001).

Chapter 3: Ecotourism Destinations in the Philippines

Tourism is the linchpin of the Philippines' economic growth strategy and has been developing consistently. Between 2016 and 2018, visitor arrivals have grown by over 10 percent (Goldsmith, 2018). The current tourism slogan is "It's More Fun in the Philippines," (DOT, 2016) and with a rich biodiversity, immaculate beaches, exotic rainforests, and life teeming everywhere from the deep blue oceans to the mountainous volcanoes, the natural attractions are a large part of why tourists are flocking to the islands. As an ecotourism destination, the Philippines has a wide array of things to offer. Its natural areas span across mountains, volcanoes, forests, caves, karst formations, marshes, white beaches, mangroves, and coral reefs. These ecosystems are home to plants and animals that cannot be found anywhere else in the world. Some of the most popular natural attractions are Boracay's beaches, Puerto Princesa Subterranean River National Park in Palawan, and the Chocolate Hills in Bohol. These sites are generating large amounts of tourism revenue for the local and national economies as well as aiding the country's development.

Without sustainable tourism practices, these destinations may lose what makes them so unique and impressive. This chapter will explore these exceptionally beautiful natural attractions and what each area is doing well and what needs to be improved. Because each destination is unique, each has a separate set of environmental issues that need to be addressed.

Puerto Princesa

Puerto Princesa City is located in the western province of Palawan. It has been acclaimed as the cleanest and greenest city in the Philippines, a great source of pride for the local people. Ecotourism has played a vastly important role in the region of Puerto Princesa. After some pushing by the city's mayor, Puerto Princesa was declared the ecotourism capital of the country

(Restificar, 2004). This title was established in hopes that Puerto Princesa would become one of the priority tourist destinations in the Philippines as well as making the province of Palawan a national tourism center.

The gem of this city is the Puerto Princesa Subterranean River National Park, which centers on a remarkable underground river that flowers directly to the sea, encased by stalactite and limestone stalagmite formations that have dazzled thousands of tourists. Inside the cave, there are small waterfalls, rock formations, and cave domes. It is the longest navigable underground river in the world (Jalani, 2012). The river was declared as a national park in 1971 and was included in the National Integrated Protected Area System in 1992 to protect its incredible karst landscape and biodiversity (Restificar, 2004). It was inscribed as a world heritage site by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) in 1999. It was also recognized as one of the New Seven Wonders of Nature in 2012 (New 7 Wonders Foundation, 2012). Not only is the site renowned for its beauty, but the unique cave is also rich with rare fossils and minerals (Restificar, 2004). Issues of tidal flooding and biodiversity conservation are a major concern for this national park (World Heritage Datasheet, 2011).

> *This park features a spectacular limestone karst landscape with an underground river. One of the river's distinguishing features is that it emerges directly into the sea, and its lower portion is subject to tidal influences. The property contains globally significant habitat for biodiversity conservation. The site contains a full 'mountain-to-sea' ecosystem and has some of the most important forests in Asia.*
>
> *-United Nations Educational, Scientific, and Cultural Organization (UNESCO)*

Figure 6. The entrance of the underground river. Reprinted from UNESCO by Ron Van Oers, n.d., from https://whc.unesco.org/en/list/652/gallery.

This national park is a source of great pride to the people of Puerto Princesa and the Philippines as a nation. It has become one of the most popular tourist destinations in the Philippines, with over 150,000 visitors each year (De Vivo, et.al, 2013). Tourism is highly regulated in Puerto Princesa Subterranean National Park. Tourists must get permits from the Liaison Office in Puerto Princesa where they must sign a compliance form that commits them to the park's rules and regulations, which include prohibiting smoking, feeding the wildlife, swimming, and littering. To ensure the park is not overrun with tourists, a limit of 900 visitors a day is strictly enforced (Puerto Princesa Underground River, 2016). The average annual growth rate of tourists is 8.4% (Restificar, 2004).

A researcher from Ateneo de Zamboanga University in Western Mindanao conducted field interviews with local people of Puerto Princesa to gauge public opinion about ecotourism in

the park and found that the overall perception of ecotourism was extremely positive. The survey divided people into groups categorized by how long they had lived in Puerto Princesa. The groups with residents of 0-5 years, 11-15 years, and 21 or more years perceived ecotourism very positively, all rating higher than 93 percent of surveyed residents perceiving ecotourism positively. The two other groups, with residents of 6-10 years and 16-20 years, had over 78 percent of surveyed residents respond that ecotourism had a positive effect. Also noteworthy is the fact that none of the surveyed residents believed that ecotourism in the park had a negative impact, regardless of the length of their residency. They either believed that ecotourism had a positive impact or they believed it had no impact on them at all. Of these positive impacts, those surveyed were asked what were the most prevalent positive impacts of ecotourism: work opportunity, urban development, or environmental protection. Each of the groups rated environmental protection as the least positive impact brought by ecotourism, potentially because work opportunity and city development are more visible and tangible and the residents can recognize these as strong effects of ecotourism. Researcher Jeffery O. Jalani writes, "However, from the enumerated positive impacts the least positive impact identified was environmental protection against work opportunity and city development seen in the area. Work and city development is something concrete as these are seen and felt by the local people. Efforts related to environmental protection done by the people in the park are even doubted by a number of residents. Activities participated in by the residents are easily forgotten for those became seasonal and short-term" (Jalani, 2012). The recorded responses also reflected uncertainty about which is more important: tourism or protection of natural resources. (Jalani, 2012). As Puerto Princesa's fame grows, there is some concern from local citizens that the increase of tourists will

damage the fragile ecosystem in the national park, but the overall impression of ecotourism in the region is very positive.

There has been significant migration of people to Puerto Princesa looking for work opportunities due to the rise in tourism, and there are no regulations set in place to limit this. The local government has tried to prioritize locals when it comes to who benefits from ecotourism employment. For instance, more than 80% of the work opportunities in the national park are from local communities, according to the park Superintendent (Jalani, 2012). There are also many tours and activities led by indigenous people or guides from local communities (Restificar, 2004).

The indigenous people who live in the park territory are a small population of about 200 Batak people and Tagbanua communities living on the coasts (World Heritage Datasheet, 2011). There has been some concern that the practices of the indigenous people are not being respected, and certain livelihood practices have been prohibited, such as hunting inside the park, because of greater concern for the conservation of biological diversity. The indigenous people's rights are recognized through the Department of Environment and Natural Resources in the Certificates of Ancestral Domain Claim for the Batak and the Tagbanua. These "Declare and certify the claim of each indigenous cultural community over a corresponding territory defined and delineated as ancestral domain" (Restificar, 2004).

The core land of the park is owned by the municipality of Puerto Princesa, and all decisions for the area are made in collaboration with the City Mayor, the Park Management Superintendent, and the Protected Areas Management Board. There is a management plan in place created by the Protected Areas Management Board that focuses on several issues in the park, especially the expansion to include tribal lands, protecting the forests from flooding and

erosion, protecting ecosystems with rich biodiversity and endemic species, protecting the local communities, and supporting sustainable ecotourism (World Heritage Datasheet, 2011).

In comparison to Boracay, there have been more effective and sustainable ecotourism management practices in the Puerto Princesa Subterranean River National Park. There are several theories to how the city has maintained a pristine natural destination without sacrificing the monetary gain that tourism brings. This may be because Puerto Princesa's tourism fame is relatively new, and not to the same extreme level as Boracay's. It also may be because the park's ecological and geological value is so immense. The park is considered one of the most important biodiversity conservation areas in the Philippines. It lies within a Conservation Hotspot, a World Wide Fund (WWF) Global 200 Eco-region, a WWF/IUCN Center of Plant Diversity, and is in one of the world's Endemic Bird Areas as well as makes up a part of the UNESCO MAB Biosphere Reserve and is an ASEAN Heritage Park (World Heritage Datasheet, 2011). While Boracay has been viewed as a party beach with no rules, Puerto Princesa Subterranean River National Park has been known as an important ecological and geological area and is respected as such.

Puerto Princesa also already had well-implemented policies and programs highlighting the importance of environmental protection, starting in the 1800s, long before the tourism influx. Environmental education orientations conducted by NGOs, training sessions and seminars by the city's tourism office and the DENR, and increased environmental programs in schools increased awareness among the local people (Jalani, 2012). Ordinances prohibiting littering and irresponsible waste disposal were already in place before the national park became extremely popular. In the past, the city was known as a prison-camp and mosquito-infested island and went through an intense renovation to become the city it is today. With this negative perspective,

cleanliness became an issue brought to the forefront of Puerto Princesa's success. The local government unit ensured that issues of cleanliness and waste disposal were taken seriously in the city, and later applied the same gravity of cleanliness in the national park. This was done by reminding the residents of tourists' expectations that the island will act as a pristine paradise for them. Another incentive to encourage responsible waste disposal was a local cleanliness competition between each Barangay, or village (Manalo, 2017). By maintaining a clean city and the natural beauty of the park, the communities sustain positive tourism experiences and enjoy the revenue that tourism brings.

Puerto Princesa highlights that strong local government and effective policy enactment can be powerful tools for sustainable ecotourism. It is a good example of how the Philippines can protect the natural beauty of its popular destinations and the livelihood of local communities without compromising a high level of tourist income and economic success. The benefits of educating local communities on environmental awareness are evident through Puerto Princesa's environmental education programs, but these programs must be implemented for tourists as well.

Bohol

Bohol is an island province[2] in the Philippines that consists of the island of Bohol, the tenth-largest island in the Philippines, surrounded by 85 smaller islands. The province is a popular tourist spot that boasts white sand beaches and lush jungles. It is most famous for the Chocolate Hills, a symmetrical geological formation of more than one thousand hills covered in grass that turn brown during the dry season, resembling chocolate. The province is also well known for its diving locations and for being home to the Philippine tarsier, one of the world's

[2] The Philippines is divided into 81 provinces, which act as the political and administrative divisions of the Philippines. These provinces are grouped into 17 regions based on their location. (Bravo, 2014).

smallest primates. On the Official Tourism Website of the Province of Bohol, ecotourism is the first advertised category of tourist activities. Just a few of these activities offered are a Basket Weaving Experience Tour, Tree Planting for Legacy Tour, and a Mangrove Adventure Tour (Bohol Tourism, 2o19).

Over the last 20 years, the island of Bohol has been undergoing ecotourism efforts to increase publicity for the island and to lure more tourists in with its gorgeous and unique natural landscapes. There are new resorts all across Alona Beach, a small strip of sandy heaven, to attract nature lovers, hikers, divers, and tourists looking to explore all that Bohol has to offer. Near Alona Beach, snorkelers and divers find a colorful coral shelf that can plunge down 250 feet and is home to vibrant biodiversity of clownfish, barracudas, and other aquatic species. The reef itself is already recovering from destructive fishing practices in the past decades, and coral reef deterioration and ocean acidification are issues that especially affect this area.

Bohol is also home to a very rare and tiny primate, the Philippine tarsier (Considine, 2006). It lives in the thick jungles of Bohol, including in the Philippine Tarsier Foundation, which is a 7.4-hectare semi-captive enclosure where visitors can learn about the tarsier, view them in their natural habitat, and contribute to the research and breeding of these creatures. The Philippine Tarsier Foundation is a non-profit organization mandated by the DENR. In 1997, the Philippine tarsier became protected through Proclamation 1030, which prohibited humans from hunting, killing wounding, or possessing tarsiers or the destruction of their habitat (Philippine Tarsier Foundation. 2005). The LGUs publicize the tarsier as the official mascot of Bohol and they are a big proponent of the ecotourism development of the island (Aure and Escabi-Ruiz, 2005).

Figure 7. The Philippine Tarsier. Reprinted from Bohol Animal Photo Gallery, by Joroen Hellingman. From http://www.bohol.ph/picture801.html

The Chocolate Hills, Bohol's most famous landmark, is an extraordinarily unique landscape. More than 1,200 perfectly shaped mounds, believed to have been formed by years of coral deposits and rainwater erosion, the hills get their name from the dry brown grass that gives the hills a chocolate-like appearance. It was named the country's 3rd National Geological Monument on June 18, 1988, in recognition of its scientific value, geomorphic uniqueness, and scenic value (UNESCO, 2006). It has been proposed for inclusion in the UNESCO World Heritage List by the Philippine Department of Environment and Natural Resources and, like the Puerto Princesa Subterranean National Park, is covered under the National Integrated Protected Areas System. The Philippine Government also declared the province of Bohol as an Eco Cultural Tourism Zone and identified Bohol as one of the ecotourism banner sites in the country (Republic Act 9446, 2007).

There are a few legends that explain the formation of the Chocolate Hills. One suggests that the hills were created when two feuding giants were fighting and threw stones and sand at one another for days. They reconciled and left the island behind, leaving the mounds of sand and stone that became the Chocolate Hills (Philippines Travel Guide, n.d). Another legend tells the story of another giant, Arogo, who fell in love with a mortal girl named Aloya. When Aloya died, Arogo wept for her, and his tears turned into hills as eternal proof of his grief (Hellingman, 2002).

Figure 8. Bohol's Chocolate Hills. Reprinted from "The Philippines' Chocolate Hills: too perfect to be real" by Greg Quinion. From https://www.theglobeandmail.com/life/travel/destinations/the-philippines-chocolate-hills-too-perfect-to-be-real/article15214998/

Bohol's ecotourism ascent focuses heavily on the local communities and how they can take an active role in leading the province in its ecotourism efforts. Many tours and activities are led by local groups, such as the Coal See and Seascape Tour, led by Basdio Farmers and Fisherman's Association, the Candijay Mangrove Adventure Tour, led by Panadtaran Mangrove

Association, and many more. These groups help poor families find income in tourism. The majority of ecotourism workers in Bohol are women, and ecotourism projects give women leadership roles, education about the environment, a steady source of income, and cultivate pride in their home city (Pleno, 2006). Not only can this pride contribute to the preservation of cultural practices, but it can also nurture a responsibility to protect the place they call home.

Bohol began focusing on ecotourism in 1997, with a Bohol environment summit and the development of the Bohol Ecotourism Development Program. The program has three main goals:

1. Put in place mechanisms that are environmentally sustainable, economically viable, and socially equitable
2. Accelerate development for the benefit of local communities
3. Spread tourism benefits to rural areas in terms of employment generation and poverty alleviation (Bohol Ecotourism Development Program, n.d.)

> *"As a result [of the Ecotourism Development Program], people are now more deeply aware of the importance of preserving endangered species. They have increased their produce from the sea, and they have cleaned up the rivers and waterways of solid wastes, resulting in healthier and more abundant marine harvests. Tourism bodies, such as municipal and barangay tourism councils, have increased, widening the opportunities to inculcate ecotourism values among the people. With better and mutually beneficial linkages among NGOs, LGUs, government agencies, and people's organizations, communities that were once sleepy have become productive."*
>
> *-Bohol Ecotourism Development Program, 2004*

One area of Bohol's ecotourism that still requires more organization is the management of the Chocolate Hills. The Chocolate Hills are under the jurisdiction of the DENR, but the provincial government of Bohol has requested jurisdiction due to the DENR granting permits for mining and quarrying on the Chocolate Hills. What complicates the protection of this monument

is balancing its protection with the need for resource utilization and tourism. There is some legislation around defining the Chocolate Hills as a Natural Monument that is unclear and in need of repair, but this would require a lengthy process of redrafting and ratifying new proclamations by the Philippine House and Senate. The main issue with the enactment of legislation was it lacked inclusion of local communities. It seems as though grassroots ecotourism projects are not well coordinated with the National Philippine Department of Tourism. This highlights the importance of LGUs in their role of connecting grassroots development with national strategies (Romero, 2010).

These case studies of different ecotourism hotspots in the Philippines reveal how the Philippines has set value systems in place that attempt to preserve the environmental sustainability of its most beautiful locations, but still faces issues that make protection of these areas difficult. These examples hopefully create the start of a framework of how Philippine ecotourism can be beneficial to the local communities, the national economy, and to the preservation of the natural value of this unique place. Because Boracay has not been branded as an ecotourism destination and its past publicity was much more centered on the laid-back, party culture of the island, there is hope that the shutdown will act as a wake-up call and will cause the Philippines to view ecotourism as a more effective and sustainable tourism plan.

Chapter 4: Climate Change and Last Chance Tourism

As a climate hotspot, the Philippines is far more vulnerable than other countries to the adverse effects of climate change. The country is extremely susceptible to "sea-level rise, increased frequency of extreme weather events, rising temperatures, and extreme rainfall. This is due to its high exposure to natural hazards (cyclones, landslides, floods, droughts), dependence on climate-sensitive natural resources, and vast coastlines where all major cities and the majority of the population reside (USAID, 2017). The Philippines is considered a climate hotspot due to its geographical features, low level of economic development, and exposure exacerbated by poor access to resources (Virola, 2008).

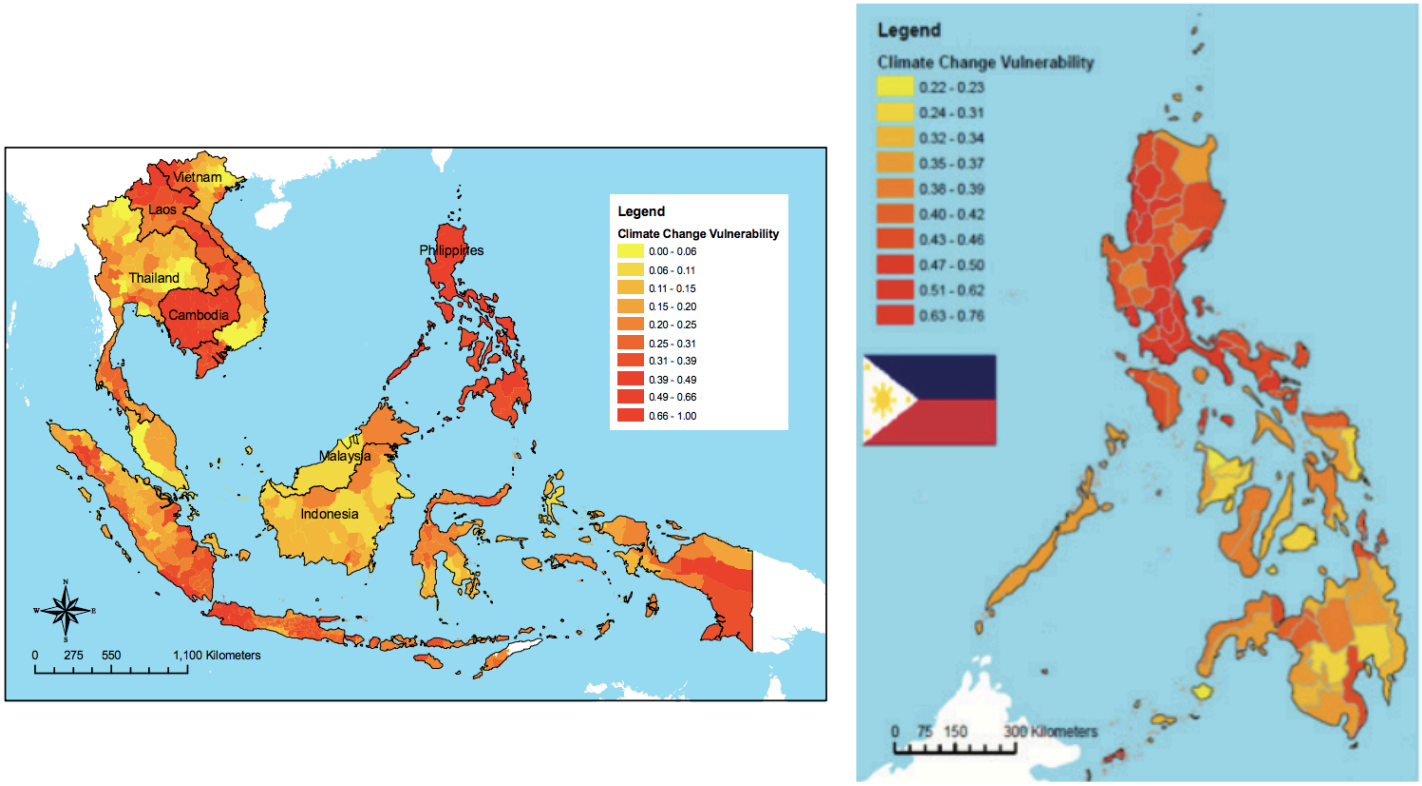

Figure 9. Climate Change Vulnerability Map: Southeast Asia and the Philippines. Reprinted from Climate Change Vulnerability Mapping for Southeast Asia *by Arief Anshory Yusuf & Herminia Francisco. January 2009. From https://www.idrc.ca/sites/default/files/sp/Documents%20EN/climate-change-vulnerability-mapping-sa.pdf*

The climate in the Philippines is tropical and monsoonal, and its most important source of rainfall variability is the El Niño Southern Oscillation. The Philippines is extremely humid, with sticky, muggy heat that can grow to be unbearable. There has already been a recorded 0.65°C increase in average temperature and number of hot days and a corresponding decrease in the number of cold nights. In terms of climate projections, the Philippines can expect a 1.8-2.2°C increase in temperature by 2050, as well as more extreme seasons: a wetter wet season from June to November and a drier dry season from December to May. More extreme weather events can be expected, such as extreme heat exceeding 35°C, or days with an extreme low of 2.5 mm of rain and days of extreme high of 300 mm of rain (USAID, 2017). These destructive issues harm all of the Philippines and its ecosystems. This chapter will identify the biggest risks of climate change in the Philippines and explain the severity of the situation, as well as give context to how "last-chance tourism" may affect the Philippines tourism industry.

The Philippines is at significant risk to ocean-based natural disasters due to its lack of natural boundaries and large coastlines. The Philippines lies in the world's most cyclone-prone area and sees around twenty cyclones every year, of which approximately eight make landfall. The oceans that surround the Philippines are naturally warm, but as the oceans and air rise in heat, more powerful and frequent storms are seen as a result (Climate Reality Project, 2016). From 2006 to 2018, the Philippines faced 75 natural disasters, mostly cyclones, tropical storms, and floods (USAID, 2017). Five of the ten deadliest typhoons to hit the Philippines have occurred since 2006. The deadliest of which, Typhoon Haiyan, was responsible for more than 6,300 lives lost, four million displaced citizens, and $2 billion in damages in 2013 (Climate Reality Project, 2016). "Sea levels in the Philippines are rising faster than the global average, increasing the hazard posed by storm surges and threatening permanent inundation of low-lying

areas" (USAID, 2017). Sea levels already have risen 0.15 meters since 1940 and are expected to rise 0.48-0.65 meters by 2100 (USAID, 2017).

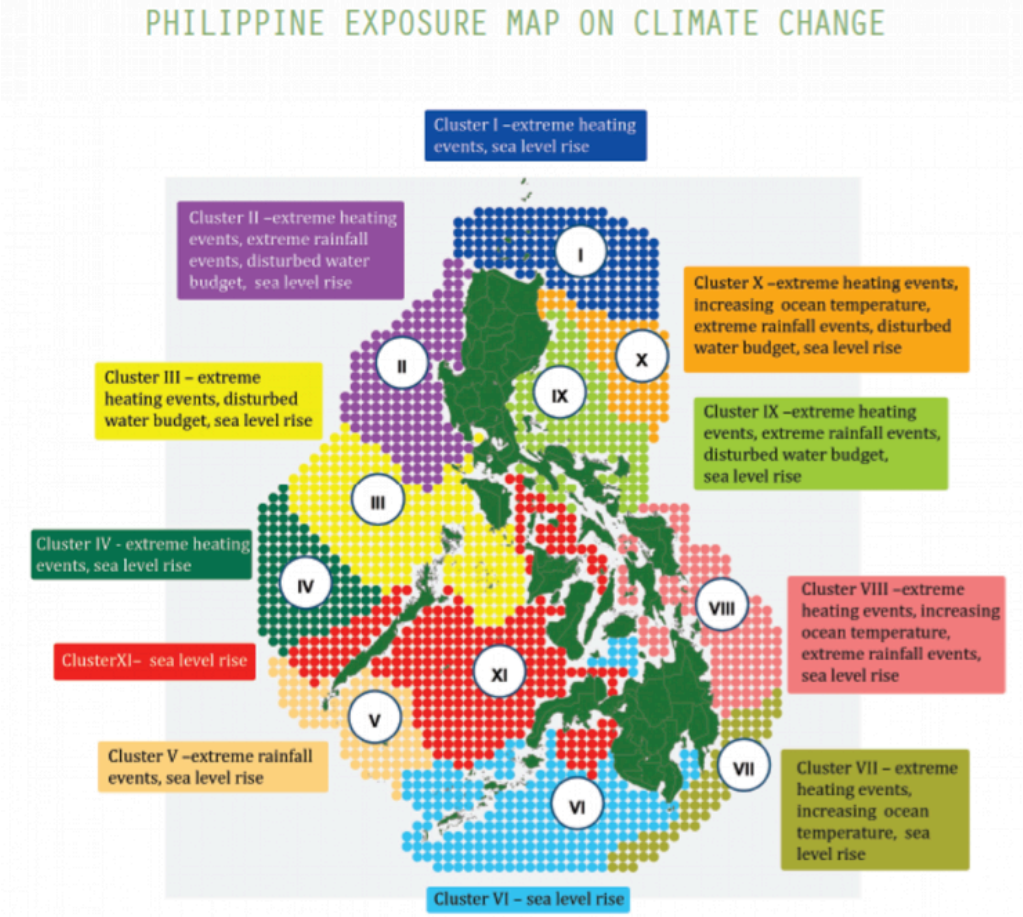

Figure 10. Philippine Exposure Map on Climate Change. Reprinted from "How Is Climate Change Affecting the Philippines?" by Climate Reality Project, n.d., from https://www.climaterealityproject.org/blog/how-climate-change-affecting-philippines. Philippine Department of Environment and Natural Resources (DENR)

Many developmental factors make it more challenging for the Philippines to respond to natural disasters caused by climate change. Because the Philippines is a developing nation with almost 100 million citizens spread out more than 7,000 islands, it is incredibly difficult to relocate and warn the population when there is an incoming storm. Not to mention the hit that the Philippine economy takes every time there is a destructive storm, which inhibits the developing country from providing better lives for its citizens, instead spending intensive time and resources focusing on the rehabilitation and recovery process. A few of the most pressing climate change

issues that face the Philippines' population are the impact on the agriculture industry, water resources, coastal ecosystems, biodiversity loss, urban infrastructure, and human health.

Agriculture is one of the most important industries in the Philippines and contributes 12% to GDP. Some of the most important exports are rice, corn, and coconuts. Climate change stressors that will affect agriculture are increased temperatures, increased rainfall variability, increased frequency of extreme weather events, and sea-level rise. The risks that these pose to agriculture are massive. Increased temperatures will add heat and water stress on crops and cause a decline in crop yield. "Rice, wheat and corn yields will likely decline by 10% for 8every 1°C increase over 30°C" (USAID, 2017). Increased variation in temperature and rainfall will also affect pest control, as increased drought is linked to increased pest infestations. Heavier rains and increased cyclones will reduce soil fertility and damage crops. They have already caused $3.8 billion in accumulated damage and losses to the agriculture sector from 2006 to 2013 (USAID, 2017).

Water resources are becoming increasingly depleted due to climate variability, as the accessibility and quality of available water are decreasing greatly. Climate change stressors such as droughts, floods, and sea-level rise, all impact water resources. Droughts reduce river flow and water levels, creating water shortages for agricultural, industrial, and municipal users. Floods and landslides degrade water supply infrastructure and saltwater intrusion of freshwater coastal aquifers caused by sea-level rise damage water quality (USAID, 2017).

As an archipelago, the Philippines and its population depend heavily on coastal ecosystems, and over 80 percent of its population lives within 50 km of the coast (Holden, 2018). "More than 60% of the coastal population's livelihoods depend on marine resources" (USAID, 2017). Ocean acidification, rising sea-levels, and sea surface temperatures, and increased salinity

all pose a threat to the valuable ecosystems that are vital to the Philippine economic future. At greatest risk are the coral reef habitats, damaged by coral bleaching, and mangrove habitats that support fisheries, rich biodiversity, and water quality. Coral reefs are valued at $2 billion and mangroves are valued at $83 million per year for their contributions to fishing, tourism, and storm protection (USAID, 2017). The Philippines is considered the "hottest of the hotspots", having the most (126) threatened endemic species and placing fifth on the world list of endangered indigenous or native species (Mittermeier et al 1999).

Urban areas in the Philippines, where 60 percent of the population resides, are at great risk to higher temperatures, heavy rainfall, strong winds, and extreme disasters. Roads, bridges, and water and sanitation facilities are at risk of damage due to these climate change stressors and threaten to increase health risks to the urban populations. Diseases in the Philippines, such as malaria, dengue fever, and diarrhea, are "expected to worsen with a changing and more variable climate that includes increased heavy rains and rising temperatures, both of which positively impact mosquito breeding and survival" (USAID, 2017). Severe natural disasters put communities and livelihoods at risk as well as damage crops and increase malnutrition and food insecurity. Climate change threatens basic elements of life for people in the Philippines, and its effects are only growing in severity.

Climate Injustice in the Philippines

Although those in poverty around the world are among the least responsible for climate change, their lives are the most at risk due to their quality of life depending on natural circumstances and their inability to adapt to changing climate (Schlosberg, 2014). The poorest developing countries will be hit earliest and hardest by climate change, and the Philippines has been ranked in the top 75 of the poorest countries in 2019 (World Economic Outlook, 2019).

Wealthier and developed countries contribute a disproportionate amount of harmful emissions and consume a disproportionate amount of resources. This concept of climate change causing the most harm to the countries and people that contribute the least it is called climate justice (Holden, 2018). The Executive Report of Climate Change in the Philippine by The World Bank states: "The greatest challenge that poorer countries face today is that hard-earned development progress they have achieved in the last several decades could be reversed in a short time because of climate change" (The World Bank, 2013).

The poor in the Philippines are faced with climate change affecting their homes and their livelihoods. "The urban poor, many of whom live in temporary shelters, are most at risk, lacking the resources to prevent or mitigate the threat of coastal inundation and storm surge" (USAID, 2017). The rural poor, many of who rely heavily on agriculture for their livelihood, are also at great risk due to the damages that climate change inflicts on their crops (USAID, 2017). When disaster strikes and hazard meets vulnerability, the poor communities are the first to be harmed. Without a means to support themselves and without homes to keep them sheltered, the poor of the Philippines are extremely vulnerable to climate change.

> *"The irony of the world today is in the reality of climate injustice: those most responsible for climate change – owing to affluent lifestyles and wasteful consumption patterns that involve the burning of fossil fuels – are the least affected when climate disasters occur. When a Yolanda [Typhoon Haiyan] unleashes its fury, the poor are far more battered and have the least capacity to recover."*
>
> –*Karl M. Gaspar, author of* Desperately seeking God's Saving Action: Yolanda Survivor's Hope beyond Heartbreaking Lamentation, 2015

Government Response to Climate Change

The Philippine government began planning for climate change with the 2009 Climate Change Act, "which requires local government units (LGUs) to draft local climate change action

plans (LCCAPs). As of July 2016, only 160 of the total 1,700 LGUs had LCCAPs in place" (USAID, 2017). The law did form the precedents for the establishment of the Climate Change Commission, (CCC) the National Framework Strategy on Climate Change (NFSCC) for 2010-2022, and the National Climate Change Action Plan (NCCAP) for 2011-2028 (DENR, 2019). The CCC is in charge of consolidating climate policy and creating programs to help the Philippines take action against climate change (USAID, 2017). The NFSCC defines the parameters for the NCCAP, and the NCCAP serves as a guiding policy document for the government's climate action (World Bank, 2013).

The Philippines is at great risk to the effects of climate change, but these laws and programs have all started relatively recently. Lack of information and education may have inhibited the Philippines from enacting laws that bring climate change to the forefront of the political conversation. Members of the National Statistical Coordination Board of the Philippines explored the need for stronger statistics on climate change in the Philippines. They stated, "Environmental statistics, and in particular, statistics on climate change and its impacts are generally lacking both in terms of quantity and quality, particularly in developing countries. Part of the reason is that national statistical agencies have not been sufficiently involved in the generation of these statistics, not only because of resource constraints but also because of lack of subject matter expertise" (Viralo, 2008).

Several other factors make it difficult for climate adaptation to be effectively implemented in the Philippines. For one, there are certain discrepancies between the government's development plans and the NCCAP. The NCCAP focuses on nature and prioritizes the preservation of the natural land, which can contradict the local and national development plans of the Philippines. In addition, the CCC has a wide range of responsibilities that hinder its

ability to implement and streamline the NCCAP, as well as a complicated relationship with other agencies and local government units. The institutions in place to help with climate action lack organization and synergy, due to overlapping responsibilities and action plans. Local governments, which carry a large portion of the responsibility for climate action, do not have the institutional capacity to carry these plans out, as they are already overwhelmed with pressing developmental tasks. Access to knowledge and information is insufficient and hampering the agencies tasked with handling climate change mitigation. The climate priorities across national plans are inconsistent and climate change issues are not always prioritized in budget planning. Overall, the climate change efforts have been fragmented and difficult to keep consistent, as they are often carried out by different Departments and Agencies, contradict the development plans, or have simply not gained enough traction and there is not enough knowledge surrounding the issue. The climate institutions lack cohesive and consistent strategic direction.

Last-Chance Tourism

Last-chance tourism capitalizes on the desire to view endangered species and fragile places before they vanish or are irreversibly altered. Forbes named it one of "[2018s] top travel trends and is attracting visitors to the Amazon rainforest, the retreating mangroves in the Everglades in Florida, Australia's bleaching Great Barrier Reef, the melting ice in Montana's Glacier National Park and the sinking city of Venice" (Brown, 2018). It is known by many names: doom tourism, disappearing tourism, and climate tourism. The trend was initially prompted by travel operators and tour agencies encouraging their clients to visit these vulnerable locations before it was too late. Today these travelers are motivated by the vulnerability of a place, and as the effects of climate change grow in intensity and frequency, more and more destinations grow in vulnerability. The effects of last-chance tourism largely increased visitors in

the Galápagos Islands and the polar regions that rare and critically endangered species call home (Lemelin, 2010). Last-chance tourism is significant to these areas and can positively influence the economy of these locations.

Despite positive influences to the economy, there are dangerous implications to this trend of tourism. An increase in tourism activity may accelerate the deterioration of these locations already stressed by climate change, which may bring another wave of visitors wishing to see the further depleted environment. These trips are often marketed as eco-friendly, as the people who usually make these trips are environmentally conscious and do not wish to contribute more to the degradation of the area. But it can also be seen as "the exploitation of vulnerable species and ecosystems that are under threat from short-term economic perspectives" (Lemelin, 2010). There is also the concern that if people are traveling far distances to see these endangered places, they are increasing their emissions through transportation which degrades the health of the very places they are visiting. This further accelerates global climate change in a damaging cycle. The long-term losses of precious ecosystems are a drastic price to pay for the short-term benefits of increased revenue and publicity.

The Philippines in its inimitable beauty and unquestionable vulnerability is a perfect candidate for last-chance tourism. Its geographical limits and fragile natural environment causes the impacts of tourism urbanization to be especially pronounced (Maguigad et.al, 2015). As an example, Boracay Island with its overwhelming tourist success and depleted resources, already tells a story of tourists rushing to see its superfine white beaches and coral reefs. The recent publicity over the shut-down will likely bring more attention and more people wishing to see the beautiful beaches before it is degraded to a point of no return. Tourism is a vital economic industry but is also identified as a contributor to climate change. In the Philippines, the economic

growth that tourism brings is seen as too great a profit to halt, and in many places, tourism is the only industry keeping the economy afloat. This highlights the complicated relationship between the positives of tourism growth and the vulnerability of the country, as well as the need for well executed ecotourism policies.

Chapter 5: Ecotourism in Southeast Asia and Solutions

Ecotourism as an industry has been growing throughout the world, and Southeast Asia is no exception. The famous beaches of Indonesia, the tropical jungles of Thailand, the vibrant coral reefs of Malaysia are just some examples of the stunning locations that people are rushing to see. But just as in the Philippines, these locations have had to adjust to this rapid rise in ecotourism and have had to manage the preservation of the locations that are responsible for a large portion of their tourism revenue. Locations such as Thailand, Vietnam, and Indonesia have faced degradation and damage similar to the Philippines. This chapter will explore the solutions these countries have set in place to protect their land as well as situate the Philippines with its neighboring countries and identify how the Philippines can learn from their examples.

In general, tourism in Southeast Asia is a heavily contested area. Because many of these countries are extremely dependent on foreign tourism as a vital source of income and jobs, decreasing the number of tourists in favor of protecting the natural environment is not a viable option. There has also been significant change in the demographic of tourists in Southeast Asia. The majority of tourists used to be from Australia, the U.S., Europe, and Japan and came in small groups. Now, most of the tourists come from China and India and arrive in large groups, which implies larger boats and more waste discharged into the environment.

> *"The invisible burden is the social and environmental impacts of tourism that are not accounted for when countries look at economic impacts. There's a cost as each tourist comes into a country. It's not equally distributed throughout the economy, and where it fails is in the protection of the environment."*
>
> *- Epler Wood, Destinations at Risk: The Invisible Burden of Tourism, 2019*

A particularly relevant example is Maya Bay in Thailand, which was swarming with visitors after the 2000 film *The Beach*, starring Leonardo DiCaprio featured the bay as a

beautiful exotic locale. In 2018, the bay was filled with 5,000 tourists each day, deteriorating the coral reefs through boat pollution, sunscreen toxic to young corals, and anchors. More than 50% of the bay's coral reefs were in poor condition, as reported by Thailand's national parks department. Maya Bay was closed to tourists in June 2018, similarly to Boracay. But unlike Boracay, the popular destination remains closed for the foreseeable future. The government initially planned on opening the beach around the same time that Boracay reopened in October 2018, but the Thailand government decided instead to continue restoration work, possibly for the next five years. Most of the restoration efforts in Maya Bay have been focused on the replanting of coral and the rejuvenation of the biodiversity that thrived there (Coca, 2019).

Ha Long Bay in Vietnam is another example of a destination that has been overrun with tourists. It is Vietnam's most frequented tourist destination, with nearly 7 million tourists visiting the bay in 2017 (Coca, 2019). It is a UNESCO World Heritage Site, but is constantly crowded and overwhelmed with tourist boats and discharged waste. Declining water quality is a prevalent issue that government officials, local businesses, grassroots organizations, and international groups have been working to improve, starting with tour boat operators and installing waste treatment technologies on their boats (Coca, 2019).

The island of Bali in Indonesia also has seen rapid growth in tourists, accompanied by an increase in the severity of its environmental problems. These issues include the overuse of freshwater, air pollution, habitat destruction, and large amounts of waste. Bali produces 3,800 tons of waste daily, and only 60 percent of the waste goes to landfills. In Kuta Beach, waste was so poorly managed that a "garbage emergency" was declared (Coca, 2019). A solution proposed by the officials in Bali is setting a $10 tax for international passengers traveling through the

island's airport, where the proceeds would go into conservation efforts focused on waste management.

These tourist hotspots in Southeast Asia and their management can provide solutions that can be adapted to fit the Philippine tourism plan. For instance, the Thailand government's dedication to restoring the coral reefs of Maya Bay to their previous splendor is evident in its continued, long-term efforts that go deeper than the visual aesthetic. Although they sacrifice the money that tourism to Maya Bay would bring the nation, they ensure a more sustainable future for its beaches and oceans. Boracay is still in need of continued conservation efforts and would have greatly benefitted from a longer shut down. The Philippines could also enforce a tax for international tourists that are flying to visit some of the more endangered areas, similarly to Bali's action. This tax could go directly towards conservation efforts for endangered species and environmental education programs.

Studying the islands of the Philippines that have already successfully implemented some ecotourism strategies in their cities is also a valuable means of identifying how other areas in the nation can follow suit. As seen in Puerto Princesa, a strong local government, an understanding of the local people's perceptions of tourism development, and local pride in the natural destination are powerful factors in ensuring that Puerto Princesa Subterranean National Park continues to thrive as a tourism hotspot and natural wonder. The strong political will of the local government unit in Puerto Princesa is a large part of how the city has been able to implement programs that encourage its residents to value and respect the natural park as well as educate them as to the importance of the natural resources that they rely on. Puerto Princesa's environmental education programs would be immensely useful if extended to other Philippine islands as well as its visitors.

The island of Bohol teaches an invaluable lesson as well: how to incorporate local communities and prioritize women in ecotourism leadership roles. Because Bohol encourages its local people to take the forefront of the ecotourism sector, visitors are granted access to tour guides with authentic knowledge of the island and local groups can reap the benefits of a thriving ecotourism sector. Bohol gives its local people and women the starring role in the growth of ecotourism, which highlights how prioritizing the needs of the community reinforces a grassroots effort to protect the island's natural beauty (Pleno, 2006).

Because the Philippines has such a rich culture embedded in the fabric of its islands, a powerful ecotourism strategy would be to highlight the authentic culture of the islands. For instance, Boracay's culture is found in the history, collective memory, and practices of its indigenous people, the Ati, but it has been difficult to identify this culture today due to the displacement and discrimination of the Ati people. This lack of cultural rootedness and cultural identity may be a strong reason why the island was allowed to become so overrun and damaged. Because the Ati people were pushed aside and marginalized, Boracay lost the source of its rich history and culture. To reconcile this relationship would not only benefit the people and identity of Boracay as a whole, but also offer a unique experience for visitors who wish to witness the beauty of Philippine culture. This effort to connect with the local identity could also aid in the effort to rebrand the island. Commercialization should not be the main focus of ecotourism; rather, it should be balanced with a shared appreciation of culture and place.

> *"Parang may black hole sa ating pagka-Pilipino, sa Filipino identity. Ang hirap nating ma-discover…Parang ganun ang nangyayari sa Boracay." [It's like there's a black hole in our Filipino-ness, in the Filipino identity. It's something that's hard for us to discover...and that's also what's happening in Boracay.]*
>
> *-Boracay priest, Father Nonoy Crisostomo. "Beyond the beach: The untold story of Boracay's Ati tribe" 2013*

The Philippines must undergo some significant changes if it hopes to thrive as an ecotourism hotspot, as noted in *Making Ecotourism Work: a manual on establishing Community-based Ecotourism Enterprise (CBEE) in the Philippines*. It highlights many ways to address the threats of ecotourism, environmental degradation, economic instability, overdevelopment, and crowding. The main strategies include:

1. Cultivate and enhance economic opportunities
2. Advocate protection and conservation of indigenous knowledge systems
3. Nurture indigenous knowledge systems and cultural heritage through cultural celebrations
4. Enhance local life appreciation
5. Empower local people
6. Enhance participation of visitors in ecotourism activities
7. Periodic assessment and evaluation of ecotourism projects
8. Economic viability of ecotourism programs (Eugenio, 2012).

For ecotourism to succeed in the Philippines, these eight strategies are an excellent place to start. Economic opportunity is inevitably going to be the driving force of ecotourism, and by encouraging local people to provide their talents and skills to the industry, the Philippines can assure that the members of the population most affected by ecotourism are able to find stability. Another integral part of ecotourism's success stems from valuing indigenous knowledge systems. An example of this is seen in the tour guides of Bohol, who are mostly residents of the island. If it is evident that their knowledge is valued, visitors will more likely respect and honor their expertise. Along the same vein, ecotourism and cultural celebrations should be practices

that go hand in hand. Cultural celebrations such as the Ati-Atihan festival honor the indigenous people and also give outside visitors a look into the unique culture of the Philippines.

Ecotourism can also be a source of great pride for the local people, which can help improve quality and appreciation of life for residents. For example, Puerto Princesa's locals take pride in being the ecotourism capital of the Philippines. Similarly, an important aspect of ecotourism is its ability to empower people to hold leadership positions in tourism and feel confident in their ownership of a place. This is especially important in the Philippines, where discrimination based on class, gender, sexual orientation, and race is highly prevalent (Angan, 2013). When marginalized people are in leadership roles, they are given an enhanced sense of responsibility and power. It is also important that ecotourism gives visitors a chance to directly participate in and contribute to the betterment of the host community. This can be anything from donating to local programs to hands-on-work like planting trees and rice. One aspect of ecotourism in the Philippines that requires improvement is providing evaluations of how successful ecotourism projects have been. The continuous and consistent review of these projects is necessary to ensure that ecotourism goals are being met. Lastly, ecotourism needs to effectively boost the Philippine economy in a way that is helpful to community livelihood. This means that ecotourism needs to be based on competent fund management and eventually reach self-sufficiency in local funding so that local communities have a stronger sense of ownership.

There are many concrete examples of how the Philippine government can implement ecotourism positively. For instance, capping the number of visitors, as the Puerto Princesa Subterranean River National Park does and as Boracay has implemented, can greatly decrease environmental degradation caused by overcrowding. The safety of biodiversity and important

organisms needs to be prioritized, and not solely the "charismatic megafauna[3]" like the adorable tarsier in Bohol. Education about these species needs to be present at every location where tourists will be interacting with them. For instance, on beaches where snorkelers and divers will encounter coral reefs, information should be readily available about the delicate nature of coral and its climate vulnerability, as well as underscoring how essential its presence is to the overall biodiversity of the Philippine ocean.

There is also the process of zoning, which could greatly impact the ecotourism processes of the Philippines. There are different types of protected areas depending on the vulnerability of the particular environment, and different prohibitions on what human activity can look like in these areas. For instance, strict protection zones prohibit all human activities other than scientific studies and religious use by indigenous communities, while recreational zones are areas that promote tourism and educational public awareness. The Chocolate Hills is a protected area and is categorized as a natural monument, which focuses protection on small areas for their unique characteristics. A protected area must be zoned correctly so that people do not over-utilize the resources. Management zones are created through the collaboration between local government, cultural communities, and residents (Eugenio, 2012).

Community participation in ecotourism is vital to its success; when people are involved in the management and care of special places, they will reach a deeper understanding and appreciation (Parducho, 2015). One way to encourage Filipinos to be active participants in ecotourism and environmental protection is to accent the concept of stewardship. The Philippines is a very religious nation, ranking as the fifth most Christian country in the world with 86.8

[3] Charismatic megafauna is a term used to refer to the plant and animal species that have a large appeal, perhaps due to an attractive appearance, to a global audience... These animals are generally associated with environmental activism and conservation messages. (World Atlas, n.d.)

million Filipinos, or 93 percent of the total population, identifying as Christian (Philippine Daily Inquirer. 2011). If the Department of Tourism were to highlight ecotourism as a means of religious fulfillment and stewardship of the Earth, it may appeal to more Filipinos.

As a nation, the Philippines needs to rework the way it views and engages with tourism. Rachel Dodds, a professor at Ryerson University in Toronto and sustainability adviser states, "Without proper management and thinking about the limits to acceptable change, places are being ruined beyond repair. Tourism is planned for the short-term, and policies or plans are not developed with the medium or long-term impacts" (Brown, 2018). Ecotourism challenges the Philippines to consider long-term effects of short-term tourism success. To sustain tourism in the Philippines, the discourse around the industry must shift from a free-for all opportunity to a regulated system that considers the long-term.

Chapter 6: Conclusion

The Philippines has the potential to thrive as an ecotourism hotspot, bringing economic growth that will help reduce the nation's high levels of poverty as well as conserving the natural environment. Currently, ecotourism is seen as a viable option for this growth in the Philippines, but the need for the revenue that tourism brings is too great to make the sacrifices that well-managed ecotourism requires. By examining different destinations in the Philippines and their tourism management, it is evident that implementing ecotourism practices and programs can greatly benefit the sustainability of a tourist destination. The Philippines requires more cohesive ecotourism plans and needs to be more proactive in protecting its irreplaceable ecosystems rather than scrambling to repair them. While there have been some efforts to integrate ecotourism into the Philippines' tourism strategy, the complicated nature of the governmental power and who has jurisdiction over certain areas can limit the progress that can be made. However, the framework for ecotourism in the Philippines is there: neighboring Southeast Asian countries and specific islands of the Philippines have seen great success in ecotourism management. Widespread integration of sustainable ecotourism is still needed for a prosperous and sustainable future for the Philippines. Overall, ecotourism as an industry is an incredibly viable solution to environmental and economic issues that have plagued the Philippines, but implementing ecotourism positively and effectively so that it benefits the local communities and is not degrading the environment is a difficult feat. The Philippine government and Department of Tourism needs to highlight that ecotourism can be used as a means to reduce poverty and preserve the natural environment. The complicated issues of tourism as a powerful revenue generator needs to be coupled with the necessity of protecting the environment in tandem with the money gained. Although a precarious balancing act of government policy, economic growth,

and natural resource protection, the Philippines has approached an environmental precipice that, if handled correctly, could propel the country forward to become the model of sustainable ecotourism in developing countries.

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