

Cover and section photo credits

Cover Photo: "Manila_08999pp" (Binondo, National Capital Region, Philippines) by Stefan Munder is licensed under CC BY-2.0. https://www.flickr.com/photos/insmu74/4300901013

Country Overview Section Photo: "Lapu Lapu-Philippines" (Cebe, Philippines) by Seth Waite is licensed under r CC BY-2.0. https://www.flickr.com/photos/28674126@N02/4316326988

Disaster Overview Section Photo: "Flooding from Typhoon Ondoy (Ketsana), Philippines 2009" (Philippines) by AusAID Department of Foreign Affairs and Trade is licensed under CC BY-2.0.

https://www.flickr.com/photos/dfataustralianaid/10695644264

Organization Structure for Disaster Management Section Photo: "Operation Damayan [Image 4 of 4]" (Manila, National Capital Region, Philippines) by DVIDSHUB is licensed under CC BY-2.0.

https://www.flickr.com/photos/dvids/10838264396/

Infrastructure Section Photo: "Skies of Manila" (San Joaquin, National Capital Region, Philippines) by Yacine Petitprez is licensed under CC BY-SA 2.0. https://www.flickr.com/photos/anykeyh/15050119642/

Health Section Photo: "Health care centre, Philippines" (Philippines) by Department of Foreign Affairs and Trade is licensed under CC BY-2.0. https://www.flickr.com/photos/dfataustralianaid/16841156085/in/photolist-rEcjY6

Women, Peace and Security Section Photo: "Philippines Old Woman" (Iloilo, Western Visayas, Philippines) by moyerphotos is licensed under CC BY-2.0. https://www.flickr.com/photos/moyermk/4120905783/in/photolist-7h9HHH

Conclusion Section Photo: "Fishermen.Philippines." (Victoria, Ilocos Region, Philippines) by Bernard Spragg. NZ is licensed under CC0 1.0 (public domain). https://www.flickr.com/photos/volvob12b/26915803150/

Appendices Section Photo: "Tricycle taxis Laoag City" (Ilocos Norte, Ilocos Region, Philippines) by Bernard Spragg.NZ is licensed under CC0 1.0 (public domain)

https://www.flickr.com/photos/volvob12b/15979998188/

Table of Contents

Welcome - Note from the Director7
About the Center for Excellence in Disaster Management & Humanitarian Assistance8
Disaster Management Reference Handbook Series Overview9
Executive Summary10
Country Overview12
Culture12
Demographics13
Ethnic Makeup13
Key Population Centers13
Language13
Religion13
Vulnerable Groups14
Economics
Government16
Environment17
Geography17
Borders
Climate17
Climate Change18
Disaster Overview20
Hazards20
Natural Hazards20
Recent History of Natural Disasters21
Country Risks23
Country Risk Profile24

Organizational Structure for Disaster Management	26
Lead Government Agencies in Disaster Response	26
Key Disaster Management Partners in Philippines	27
International Federation of Red Cross and Red Crescent Societies	29
U.S. Government Agencies in Philippines	30
Participation in International Organizations	31
Foreign Disaster Relief and Emergency Response	32
Policies, Framework, and Plans for Disaster Management	33
Guiding Policy	33
Guiding Framework	33
Key Plans	33
Education and Training	34
Disaster Management Communications	35
Early Warning Systems	35
Responsible Agencies for Early Warning	36
Military Role in Disaster Relief	36
nfrastructure	38
Airports	38
Seaports	38
Land Routes	38
Roads	38
Railways	38
Waterways	40
Schools	40
Communications	41
Utilities	42
Power	42
Water and Sanitation	42

Health	44
Health Overview	44
Healthcare System Structure	44
Challenges in the Healthcare System	45
Health Cooperation	45
Communicable Diseases	45
Non-Communicable Diseases	46
Training for Health Professionals	46
Women, Peace, and Security	48
Conclusion	50
Appendices	52
DOD DMHA Engagements in the Past Five Years (FY 2012-2017)	52
International/Foreign Relations	54
Force Protection/Pre-Deployment Information	54
Passport/Visa	55
Emergency Contact Information	55
Currency Information	55
Travel Health Information	55
Sendai Framework	58
HFA Country Progress Report	60
Country Profile	65
Acronyms and Abbreviations	80
References (Endnotes)	84
List of Figures	
Figure 1: Map of the Philippines	17
Figure 2: INFORM's Country Risk Profile for the Philippines	24

Figure 3: Disaster Management Structure in the Philippines	26
Figure 4: International Humanitarian Coordination Architecture	32
Figure 5: Philippine National Railways	41
Figure 6: Department of Health Functional Structure	44
Figure 7: Non-Communicable Diseases Prevalent in the Philippines	46
Figure 8: UN Sendai Framework for Disaster Risk Reduction 2015-2030	59
Figure 9: HFA Level of Progress Achieved	60
List of Tables	
Table 1: Disaster Management Partners	27
Table 2: Airports in the Philippines	39
Table 3: Seaports in the Philippines	39
Table 4: Global Gender Gap Index Rank – ASEAN Member States, 2016 and 2006	48
Table 5: Health Information – Suggested Vaccines	56
Table 6: National Progress Report on the Implementation of the HFA	60
Table 7: HFA Country Progress Report Future Outlook Areas, Philippines	62
List of Photos	
Photo 1: Philippine National Flag	12
Photo 2: Street Dancing in Davao City	13
Photo 3: Metro Manila Skyline	13
Photo 4: Saint Augustine Church, Paoay, Ilocos Norte, Philippines	14
Those is sufficiently addy, notes that continues in the sufficient and	1 -
Photo 5: Vulnerable Populations During Disasters	
	14
Photo 5: Vulnerable Populations During Disasters	14 20
Photo 5: Vulnerable Populations During Disasters Photo 6: U.S. Military Delivers Relief Supplies in the Aftermath of Typhoon Haiyan	14 20 29
Photo 5: Vulnerable Populations During Disasters	14 20 29 30
Photo 5: Vulnerable Populations During Disasters	14 20 29 30 33
Photo 5: Vulnerable Populations During Disasters	14 20 29 30 33
Photo 5: Vulnerable Populations During Disasters	14 20 29 30 33 36

Welcome - Note from the Director

This Philippines Disaster Management Reference Handbook offers readers an operational understanding of the nation's disaster management capability and vulnerability, with detailed information on demographics, hazards, government structure, regional and international assistance, infrastructure, laws and guidelines, risks and vulnerabilities, and other areas vital to a comprehensive disaster management knowledge base.

The Philippines is located within a typhoon belt in the Pacific and is vulnerable to approximately 20 typhoons annually. In addition to typhoons, the country suffers from earthquakes, volcanic eruptions, storm surges, flooding, and landslides. The Philippines has endured disasters that involve national and international assistance.¹

The Armed Forces of the Philippines (AFP) is a primary responder in disasters and have been deployed frequently to several disaster relief operations in the country in recent years.² The AFP regularly works with U.S. Forces to conduct military training exercises focused on a variety of missions, including disaster relief, humanitarian assistance, and counterterrorism. The U.S. and the Philippines have participated in many bilateral and multilateral exercises including Balikatan, PHIBLEX, Pacific Responder, Pacific Partnership, Tempest Express, Pacific Endeavor, and others. Many of these exercises include government, non-governmental organizations, and members of the international humanitarian community. Training efforts bring value because they increase the speed of response to the affected country thereby reducing human suffering and saving lives in disasters. As a result of civil-military activities, the Philippine forces are better prepared to provide relief during humanitarian assistance and disaster response operations.³

In addition, the U.S. and the AFP have coordinated the framework for defense and security cooperation for their militaries through the Mutual Defense Board and Security Engagement Board (MDB-SEB). It ensures cooperation in areas involving humanitarian assistance, disaster relief, maritime security, cyber security, and other national security interests.⁴

Sincerely,

Joseph D. Martin, SES Director

Information about the Center for Excellence in Disaster Management and Humanitarian Assistance

Overview

CFE-DM is a U.S. DOD organization that was established by U.S. Congress in 1994. The Center is a direct reporting unit to U.S. Pacific Command and is located on Ford Island, Joint Base Pearl Harbor-Hickam, Hawaii.

CFE-DM was founded as part of the late Senator Daniel K. Inouye's vision. The Senator had witnessed the effects of Hurricane Iniki that struck the Hawaiian Islands in 1992, and felt the civil-military coordination in the response could have been more effective. He set about to establish CFE-DM to help bridge understanding between civil and military responders, and to provide a DOD platform for building Disaster Management and Humanitarian Assistance (DMHA) awareness and expertise in U.S. forces, and with partner nations in the Asia-Pacific. While maintaining a global mandate, the Asia-Pacific region is our priority of effort and collaboration is the cornerstone of our operational practice.

Mission

The Center's mission is to advise U.S. Pacific Command leaders; enable focused engagements, education and training; and increase knowledge of best practices and information to enhance U.S. and international civil-military preparedness for disaster management and humanitarian assistance.

Vision

CFE-DM exists to save lives and alleviate human suffering by connecting people, improving coordination and building capacity.

Contact Information

Center for Excellence in Disaster Management and Humanitarian Assistance 456 Hornet Ave JBPHH HI 96860-3503 Telephone: (808) 472-0518 https://www.cfe-dmha.org

Disaster Management Reference Handbook Series Overview

The Disaster Management Reference Handbook Series is intended to provide decision makers, planners, responders and disaster management practitioners with an overview of the disaster management structure, policies, laws, and plans for each country covered in the series. Natural and man-made threats most likely to affect the country are discussed. The handbooks also provide basic country background information, including cultural, demographic, geographic, infrastructure, and other relevant data.

Conditions such as poverty, water and sanitation, vulnerable groups, and other humanitarian issues are included. A basic overview of the health situation in the country and disease surveillance is also covered. The handbooks include information on key national entities involved in disaster management, disaster response and preparation, and the military's role in disaster relief. Information on United Nation agencies, international non-governmental organizations (NGO), major local NGOs, and key U.S. agencies and programs in the country, are also provided.

The overall aim is to offer a guide that brings together important information about disaster management and response for each country in an effort to provide a basic understanding for the reader. Information in the handbooks are compiled and based primarily on trusted, reliable, publicly available sources. Much of the information used is from U.S. or other government sources, United Nation sources, NGO websites, scholarly references, foreign government websites, and various media sources. When available, a link to the original internet source is provided.

Each handbook is a working document and will be updated periodically as new, significant information becomes available. We hope that you find these handbooks informative, relevant, reliable, and useful in understanding disaster management and response for this country. We welcome and appreciate your feedback to improve this document and help fill any gaps to enhance its future utility. Feedback, comments, or questions can be emailed to cfe.dmha.fct@pacom.mil. You may also contact the Center for Excellence at: (808) 472-0518. Please visit our website (https://www.cfe-dmha.org) to view the latest electronic versions available or to request a hard copy of a disaster management reference handbook.

Disclaimer

This report has been prepared in good faith based primarily on information gathered from open-source material available at the date of publication. Most of the information used was from United States (U.S.) or other government sources and is therefore considered to be in the public domain. Such sources include the Central Intelligence Agency (CIA) Fact Book, U.S. Department of State (DOS), and foreign governments' web pages. Where possible, a link to the original electronic source is provided in the endnote (reference) section at the end of the document. Other sources used include NGO home pages, ReliefWeb, United Nations Development Programme (UNDP), United Nations Office for the Coordination of Humanitarian Affairs (OCHA), World Bank, and Asian Development Bank (ADB). While making every attempt to ensure the information is relevant and accurate, Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DM) does not guarantee or warrant the accuracy, reliability, completeness or currency of the information in this publication.

Executive Summary

The Philippines has a high vulnerability to natural hazards which are attributed to the nation's geographic position in Southeast Asia.⁵ Natural disasters such as typhoons, earthquakes, floods, volcanic eruptions, landslides, and fires affect the country.6 Volcanic eruptions and tsunamis are related to the continental plate activity around "the Ring of Fire". Because it is one of the most geologically active areas, it is nicknamed "The Ring of Fire". This is a circular arm of active volcanoes that surrounds the Pacific Ocean basin. This area in the Pacific Ocean covers nearly 25,000 miles from the southern tip of South America, to the west coast of North America, across the Bering Strait, through Japan, and into New Zealand.8 In 2013, Typhoon Haiyan (also known as Typhoon Yolanda), one of the deadliest disasters to strike the Philippines, affected 26 million people and claimed at least 8,000 lives. Rising sea levels are also a direct threat to approximately 70 percent of the Philippine population, which has forced many to relocate as a result. In addition, climate change has also increased the severity and frequency of natural disasters in the country.¹⁰

The agricultural tradition and rapid development in some areas of the country leave large portions of the population and the economy vulnerable to natural hazards. Apart from the metropolitan regions, the agricultural workers and fishermen are the most affected population by natural disasters. Approximately one-third of the Philippines total population are employed in the agriculture sector and natural disasters pose significant threats to this population's food security and sources of income.¹¹

The Philippine Government, International Non-government Organizations (INGOs) and local NGOs are all making attempts to address the impact of disasters and climate change at various levels. The Philippine Government has made significant strides in the implementation of disaster risk reduction (DRR) planning and activities through the development of the National Disaster Risk Reduction and Management Council (NDRRMC) which acts as the lead agency for DRR in the Philippines. 12 The disaster focal points are the NDRRMC and the Office of Civil Defence (OCD). The Department of Social Welfare and Development (DSWD) is responsible for leading immediate disaster relief efforts.13

The Armed Forces of the Philippines (AFP) is a primary responder in disasters and have been deployed frequently to several disaster relief operations in the country in recent years. The Philippines has endured disasters that involve national and international assistance.¹⁴

There is increased awareness on disaster risk reduction in the Philippines, but proper integration with climate change adaptation and sustainable development policies can be improved. Disaster risk reduction management and climate change adaptation have been integrated in various plans and framework; however, multiple plans can be overwhelming for local government units. The Philippine Government has learned from Typhoon Haiyan that risk communication is essential and through the NDRRMC has issued very specific warnings regarding potential storm impacts as a result. The property of the story of t



Country Overview

The Philippines is an island country located in archipelagic Southeast Asia. Officially named the Republic of the Philippines, it is a sovereign country with 7,107 islands covering more 115,830 square (sq.) miles of terrain. The nation is divided into three island groups: Luzon, Visayas and Mindanao. Luzon is the largest of the Philippine islands and the most densely populated. The country's capital city, Manila, is located on Luzon. Visayas consists of seven large and several hundred smaller islands. Mindanao is the second largest island. According to the Philippines Statistics Authority the total estimated population of the Philippines is 100.98 million as of August 2015.

The Philippines was a part of the Spanish Empire for more than three hundred years. In 1565 Miguel Lopez de Legazpi was appointed by King Phillip II as the Philippines first Governor-General. Legazpi declared Manila, a natural harbor, the capital of the Philippines. In 1896, the Philippine Revolution produced the short-lived First Philippine Republic, and the Philippine-American War. The United States maintained sovereignty over the islands until after World War II, when the Philippines were recognized as an independent country in 1946. On July 4, 1946, Manuel Roxas of the Nationalist Party was inaugurated as the first President of the Republic of the Philippines.¹⁹

The country has since gone through the People Power Revolution overthrowing the dictatorship. The Philippines is a founding member of the United Nations (UN) in 1945, Association of Southeast Asian Nations (ASEAN) in 1967, World Trade Organization (WTO) in 1995, and the East Asia Summit (EAS) in 2005.^{20, 21, 22, 23}

The Philippines is a unitary presidential constitutional republic, with the President operating as both the head of state and the head of government. The country has embassies and consulates in 62 countries. The major exports of the Philippines consist of rice, bananas, cashews, and other food products. The Philippines has an open economy and a global trade market. Top export markets include Japan, the United States, China, South Korea, and Germany.²⁴

It is a culturally diverse country due to its archipelagic nature and is considered one of the world's mega biodiversity countries due to its unique flora and fauna. The country's unique location has made it the melting pot

of Asia. Despite having widespread poverty, the Philippines has performed comparatively well in Human Development Index (HDI), predominantly in comparison to other Southeast Asian nations.²⁵ Photo 1 depicts the Philippine's national flag.²⁶



Photo 1: Philippine National Flag

Culture

The culture of the Philippines is a mixture of many cultures and influences. The culture displays historical influences from early colonization by Spain and the United States. Filipino culture is rich in traditions and beliefs of the native people; however Filipino culture has struggled to find its national identity. The Philippines is a westernized culture with heavy influences from the occupation of various colonizers; their culture is best described as a combination of various cultures. The Filipino culture bears a resemblance to and is comparable to various cultures such as the Spanish, American, and many other Asian countries.²⁷

Philippine culture is driven by community acceptance and education is a value deeply rooted in the culture because it provides vast opportunities for an improved life. In the Filipino culture an individual's skin tone, attractiveness and financial status are the primary determinates of an individual's social status. Within the Filipino culture a family's social position and business-oriented relationships are beneficial in attaining success. Government representatives, affluent acquaintances, and persons involved in community leadership roles are frequently sponsors at Filipino marriage ceremonies and baptisms. Those networks are of great significance and further promote a family's social status within the Filipino community.²⁸

Filipino culture is bright and vibrant, and festivals are held throughout the year. Photo 2 depicts street dancing in Davao City.²⁹

In the Filipino culture a significant disparity

exists between the wealthiest two percent of the population- the wealthy, and the vast majority of the population, which lives in poverty. Financial means to purchase consumer products is an indication of power in Filipino culture. Wellto-do persons tend to lead a more westernized standard of living. In Filipino culture owning a vehicle is a statement of wealth and an indication of a higher social status. A family's residence and furniture, especially upholstered furnishings, area rugs and electrical appliances, indicate a family's social position. Women living above the poverty level tend to own vast wardrobes. Additionally, the most prestigious schools in the Philippines are private schools which are expensive. Wealthy families often elect to send their children to private school as it is the most important indicator of social position in the Filipino culture.³⁰



Photo 2: Street Dancing in Davao City

Demographics

Ethnic Makeup

The Filipino people's origins are of South Asian heritage; however Chinese, American, Indian, and other nationalities have contributed to a multiethnic background in the country. Philippine society is a complex one whereas, approximately 80 major ethno-linguistic groups, with many subclasses makeup the Filipino population. All of these, traditionally, are ethnic groups practicing distinct cultures.³¹ The ethnic makeup of the Philippines is Tagalog (28.1 percent), Cebuano (13.1 percent), Ilocano (9 percent), Bisaya/Binisaya (7.6 percent), Hiligaynon Ilonggo (7.5 percent), Bikol (6 percent), Waray (3.4 percent) and other (25.3 percent).³² These multiple ethnicities and cultures are found throughout the islands, each practicing distinct beliefs and customs.33

Key Population Centers

Manila is the nation's capital city and Quezon City has the greatest population; both cities are a part of the greater Metro Manila area, officially known as the National Capital Region (NCR). Approximately ten percent of the total Philippine population resides in Metro Manila.³⁴ Manila has approximately 1.7 million residents (as of 2016)³⁵ and is the primary manufacturing region in the Philippines.³⁶ Manila and nearby ports are the distribution hub for shipping manufactured goods.³⁷ Photo 3 depicts the Metro Manila skyline.³⁸



Photo 3: Metro Manila Skyline

Language

Filipino is the national language and based on Tagalog. English is also widely spoken throughout the country. There are approximately 80 language groups, with more than 500 dialects.³⁹ The eight major dialects spoken in the Philippines are; Tagalog, Cebuano, Ilocano, Hiligaynon (or Ilonggo), Bicol, Waray, Pampango, and Pangasinan.⁴⁰

Religion

The Philippines is the only predominately Christian nation in Asia. Approximately 86 percent of the population identifies as Roman Catholic. The Chinese minority has been culturally significant in influencing Filipino Catholicism with various beliefs and practices of Buddhism, Taoism, and Confucianism. An additional six percent is associated with national Christian cults, and two percent belonging to an estimated 100 Protestant denominations. Roughly four percent of the population identifies as Muslim. The Filipino Muslim population is mostly located on the southern islands of Mindanao, Sulu, and Southern Palawan. The residual two percent identify with non-

Western, indigenous beliefs and practices and are predominately located in isolated, rugged regions.⁴¹

Photo 4 depicts Saint Augustine Church, a Roman Catholic Church, commonly referred to as Paoay Church.⁴²



Photo 4: Saint Augustine Church, Paoay, Ilocos Norte, Philippines

Vulnerable Groups

Women

The Philippines remains to have significant disparities in some outlooks on women's rights and equality. The Government of the Philippines has implemented anti-Violence Against Women (VAW) campaigns; however, Filipino women continue to endure the effects of gender-based violence. Filipino women are exposed to sex trafficking, involuntary prostitution, and sexual harassment in public, the work place and in their day to day activities regardless of their social or economic status.

Women are also vulnerable to domestic abuse. A fourth of women in relationships have suffered physical abuse. The Philippines is still the only country that still bans divorce which can exacerbate the abuse. Legal provisions in the Family Code allow for legal separations and annulments but they can be very expensive and cost on average US\$10,000 which is more than most Filipinos' annual income.⁴³

The Philippines does impose penalties for violence against women and children. There are existing laws and policies in the country that recognize the need to protect the family and its members, particularly women and children from violence including the Anti-Violence Against Women and Their Children Act of 2004 (RA 9262), and the Anti-Rape Law (RA 8353). 44 However, the justice system is very slow. Midyear data from 2015 showed a surge of 63.5

percent in rape cases. From 2010-2014, criminal abuses against women and children rose by 200 percent.⁴⁵

The Philippines has a high rate of teenage pregnancy and there is a stigma surrounding unwed mothers. In the Filipino culture if a woman becomes pregnant, it is expected that the man should wed her. This further intensifies the nonexistence of divorce. When a woman with a child is unwed this leaves the woman demoralized by a greatly patriarchal culture where the idea of childlessness is viewed as undesirable. In the Filipino culture there is an expectation that women will bear children because Filipino women have a responsibility to continue the family lineage.⁴⁶

Natural disasters and conflicts have displaced millions of women since 2013 and have worsened gender abuse.⁴⁷ Women and children are vulnerable during emergencies and disasters and are in need of specific services. Pregnant and lactating mothers are also at high risk during disasters and in the displacement that follows a disaster. Reproductive healthcare is needed for this affected population. These women require prenatal and post-partum healthcare as well as specific nutrition and hygiene needs. In the event of the recent Mayon Volcano eruption in January 2018, many pregnant and lactating women were displaced and are expected to stay in evacuation centers until they can return to their homes.⁴⁸ Photo 5 is a photo of pregnant Filipino women who are displaced as a result of the Mayon Volcano eruption in front of the United Nations Population Fund (UNFPA's) emergency maternity tent facility.⁴⁹



Photo 5: Vulnerable Populations During Disasters

The Poor

In the Philippines, most of the poor live in rural areas and work mainly in farming and fishing. The poor are vulnerable to financial shocks and natural disasters, and are disproportionately affected by these disasters. Efforts to cope with these stressors result in deeper levels of economic debt and instability. Increased frequency and intensity of natural disasters, inadequate natural resource management, armed conflict in Mindanao, inadequate education and health services, weak governance, and other factors are among the developmental challenges that have added to extreme poverty in the country. Many poor families have six or more members, including young and old dependents. The head of household often has only elementary education or below. They have minimal access to health and education services, electricity, water sources, and adequate toilet facilities. The United States Agency for International Development (USAID), through humanitarian assistance work in disaster affected and conflict affected areas, is supporting efforts to provide the poor access to services and help mitigate the impact of natural disasters.⁵⁰

Displaced Persons

The crisis in Marawi displaced an estimated 95 percent of the city's total population. Over 354,000 individuals were displaced and many were forced to stay with relatives outside of the city or relocate to various evacuation centers. Humanitarian assistance providers indicated that Internally Displaced Persons (IDPs) in evacuation centers and host communities were living in crowded conditions and lacked sufficient access to services including latrine maintenance and hygiene supplies.⁵¹

Children

Approximately 10 million children in the Philippines are suffering deprivations, particularly in health, education, and living standards which include safe shelter, safe water, and sanitary toilet facilities according to a report from the Philippine Institute for Development Studies. The combination of poverty and disasters creates 'double vulnerability' for children, who are one of the most vulnerable populations in the Philippines.⁵²

The prevalence of street children in the Philippines is an epidemic and presents significant risks to the children working the streets. The condition of children working, and some children residing on the street is considered a violation of children's rights. In the major cities street children account for one to three percent

of the total youth population. In the National Capital Region (NCR), also called Metro Manila, it is estimated that approximately 30,000 children work the streets. While nationally, roughly 250,000 children are thought to be at work on the streets of metropolitan areas. Street children are child workers who work and live on the streets for long periods of time. Street children are often engaged in selling, vehicle washing, begging, soliciting, facilitating drug sales, prostitution and minor theft.

Street children are extremely vulnerable. Street children are forced to endure a lack of food, extreme weather conditions, illnesses, exploitation, and corruption. Street children, both male and female, have an increased vulnerability to mistreatment, sexual abuse and exploitation.

Many social and economic factors contribute to children working in the streets. The main reasons for children to work the streets are contributions to support large families living in poverty; unemployed or underemployed parents or guardian; inadequate access to fundamental social services; and a failure of family support. Children who are victims of sexual or physical abuse within their family often turn to the streets. Prolonged family issues such as lack of food, mistreatment, and domestic violence results in children leaving their homes and living on the streets, while some street children are victims of family abandonment.⁵³

Economics

In 2017, for the first time since the 2008 global financial crisis, the national account balance fell into a negative range. However, the national banking system remains stable and international reserves endure at secure levels. The Philippine economy has demonstrated its resiliency to global economic hardships, due to considerable remittances from approximately 10 million workers and migrants abroad, a lack of exposure to distressed international securities, lesser dependence on exports, resilient domestic consumption, and a fast growing outsourcing sector.⁵⁴

Economic growth has rapidly increased with an average exceeding six percent annually from 2011 to 2017. In 2016, the Philippines set a record for net Foreign Direct Investment inflows (FDI). FDI to the Philippines has continued to fall behind regionally, due to the Philippine constitution and other domestic laws

which restrict foreign ownership in significant industries such as land ownership and public utilities.⁵⁵

Approximately 30 million people are employed in the Philippines. The national unemployment rate is over nine percent and fifty percent of the national population lives below the poverty line. The agriculture, forestry, and fishing industries account for roughly 40 percent of the total workforce. The remaining 60 percent of the working population are employed in light manufacturing, construction, mining and the service industries. Weather patterns have resulted in severe drought conditions as a result of El Niño weather affecting the agricultural sector. This has also had an impact and reduction in the number of available jobs.⁵⁶

With a shortage of employment opportunities, high rate of poverty and underemployment, many Filipinos have volunteered their time and skills in the healthcare industry, working without pay, with the hope of securing a full-time position when one is available. It is common for individuals to work seven day workweeks, often taking any additional work available in order to provide for their families and improve their economic status. Many parents work multiple jobs to afford educations for their children.

It is estimated that over 800,000 Filipinos work abroad. The Philippines Overseas Employment Administration (POEA) is a government agency which has mechanisms in place to provide oversight and protections for Overseas Filipino Workers (OFWs). The POEA provides laws governing the number of hours worked, and proper insurance coverage, and advocates for and monitors that adequate vacation time is earned and paid out. However many OFWs are victimized through exploitation and mistreatment by their employers abroad.⁵⁷ The revenue generated by OFWs is approximately seven billion annually, sent back to the Philippines, accounting for approximately four percent of the Philippines Gross Domestic Product (GDP).58

The Philippines is a member of ASEAN, a regional organization, which has a significant influence in the development of regional trade policies. Major export commodities include rice, bananas, cashews, pineapples, mangoes, and coconut products. The Philippines also exports manufactured products including electronics, machinery, and textiles. Major trading partners of the Philippines include the U.S., European Union (EU) states, and Japan. Philippine imports

include fuel and consumer goods, because the Philippines have yet to develop its mineral and petroleum reserves due to the rough, mountainous topography of the islands and insignificant funding capacities.⁵⁹

Government

The Malolos constitution was created in 1899. A new constitution was also drafted in 1935. After the declaration of martial law in 1972, the Philippines' original constitution was superseded by a new constitution in 1987 which created a head of state, a prime minister, and a single legislative chamber. The new constitution implemented term limitations; the president is limited to one six-year term, but the vice president may serve two consecutive six-year terms, members of the house and provincial governors were limited to three consecutive three-year teams, and senators were limited to two consecutive six-year terms. Additionally, the president and vice president may be political opponents and do not run for election on the same ticket.

The Philippine Government operates as a republican form of government which was established during the commonwealth era. It is constructed of three branches, the executive, legislative, and judicial branches. The Philippines has seventy provinces. Each province has an elected governor, but not legislative branch. Philippine provinces are divided into municipalities. The lowest unit of government is the barangay, which comprises up to two hundred residences and an elementary school. The barangay captain allocates funding at the local level. Philippine legislation has created over sixty cities; recognition as a city is highly desirable as cities receive their funding separately from provinces and are eligible for federal funding.60

The country is led by President Rodrigo Duterte. He is known for his anti-drug policies, and the fight against jihadist groups in Mindanao.⁶¹ It is estimated since June 2016, when President Rodrigo Duterte took office, and declared "a war on drugs" that approximately 7,000 individuals have been victims of extrajudicial killings in the Philippines.⁶² The Philippine National Police (PNP) report that approximately 4,000 drug suspects died in legitimate police operations from July 2016 to January 2018; however, independent estimates are considerably higher. The government of the

Philippines and the PNP have conflicting reports of actual death numbers. The government has been urged to support a United Nations-led investigation into the thousands of killings.⁶³

Environment

Geography

The Philippines has a land area of roughly 300,000 square kilometers (115,830 sq. miles) of which 1137 sq. miles is water area. The country is surrounded by the South China Sea (also referred to as the West Philippine Sea)⁶⁴ to the west, the Philippines Sea to the east, the Sulu Sea and Celebes Sea in the south, and the Bashi Channel to the north.⁶⁵

The Philippines is an archipelago comprised of 7,107 islands, of which 2,000 are occupied and 11 islands hold 95 percent of the total country's land area. The country is divided into three main geographic areas: Luzon, Visayas, and Mindanao. The largest is Luzon at 105,000 square kilometers, followed by Mindanao at 95,000 square kilometers. Luzon and Mindanao have a diverse topography and are made of high mountains with alluvial plains and narrow fertile valleys. The smaller islands are mountainous surrounded by flat lowlands.⁶⁶

The country is part of the 'Pacific Ring of Fire' with many active volcanoes throughout the islands and a high frequency of earthquakes.⁶⁷ Topographically, the Philippines is scattered and separated by the sea. The country has one of the longest shorelines of any country in the world. Mount Apo is an active volcano and holds the highest point in the country at 2954 meters (9,692 feet) and is located in the southern ranges in Mindanao.⁶⁸

The northern Luzon highlands reach elevations between 2,500 meters (1.5 miles) and 2,750 meters (1.7 miles). The Philippines has lush rain forests which provide unique habitats for more than 500 types of birds, over 800 kind of orchids, and 8,500 species of flowering plants.⁶⁹

Laguna de Bay, located to the southeast of Manila Bay, is the largest freshwater lake in the Philippines. Philippine geography comprises multiple river systems including the Pulangi, which flows into the Mindanao River; the Agusan, in Mindanao which runs north into the Mindanao Sea; the Cagayan in northern Luzon; and the Pampanga, which flows south from east Central Luzon into Manila Bay.⁷⁰ Figure 1 depicts a map of the Philippines.⁷¹

Borders

The Philippines is an island nation located in Southeast Asia between the Philippine Sea and the South China Sea, and therefore has no land borders.



Figure 1: Map of the Philippines

Climate

The Philippines has a tropical rainforest climate throughout the country due to its geographical location. The main characteristics

COUNTRY OVERVIEW

are high temperatures and high humidity which are present all year long. The average temperature in the Philippines is $26^{\circ \text{C}}$ (78.8) Another characteristic is strong typhoons which occur June through November. Rainfall is likely every month and differs throughout the year. Heavy rain is expected in June through October, while hardly any rainfall occurs from December to May due to trade winds from the northeast. The monsoon is a rainy wind originating from the southwest. Many of the Philippine islands are vulnerable to extreme flooding and destruction during the typhoon season. The norther islands of the Philippines experience a greater frequency of typhoons than the southern islands.

Climate Change

In 2009, Congress passed the Climate Change Act, which provides a policy framework to address rising threats to the environment. The act created the Climate Change Commission (CCC) to develop policies and coordinate government programs on climate change. The CCC developed the National Climate Change Action Plan (NCCAP) 2011-2028 that acts as a road map for all climate change programs in the Philippines.⁷⁵ The plan prioritizes food security, water sufficiency, ecosystem and environmental stability, human security, and sustainable energy.⁷⁶

The Philippines is extremely vulnerable to climate change impacts. Climate change effects are expected to increase the occurrence of stronger typhoons, sea-level rise, and elevated storm surges in coastal regions. Intensified storm surges are predicted to affect more than 40 percent of the coastal population. Informal villages along the coast are at the highest risk of

storm surge and floods.⁷⁷

Agricultural production in the Philippines is predicted to be affected by climate change in the region. Climate change related impacts will further cause damage to coastal coral reefs with warming waters and acidification, lessening the catch potential for fisherman as the feeding and reproduction grounds for many fish species will be destroyed. It is predicted that climate change impacts could reduce the potential catch capacity by nearly 50 percent. This impact could result in increased food security concerns in the region, as approximately 40 percent of dietary animal protein consumption in Southeast Asia is from fish.⁷⁸

Heat extremes associated with climate change could result in a significant increase in heat-related mortalities. Significant increases in variability of monsoon precipitation are predicted, with an extreme increase in the number of annual dry days, thus leading to prolonged droughts.⁷⁹



Disaster Overview

Hazards

The Philippines has an increased vulnerability to natural hazards, which are attributed to the nation's geographic position in Southeast Asia within the "Ring of Fire" between two tectonic plates (Eurasian and Pacific). The Philippines is most vulnerable to typhoons; however, volcanoes, floods, landslides, earthquakes, droughts and tsunamis also pose serious risks. The nation's natural hazards are due to contributing weather and environmental factors. In the Philippines it is common for the occurrence of one type of disaster to create conditions for another type of disaster. These interrelated hazards present significant risks to infrastructure and housing, and contribute to negative societal and economic effects. Photo 6 depicts an image of a MH-60S Seahawk delivering relief supplies in Operation Damayan in the aftermath of Typhoon Haiyan (Yolanda) in November 2013.80

Natural Hazards

The Philippines experiences natural hazards such as typhoons, earthquakes, floods, volcanic eruptions, landslides, and fires.⁸¹

Typhoons

Typhoons are both the most common and most destructive natural disasters in the Philippines. Historically, the Philippines have been vulnerable to extreme weather. Typhoons Haiyan, Thelma, Ike, Fengshen, Washi, Durian, Bopha, Trix, Amy, and Nina were the ten deadliest typhoons on record to impact the Philippines from 1947 to 2014. Typhoon Haiyan (Yolanda) resulted in more than 6,300 lost lives, over four million displaced citizens, and US\$2 billion in damages in 2013.

Annually, an average of twenty tropical cyclones enters the waters surrounding the Philippines. Approximately eight or nine tropical cyclones make landfall and cause loss of life and extensive damage. Over the last ten years, tropical storms in the Philippines have become more frequent and more severe. The Philippines lacks natural barriers, and there is practically nothing buffering the Philippine islands and the sea. This further intensifies the damage caused by typhoons.⁸²

Volcanoes

The Philippines is also unique for its high level of exposure to volcanic hazards. Located on the 'Pacific Ring of Fire', the country lies at the intersection of two tectonic plates - the Eurasian and the Pacific. These plates move continually, causing both volcanic events and earthquakes. The country is home to roughly 300 volcanoes, of which 22 are classified as active and five are classified as highly active: Taal, Mayon, Bulusan, Kanlaon and Hibok-Hibok.⁸³ In January 2018, Mount Mayon erupted and projected lava and volcanic ash 10 meters (32 feet) into the air. Approximately 20,000 local residents evacuated the area. In 2013, Mayon erupted killing five and injuring seven individuals.⁸⁴



Photo 6: U.S. Military Delivers Relief Supplies in the Aftermath of Typhoon Haiyan

Earthquakes

The Philippines' earthquake risk is similar to that of its volcanic risk. The root cause of both hazards is the same – the tectonic plate boundary. The country has an average of roughly 20 earthquakes each day, but most of the daily earthquakes measure 4.5 or less, and do not cause infrastructure damage or loss of life. However, strong earthquakes are a serious risk in the Philippines. Seismic activity is common throughout the country except in the Palawan region. The population and infrastructure are largely unprepared for a massive earthquake. The Philippine Institute of Volcanology and Seismology (PHIVOLCS) has recorded twelve destructive earthquakes from 1968-2017.

Floods

Monsoon rains can be very damaging to the many low-lying, marginally developed areas in the Philippines. Total annual rainfall is expected in the Philippines ranging from 1 meter (3.28 feet) to 4 meters (13.12 feet). However, unusually strong monsoon seasons have recently been exacerbated by increased urban development, which impedes the traditional drainage channels and creates flooding hazards in urban areas. The Philippines is also at a relatively high risk for sea level rise along the coast.⁸⁷

Tsunamis

There is an elevated risk of tsunamis in the Philippines due to it being an island nation with significant seismic activity. The coastlines are at the highest risk of tsunami impacts and most of the coastal areas have endured minimal impacts of a tsunami; although, the greater and more frequent risk in the Philippines is typhoon related flooding. However, the nation has not endured any substantial tsunami-related economic impacts and does not deem tsunamis a high-risk hazard.⁸⁸

Landslides

Landslides often initiated by other significant weather events, are a major hazard in the country. Most of the nation's regions, with the exception of the Palawan regions, are highly susceptible to landslides. Landslides are commonly generated by a volcanic eruptions, earthquakes, and typhoons or increased monsoon rainfall. Landslide hazards are most common in the mountainous and inland regions of the islands and tend to impact rural populations most heavily.⁸⁹

Droughts

The islands of the Philippines endure weather conditions related to El Niño, including prolonged drought conditions from postponements in seasonal monsoon precipitation. Severe drought conditions impact the economy and the population. Droughts result in a lack of clean drinking water, water scarcity, reduced hydro-power generation, an increase in waterborne disease, and loss of income.⁹⁰

Recent History of Natural Disasters

Mayon Volcano Eruption - Jan 2018

On 15 January 2018, two lava collapse events occurred in the Mayon Volcano (located in Albay provice 300 km southeast of Manila), producing rockfall and ashfall in 29 villages of Camalig and Guinobatan. Lava flow, rockfall events and short pyroclastic flows were also observed the following day. The PHILVOLCS recommended a permanent and extended danger zone due to the danger of rockfalls, landslides and sudden explosions/collapse that could generate hazardous volcanic flows. As a result, evacuations were conducted in 25 villages.⁹¹ As of 19 February 2018, approximately 90,000 people in six municipalities and two cities of Albay province have been affected; approximately 62,000 people are currently in 57 evacuation centers; Level 4 alert (hazardous eruption imminent) remains in place over the area; and prolonged evacuation is in effect for Albay communities.92

Tropical Cyclone Tembin - December 2017

Several provinces on the island of Mindanao were affected by Tropical Storm Tembin (known locally as Vinta), which made landfall on 22 December 2017. More than 170 people were killed, and the destruction displaced thousands, damaged houses and livelihoods, affecting northern and central parts of Mindanao. According to the seventh Disaster Response Operations Monitoring and Information Center (DROMIC) report issued by the Department of Social Welfare and Development (DSWD), the storm affected at least 313,498 people in 998 barangays in regions.⁹³

Tropical Storm Kai-Tak - December 2017

On 16 December 2017, Tropical Storm Kaitak (known locally as Urduja) made landfall over San Policarpio, Eastern Samar province. As a result of Kai-tak, two months of rain fell in

48 hours, triggering severe flooding. Northern Samar Province, Tacloban and Ormoc cities declared a state of calamity. The National Disaster Risk Reduction and Management Council (NDRRMC) activated the national response clusters to closely monitor the situation and assist local authorities in the affected areas to coordinate the response. There was no request for international assistance. According to the NDRRMC, a total of 435,220 families were affected in 2,524 barangays. Fourteen persons were reported dead. Around US\$1 million worth of damages were sustained on national roads, while agricultural crops incurred around US\$720,000 worth of damages. 94

Earthquakes - July 2017

On 6 July 2017, a 6.5-magnitude earthquake struck the Philippines. The earthquake had a depth of 6.49 kilometers; it had an epicenter located three kilometers north-northeast of Masarayao, Leyte. An estimated 371,680 people lived within 15 kilometers of the epicenter. As of 19 July, nearly 1,000 aftershocks had occurred, including several over 4.0 in magnitude and a 5.8-magnitude quake on 10 July. Three deaths and 448 injuries were reported.⁹⁵

Earthquakes – February - March 2017

On 10 February 2017, a 6.7-magnitude earthquake with a depth of ten kilometers and an epicenter located near Surigao City caused loss of lives and damage to properties in the Caraga region, particularly in Surigao del Norte province. On 5 March, a 5.9 magnitude tremor near the San Francisco Municipality occured. The earthquakes affected a total of 10,691 families, or 53,455 people, in 82 barangays in the Province of Surigao del Norte. Eight people were reported dead and 249 people sustained injuries due to the initial 6.7-magnitude earthquake as well as the 5 March earthquake.⁹⁶

Floods and Landslides-January 2017

On 16 January 2017, over 63,000 people were displaced due to flash floods in northern Mindanao and the Visayas with an estimated 48,000 people inside 115 evacuation centers.⁹⁷

Typhoon Haima - October 2016

On 19 October 2016, the typhoon made landfall in Cagayan as a category 4 storm. Eight deaths, all males, including two minors and an infant, were attributed to this storm. These deaths all occurred from landslides in Caraga (CAR). Additionally, there were two people

reported missing. A total of 53,433 people were displaced in CAR and Regions I, II, III, IV-A and V, according to the Department of Social Welfare and Development (DSWD).⁹⁸

Floods and Landslides - August 2016

From 13-14 August 2016, heavy rains and flooding caused by the southwest monsoon combined with a low-pressure weather front, forced over 260,000 people to flee their homes. The intense monsoon rains affected six regions of the country, mostly in Luzon, triggering flooding as well as landslides in some parts of Rizal province and Northern Luzon. Days after the torrential rains, close to 18,000 people were housed in 77 designated evacuation centers across the country. On August 17, Dagupan, a city 200 km north of Manila declared a state of calamity, following a city-wide flooding.⁹⁹

Typhoon Melor - December 2015

Typhoon Melor made landfall in Batag Island, Northern Samar, across southern Luzon, and made five other landfalls on December 16, 2015. Typhoon Melor packed winds of 150 kilometers per hour (kph) (93.2 mph) and gusts of up to 185 kph (114 mph), and brought heavy to intense rainfall within its 300 km diameter. Provincial and local governments conducted pre-emptive evacuations in communities with high risk of landslides. More than 730,000 people from five regions were evacuated to evacuation centers. There were 41 confirmed deaths and over 199,850 houses were damaged. Most damage to houses was in the provinces of Oriental Mindoro Northern Samar and Sorsogon. Ninetynine classrooms and 35 health facilities were damaged.100

Typhoon Koppu - October 2015

On 14 October 2015, Typhoon Koppu (known locally as Lando) entered the Philippines. The government reported at least 46 people died, 82 were injured and 5 were reported missing from the storm. More than half a million people were evacuated, of which 108,700 people were in 424 evacuation centers. Government-led relief efforts transitioned to recovery operations three weeks into the response to Typhoon Koppu. 101

Typhoon Hagupit - December 2014

Typhoon Hagupit (known locally as Ruby) made its first landfall in the Philippines' Eastern Samar province as a category 2 on 6 December 2014 with maximum sustained winds of 175 kilometers per hour and gusts of up to 210

kilometers per hour. The storm made a second landfall in the morning of 7 December in Cataingan municipality, Masbate province. It weakened into a tropical storm as it continued to slowly move towards Batangas province, south of Manila, with moderate to heavy rain. At the height of the evacuations on 9 December, 1.7 million people were in 5,193 evacuation centers. ¹⁰²

Typhoon Rammasun - July 2014

Typhoon Rammasun (known locally as Glenda) made landfall over Lapu-Lapu in Albay province in the eastern Philippines on 15 July 2014. It crossed the National Capital Region area the following morning, impacting Metro Manila with strong winds and heavy rain, causing power outages and interrupting telecommunications. Rammasun killed 100 people, destroyed more than 100,000 houses and damaged 400,000 others. Half a million people were displaced and more than 27,000 people sheltered in 108 evacuation centers. 103

Typhoon Haiyan - November 2013

Tropical Storm Haiyan (known locally as Yolanda) initially formed in Micronesia, then gained strength, continued west and made its first landfall on 8 November 2013 in Guiuan municipality of the Eastern Samar province. Initial reports estimated that 4.3 million people were affected in 36 provinces. The government accepted the UN offer of international assistance. The number of affected people rose to 14 million across nine regions, including four million people who remained displaced from their homes. Humanitarian partners presented on 10 December the Strategic Response Plan (SRP) for Typhoon Haiyan, which requested US\$791 million to complement the Government-led response and recovery efforts. The typhoon was the deadliest event of 2013 in the Asia-Pacific, killing more than 6,000 people.¹⁰⁴

Typhoon Nari - October 2013

Typhoon Nari (locally known as Santi) hit the northern Philippines early on 12 October 2013, killing 13 people and affecting more than 200,000. More than 43,000 people (or 9,000 families) were displaced, some living with host families and others in evacuation centers. More than 16,500 homes were damaged. Bulacan province suffered extensive damage from flooding, with several villages submerged and rice and vegetable farms damaged or destroyed. 105

Country Risks

Pollution

Pollution is a major concern in the Philippines. This is because only an estimated 10 percent of the sewage generated in the country is properly treated or disposed of. The remainder, approximately 90 percent, of raw sewage is naturally disposed of and eventually ends up in the ocean due to precipitation, surface runoff, flooding, and coastal erosion. Water pollution is an increasing concern for groundwater, rivers, lakes, and coastal regions. It is common for industrial materials from abandoned mining areas to generate mercury pollution in the water. These issues are a result of poor urban planning, inadequate management and a lack of regulation enforcement. 106

Overfishing and Destructive Fishing

The Philippines has seen an increase in over-fishing and destructive fishing practices. The Asian Development Bank (ADB) has estimated that there is a 90 percent decline in the number of marine life that can be fished in some regions. The nation's mismanagement of its fisheries results in an estimated loss of US\$40 million annually. Additionally, inadequate enforcement of fishery laws and air and water pollution in major urban centers has further contributed to a decline in fishery revenues.¹⁰⁷

Deforestation

Variable laws along with insufficient regulations, a lack of enforcement, and decreased financing have resulted in significant challenges in forest conservation. Decades of deforestation, has reduced forest cover to approximately three percent of the original cover. Philippine forests remain vulnerable to poor agricultural practices, and increased urbanization, unlawful logging, and forest fires. Prolonged forest degradation has resulted in severe soil erosion. The destruction of natural forest is deteriorating the nation's rich biodiversity. There are an estimated 180 native terrestrial mammal species located in Philippines forests, of which approximately 61 percent are endemic to the nation. Deforestation increases the risk of species becoming endangered as many species are dependent of the natural forests endemic to the Philippines. 108

Increased Coastal Development

A rapid increase in coastal development has caused significant damage to the marine environment. Coral reefs, mangrove and seagrass have been damaged, increasing the nation's vulnerability to coastal disasters and reducing sustainable marine life within the region. As coastal populations have increased, so has excavation, dredging, and coastal transformation to accommodate coastal development practices. The increased practices have resulted in an increase in corals extraction for reclamation and construction, predominantly in coastal regions. Mangroves have been extensively damaged and reduced due to coastal development, particularly because of the aquaculture sector. 109

Country Risk Profile

Risk involves exposure to hazards, vulnerability, as well as lack of coping capacity is important factors in Disaster Risk Management. Figure 2 shows INFORM's risk profile for Philippines. INFORM is a global, objective, and transparent tool for understanding the risk of

humanitarian crises. INFORM is a composite indicator, developed by the Joint Research Center, combining 53 indicators into three dimensions of risk: hazards (events that could occur) and exposure to them, vulnerability (the susceptibility of communities to those hazards) and the lack of coping capacity (lack of resources that can alleviate the impact). It is a collaboration of the Inter-Agency Standing Committee Reference Group on Risk, Early Warning and Preparedness and the European Commission. The index results are published once every year.

INFORM gives each country a risk score of 1-10 (1 being the lowest and 10 the highest) for each of the dimensions, categories, and components of risk, as well as an overall risk score. The higher the score the more vulnerable a country is. The purpose of INFORM is to provide an open, transparent, consensus-based methodology for analyzing crisis risk at global, regional or national level. The Philippines has a 2018 Hazard and Exposure risk of 7.8/10; a Vulnerability score of 4.2/10; and a Lack of Coping Capacity score of 4.2/10. Physical exposures to tropical cyclones are the highest. 110

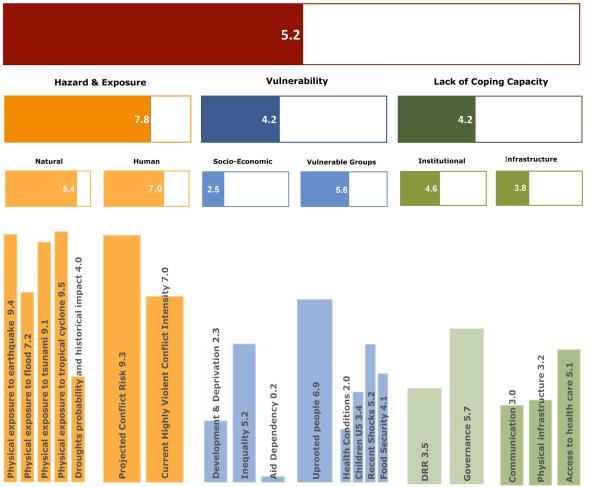


Figure 2: INFORM's Country Risk Profile for the Philippines



Organizational Structure for Disaster Management

Figure 3 depicts the Disaster Management Structure in the Philippines.¹¹¹ The National Disaster Risk Reduction and Management Council (NDRRMC) depicted in red in the middle of the figure is the central body for coordinating disaster management and response.

Lead Government Agencies in Disaster Response

The National Disaster Risk Reduction and Management Council (NDRRMC) is the

national disaster focal point body responsible for coordinating preparedness, response, prevention and mitigation, and rehabilitation and recovery.

The Department of Social Welfare and Development (DSWD), through the Disaster Response Assistance and Management Bureau, is the lead agency for disaster response. It is responsible for planning, coordinating, and leading immediate disaster relief efforts, as well as ongoing monitoring. The DSWD leads the NDRRMC's disaster response pillar and provides technical assistance and resource augmentation, camp coordination and management activities, and food and non-food items to the affected population.

The Office of Civil Defense (OCD) is the executive arm and secretariat of the NDRRMC. The primary role of the OCD is to administer the national civil defense and disaster risk reduction and management programs. The OCD also provides guidance on strategic approaches and measures to reduce vulnerabilities and risk.¹¹²

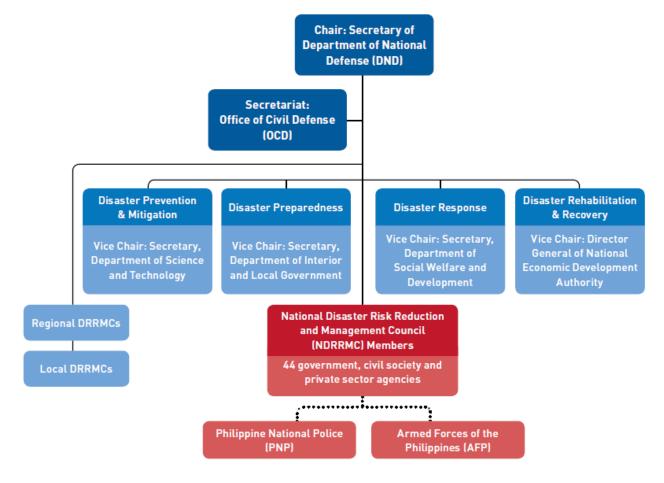


Figure 3: Disaster Management Structure in the Philippines

Key Disaster Management Partners in Philippines

Table 1 represents many of the Disaster Management partners in the Philippines.

	y of the Bloader Management parties in the 1 mmp pines.
act:onaid	ActionAid has provided essential items such as food, hygiene packs, shelter materials and repair kits, disaster resilient houses, agricultural tools and fishing equipment, and facilitated cash transfers and skills training for small business owners to restart livelihoods. ActionAid has supported vulnerable communities, particularly women, to create their own disaster preparedness plans, empowering communities to respond to disasters. ¹¹³ Website: http://actionaid.org/philippines
ADRA	ADRA is a global humanitarian organization that has been in operation for over 30 years in the Philippines. They work to assist those affected by disasters and improve social development for vulnerable communities with families living in extreme poverty. ¹¹⁴ Website: www.adra.ph
ADB	ADB assists the Philippines through grants and loans aimed at immediate relief and post-disaster reconstruction and rehabilitation of communities devastated by disasters. ADB has opened an office in Tacloban city, which will coordinate and monitor the use of funds, and advise local governments on recovery efforts. ¹¹⁵ Website: www.adb.org
Australian Aid 🔶	Australian Aid assists the Philippines in disaster preparedness including risk maps, more disaster resilient housing, and other services. Their aid focuses on disaster risk management and climate change adaptation, education, local government service delivery, peace building and good governance. ¹¹⁶ Website: https://dfat.gov.au
care	Care delivers emergency relief and long-term international development projects. In emergencies, Care responds to save lives, with special attention to the needs of women and girls. Their humanitarian action includes preparedness and early action, emergency response and recovery, and encourages future resilience and development. ¹¹⁷ Website: care-philippines.org/
+0	The Philippine Red Cross delivers humanitarian assistance to populations affected by natural hazards or human-induced emergencies. Website: www.ifrc.org
F OO	In emergency situations, FAO collaborates with different humanitarian agencies and government. The mission of the FAO is to eliminate hunger and malnutrition. 119 Website: http://www.fao.org/philippines/en/
GFDRR Global Facility for Disaster Reduction and Recovery	GFDRR has supported the Philippines since 2008 in enabling risk reduction activities, strengthening the country's financial resilience, and improving post-disaster recovery. It is a grant-funding mechanism, managed by the World Bank. 120 Website: https://www.gfdrr.org/philippines
IOM • OIM	IOM established its office in the Philippines in 1975. IOM is a member of the UN Country Team/Humanitarian Country Team (UN CT/HCT) and is the co-lead agency of the Department of Social Welfare and Development (DSWD) in the Camp Coordination and Camp Management (CCCM) Cluster for internally displaced persons (IDPs). 121 Website: https://www.iom.int/countries/philippines

Table 1: Disaster Management Partners

jica	JICA provides economic assistance to the Philippines in many priority areas including overcoming vulnerability due to various risks including natural disasters, climate change, and infectious disease. ¹²² Website: https://www.jica.go.jp/philippine/english/index.html
OCHA	In 2007, OCHA established a presence in Manila to complement the Government's response to natural disasters and to strengthen humanitarian coordination. Website: www.unocha.org
Plan	Plan International trains emergency response teams in disaster risk management capacity activities. 124 Website: https://plan-international.org/
Save the Children	Save the Children responds to natural disasters in the Philippines. They remain in the Philippines helping vulnerable children still recovering from Typhoon Haiyan. They deploy emergency responders to disaster areas and are involved with rebuilding efforts. ¹²⁵ Website: www.savethechildren.org
unicef	UNICEF implements programs covering education, health and nutrition, disaster risk reduction and emergencies, HIV and AIDS prevention, child protection, communication, and local policy and institutional development. Website: https://www.unicef.org/philippines/
U N D P	UNDP supports communities in crisis situations especially those affected by natural disasters and armed conflict. UNDP has a resilience project aimed to contribute to national efforts to build community resilience and reduce vulnerability to natural hazards by enhancing capacities of local government units and stakeholders in disaster risk reduction and management. 127 Website: www.ph.undp.org/
UNFPA	During emergencies, UNFPA supports government in the protections of reproductive health and the prevention and management of gender-based violence. 128 Website: http://philippines.unfpa.org/en/country-programme-1
USAID	USAID OFDA has robust disaster risk reduction programs that build the capacity of local communities, government agencies and nongovernmental organizations to prepare for and respond to the range of natural disasters. USAID/OFDA has responded to 50 disasters in the Philippines since 1990. Website: www.usaid.gov/
WFP	WFP helps communities in the Philippines affected by conflict and natural disasters to rebuild their lives by encouraging self-sufficiency through food and cash assistance programs. ¹³⁰ Website: http://www1.wfp.org/countries/philippines
World Health Organization	
World Vision	World Vision helps communities affected by disasters by providing life-saving relief supplies and assist in disaster management activities. 132 Website: https://www.worldvision.org.ph/

Table 1: Disaster Management Partners (cont.)

International Federation of Red Cross and Red Crescent Societies

The International Federation of Red Cross and Red Crescent Societies (IFRC) is a humanitarian organization which provides assistance and promotes humanitarian activities by National Societies, with a view to preventing and alleviating human suffering. It was founded in 1919, and includes 190 Red Cross and Red Crescent National Societies. The IFRC carries out relief operations to assist victims of disasters, and combines this with development work to strengthen the capacities of its member National Societies. 133

The Philippine Red Cross (PRC)

The Philippine Red Cross (PRC) is a voluntary, independent and autonomous non-governmental society auxiliary to the government authorities in the humanitarian field. The PRC exists to assist the Philippine government in discharging the obligations provided in the Geneva Conventions and the statutes of the International Red Cross and Red Crescent Movement. It is a permanent member of the national and local Disaster Risk Reduction and Management (DRRM) councils of the Philippines. Keys roles and responsibilities of the PRC in disaster management are established

under national legislative and policy frameworks, such as the Philippines Red Cross Act 2009 and the Philippines Disaster Risk Reduction and Management Act 2010. The PRC's recognized functions include organizing (in liaison with public authorities) emergency relief operations, establishing and maintaining national and international relief efforts in response to natural or man-made disasters during times of peace and armed conflict, and meet emergency needs and alleviate suffering.¹³⁴

The PRC is responsible for Disaster Management Services (DMS). They deliver humanitarian assistance to populations affected by natural hazards or human-induced emergencies. They have a wide network of skilled and well-trained staff and volunteers. The PRC has six major services, which include disaster management, health, welfare, blood, volunteer service, and Red Cross youth. The DMS implements its mandate to save lives, minimize human suffering, and reduce loss of properties, by implementing preparedness, risk reduction, and management programs for at-risk communities; ensuring timely and effective relief assistance; and conducting recovery programs. 135 Photo 7 depicts the Philippine Red Cross Operations Center. 136



Photo 7: Philippine Red Cross Operations Center

The PRC is the foremost humanitarian organization in the country. For example, the agency provided aid to evacuees from the January 2018 Mayan volcano eruption. This includes distributing clean water, food, hygiene kits, sleeping kits, jerry cans, and tarpaulin mats. The PRC also assisted in building latrines in evacuation centers and schools as seen in Photo 8 137

U.S. Government Agencies in Philippines

USAID

The U.S. Agency for International Development (USAID)'s Office of U.S. Foreign Disaster Assistance (OFDA) has robust disaster risk reduction programs that build the capacity of local communities in the Philippines, government agencies and nongovernmental organizations to prepare for and respond to the range of natural disasters. USAID/OFDA has responded to 50 disasters in the Philippines since 1990.¹³⁸

USAID/OFDA has continued to support community resilience in Metro Manila and in three municipalities and 15 villages in Compostela Valley, Mindanao. Projects include improving evacuation centers and early warning systems, clearing channels, and constructing flood-resilient infrastructure. 139

Typhoon Haiyan/Yolanda struck the Philippines in November 2013 and affected more than 16 million people and caused 6,300 deaths. USAID provided more than US\$56 million of the US\$143 million U.S. government contribution to support the Government of the Philippines' response efforts. USAID/OFDA deployed a Disaster Assistance Response Team (DART). The DART team conducted assessments in affected areas, liaised with other humanitarian and government actors in the country, and recommended response options. At the same time, USAID/OFDA activated a Washington D.C.-based Response Management Team to coordinate the U.S. Government's response and coordinate relief activities, and provide support to the DART.140

As of March 2018, USAID has provided critical relief supplies to people affected by the conflict in Marawi, the capital city of Lanao del Sur Province in the Philippines' Autonomous Region in Muslim Mindanao. USAID/OFDA provided US\$3 million to address the multisector needs of vulnerable populations in Marawi



Photo 8: Philippine Red Cross Building Latrines for Disaster Victims

and neighboring areas, through the provision of protection, shelter, and water, sanitation, and hygiene (WASH) assistance. These supplies included safe drinking water, hygiene kits, shelter material and kitchen sets. On October 23, 2017, the Government of the Philippines announced the end of a five-month offensive against the Islamic State of Iraq and Syria-affiliated armed groups in Marawi. By the end of December 2017 there were 354,000 registered internally displaced persons (IDPs) and approximately 97,000 of them returned to Marawi following the end of conflict.¹⁴¹

The USAID office in the Philippines is listed below with contact information: 142

USAID/Philippines Annex 2 Building, U.S. Embassy 1201 Roxas Boulevard, Ermita Manila, Philippines Postal Code - M 1000 Phone: +63 (2) 301-6000 Fax: +63 (2) 301-6213 Email: infoph@usaid.gov

U.S. Embassy

The Embassy has many different functions, including political, administrative, economic, public diplomacy, and consular affairs, managed under the Ambassador by counselors from the Department of State. USAID manages bilateral development projects. The Defense Attache's office at the Embassy handles military affairs. The U.S. Veterans Administration has an overseas office there which handles affairs for veterans of the U.S. Armed Forces.¹⁴³

The U.S. Embassy Manila office is listed below with contact information: 144

U.S. Embassy Manila 1201 Roxas Boulevard Manila, Philippines 1000 Phone: (632) 301-2000 Fax: (632) 301-2017

Participation in International Organizations

The Philippines belongs to the following international organizations:

Asian Development Bank (ADB), Association of Southeast Asian Nations (ASEAN), ¹⁴⁵ (the Philippines served as chair and host of ASEAN in 2017. ¹⁴⁶), ASEAN Regional Forum (ARF),

Asia-Pacific Economic Cooperation (APEC) forum, Bank for International Settlements (BIS), Community of Democrats (CD), Conference on Interaction and Confidence Building Measures in Asia (CICA -observer), Colombo Plan (CP), East Asia Summit (EAS), Food and Agriculture Organization of the United Nations (FAO), Group of 24 (G-24), Group of 77 (G-77), International Atomic Energy Agency (IAEA), International Bank for Reconstruction and Development (IBRD), International Civil Aviation Organization (ICAO), International Chamber of Commerce (ICC) (national committees), Institute of Catastrophe Risk Management (ICRM), **International Development Association** (IDA), International Fund for Agricultural Development (IFAD), International Finance Corporation (IFC), International Federation of Red Cross and Red Crescent Societies (IFRCs), International Hydrographic Organization (IHO), International Labour Organization (ILO), International Monetary Fund (IMF), International Maritime Organization (IMO), **International Mobil Satellite Organization** (IMSO), Interpol, International Olympic Committee (IOC), International Organization for Migration (IOM), Inter-Parliamentary Union (IPU), International Organization for Standardization (ISO), International Telecommunications Satellite Organization (ITSO), International Telecommunication Union (ITU), International Trade Union Confederation (ITUC), Multilateral Investment Guarantee Agency (MIGA), United Nations Mission for the Referendum in Western Sahara (MINURSO), United Nations Stabilization Mission in Haiti (MINUSTAH), Non-Aligned Movement (NAM), Organization of American States (OAS) (observer), Organization for the Prohibition of Chemical Weapons (OPCW), Prudential Corporation Asia (PCA), PIF (partner), United Nations (UN), United Nations Conference on Trade and Development (UNCTAD), United Nations Educational, Scientific, and Cultural Organization (UNESCO), UNHCR, United Nations Industrial Development Organization (UNIDO), Union Latina, United Nations Mission in Liberia (UNMIL), UN Military Observer Group in India and Pakistan (UNMOGIP), United Nations Operation in Côte d'Ivoire (UNOCI), United Nations World Tourism Organization (UNWTO), Universal Postal Union (UPU), World Bank, World Customs Organization (WCO), World Federation of Trade Unions (WFTU), World Health Organization (WHO), World Intellectual Property Organization (WIPO), World Meteorological Organization (WMO), and the World Trade Organization (WTO).¹⁴⁷

Foreign Disaster Relief and Emergency Response

In major natural disasters, the Philippines may be willing to accept specific offers of assistance targeted to meet gaps in national capacity or resources. If the Government of the Philippines experiences a disaster and requests and/or accepts international assistance, coordination between the Humanitarian Country Team (HCT) agency co-leads for the clusters, the Resident Coordinator/Humanitarian Coordinator (RC/HC) and the national response systems and bodies including NDRRMC and DSWD, are initiated. The HCT is comprised of 24 UN agencies, INGOs, private sector representatives and donor agencies, led by the UN Resident Coordinator/Humanitarian Coordinator (RC/HC). Currently there are 11 NDRRMC response clusters, led by HCT agency co-leads and government departments and agencies. ¹⁴⁸ Figure 4 depicts the international civilian humanitarian

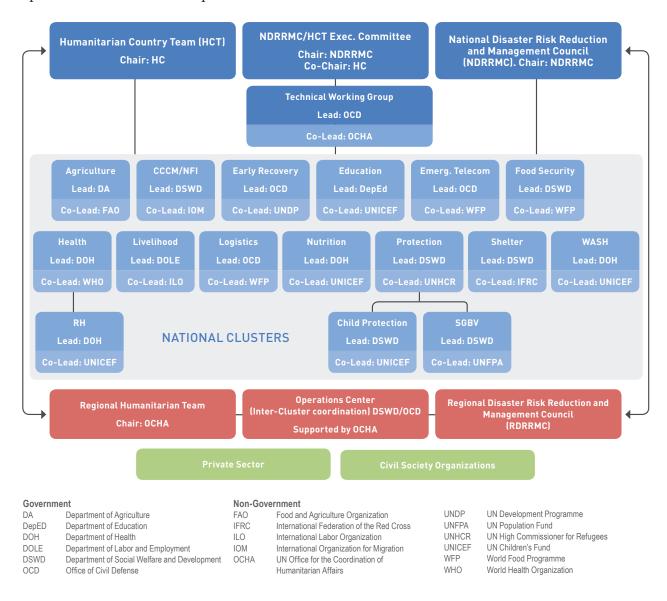


Figure 4: International Humanitarian Coordination Architecture

Source: UN OCHA Philippines

coordination architecture in the Philippines. 149

Photo 9 is an example of foreign disaster relief and emergency response. ¹⁵⁰ In the aftermath of Typhoon Haiyan/Yolanda, the U.S. military supported the Philippine government. The photo depicts an MH-60S Seahawk from the "Island Knights" of Helicopter Sea Combat Squadron (HSC) 25 providing supplies onto Tacloban Air Base in support of Operation Damayan. The George Washington Strike Group supported the 3rd Marine Expeditionary Brigade in this endeavor. ¹⁵¹

Policies, Framework, and Plans for Disaster Management

Guiding Policy

Philippine Disaster Risk Reduction and Management Act (DRRM Act 2010 or Republic Act No. 10121)

The Philippine National Disaster Risk Reduction and Management Act 2010 (DRRM Act 2010) established a multi-level disaster risk management system. The Act establishes the NDRRMC as the peak policy-making body for coordination, integration, supervision, monitoring and evaluation. The Office of Civil Defense (OCD) is tasked with administering the national civil defense and disaster risk reduction and management program. The DRRM Act is the guiding policy for the establishment

of the National Disaster Risk Reduction and Management Council (NDRRMC).¹⁵³ The DRRM Act 2010 is accompanied by a set of "Implementing Rules and Regulations" that lists the powers and functions of the National, Regional and Local Disaster Risk Reduction and Management Councils (DRRMCs), as well as provisions for installing Local Disaster Risk Reduction and Management Offices (LDRRMOs) in every barangay.¹⁵⁴

Guiding Framework

National Disaster Risk Reduction and Management Framework (2011)

The 2011 National Disaster Risk Reduction and Management Framework (2011) explains the country's commitments into priority programs, projects, and budgets and is integrated into the Philippines National Disaster Risk Reduction Plan 2011-2028 (NDRRP).¹⁵⁵

Key Plans

National Disaster Risk Reduction and Management Plan 2011-2028 (NDRRP)

The NDRRP outlines key planning aspects such as timelines, lead agencies, outcomes and activities according to four thematic areas: (1) disaster prevention and mitigation, (2) disaster preparedness, (3) disaster response and (4) disaster rehabilitation and recovery. The NDRRMP fulfills the requirement of RA No.



Photo 9: U.S. International Assistance to the Philippines after Typhoon Haiyan

10121 of 2010, which provides the legal basis for policies, plans and programs to deal with disasters. The NDRRP also outlines provisions for developing and implementing disaster risk reduction plans at the regional, provincial, city, municipal and barangay levels.¹⁵⁶

Strengthening Disaster Risk Reduction in the Philippines: Strategic National Action Plan (SNAP) 2009-2019

The plan attempts to strengthen disaster risk reduction and outlines 18 priority programs and projects based on 150 strategic actions. The plan includes a four-point plan of action for preparedness including upgrading the forecasting capability of warning agencies; intensification of public information and education campaign on disaster preparedness; enhancing capacity building of local chief executives and disaster coordinating councils; and strengthening mechanisms for government and private sector partnerships.¹⁵⁷

National Disaster Response Plan for Hydrometeorological Hazards (2014)

This disaster response plan outlines the processes and mechanisms for national, regional and local disaster response, focusing on hydrometeorological hazards including typhoons, tropical storms and flooding. The plan outlines the role of the AFP, who directs the Search, Rescue and Retrieval (SRR) cluster. AFP is also a member of the Camp Coordination and Camp Management (CCCM) cluster and the Logistics cluster.

National Disaster Response Plan for Earthquake and Tsunami

This is the National Government's action plan in providing response assistance for managing earthquakes and tsunamis. The plan aims to ensure the timely, effective and coordinated response by the National Government by providing support assistance to disaster affected areas. All local government units are mandated to prepare and render disaster response within their boundaries. ¹⁵⁸

Armed Forces Humanitarian Assistance and Disaster Response Plan (OPLAN Tulong – Bayanihan) (2016)

This plan outlines core functions and operational processes and systems to be used by the AFP in Humanitarian Assistance and Disaster Relief (HADR) operations. 159

Metro Manila Earthquake Contingency Plan (Oplan Metro Yakal Plus)

This plan is the Metro Manila Disaster Risk Reduction Management Council's (MMDRRMC) response tool based on the 7.2 Magnitude movement of the West Valley Fault (WVF) with Intensity VIII ground shaking disaster scenario. It aims to prepare for earthquake disaster preparedness response of the MMDRRMC and its partners by defining roles and responsibilities that are carried out before, during, and after a strong earthquake. Response operations, standard operating procedures and command structure follow the provisions of the National Disaster Response Plan for Earthquakes and Tsunami and Incident Command System (previously mentioned). 160

AFP Earthquake Preparedness and Response Plan "PAGLIGTAS" for Metro Manila

The AFP provides support to the NDRRMC's HADR operation to mitigate the effects of the 7.2 magnitude earthquake model scenario in Metro Manila and to save lives. The role of the AFP is to conduct search and rescue operations, support operations, and other humanitarian assistance activities. In the plan, it is also established that the AFP will conduct stability and security operations in support to the Philippine police if needed. The AFP with its capabilities and assets, can provide support to the NDRRMC through Unified Commands and Joint Task Force. ¹⁶¹

CBRN National Action Plan

The Philippines has a national Chemical, Biological, Radiological, and Nuclear (CBRN) Action Plan. This plan unifies the capacity of the country and establishes priority actions for enhancing capabilities to predict, prevent, prepare for, and perform mitigating activities on CBRN incidents and disasters. The plan also sets plans for conducting post-action activities. 162

Operational Guidelines on Philippine International Humanitarian Assistance Cluster (draft, 2016)

These operational guidelines for the Philippines International Humanitarian Assistance Cluster (PIHAC) contain provisions for the cluster to manage incoming international humanitarian assistance. It draws upon the IDRL Guidelines and is currently under development.¹⁶³

Education and Training

The Office of Civil Defense (OCD) coordinates training and capacity building. It is the implementing arm of the NDRRMC. The OCD creates, supervises and monitors the implementation of National DRRM and Civil Defense training policies, plans and programs. Their specific functions include: 164

Formulate Civil Defense Career
 Development Training Program for OCD
 Organic Personnel and other DRRM
 professionals;

 Develop and establish a comprehensive monitoring system to ensure the effective implementation of DRRM and Civil Defense Training;

 Evaluate the training conducted to determine the effectiveness of the program;

 Conduct research for the development of courses on Civil Defense and DRRM;

 Formulate the training needs assessment system on Civil Defense and DRRM to determine other training requirements of OCD personnel and the general public;

 Coordinate with the network of local and foreign DRRM, Civil Defense and Climate Change institutions for training opportunities, partnerships and cooperation; and

 Supervise the implementation of national DRRM training policies, plans and programs.

After Typhoon Haiyan/Yolanda hit the Philippines in November 2013, United Nations International Strategy for Disaster Reduction (UNISDR) has been actively engaged through its regional and sub-regional offices and the UNISDR Global Education and Training Institute (GETI) to provide capacity development, policy advice and tailored technical assistance to national and local governments. 165

Disaster Management Communications

The Philippine government and aid agencies learned from Typhoon Haiyan and have focused on disaster risk reduction and preparedness, which emphasizes the importance of Early Warning Systems (EWS), clear evacuation points, pre-positioned aid, and education on safer locations to build and plant. Since Typhoon Haiyan, the communication of early warnings

in the Philippines has improved significantly. Philippine government agencies have been successful in effective communication of early warnings and organizing evacuations in affected areas. The Philippine government was successful in its response to Typhoon Koppu in October 2015, which caused more than 300 villages to be under water and claimed the lives of more than 50 people. 166

Early Warning Systems

The Government of the Philippines lists three services for disaster information, mitigation, and management:

- The Climate Experiment Project: this is a software that calculates the percent chance of rain (PCOR) or probability of rain using infrared and water vapor satellite image data, and Doppler Radar data in combination with statistical evaluation of historical rainfall;
- Nationwide Operational Assessment of Hazards (NOAH): is a service that aims to increase awareness for disaster risk and involves preparedness and reducing the catastrophic impacts of extreme hazard events; and
- <u>Philippine Geoportal</u>: advocates the use of standard multi-scale basemaps that serve as tools for strategic planning, decision making, situational analysis and other common requirements.¹⁶⁷

NOAH can mitigate disasters such as floods, typhoons, and landslides by providing information about bad weather through their website and free mobile phone application. The application provides information on rainfall in real-time on water levels, rainfall, and humidity in 200 areas in the Philippines. The government has installed sensors, rain gauges, and weather monitoring systems in various areas. In addition, people can access Tweets sent out via Twitter via cell phones from the Philippines weather bureau, or the Philippine Atmospheric, Geophysical and Astronomical Services (PAGASA).

Approximately 80 percent of the households in the country have a mobile phone which makes early warning alerts via text a viable option. ¹⁶⁸ Photo 10 shows one Filipino resident with a cell phone who is able to receive early warning alerts. ¹⁶⁹

Flood-prone towns receive flood early warning devices from the Department of Science and Technology (DOST). The devices are composed of an electric siren, LED beacon,



Photo 10: Early Warning Alerts Via Mobile Phone in the Philippines

controller box, and solar panel. They alert residents in low-lying areas of impending floods or flash floods and allow residents to evacuate to safer areas.¹⁷⁰

Responsible Agencies for Early Warning

The Department of Science and Technology (DOST) is responsible for monitoring and forecasting EWS. The DOST is the chair on Disaster Preparedness and Mitigation of the Regional Disaster Risk Reduction and Management Council. DOST also brings EWS Information, Education and Communication (IEC) forums into Philippine provinces.¹⁷¹ The Philippine Atmospheric, Geophysical, and Astronomical Services Administration (PAGASA) provide tropical cyclone warnings, flood bulletins and advisories, and various weather forecasts.¹⁷² The Philippine Institute of Volcanology and Seismology (PHIVOLCS) is a service institute of the DOST and is responsible for the mitigation of disasters that may arise from volcanic eruptions, earthquakes, and tsunamis. 173

Military Role in Disaster Relief

The Armed Forces of the Philippines (AFP) has an integral role in disaster response in the Philippines. The components of the AFP include the Philippine Army, Philippine Navy, Philippine Air Force and the Philippine Marine Corps. HADR is one of the mission areas of the Armed Forces. AFP is involved in disaster response activities and has a role and responsibility in reducing vulnerability and building capacity.

The National Disaster Response Plan (NDRP) defines the AFP as a key responder in the event of a disaster. The AFP is expected to establish

area commands for directing operations in the field that will engage in search and rescue, relief, rehabilitation, and recovery.¹⁷⁴

The AFP has the following key functions in disaster response: 175

- Conduct Search, Rescue and Retrieval (SRR) Operations;
- Conduct evacuations of affected communities;
- Provide assistance in the transportation of relief goods and rescue and medical teams;
- Provide resource and personnel support to NDRRMC, clusters and other agencies;
- Assist the police in restoring and maintaining peace and order;
- Assist in the restoration of government functions; and
- Respond to requests for assistance from Local Government Units (LGUs) and cluster members through DRRMCs or the OCD.

Coordination

The AFP Civil-Military Coordination Center (CMCC) is the national mechanism for facilitating civil-military coordination in crisis situations that require the support of the AFP.

The Office of Civil Defense (OCD)-AFP Coordination Center was established to operate as a facility for OCD and AFP in implementing command, control and coordination during an HADR operation. The OCD-AFP is also responsible for coordinating with non-military organizations including NGOs and INGOs.

The Government of the Philippines established the humanitarian coordination structure of national clusters in 2007. It defines leadership roles for government cluster leads, and their responsibilities in establishing cluster operational strategies before, during and after disasters.

The humanitarian coordination structure has been used as a coordination platform and was activated in the response to Typhoon Haiyan in 2013. The NDRP added eight response clusters in 2014 in order to coordinate the response to Typhoon Hagupit.

Each cluster has a designated operational protocol that guides emergency response. This includes outlining the roles of the cluster lead, coordination mechanisms with the NDRRMC, the AFP, the Operations Center, government agencies, and others. The AFP provides logistics and communications support to other government cluster agencies and leads the SRR cluster.¹⁷⁶



Infrastructure

The transport system in the Philippines includes road, water, air, and rail transport. 177 The infrastructure in the Philippines is among the least developed in the region. This can make foreign and local investment challenging. 178 One indicator that provides information on the challenges is the country's ranking in the World Economic Forum's Global Competitiveness Report 2015-2016. The Philippines was ranked 90th of the 140 countries surveyed for quality of roads. The country measured a 3.4 score (with 1 being the worst and 7 being the best). Perception may lead to the Philippines not being a good investment for a myriad of reasons, including poor transport infrastructure (goods may not be transported easily or efficiently). 179

The capital city, Manila, is an old city with dilapidated wooden buildings and structures. According to the Metropolitan Manila Development Authority, many areas are below sea level, which makes the city vulnerable to flooding and tsunamis from Manila Bay as well as makes the city vulnerable to inferno-like fires in the case of an earthquake disaster. Typhoons Ketsana (Ondoy) in 2009 and Typhoon Haiyan (Yolanda) in 2013 hit the Philippines and caused substantial destruction. ¹⁸⁰

The current drainage and sewer systems are approximately 70 years old and work at

less than 50 percent of capacity. When storms, typhoons, and flooding occur it can exacerbate the poor water and sanitation problems and causes flooding. To address this, the Philippine government has invested in anti-flood infrastructure in the Manila area by building and strengthening dykes, dredging heavily silted waterways and rivers, and installing pumps in Manila and other parts of the Philippines.¹⁸¹ Photo 11 is an image of a man carrying his belongings above the water as he heads towards a rescue boat after flooding in Manila.¹⁸²

Airports

In the Philippines, air travel is an important form of travel and passenger traffic and cargo volumes over the past decade have grown. There are 85 government airports in the Philippines, with eleven of them serving as international hubs. Main international entry points are Ninoy Aquino International Airport in Manila, and Mactan International Airport in Cebu. ¹⁸³ Table 2 lists a few of the international airports in the Philippines and identifies runway length and surface. ¹⁸⁴

The national airline is Philippine Airlines (PAL) but there are others (Continental, Emirates, Gulf Air, and Saudi Airlines, Cathay Pacific, Singapore Airlines, Air France-KLM, Japan Airlines, Cebu Pacific, Airphil Express, and Zest Air) that operate domestic and international routes. ¹⁸⁵



Photo 11: Flooding in Manila

Airport	Nearest town/city	Maximum Runway length	Runway surface information
Manila Ninoy Aquino International (NAIA)	Manila (12 km)	3,737 m (12,261 ft)	Concrete with Asphalt Delivery
Mactan-Cebu International	Cebu (15 km)	3,300 m (10,827 ft)	Asphalt
Davao International	Davao (14 km)	3,000 m (9,842 ft)	Asphalt
Clark International	Angeles City, Municipality of Mabalacat	3,200 m (10,499 ft)	Concrete

Table 2: Airports in the Philippines

Seaports

There are more than 1,000 ports scattered throughout the archipelago of the Philippines. Of these ports, 117 are international ports, with a dozen of them having major cargo and passenger terminals. The main maritime gateway to the

Philippines is the port of Manila. A number of city ports are part of the Strong Republic Nautical Highway that permits land vehicles to use a 24-hour roll-on roll-off ship service. This provides an affordable way to move around the Philippines. ¹⁸⁶ Table 3 lists various seaports in the Philippines along with a brief description. ¹⁸⁷

Port	Description
Batangas	Batangas is the main port for the Calabarzon industrial area of southern Luzon. Location: 15° 45' north, 121° 03' east 120 km south of Metro Manila.
Cagayan de Oro	The Cagayan de Oro Port has container handling facilities that include a 25-ton, rail-mounted, level-luffing crane, 11 forklifts of 15-35-ton capacity, six prime movers, and eight trailers.
Cebu	The Cebu Port has nine berths at Marginal Wharf, with an additional six berths available at finger piers. Location: 10° 18' north, 123° 54' east.
Davao	Davao Port has four government wharves with depths alongside ranging from 3.66 m to 9 m, and with lengths of up to 900 m. There are 11 private berths with depths alongside of between 7.18 m and 10.67 m and with lengths of up to 400 m. There are three berths available for containers on the Sasa Wharf. Total port area is 16.75 hectares. Location: 7° 4' north, 125° 37' east.
Iloilo	The Iloilo Straits wharf is 160 m long and 9.14 m deep alongside. A new port area with a 300-m quay and a depth alongside of 10.5 m is equipped with a 6,000-sq-m container freight station. The port has one mobile crane. Location: 10° 42′ north, 122° 34′ east.
Legaspi	This port restricts vessels must be less than 69 m long and have a draught of less than 4 m in order to berth at the wharf. Dimensions: 13° 09' north, 123° 45' east.
Manila	Manila International Container Terminal's quay is 1,000 m long and its minimum depth alongside is 11 m. The total area of the terminal is 94 ha and equipment available for use includes two 35-ton container gantry cranes, six 35-ton straddle carriers, 18 prime movers, and 45 chassis. The port also has one 10-ton and 42 three-ton forklifts. The southern harbor facility has five-finger piers with an aggregate quay length of 4,331 m and water depths of 11 m alongside. The total terminal area is about 27 ha. Handling equipment includes two 30-ton container cranes, seven 35-ton rubber-tyred yard gantry cranes, 75 trailers, 42 prime movers, four 40-ton forklifts, and three 25-ton forklifts.
Nasipit	Nasipit port has roll-on roll-off (Ro-Ro) facilities available at the north berth.
Puerto Princesa	This port has a main berth of 193 m and a secondary berth of 154.5 m, with depths of water alongside ranging from 7.42 m to 10.72 m. The total area of the terminal is 3.7 ha, which includes 1.2 ha of paved storage area and 4,218 sq m of container yards. The port also has one 20-ton crane, one 16-ton forklift and two 10-ton forklifts.
Surigao	The Surigao port includes a 25-ton shore crane, two 15-ton and four 5-ton forklifts, and 12 trailers.
Zamboanga	The quay at Zamboanga has a length of 320 m and a depth of 10 m alongside. Available at this port is a container yard of 6,090 sq m and a marshalling area of 13,700 sq m.

Table 3: Seaports in the Philippines

Land Routes

Roads

A large part of the Philippine road network is inadequate. The major cause of the low quality of the roads is poor and inadequate maintenance. This is due to insufficient maintenance funds and inadequate institutional capacity of agencies that are tasked with road maintenance. 188 For example, roads in rural areas and outlying provinces are damaged. Most (85 percent) of the roads are considered local or small village roads, with 15 percent classified as national roads. There have been a few attempts to reduce traffic congestion, but Metro Manila has major problems with traffic congestion. Some measures have been put in place to alleviate traffic. One restriction bans private cars from the roads on certain days depending on license plate numbers and the Metro Manila Skyway Project requires drivers to pay high tolls that keep many motorists from using it on a regular basis. 189

In December 2017, the Asian Development Bank (ADB) approved a US\$380 million loan to help the Philippine government strengthen the road network and increase economic development in Mindanao. Mindanao is the Philippines' second largest island with approximately 20 million people. The infrastructure investment is called the Improving Growth Corridors in Mindanao Road Sector Project, and it seeks to improve approximately 280 km of national roads and bridges in Mindanao. Elevated pavements, enhanced slope protection, and better drainage will be incorporated into the project to take into consideration climate change and raising sea levels. It will benefit the community by improving their access to basic infrastructure, social services, and economic or financial resources or opportunities. The project is intended to help the Department of Public Works and Highways improve the long-term planning, fiscal accountability, and human resource management in the transport sector. The total project cost is estimated at \$503 million, with the Government of the Philippines contributing \$123 million.190

The Department of Public Works and Highways is responsible for maintenance and construction of infrastructure including roads and highways, flood control and water resource development system. They are tasked with ensuring the safety of all public works in accordance with national development objectives. 191

Transport services consist mainly of jeepneys, taxis, tricycles, and pedicabs. 192 Jeepneys (also known as "King of the Road"), are U.S. military converted jeeps that were created in World War II as it offered a way for passengers to get around after the city's street cable cars were destroyed by bombing. Mechanics adapted the jeeps to accommodate multiple passengers. Often, passengers sit facing each other with their knees touching. Currently in the Philippines, approximately 40 percent of passengers use these jeepneys as a regular form of transportation. They provide a cheaper alternative to the bus or train; costing approximately (US\$0.16) a ride and they allow for easier navigation on streets that public transportation does not reach.¹⁹³ Photo 12 is a photo of a jeepney in Manila. 194



Photo 12: Jeepneys: A Common Mode of Transportation in the Philippines

Railways

Manila has three light rail systems and one heavy train line. 195 Railways are a quick and inexpensive way of travelling in the capital and surrounding area, although trains often are crowded, especially during peak rush hours. Rail transportation in the Philippines is operated by three agencies (the Philippine National Railways, the Metro Rail Transit Authority, and the Light Rail Transit Authority). The stateowned Philippine National Railways (PNR) operates commuter and long-distance services on Luzon. The PNR has two main, single-track lines, Northrail and Southrail. Both are in poor condition. This has resulted in some of Southrail and all of Northrail being suspended and or closed for approximately 20 years. The Metro Rail Transit Authority (MRT) and Light Rail Transit Authority (LRT) operate elevated light-rail lines in Metro Manila. 196 Figure 5 shows the Philippine National Railway Route Map. 197



Figure 5: Philippine National Railways

Waterways

The Philippines has 3,219 km of inland waterways. Vessels of up to 1.5 m draught can access them. The 350-km Cagayan River on Luzon is the Philippines' longest river. The 25-km Pasig River is the country's main internal waterway running from Manila Bay through the capital to Laguna de Bay, the country's largest freshwater lake. Water transport plays an important role in the Philippines because of the many waterways and the archipelagic nature of the country. Photo 13 shows an example of the Philippine water taxis.



Photo 13: Water Taxi Transportation in the Philippines

Schools

The Philippine Department of Education formulates, implements, and coordinates policies, plans, programs and projects in the areas of education. It provides for the establishment and maintenance of a complete, adequate, and

integrated system of basic education relevant to the goals of national development. It also supervises all elementary and secondary education institutions, including alternative learning systems, both public and private.²⁰⁰

The Philippines has had a few educational milestones in recent decades. In 1982, there was implementation of a new elementary school curriculum. In 1999, the curriculum was decongested leading to the curriculum for elementary and secondary levels to be separated. In 2005/2006, there was an implementation of standard curriculum for elementary public schools and private schools.²⁰¹

Education in the Philippines includes a Kindergarten to twelfth grade (K to 12) Basic Education Curriculum. Elementary education is grade 1-6; junior high school includes grades 7-10 and senior high school is 11-12. Learning standards include communication skills in English and Filipino.²⁰²

The Disaster Risk Management Act of 2010 mandates that educational institutions regularly hold flood, typhoon and earthquake drills. In 2010, the Education Department, in conjunction with the NDRRMC, developed disaster preparedness modules for schools to educate students on various hazards, and how to respond to the hazards. NDRRMC volunteers work with teachers on emergency alerts, safety measures, preparing go-to bags (with clothes, medicine and emergency supplies), evacuation, and storage of items in elevated locations in case of floods.²⁰³

Communications

In recent years, telecommunications links have rapidly improved in the Philippines. Both fixed-line connections and mobile telephones are up. Capacity and coverage has improved with foreign investment. Most telecommunication services can be met in all but the most remote parts of the country. Approximately 80 percent of the households in the country have a mobile phone which makes early warning alerts via text a viable option. There were 44.2 million Internet subscribers in early 2015. Telephone fixed line subscription was 3.8 million in July 2016.

The Philippines has developed a growing reputation as a call center for U.S. and foreign firms. This is a result of low wages, a workforce of English speakers, and relatively high skill levels. The country is also slowly building a reputation for software development.²⁰⁸

The country has multiple national private TV and radio networks with multi-channel satellite and cable TV systems. There are approximately 1,400 radio stations. A series of submarine cables connect countries such as the U.S., Hong Kong, Guam, Singapore, Taiwan, Japan, Brunei, Malaysia, and others.²⁰⁹

Utilities

Power

The Philippines has invested in hydroelectric and wind power, but most of their power comes from imported coal which makes it expensive. Typhoon Haiyan (Yolanda) placed great stress on the Philippines power grid causing damages to energy facilities in the affected areas. ²¹⁰ In 2017, approximately 88 percent of the population had access to electricity, while the remaining 12 percent of the population did not. ²¹¹

The National Grid Cooperation of the Philippines (NGCP) is responsible for the delivery of safe and reliable electricity throughout the country. NGCP brings power produced by power plants to distribution utilities. As systems operator of the Philippine national grid, the cooperation balances the supply and demand of electricity to efficiently serve their customers (power generators, private distribution utilities, electric cooperatives, government-owned utilities, Eco zones, industries, and directly connected companies). NGCP also builds transmission lines which will pass through and interconnect, the country's major islands resulting in every household having electricity. 212

The National Power Corporation (NPC) is responsible for the construction, operations, and maintenance of facilities for the production of electricity.²¹³

The Renewable Energy Act of 2008 was written to accelerate the development of renewable energy resources, achieve energy self-reliance, reduce the country's dependence on fossil fuels, and minimize the country's exposure to price fluctuations in international markets. The Department of Energy (DOE) launched The Philippine Energy Plan 2012-2030, which provides the roadmap for future demand and capacity addition plans.²¹⁴

The Bataan Nuclear Power Plant (BNPP) is located at Napot Point in Bataan. The plant is the only commercial nuclear power station built with the ASEAN countries. The BNPP was built at 18 meters above sea level to protect against tidal waves and tsunamis. It was designed to withstand the highest earthquake on Luzon Island at ground acceleration of 8 on the Richter scale. The NPC was instructed by law to preserve and maintain the nuclear plant. The plant was opened in 2008 to the public as part of the Philippine Government's Information, Education and Communication Program on nuclear power.²¹⁵

Water and Sanitation

The water and sanitation sector in the Philippines lacks national government attention and fiscal allocations are inadequate in order to improve and extend proper access and services for poorer populations. The water supply subsector in urban areas is the only region with near-adequate funding, however the majority of funding is allocated for Metropolitan Manila and funding allocations for other major urban regions is inadequate. Likewise, funding for sanitation and adequate water supply in the rural areas is also extremely inadequate. Rural sanitation continues to remain the lowest. However, the projections for advancement are improving as the Philippine Government has indicated its increased commitment to improve established agreements for the sanitation sector.²¹⁶ Ninetythree percent of wealthy rural households have access to improved sanitation, however only 27 percent among the poorest households have access to sanitation. Water supply distribution and access reflects vast disparities with 69 percent of the wealthy household having access to piped connections and approximately four percent of the poorest household have access to piped water in their homes.²¹⁷



Health

Health Overview

Significant investment and advances in the healthcare system have been made in recent years. Filipinos are living longer; in part this is due to the economic growth experienced by the country, as well as a strong country capacity. Even with all the current progress not all Filipinos have benefited from the advances. The most vulnerable groups haven't seen significant progress and the health system remains fragmented.²¹⁸ Due to inequalities in certain regions and population, many Filipinos continue to suffer from illnesses that can be prevented or treated. Filipinos have a life expectancy of 68 years, and 92 percent of them are now being covered by health insurance.²¹⁹ Another improvement can also be seen in maternal care and child health services. The number of children living beyond infancy has increased. More women are now delivering in hospitals, and the number of births attended by medical professionals has also increased. There are currently many initiatives to reduce deaths due to non-communicable diseases (NCDs), while

communicable disease prevention has improved due to better diagnosis and treatment.

The Philippines has been an active Member State of the World Health Organization (WHO). The Regional Office of the WHO is located in the Philippines. The Philippines has also participated in shaping development agendas, to include the Sustainable Development Goals (SDGs). The WHO and the Filipino Department of Health are focusing in five different priorities for health development: saving lives, promoting wellbeing, protecting health, optimizing the health architecture, and using platforms for health.²²⁰

Healthcare System Structure

In the Philippines, The Department of Health (DOH) is the primary health agency and is led by the Secretary of Health. The DOH is responsible for ensuring access to basic public health services for all Filipinos through the provision of quality healthcare and regulation of providers of health goods and services. The department develops health policies and programs, regulations, performance monitoring and standards for public and private health sectors, along with provision of specialized and tertiary care.²²¹ Figure 6 below depicts the DOH functional structure.²²²

DOH Functional Structure

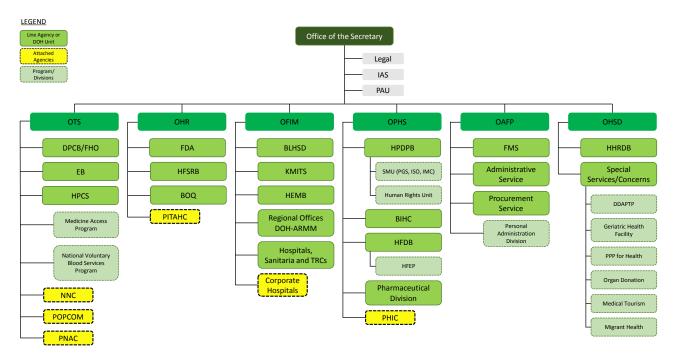


Figure 6: Department of Health Functional Structure

Challenges in the Healthcare System

The Philippines faces many gaps and challenges within its healthcare system to include (mix of gaps and goals below):

- Difficulty in synchronizing public health in a developed and fragmented health system;
- Bringing care to geographically isolated conflict-prone and economically disadvantaged areas;
- Implementation of rapid health insurance coverage to about 40 million Filipinos through national subsidy (50 percent of population);
- Reform governance of public hospitals;
- Improve timeliness and accuracy of national data gathering;
- Resistance to Public Private Partnerships; and
- Frequent natural and man-made disasters.²²³

The WHO has described the healthcare system in the Philippines as "fragmented", since there has been unequal access to healthcare, in which the poor are mostly affected. The Philippines also has a shortage of human medical resources, in particular, doctors. Out of the entire healthcare professional in the Philippines, only 30 percent are employed by the government, making the other 70 percent employed by the private sector.²²⁴

Health Cooperation

The Philippine Government has created the Bureau of International Health Cooperation (BIHC). The functions of the BIHC consist of:

- Promoting and sustaining international partnership through agreements and other instrumentalities;
- Enhancing policies, plans, agreements and systems for international cooperation and partnership;
- Establishing effective systems and mechanisms for collaboration and coordination; and
- Monitors FAP Plans (Foreign Assisted Projects), Bilateral and Multilateral Agreements.

The BIHC is composed of two Divisions:

1) *International Relations Division*The functions of the International Relations
Division (IRD) consist of:

- Managing bilateral agreements, international commitments and initiatives such as on Tobacco Control, Trade and Migrants Health;
- Ensuring active participation of DOH officials and staff in international commitments and promote representation through facilitation of international travels and fellowships and human resource development activities; and
- Ensuring effective technical exchanges and efficient mobilization of foreign resources by updating systems and facilitating the conduct of Foreign Medical Missions, Foreign Donations, and Foreign Visits.
- 2) *Project Monitoring Division*The functions of the Project Monitoring Division consist of:
- Leading and managing the Foreign Assisted Projects;
- Developing and operate policies and systems for Project Monitoring and Evaluation; and
- Implement the Sector Development Approach for Health (SDAH) and ensures the effective implementation of SDAH mechanisms with the Development Partners through:
 - Health Partners Meeting (HPM)
 - Joint Assessment and Monitoring and Evaluation (JAME)
 - Development Partner Scorecard (DPS).²²⁵

Communicable Diseases

The outbreak of infectious disease in the Philippines is not uncommon. The cause of infectious diseases are pathogenic microorganisms, such as bacteria, viruses, parasites and/or fungi, which makes the spread either directly or indirectly, from person to person.²²⁶

Dengue

Dengue is transmitted through the bite of an infected mosquito. The infected mosquitos thrive in standing water, such as puddles, water tanks, containers, and old tires. The Philippines has had confirmed cases of Dengue. Although Dengue occurs nationally, the most affected areas are Central Visayas, Central Luzon, Calabarzo, and Soccsksargen. The peak season for Dengue is May through November, but because of the climate in the Philippines, it can also happen year round.²²⁷

Cholera

In 2017 the Filipino Department of Health declared a Cholera outbreak in two areas of Visaya. An estimated two hundred persons were affected by the outbreak. Cholera, a waterborne illness, can affect both adults and children. However, children under five years of age are most vulnerable. Maintaining proper sanitation is paramount for its prevention.²²⁸

Chikungunya

Chikungunya is a viral infection transmitted through the bite of an infected mosquito. Chikungunya is an endemic in the Philippines, with most cases being reported in the center and south of the country.²²⁹

Typhoid

Typhoid Fever is a gastrointestinal infection caused by the Salmonella bacteria. It is transmitted from one person to another through the fecal-oral route when a person that is infected (but potentially asymptomatic) and has inadequate hygiene practices, passes the infection to another person when handling food and water.²³⁰

Non-Communicable Diseases

Non-Communicable Diseases (NCD) are a significant threat in the Philippines. The main threat to Filipinos is cardiovascular disease, cancer, diabetes, and chronic respiratory disease. An unhealthy diet, smoking, and tobacco use are common habits in the Philippines that contribute to the NCD risks.²³¹

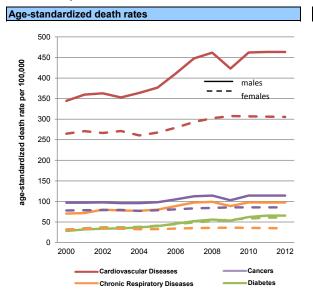
Figure 7 depicts the non-communicable diseases which are prevalent in Philippines and the mortality rates associated with each disease.²³²

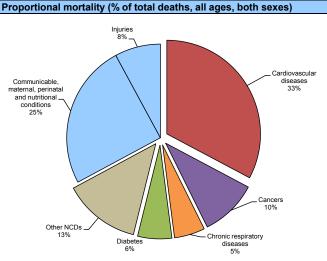
Training for Health Professionals

The Board of Medical Education is responsible for the training and education of healthcare professionals. The minimum requirement for students seeking admission to medical school, is a bachelor's degree in science or arts. After receiving the bachelor's degree, students then enroll in a four year professional degree program, therefore qualifying them to take an exam to get their license after completion.²³³ All medical professionals that require a license to practice, including nurses, are required to pass a written examination, which is given by the Board of Medical Education.²³⁴

Total population: 96 707 000 Income Group: Lower middle

Percentage of population living in urban areas: 48.8% Population proportion between ages 30 and 70 years: 35.2%





Total deaths: 571,000 NCDs are estimated to account for 67% of total deaths.

Figure 7: Non-Communicable Diseases Prevalent in the Philippines



Women, Peace, and Security

The Philippines was the first country in Asia to adopt a National Plan on Women, Peace and Security (NAPWPS). The NAPWPS is the response of the Philippines to various international measures on women, peace and security. It supports the implementation of national mandates on women and gender equality, as well as peace and development. It is a product of constructive engagement between the government and civil society towards addressing sexual and gender-based violence in the context of conflict and promoting women's participation in peacebuilding.

Based on the United Nations Security Council Resolution (UNSCR), the Philippine NAPWPS is composed of two primary outcomes, as enshrined in UNSCR 1325 and 1820:

- Protection and Prevention To ensure the protection of women's human rights and prevention of violation of these rights in armed conflict and post-conflict situations
- Empowerment and Participation To empower women and ensure their active and meaningful participation in areas of peacekeeping, peacemaking, peacebuilding, conflict prevention, conflict resolution, and post-conflict reconstruction

The Philippines also has two support outcomes in conjunction with the two primary outcomes:

 Promotion and Mainstreaming - To promote and mainstream gender perspective

in all aspects of conflict prevention, conflict resolution and peacebuilding

Monitoring and Evaluation To institutionalize a system to
 monitor, evaluate and report on the
 implementation of the NAPWPS in
 order to enhance accountability for
 the successful implementation and the
 achievement of goals.

These outcomes contain action points and indicators, with a corresponding government body identified to fulfill such indicators. The 2014 NAPWPS currently contains eleven action points and thirty-seven indicators.²³⁵

On gender equality, the Philippines has a rather impressive record. The World Economic Forum, on its most recent Global Gender Gap, stated that the Philippines are the highest ranking country in the Association of South East Asian Nations (ASEAN). The Philippines has kept this ranking since 2006, when the global report was first released.

Out of 144 countries assessed around the world for the Global Gender Gap, the Philippines was ranked 7th, which means that only six other countries in the world have a smaller gender gap. The Global Gender Gap Index is a composite measure of gender gaps on four socio economic outcomes: economic participation and opportunity; educational attainment; political empowerment; and health and survival.²³⁶ Table 4 shows the gender gap index among ASEAN member states.²³⁷

The Philippines recently passed a law in the Senate extending paid maternity leave for 120 days. The Lesbian, Gay, Transgender, and Bisexual (LGTB) community has also seen support in Congress when electing Geraldine Roman is the first openly transsexual woman serving in Congress. Because of Roman's work, an Anti-Discrimination Bill that had been lingering in the Senate for the past 17 years is finally being debated.

Even with anti-Violence Against Women (VAW) campaigns by the government, Filipinas are still affected by gender-based violence. The gender-based violence affecting women in the country is not necessarily tied to socioeconomic or educational status; rather, it is related to sex trafficking, forced prostitution, and sexual harassment in schools, the workplace, and on the street.²³⁸

	2016		2006	
ASEAN Member State	Overall Rank	Overall Score	Overall Rank	Overall Score
Brunei Darussalam	103	0.669	99	0.639
Cambodia	112	0.658	89	0.629
Indonesia	88	0.682	68	0.654
Lao PDR	43	0.724	60	0.699
Malaysia	106	0.666	72	0.651
Philippines		0.786		0.752
Singapore	55	0.712	65	0.655
Thailand	71	0.699	40	0.683

Table 4: Global Gender Gap Index Rank – ASEAN Member States, 2016 and 2006



Conclusion

The Philippines is the third most disasterprone countries in the world due to its proximity to the "Pacific Ring of Fire". The country experiences many forms of natural disasters such as typhoons, earthquakes, floods, volcanic eruptions, landslides, and fires. They were hit by 531 disasters from 1900 to 2012, affecting more than 160 million people and causing US\$ 10.5 billion in damage. The Philippines also experienced the most destructive disaster, Typhoon Haiyan (Yolanda), which affected 26 million people and claimed at least 8,000 lives in 2013. 239 Typhoons are typically the most destructive disasters that affect the Philippines, with an average of twenty tropical cyclones entering the waters surrounding the country every year.²⁴⁰

The Philippines has come a long way on their disaster response strategies. As a country that is highly vulnerable to disasters, having a robust National Disaster Risk Reduction and Management Plan is key for their success.²⁴¹ The country has focused its intension on Disaster Management and has implemented policy to support their efforts. The Philippine Congress implemented the Philippine National Disaster Risk Reduction and Management Act of 2010 (DRRM Act 2010) to establish a multi-level disaster risk management system. 242 The DRRM Act works at the guiding policy for the establishment of the National Disaster Risk Reduction and Management Council (NDRRMC) and the institutionalization of the National Disaster Risk Reduction and

Management Plan (NDRRP).²⁴³ Since Typhoon Haiyan devastated the Philippines in 2013, the communication of early warnings in the Philippines has improved significantly. The Philippine government and aid agencies have taken lessons learned and have focused on disaster risk reduction and preparedness. The country understands the importance of early warning systems, clear evacuation points, pre-positioned aid in remote countries, and education on safer locations to build houses and plant crops. Philippine government agencies have been successful in effective communication of early warnings and organizing evacuations in affected areas. For example, the Philippine government was successful in its response to Typhoon Koppu in October 2015, which caused more

than 300 villages to be under water.²⁴⁴ The government is able to mitigate disasters such as floods, typhoons, and landslides by providing information about bad weather through disaster service websites and free mobile phone applications.²⁴⁵

The Armed Forces of the Philippines (AFP) play an important role in disaster response. HADR is one of the mission areas of the Armed Forces. The role of the AFP in disaster response activities is in reducing vulnerability and exposure of communities as well as building community capacity. The National Disaster Response Plan (NDRP) defines the AFP as a key responder in the event of a disaster.²⁴⁶

Civil-military coordination in disaster response in the country has undergone significant transformation. The response to Typhoon Haiyan generated a response of foreign military assets from over twenty different states. This has shaped disaster management framework and structures in the Philippines.²⁴⁷

The Philippines has been experiencing economic growth; this has allowed the country to improve its healthcare, which in turn means that Filipinos are living longer. However, this progress is not reaching all Filipinos; the poor and those is rural areas remain vulnerable and have limited access to the healthcare system.²⁴⁸

Many people in the Philippines are also vulnerable because the current infrastructure is poor and the current drainage and sewer systems are in need of repair. Many cities in the Philippines are vulnerable to flooding and tsunamis since they are below sea level. The country suffered substantial destruction and devastation from the previous city typhoons in 2009 and 2013. To remedy this, the Philippine government has invested in anti-flood infrastructure in the Manila area by building and strengthening dykes, dredging waterways and installing pumps in Manila and other parts of the Philippines.²⁴⁹



Appendices

DOD DMHA Engagements in the Past Five Years (FY 2012-2017)

November 2017 - SALAKNIB Practical Exercise

The U.S. Army and the Philippine Army (PA) conducted exercise SALAKNIB from November 16-27, 2017 in Luzon, Philippines. Both counterparts participated in Subject Matter Expert (SME) exchanges and practical exercises to share information, and reinforce their long military partnership. The American and Filipino soldiers shared information such as gunnery procedures and maintenance for the Armored Personnel Carrier, artillery tactics and processes, as well as study and validation of the PA Sustainment Functional Concept Document.²⁵⁰

October 2017 - Pacific Responder

The 36th Contingency Response Group (CRG) and Philippine Air Force (PAF) partnered during the first Pacific Responder exercise Sept. 23-29, 2017, at Andersen Air Force Base, Guam. The exercise was a week-long engagement in which forces focused on leadership planning, as well as disaster response execution. Multiple fields such as command and control, security forces, engineering assistance, structures, and aircraft maintenance were shared.²⁵¹

October 2017 - KAMANDAG

Third Marine Expeditionary Brigade (III MEB) and the Philippines Armed Forces collaborated during exercise KAMANDAG. The inaugural exercise took place Oct. 2-11, 2017, at multiple locations on the island of Luzon.

The purpose of this Philippines-led military exercise was to conduct bilateral exchanges between Philippine and U.S. forces. This allowed for enhanced cooperation and interoperability between the Philippines and the U.S. This is consistent with the Mutual Defense Treaty and Visiting Forces Agreement.²⁵²

May 2017 - Balikatan

Balikatan 2017 makes the 33rd iteration of the annual U.S.-Philippine bilateral military exercise. From May 8-19, 2017, Balikatan focused on multiple missions, to include humanitarian assistance and disaster relief, counterterrorism, and other combined military operations. During the 2017 exercise, multinational forces from the Australian Defence Force and the Japan Self-Defense Force joined the U.S. and the Philippines in all major training events.²⁵³

October 2016 - PHIBLEX

Philippine and United States Marines came together for exercise PHIBLEX 2016. This is an annual U.S.-Philippine military bilateral exercise that combines amphibious capabilities with humanitarian civic assistance efforts to strengthen interoperability and working relationships.

Over 1,400 U.S. Marines and 500 Armed Forces of the Philippines members participated in the exercise. Through this exercise, the U.S. and The Philippines will continue to enhance the relationship through commitment, cooperation, and capability.²⁵⁴

April 2016 - Balikatan

This marked the 32nd iteration of U.S. and Philippine armed forces participating in Exercise Balikatan. The annual exercise is comprised of approximately 5,000 U.S. service members and 3,500 members of the Philippine armed forces, in addition to nearly 80 Australian Defense Force personnel and observers from 12 other nations.²⁵⁵

September 2016 - Pacific Partnership

The U.S. Navy's annual multilateral, multiservice mission visited Timor Leste, Philippines, Vietnam, Malaysia, and Indonesia, in an effort to improve disaster response preparedness and enhance relationships in the region.

The Commander of Destroyer Squadron (DESRON) 23 led the 2016 mission. They embarked aboard hospital ship USNS Mercy and approximately 1,200 military and civilian personnel from Australia, Canada, Japan, Malaysia, New Zealand, Republic of Korea, Singapore, the United Kingdom, and the U.S. participated in the four-month long mission.²⁵⁶

August 2015 Tempest Express-27

Tempest Express-27 was held in Manila, Philippines, from 23 -31 July. This continued the series of multilateral engagements in the Indo-Asia-Pacific region designed to promote regional peace and security, and enhance multinational capabilities and capacity of nations participating in the Multinational Planning and Augmentation Team (MPAT) workshop. The Philippine military, police force, and civilian humanitarian agency representatives from Australia, Bangladesh, Cambodia, Canada, France, Germany, Indonesia,

Japan, Korea, Mongolia, Nepal, New Zealand, Singapore, Sri Lanka, United Kingdom, U.S., and Vietnam participated. The participants contributed to the refinement of staff skills to operate in a coalition or multinational force headquarters as part of multinational military disaster operations.²⁵⁷

October 2015 - PHIBLEX

PHIBLEX is an annual, bilateral training exercise conducted by U.S. Marine and Navy forces alongside members of the Armed Forces of the Philippines. It focuses on strengthening the partnership and relationship between the two nations, across a range of military operations, including disaster relief and complex expeditionary operations.²⁵⁸

September 2015 - Multinational Communications Interoperability Program (Pacific Endeavor)

USPACOM facilitated a Multinational Communications Interoperability Program (MCIP) as part of exercise Pacific Endeavor. This included the development and integration of a HADR scenario event, including civilmilitary coordination related to communications interoperability.²⁵⁹

August 2015 - Pacific Angel

Pacific Angel is a mass-casualty exercise and the culminating event of a five-day subject matter expert exchange between the U.S. Defense Institute for Medical Operations, the Armed Forces of the Philippines, the Philippine National Police, the Tarsier, the PHCU, and the CHCU.

It was part of the greater Pacific Angel Philippines, an exercise that brings together U.S. service members and other partner nation military personnel to establish partnerships and build capacity.²⁶⁰

April 2015 – Balikatan

U.S. and Philippine forces began the 31st iteration of Exercise Balikatan, an annual bilateral training exercise and humanitarian assistance engagement. Balikatan seeks to improve the readiness of participating U.S. and Philippine forces. Balikatan takes place in the Philippines; approximately 6,000 U.S. personnel participate during the exercise.²⁶¹

September 2014 – PHIBLEX

Approximately 2,300 U.S. and Philippine service members participated in the bilateral air-ground and amphibious training during Amphibious Landing Exercise 2014 (PHIBLEX 14) in Philippines. PHIBLEX 14 was designed to improve interoperability, increase readiness and enhance the ability to respond to natural disasters or other regional contingencies. The training consisted of a staff planning exercises, field training exercises, and humanitarian and civic assistance projects, sustains and reinforces the foundation and framework for a bilateral force to respond rapidly and effectively to regional humanitarian crises.²⁶²

August 2015 – ARF Bio-Preparedness Exercise

The Philippines and the U.S. hosted a three-day table-top exercise (TTX) workshop made up of policy professionals, practitioners, security forces, and health subject matter experts (SMEs) as part of the ASEAN Regional Forum's (ARF) Cross-Sectoral Workshop on Biological Preparedness and Response.

This bio-preparedness exercise is a step in evolving the partnership with participating nations, which helps improve disaster and disease response preparedness, while enhancing relationships among all participants.

Led by the Philippines and the U.S., the ARF Bio-Preparedness TTX workshop brought 26 nations and the European Union together to collaborate and build on previously established disaster response plans. During the exercise, they tested the guidelines from the prior year with the help of a 10-page bio-preparedness guide, created by the exercise team.²⁶³

August 2014 – ARF Bio-Preparedness Exercise

Marine Corps Forces Pacific (MARFORPAC) facilitated an ASEAN Regional Forum (ARF) Cross-Sectoral Security Cooperation on Bio-Preparedness Workshop in Makati, Philippines. This event focused on the "Best Practices for Preparedness and Response to a Biological Event" and built upon several ASEAN biopreparedness workshops previously completed and those practices best identified among ARF events from 2009-2013. The workshop's main deliverable was an ARF national guideline template for bio-preparedness and response. It included 155 experts from 18 countries in the areas of countering weapons of mass destruction policy making, civilian and military law enforcement officers, civilian-military defense

officials, healthcare, agriculture, and veterinary sectors.

June 2014 - CARAT

A U.S. Navy task group comprised of ships, aircraft, Sailors, and Marines participated in the 20th annual exercise Cooperation Afloat Readiness and Training (CARAT). CARAT Philippines is part of a broader bilateral exercise series the U.S. Navy conducts with nine partner nations in South and Southeast Asia. It addresses shared maritime security priorities, strengthen maritime partnerships, and enhance interoperability among participating forces.²⁶⁴

International/Foreign Relations

A significant foreign relations issue relates to the Philippines' territorial dispute with China over the Scarborough Shoal and Spratly Islands in the South China Sea.²⁶⁵

The Philippines has a long history of relationship with the U.S; however, in recent years President Duterte has promoted an open alliance Russia and China. As a result of the territorial dispute, President Rodrigo Duterte has reduced defence ties with the U.S. and has criticized U.S. policies in the Philippines. ²⁶⁶

Most of the foreign aid received by the Philippines comes from Organization for Economic Cooperation and Development (OECD) countries, as well as several development projects that are running on funding. The main donor countries to the Philippines in terms of bilateral aid are Japan and the U.S. The aid from both of these countries makes up 80 percent of the bilateral aid (65 percent from the U.S. and 15 percent from Japan). The European Union (EU), provides minimal aid, only accounting to three percent.

In 2017, President Duterte rejected US\$280 million in foreign aid offered by the European Union. President Duterte rejected the foreign aid because it had strings attached to it (attempting to enforce human rights regulations in exchange for its aid).²⁶⁷ The human rights check has surfaced as a result of President Duterte's antidrug war efforts. The U.S. and the EU have expressed concerns over the human rights violations in the Philippines. Approximately 7,000 people have been killed since June 30, 2017.²⁶⁸

Russia

In 2017, President Rodrigo Duterte welcomed visiting Russian warships in Manila; this was the first formal contact between the Russian and Philippine navies. The Philippines aims to maintain external lines of support, since its unpopular domestic policies are not accepted by some foreign governments.²⁶⁹ Russia has recently offered to assist in the sale of small arms to equip the Philippine Army for its efforts to crack down on Filipino or transnational armed groups operating in the country. This would be a mutual benefitting relationship, in which Russia makes sales and the Armed Forces of the Philippines gets a source of weapons.²⁷⁰

In 2017, Russia and the Philippines signed the Agreement on Defense Cooperation (ADC), which paves the way for institutionalized military-to-military exchanges, including training, intelligence-sharing, and opens the possibility of joint exercises between the two countries. The Philippines is interested in joint naval drills in the South China Sea with Russia, or even in the Sulu and Celebes Sea, where Islamic State-affiliate groups have been conducting piracy operations. Russia and the Philippines also signed an agreement to promote bilateral intelligence sharing, which will focus on counterterrorism cooperation. 271

China

After President Duterte took office in 2016, he shifted the country's foreign policy toward China by agreeing to resolve the South China Sea dispute through bilateral talks. This decision came despite the ruling of The Hague's Permanent Court of Arbitration on a case against China brought by the previous Philippine government. This started the current relationship with China, in which Chinese President Xi Jinping invited President Duterte to Beijing for a four day visit that resulted in US\$24 billion worth of investment and financing agreements with China. Of these agreements, US\$15 billion were investment projects and U.S. \$9 billion credit facilities.²⁷² China and the Philippines have confirmed the launch of a biannual bilateral consultation mechanism (BCM) on the South China Sea.²⁷³

Force Protection/Pre-Deployment Information

The following information is provided for pre-deployment planning and preparations. Visit www.travel.state.gov prior to deployments for further up-to-date information.

Passport/Visa

Before entering Philippines, you must ensure that your passport has at least six months validity remaining from the date of departure from Philippines.

U.S. citizens may enter the Philippines for purposes of tourism without a visa if they present:

- a valid U.S. passport and
- a return ticket to the United States or an onward ticket to another country.

Upon your arrival, immigration authorities will stamp an entry visa valid for 30 days on your passport. If you plan to stay longer than 30 days, you must apply for an extension at the Philippine Bureau of Immigration.

If you overstay your visa, you are subject to fines and detention by Philippine immigration authorities.

You may obtain a multiple-entry transit 9(b) visa to permit travel from one country to another via the Philippines. Travelers must receive a transit visa from a Philippine embassy or consulate prior to traveling to the Philippines.²⁷⁴

Emergency Contact Information

U.S. Embassy Manila 1201 Roxas Boulevard Manila, Philippines 1000 Telephone: +(63)(2) 301-2000 Emergency After-Hours Telephone: +(63)(2) 301-2000 x0 Fax: (63) (2) 301-2017 acsinfomanila@state.gov

Consulates U.S. Consular Agency - Cebu City Ground Level, Waterfront Hotel Salinas Drive Lahug, Cebu City Philippines 6000 Telephone: (63)(32) 231-1261 Emergency After-Hours Telephone: Please contact the U.S. Embassy in Manila: +(63)(2) 301-2000 x0 Fax: +(63) (32) 231-0174 ACSInfoCebu@state.gov²⁷⁵

Currency Information

The currency of Philippines is the Philippine Peso. The symbol used for the Peso is the \mathbf{P} .²⁷⁶

Travel Health Information

Medical Care

In the Philippines, adequate medical care is available in major cities, but that does not mean that the best hospitals will meet standards of medical care, sanitation, and facilities provided in the United States. In rural and remote areas, medical care is limited. Furthermore, the traffic pattern in Manila tends to slow down ambulances and other first responders from reaching persons in need.

Most hospitals in the Philippines require a down payment of the estimated cost of care. Being hospitalized or medically evacuated to the United States can cost tens of thousands of dollars. It is possible for a hospital or medical professional to decline treatment if payment is not received prior to the service. Hospitals can also refuse to discharge patients or release medical documents until all bills have been paid. Due to the cost, make sure your health insurance plan provides coverage overseas. Most care providers overseas only accept cash payments.²⁷⁷

Vaccination and Prescriptions

Before arriving in Philippines, make sure you are up-to-date on all vaccinations recommended by the U.S. Centers for Disease Control and Prevention (CDC). You should also bring any medications you are taking with you.

If traveling with prescription medication, check with the government of the Philippines to ensure the medication is legal in the Philippines and to obtain clearance to enter the country with it. Always carry your prescription medication in original packaging with your doctor's prescription. The CDC provides travel recommendations to the Philippines. The information in Table 5 is taken directly from the CDC website.²⁷⁸

Routine vaccines (for all travelers)	Make sure you are up-to-date on routine vaccines before every trip. These vaccines include Measles-Mumps-Rubella (MMR) vaccine, diphtheriatetanus-pertussis vaccine, varicella (chickenpox) vaccine, polio vaccine, and your yearly flu shot.
Hepatitis A (for most travelers)	CDC recommends this vaccine because you can get hepatitis A through contaminated food or water in Philippines, regardless of where you are eating or staying.
Typhoid (for most travelers)	You can get typhoid through contaminated food or water in Philippines. CDC recommends this vaccine for most travelers, especially if you are staying with friends or relatives, visiting smaller cities or rural areas, or if you are an adventurous eater.
Hepatitis B (for some travelers)	You can get hepatitis B through sexual contact, contaminated needles, and blood products, so CDC recommends this vaccine if you might have sex with a new partner, get a tattoo or piercing, or have any medical procedures.
Japanese Encephalitis (for some travelers)	You may need this vaccine if your trip will last more than a month, depending on where you are going in Philippines and what time of year you are traveling. You should also consider this vaccine if you plan to visit rural areas in Philippines or will be spending a lot of time outdoors, even for trips shorter than a month. Your doctor can help you decide if this vaccine is right for you based on your travel plans.
Rabies (for some travelers)	Rabies can be found in dogs, bats, and other mammals in the Philippines, so the CDC recommends this vaccine for the following groups: -Travelers involved in outdoor and other activities (such as camping, hiking, biking, adventure travel, and caving) that put them at risk for animal bites. -People who will be working with or around animals (such as veterinarians, wildlife professionals, and researchers). -People who are taking long trips or moving to Philippines. -Children, because they tend to play with animals, might not report bites, and are more likely to have animal bites on their head and neck.
Yellow Fever	There is no risk of yellow fever in the Philippines. The Government of the Philippines requires proof of yellow fever vaccination only if you are arriving from a country with risk of yellow fever. This does not include the U.S. If you are traveling from a country other than the U.S, check this list to see if you may be required to get the yellow fever vaccine.
Malaria (some travelers)	When traveling in the Philippines, you should avoid mosquito bites to prevent malaria. You may need to take prescription medicine before, during, and after your trip to prevent malaria, depending on your travel plans, such as where you are going, when you are traveling, and if you are spending a lot of time outdoors or sleeping outside. Talk to your doctor about how you can prevent malaria while traveling.

Table 5: Health Information – Suggested Vaccines

Eat and Drink Safely

Unclean food and water can cause travelers' diarrhea and other diseases. Reduce your risk by sticking to safe food and water habits.²⁷⁹

Eat

- Food that is cooked and served hot
- Hard-cooked eggs
- Fruits and vegetables you have washed in clean water or peeled yourself
- Pasteurized dairy products

Don't Eat

- Food served at room temperature
- Food from street vendors
- Raw or soft-cooked (runny) eggs
- Raw or undercooked (rare) meat or fish
- Unwashed or unpeeled raw fruits and vegetables
- Unpasteurized dairy products
- "Bushmeat" (monkeys, bats, or other wild game)

Drink

- Bottled water that is sealed
- Water that has been disinfected
- Ice made with bottled or disinfected water
- Carbonated drinks
- Hot coffee or tea
- Pasteurized milk

Don't Drink

- Tap or well water
- Ice made with tap or well water
- Drinks made with tap or well water (such as reconstituted juice)
- Unpasteurized milk

Prevent bug bites

Bugs (like mosquitoes, ticks, and fleas) can spread a number of diseases in the Philippines. Many of these diseases cannot be prevented with a vaccine or medicine. You can reduce your risk by taking steps to prevent bug bites.

To prevent bug bites:

- Cover exposed skin by wearing longsleeved shirts, long pants, and hats;
- Use an appropriate insect repellent;
- Use permethrin-treated clothing and gear (such as boots, pants, socks, and tents). Do not use permethrin directly on skin;
- Stay and sleep in air-conditioned or screened rooms; and
- Use a bed net if the area where you are sleeping is exposed to the outdoors.

For protection against ticks and mosquitos:

Use a repellent that contains 20 percent or more DEET for protection that lasts up to several hours.

For protection against mosquitos only:

Products with one of the following active ingredients can also help prevent mosquito bites. Higher percentages of active ingredient provide longer protection.

- DEET;
- Picaridin (also known as KBR 3023, Bayrepel, and icaridin);
- Oil of lemon eucalyptus (OLE) or PMD; and
- IR3535.

If you are bitten by bugs:

- Avoid scratching bug bites, and apply hydrocortisone cream or calamine lotion to reduce the itching;
- Check your entire body for ticks after outdoor activity. Be sure to remove ticks properly.

Note: Zika is a risk in the Philippines. For more information, see Zika Travel Information.

Safety and Security

U.S. citizens contemplating travel to the Philippines should review the Travel Advisory and carefully consider the risks to their safety and security while there, including the risk of kidnappings and bombings. Occasionally, the U.S. Embassy is targeted by planned and/or spontaneous demonstrations.

Some of the most common crimes in the Philippines include pick pocketing, Internet scams, and credit/ATM card fraud. These crimes tend to be most common amongst U.S. citizens. While U.S. citizens are not typically targeted, kidnappings, violent assaults, murder-forhire, and other violent crimes have occurred in the Philippines. Currently, the Philippine law enforcement agencies are engaged in a nationwide counter-narcotics campaign. This campaign has resulted in a sharp increase in violence between police and individuals suspected of involvement in the drug trade. As part of this campaign, law enforcement is engaged in aggressive search and buy and bust operations that could affect foreigners.²⁸⁰

Sendai Framework

The Sendai Framework is the global blueprint and fifteen year plan to build the world's resilience to natural disasters.²⁸¹ The Sendai Framework for Disaster Risk Reduction 2015-2030 outlines seven clear targets and four priorities for action to prevent new and reduce existing disaster risks:

The Seven Global Targets:²⁸²

- Substantially reduce global disaster mortality by 2030, aiming to lower average per 100,000 global mortality rates in the decade 2020-2030 compared to the period 2005-2015.
- Substantially reduce the number of affected people globally by 2030, aiming to lower average global figure per 100,000 in the decade 2020 -2030 compared to the period 2005-2015.
- Reduce direct disaster economic loss in relation to global gross domestic product (GDP) by 2030.
- Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030.
- Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020.
- Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of this Framework by 2030.
- Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to the people by 2030.

The Four Priorities of Action:

- Understanding disaster risk;
- Strengthening disaster risk governance to manage disaster risk;
- Investing in disaster reduction for resilience; and
- Enhancing disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation and reconstruction.

The Sendai Framework aims to achieve the substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries over the next 15 years. It was adopted at the Third United Nations World Conference on Disaster Risk Reduction in Sendai, Japan in 2015.²⁸³ The Sendai Framework is the successor instrument to the Hyogo Framework for Action (HFA) 2005-2015: Building the Resilience of Nations and Communities to Disasters.²⁸⁴ Figure 8 shows the Sendai DRR Framework.²⁸⁵



www.preventionweb.net/go/sfdrr

www.unisdr.org isdr@un.org

Chart of the Sendai Framework for Disaster Risk Reduction

2015-2030

Scope and purpose

The present framework will apply to the risk of small-scale and large-scale, frequent and infrequent, sudden and slow-onset disasters, caused by natural or manmade hazards as well as related environmental, technological and biological hazards and risks, it aims to guide the multi-hazard management of disaster risk in development at all levels as well as within and across all sectors.

Expected outcome

The substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries

Goal

Prevent new and reduce existing disaster risk through the implementation of integrated and inclusive economic, structural, legal, social, health, cultural, educational, environmental, technological, political and institutional measures that prevent and reduce hazard exposure and vulnerability to disaster, increase preparedness for response and recovery, and thus strengthen resilience

Targets

Substantially reduce	Substantial
global disaster mortality	number of
by 2030, aiming to lower	globally by
average per 100,000	to lower th
global mortality between	global figur
2020-2030 compared to	between 20
2005-2015	compared t

Substantially reduce the number of affected people sconomic loss in relation globally by 2030, aiming to lower the average per 100,000 getween 2020-2030 compared to 2005-2015

Substantially reduce
disaster damage to critical
infrastructure and disruption
of basic services, among
them health and educational
facilities, including through
by 2030

Substantially increase the
number of countries with
national and local disaster
national py 2020
by 2030

Substantially enhance
th international cooperation
ter to developing countries
through adequate and
sustainable support to
complement their national
actions for implementation
of this framework by 2030

Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to people by 2030

Priorities for Action

There is a need for focused action within and across sectors by States at local, national, regional and global levels in the following four priority areas.

Priority 1
Understanding disaster risk

Strengthening disaster risk governance to manage disaster risk

Priority 3
Investing in disaster risk reduction for

resilience

Priority 4

Enhancing disaster preparedness for effective response, and to «Build Back Better» in recovery, rehabilitation and reconstruction

Figure 8: UN Sendai Framework for Disaster Risk Reduction 2015-2030

Hyogo Framework for Action Country Progress Report

The Hyogo framework for Action (HFA) was adopted as a guideline to reduce vulnerabilities to natural hazards. The HFA assists participating countries to become more resilient and to better manage the hazards that threaten their development. The levels of progress of the 2013-2015 results of the HFA for Philippines are represented in Figure 9 and Table 6. Table 7 provides an overview of the overall challenges and the future outlook statement from the HFA report. The 2013-2015 is the most recent HFA report available for Philippines.²⁸⁶

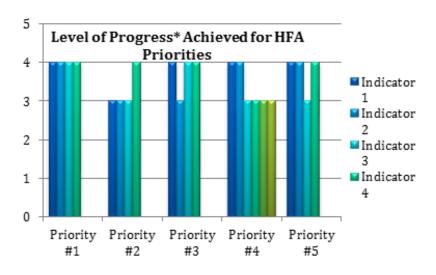


Figure 9: HFA Level of Progress Achieved

Priority for Action #1: Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.

Core Indicator*	Indicator Description	Level of Progress Achieved
1	National policy and legal framework for disaster risk reduction exists with decentralized responsibilities and capacities at all levels.	4
2	Dedicated and adequate resources are available to implement disaster risk reduction plans and activities at all administrative levels.	4
3	Community Participation and decentralization is ensured through the delegation of authority and resources to local levels.	4
4	A national multi sectoral platform for disaster risk reduction is functioning.	4

Priority #2: Identify, assess and monitor disaster risks and enhance early warning

Core Indicator*	Indicator Description	Level of Progress Achieved
1	National and local risk assessments based on hazard data and vulnerability information are available and include risk assessments for key sectors.	3
2	Systems are in place to monitor, archive and disseminate data on key hazards and vulnerabilities.	3
3	Early warning systems are in place for all major hazards, with outreach to communities.	3
4	National and local risk assessments take account of regional / transboundary risks, with a view to regional cooperation on risk reduction.	4

Table 6: National Progress Report on the Implementation of the HFA

Priority #3: Use knowledge, innovation and education to build a culture of safety and resilience at all levels

Core Indicator*	Indicator Description	Level of Progress Achieved
1	Relevant information on disasters is available and accessible at all levels, to all stakeholders (through networks, development of information sharing systems, etc.).	4
2	School curricula, education material and relevant trainings include disaster risk reduction and recovery concepts and practices.	3
3	Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.	4
4	Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.	4

Priority #4: Reduce the underlying risk factors

Core Indicator*	Indicator Description	Level of Progress Achieved
1	Disaster risk reduction is an integral objective of environment related policies and plans, including for land use natural resource management and adaptation to climate change.	4
2	Social development policies and plans are being implemented to reduce the vulnerability of populations most at risk.	4
3	Economic and productive sectorial policies and plans have been implemented to reduce the vulnerability of economic activities.	3
4	Planning and management of human settlements incorporate disaster risk reduction elements, including enforcement of building codes.	3
5	Disaster risk reduction measures are integrated into post disaster recovery and rehabilitation processes.	3
6	Procedures are in place to assess the disaster risk impacts of major development projects, especially infrastructure.	3

Priority #5: Strengthen disaster preparedness for effective response at all levels

Core Indicator*	Indicator Description	Level of Progress Achieved
1	Strong policy, technical and institutional capacities and mechanisms for disaster risk management, with a disaster risk reduction perspective are in place.	4
2	Disaster preparedness plans and contingency plans are in place at all administrative levels, and regular training drills and rehearsals are held to test and develop disaster response programs.	4
3	Financial reserves and contingency mechanisms are in place to support effective response and recovery when required.	3
4	Procedures are in place to exchange relevant information during hazard events and disasters, and to undertake post-event reviews.	4

Table Notes:

- *Level of Progress:
- 1 Minor progress with few signs of forward action in plans or policy
- 2 Some progress, but without systematic policy and/ or institutional commitment
- 3 Institutional commitment attained, but achievements are neither comprehensive nor substantial
- 4 Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational
- 5 Comprehensive achievement with sustained commitment and capacities at all levels

Table 6: National Progress Report on the Implementation of the HFA (cont.)

Future Outlook Area 1: The more effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction.

Challenges:	National Level: The integration of DRR-CCA was at first done only with external assistance, and only for piloting. The country was only compelled to continue it in order to sustain the programs; hence the integration was only very recent. There are plans in place but implementation remains a challenge, such as, for the integrated coastal management strategy of the DENR. Local Level: There is increased awareness on DRR but proper integration with CCA and other sustainable development policies is still insufficient. RA 10121 is still not completely localized, and there is also not complete clarity on questions of LGU monitoring and supervision. DRRM and CCA have been integrated in the various plans including the comprehensive land use and physical framework plans and the local DRRM Plan, but with so many plans being required from LGUs they may be overwhelmed. There is a need to come up with a more harmonized and at the same time comprehensive planning process with clear demonstration of linkages. Furthermore, there is some difficulty in understanding the plans and their link to sustainable development. Some LGUs submit only for compliance purposes. Inter-LGU collaboration/cooperation in planning and ecosystem based approach also remains a challenge.
Future Outlook Priorities:	Review RA 10121 (Sunset Review of the law and its implementation plan). Harmonize the whole planning process. Mainstream all established guidelines (DRR-CCA Policy Integration and Harmonization). Fully integrate DRR-CCA functions. Enhance DRRM appreciation and understanding for local governments as well as communities through more vigorous IEC.

Table 7: HFA Country Progress Report Future Outlook Areas, Philippines

Future Outlook Area 2: The development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level, that can systematically contribute to building resilience to hazards.

Challenges:

The institutions that should ensure the full implementation of RA 10121 as the DRRM framework and guide to action for the Philippines are still in the process of being fully formed and operationalized, though the basic building pieces have already been put in place. The NDRRMC has been fully constituted, with all its members and representatives from civil society, the academe, and the Church already filled in. The challenge now is making every component constantly aware that DRRM is a year-round concern; that they are all aware that the Council now is collective body with each part expected to fully and seamlessly performing its role. The strengthening of institutions and building of capacities for DRR still have some gaps, notwithstanding the considerable achievements that have been reached already. The lack of resources remains a concern, given the increasing enormity of hazards compounded by the unabated change in climate. Apart from resource availability, the systems in accessing and using the funds still need to be fine-tuned. While the procedures have already been put in place (through JMCs and supporting guidelines), much effort needs to be done in orienting and familiarizing the national institutions and the LGUs. With these done, problems in coordination, duplication and waste of resources will be avoided. Finally, there is the question of culture. Some communities still tend to be more reactive rather than proactive. The culture of preparedness has yet to be really imbibed universally. Poverty and lack of access to resources contribute to this situation. Ensuring economic security and improving governance are also called for.

Future Outlook Priorities:

The integration of DRRM into the educational system needs to be more purposive and comprehensive. It should be recognized as a distinct discipline and that should be accorded a higher level of priority. Priority should also be given to the full institutionalization of DRR offices, as prescribed under RA 10121, especially at the local level. The establishment of fully functioning and fully represented local DRRMCs should be the first order of the day. Stakeholder involvement should be upgraded. The willingness to help and direct involvement of civil society, the private sector, and other stakeholders are already there, it is now a question of putting order and system in this so that actors can interact and cooperate with each other with synergy and greater harmony and mutuality. The problem of resources should be addressed in the following manner: accurately identifying exactly where the needs are; finding the possible sources; and systematizing how these are utilized. The latter involves proper channeling, allocation, and prioritization which are all functions of management, organization, leadership, and vision. What goes where, and when, and towards what? These are matters that need to be fully addressed if the country wants to be one step ahead of disasters. Finally, there is the matter of culture. Filipinos definitely have coping capacities. But the times call for the need to go beyond coping and making do. A culture of transcending needs to be adopted; a disposition that dictates controlling the givens instead of being controlled by what comes. Governance reform should be integral to DRRM.

Table 7: HFA Country Progress Report Future Outlook Areas, Philippines (cont.)

Future Outlook Area 3: The systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programs in the reconstruction of affected communities.

Challenges:	The main challenge for the country is how to keep up with the increasing frequency and severity of disasters that happen in its shores, constantly testing the limits of its institutions and preparedness mechanisms that have been put in place. The problems in fully localizing the DRRM framework result to some confusion in actual disaster response, including the accessing of earmarked funds, as well as the conduct of recovery. The recovery framework also needs a thorough revisiting. The RA 10121 provides that the responsibility for post-disaster recovery and rehabilitation falls under the NEDA, but the practice after Yolanda – specifically the creation of a new office call the OPARR – shows that the mechanisms, systems, and structures on recovery have yet to be clarified and institutionalized. This is an imperative in order to ensure that the country can quickly "build back better" after every disaster.
Future Outlook Priorities:	There are a number of positive ways forward in the area of response and recovery. Foremost of this is the development of a national recovery framework, with the notion of "building back better" or "bouncing forward" as a core guiding principle. The laws and policies also need to be harmonized in order to ensure a clearer, more effective response system. These include the RA 10121 and the Local Government Code primarily, as well as the Climate Change Act of 2009 (RA 9729), the NDRRM Plan, the National Climate Change Action Plan (NCCAP), National Disaster Response Plan, National Disaster Preparedness Plan and other related policies and guidelines. The integration of DRR and CCA should be fully operationalized. Community-Based DRRM should also be strengthened and institutionalized, through the national agencies' support to LGUs as well as that of civil society. There should also be constant post-incident evaluation. On the whole the monitoring and evaluation framework and mechanisms should be institutionalized. Lastly, the welfare and safety of DRRM workers, especially the disaster responders, should be ensured. One possible way is the creation of a Magna Carta for DRRM Workers.

Table 7: HFA Country Progress Report Future Outlook Areas, Philippines (cont.)

Country Profile

The information in the Country Profile section is sourced directly from the CIA World Fact book. Additional numbers on country comparison to the world can be found by going directly to the CIA website.

Background:

The Philippine Islands became a Spanish colony during the 16th century; they were ceded to the US in 1898 following the Spanish-American War. In 1935 the Philippines became a self-governing commonwealth. Manuel QUEZON was elected president and was tasked with preparing the country for independence after a 10-year transition. In 1942 the islands fell under Japanese occupation during World War II, and U.S. forces and Filipinos fought together during 1944-45 to regain control. On 4 July 1946 the Republic of the Philippines attained its independence. A 20-year rule by Ferdinand MARCOS ended in 1986, when a "people power" movement in Manila ("EDSA 1") forced him into exile and installed Corazon AQUINO as president. Her presidency was hampered by several coup attempts that prevented a return to full political stability and economic development. Fidel RAMOS was elected president in 1992. His administration was marked by increased stability and by progress on economic reforms. In 1992, the US closed its last military bases on the islands. Joseph ESTRADA was elected president in 1998. He was succeeded by his vice-president, Gloria MACAPAGAL-ARROYO, in January 2001 after ESTRADA's stormy impeachment trial on corruption charges broke down and another "people power" movement ("EDSA 2") demanded his resignation. MACAPAGAL-ARROYO was elected to a six-year term as president in May 2004. Her presidency was marred by several corruption allegations but the Philippine economy was one of the few to avoid contraction following the 2008 global financial crisis, expanding each year of her administration. Benigno AQUINO III was elected to a sixyear term as president in May 2010 and was succeeded by Rodrigo DUTERTE in May 2016.

The Philippine Government faces threats from several groups, some of which are on the US Government's Foreign Terrorist Organization list. Manila has waged a decades-long struggle against ethnic Moro insurgencies in the southern Philippines, which has led to a peace accord with the Moro National Liberation Front and ongoing

peace talks with the Moro Islamic Liberation Front. The decades-long Maoist-inspired New People's Army insurgency also operates through much of the country. The Philippines faces increased tension with China over disputed territorial and maritime claims in the South China Sea.

Location:

Southeastern Asia, archipelago between the Philippine Sea and the South China Sea, east of Vietnam

Geographic Coordinates:

13 00 N, 122 00 E

Map References:

Southeast Asia

Area:

Total: 300,000 sq km

Land: 298,170 sq km

Water: 1,830 sq km

Country comparison to the world: 74

Area - Comparative:

Slightly less than twice the size of Georgia; slightly larger than Arizona

Land Boundaries:

0 km

Coastline:

36,289 km

Maritime Claims:

Territorial Sea: irregular polygon extending up to 100 nm from coastline as defined by 1898 treaty; since late 1970s has also claimed polygonal-shaped area in South China Sea as wide as 285 nm

Exclusive economic Zone: 200 nm

Continental Shelf: to the depth of exploitation

Climate:

Tropical marine; northeast monsoon (November to April); southwest monsoon (May to October)

Terrain:

Mostly mountains with narrow to extensive coastal lowlands

Elevation:

Mean elevation: 442 m

Elevation extremes: lowest point: Philippine Sea

0 m

Highest point: Mount Apo 2,954 m

Natural Resources:

Timber, petroleum, nickel, cobalt, silver, gold, salt, copper

Land Use:

Agricultural land: 41 percent

Arable land 18.2 percent; permanent crops 17.8 percent; permanent pasture 5 percent

Forest: 25.9 percent

Other: 33.1 percent (2011 est.)

Irrigated Land:

16,270 sq km (2012)

Population - Distribution:

Population concentrated where good farmlands lie; highest concentrations are northwest and south-central Luzon, the southeastern extension of Luzon, and the islands of the Visayan Sea, particularly Cebu and Negros; Manila is home to one-eighth of the entire national population

Natural Hazards:

Astride typhoon belt, usually affected by 15 and struck by five to six cyclonic storms each year; landslides; active volcanoes; destructive earthquakes; tsunamis

Volcanism: significant volcanic activity; Taal (311 m), which has shown recent unrest and may erupt in the near future, has been deemed a Decade Volcano by the International Association of Volcanology and Chemistry of the Earth's Interior, worthy of study due to its explosive history and close proximity to human populations; Mayon (2,462 m), the country's most active volcano, erupted in 2009 forcing over 33,000 to be evacuated; other historically active volcanoes include Biliran, Babuyan Claro, Bulusan, Camiguin, Camiguin de Babuyanes, Didicas, Iraya, Jolo, Kanlaon, Makaturing, Musuan, Parker, Pinatubo, and Ragang

Environment - Current Issues:

Uncontrolled deforestation especially in watershed areas; soil erosion; air and water pollution in major urban centers; coral reef degradation; increasing pollution of coastal mangrove swamps that are important fish breeding grounds

Environment - International Agreements:

Party to: Biodiversity, Climate Change, Climate Change-Kyoto Protocol, Desertification, Endangered Species, Hazardous Wastes, Law of the Sea, Marine Dumping, Ozone Layer Protection, Ship Pollution, Tropical Timber 83, Tropical Timber 94, Wetlands, Whaling Signed, but not ratified: Air Pollution-Persistent Organic Pollutants

Geography - Note:

Note 1: favorably located in relation to many of Southeast Asia's main water bodies: the South China Sea, Philippine Sea, Sulu Sea, Celebes Sea, and Luzon Strait

Note 2: for decades, the Philippine archipelago was reported as having 7,107 islands; in 2016, the national mapping authority reported that hundreds of new islands had been discovered and increased the number of islands to 7,641 - though not all of the new islands have been verified

Population:

104,256,076 (July 2017 est.)

Country comparison to the world: 13

Nationality:

Noun: Filipino(s)

Adjective: Philippine

Ethnic Groups:

Tagalog 28.1 percent, Cebuano 13.1 percent, Ilocano 9 percent, Bisaya/Binisaya 7.6 percent, Hiligaynon Ilonggo 7.5 percent, Bikol 6 percent, Waray 3.4 percent, other 25.3 percent (2000) census)

Languages:

Filipino (official; based on Tagalog) and English (official); eight major dialects - Tagalog, Cebuano, Ilocano, Hiligaynon or Ilonggo, Bicol, Waray, Pampango, and Pangasinan

Religions:

Catholic 82.9 percent (Roman Catholic 80.9 percent, Aglipayan 2 percent), Muslim 5 percent, Evangelical 2.8 percent, Iglesia ni Kristo 2.3 percent, other Christian 4.5 percent, other 1.8 percent, unspecified 0.6 percent, none 0.1 percent (2000 census)

Age Structure:

0-14 years: 33.39 percent (male 17,764,826/ female 17,050,168)

15-24 years: 19.16 percent (male 10,199,389/ female 9,780,025)

25-54 years: 36.99 percent (male 19,597,675/ female 18,964,900)

55-64 years: 5.97 percent (male 2,844,739/female 3,375,139)

65 years and over: 4.49 percent (male 1,930,273/ female 2,748,942) (2017 est.)

Dependency Ratios:

Total dependency ratio: 58.2

Youth dependency ratio: 51

Elderly dependency ratio: 7.2

Potential support ratio: 13.8 (2015 est.)

Median Age:

Total: 23.5 years

Male: 23.1 years

Female: 24 years (2017 est.)

Country comparison to the world: 168 **Population Growth Rate:**

1.57 percent (2017 est.)

Country comparison to the world: 73

Birth Rate:

23.7 births/1,000 population (2017 est.)

Country comparison to the world: 61

Death Rate:

6.1 deaths/1,000 population (2017 est.)

Country comparison to the world: 156

Net Migration Rate:

-2 migrant(s)/1,000 population (2017 est.)

Country comparison to the world: 164

Population Distribution:

Population concentrated where good farmlands lie; highest concentrations are northwest and south-central Luzon, the southeastern extension of Luzon, and the islands of the Visayan Sea, particularly Cebu and Negros; Manila is home to one-eighth of the entire national population

Urbanization:

Urban population: 44.2 percent of total

population (2017)

Rate of urbanization: 1.57 percent annual rate of change (2015-20 est.)

Major Urban Areas - Population:

MÁNILA (capital) 12.946 million; Davao 1.63 million; Cebu City 951,000; Zamboanga 936,000 (2015)

APPENDICES

Sex Ratio:

At birth: 1.05 male(s)/female

0-14 years: 1.04 male(s)/female

15-24 years: 1.04 male(s)/female

25-54 years: 1.03 male(s)/female

55-64 years: 0.84 male(s)/female

65 years and over: 0.72 male(s)/female

Total population:

1.01 male(s)/female (2016 est.)

Mother's mean age at first birth:

23 years

Note: median age at first birth among women 25-

29 (2013 est.)

Maternal Mortality Ratio:

114 deaths/100,000 live births (2015 est.)

Country comparison to the world: 71

Infant Mortality Rate:

Total: 21.4 deaths/1,000 live births

Male: 24.3 deaths/1,000 live births

Female: 18.3 deaths/1,000 live births (2017 est.)

Country comparison to the world: 77

Life Expectancy at Birth:

Total population: 69.4 years

Male: 65.9 years

Female: 73.1 years (2017 est.)

Country comparison to the world: 162

Total Fertility Rate:

3.02 children born/woman (2017 est.)

Country comparison to the world: 55

Contraceptive Prevalence Rate:

55.1 percent (2013)

Health Expenditures:

4.7 percent of GDP (2014)

Country comparison to the world: 152

Hospital Bed Density:

1 beds/1,000 population (2011)

Drinking Water Source:

Improved:

Urban: 93.7 percent of population

Rural: 90.3 percent of population

Total: 91.8 percent of population

Unimproved:

Urban: 6.3 percent of population

Rural: 9.7 percent of population

Total: 8.2 percent of population (2015 est.)

Sanitation Facility Access:

Improved:

Urban: 77.9 percent of population

Rural: 70.8 percent of population

Total: 73.9 percent of population

Unimproved:

Urban: 22.1 percent of population

Rural: 29.2 percent of population

Total: 26.1 percent of population (2015 est.)

HIV/AIDS - adult prevalence rate:

0.1 percent (2016 est.)

Country comparison to the world: 108

HIV/AIDS - people living with HIV/AIDS:

56,000 (2016 est.)

Country comparison to the world: 54

HIV/AIDS - deaths:

<1000 (2016 est.)

Major Infectious Diseases:

Degree of risk: high

Food or waterborne diseases: bacterial diarrhea,

hepatitis A, and typhoid fever

Vectorborne diseases: dengue fever and malaria

Water contact disease: leptospirosis (2016)

Obesity - Adult Prevalence Rate:

6.4 percent (2016)

Country comparison to the world: 168

Children Under the age of 5 years Underweight:

19.9 percent (2013)

Country comparison to the world: 29

Education Expenditures:

2.7 percent of GDP (2009)

Country comparison to the world: 149

Literacy:

Definition: age 15 and over can read and write

Total population: 96.3 percent

Male: 95.8 percent

Female: 96.8 percent (2015 est.)

School Life Expectancy (primary to tertiary education):

Total: 13 years

Male: 12 years

Female: 13 years (2013)

Unemployment, Youth Ages 15-24:

Total: 15 percent

Male: 14.3 percent

Female: 16 percent (2015 est.)

Country comparison to the world: 74

Country Name:

Conventional long form: Republic of the

Philippines

Conventional short form: Philippines

Local long form: Republika ng Pilipinas

Local short form: Pilipinas

Etymology: named in honor of King Phillip II of Spain by Spanish explorer Ruy Lopez de Villalobos, who visited some of the islands in

1543

Government Type:

Presidential republic

Capital:

Name: Manila

Geographic coordinates: 14 36 N, 120 58 E Time difference: UTC+8 (13 hours ahead of

Washington, DC, during Standard Time)

Administrative Divisions:

80 provinces and 39 chartered cities

Provinces: Abra, Agusan del Norte, Agusan del Sur, Aklan, Albay, Antique, Apayao, Aurora, Basilan, Bataan, Batanes, Batangas, Biliran, Benguet, Bohol, Bukidnon, Bulacan, Cagayan, Camarines Norte, Camarines Sur, Camiguin, Capiz, Catanduanes, Cavite, Cebu, Compostela, Cotabato, Davao del Norte, Davao del Sur, Davao Oriental, Dinagat Islands, Eastern Samar, Guimaras, Ifugao, Ilocos Norte, Ilocos Sur, Iloilo, Isabela, Kalinga, Laguna, Lanao del Norte, Lanao del Sur, La Union, Leyte, Maguindanao, Marinduque, Masbate, Mindoro Occidental, Mindoro Oriental, Misamis Occidental, Misamis Oriental, Mountain, Negros Occidental, Negros Oriental, Northern Samar, Nueva Ecija, Nueva Vizcaya, Palawan, Pampanga, Pangasinan, Quezon, Quirino, Rizal, Romblon, Samar, Sarangani, Siquijor, Sorsogon, South Cotabato, Southern Leyte, Sultan Kudarat, Sulu, Surigao del Norte, Surigao del Sur, Tarlac, Tawi-Tawi, Zambales, Zamboanga del Norte, Zamboanga del Sur, Zamboanga Sibugay

Chartered Cities: Angeles, Antipolo, Bacolod, Baguio, Butuan, Cagayan de Oro, Caloocan, Cebu, Cotabato, Dagupan, Davao, General Santos, Iligan, Iloilo, Lapu-Lapu, Las Pinas, Lucena, Makati, Malabon, Mandaluyong, Mandaue, Manila, Marikina, Muntinlupa, Naga, Navotas, Olongapo, Ormoc, Paranaque, Pasay, Pasig, Puerto Princesa, Quezon, San Juan, Santiago, Tacloban, Taguig, Valenzuela, Zamboanga (2012)

Independence:

4 July 1946 (from the US)

National Holiday:

Independence Day, 12 June (1898); note - 12 June 1898 was date of declaration of independence from Spain; 4 July 1946 was date of independence from the US

Constitution:

Several previous; latest ratified 2 February 1987, effective 11 February 1987 (2016)

Legal System:

Mixed legal system of civil, common, Islamic, and customary law

International Law Organization Participation:

Accepts compulsory ICJ jurisdiction with reservations; accepts ICCt jurisdiction

Citizenship:

Citizenship by birth: no

Citizenship by descent only: at least one parent must be a citizen of the Philippines Dual citizenship recognized: no

Residency requirement for naturalization: 10 years

Suffrage:

18 years of age; universal

Executive Branch:

Chief of state: President Rodrigo Duterte (since 30 June 2016); Vice President Leni ROBREDO (since 30 June 2016); note - the president is both chief of state and head of government

Head of Government: President Rodrigo Duterte (since 30 June 2016); Vice President Leni Robredo (since 30 June 2016)

Cabinet: Cabinet appointed by the president with the consent of the Commission of Appointments, an independent body of 25 Congressional members including the Senate president (ex officio chairman), appointed by the president

Elections/Appointments: president and vice president directly elected on separate ballots by simple majority popular vote for a single 6-year term; election last held on 9 May 2016 (next to be held in May 2022)

Election Results: Rodrigo Duterte elected president; percent of vote - Rodrigo Duterte (PDP-Laban) 39 percent, Manuel "Mar" ROXAS (LP) 23.5 percent, Grace POE (independent) 21.4 percent, Jejomar BINAY (UNA) 12.7 percent, Miriam Defensor SANTIAGO (PRP) 3.4 percent; Leni ROBREDO elected vice president; percent of vote Leni ROBREDO (LP) 35.1 percent, Bongbong MARCOS (independent) 34.5 percent, Alan CAYETANO 14.4 percent, Francis ESCUDERO (independent) 12 percent,

Antonio TRILLANES (independent) 2.1 percent, Gregorio HONASAN (UNA) 1.9 percent

Legislative Branch:

Description: bicameral Congress or Kongreso consists of the Senate or Senado (24 seats; members directly elected in multi-seat constituencies by majority vote; members serve 6-year terms with one-half of the membership renewed every 3 years) and the House of Representatives or Kapulungan Ng Mga Kinatawan (297 seats; 238 members directly elected in single-seat constituencies by simple majority vote and 59 representing minorities directly elected by party-list proportional representation vote; members serve 3-year terms) *Elections:* Senate - elections last held on 9 May 2016 (next to be held in May 2019); House of Representatives - elections last held on 9 May 2016 (next to be held in May 2019)

Election Results: Senate - percent of vote by party - LP 31.3 percent, NPC 10.1 percent, UNA 7.6 percent, Akbayan 5.0 percent, other 30.9 percent, independent 15.1 percent; seats by party - LP 6, NPC 3, UNA 4, Akbayan 1, other 10; House of Representatives - percent of vote by party - LP 41.7 percent, NPC 17.0 percent, UNA 6.6 percent, NUP 9.7 percent, NP 9.4 percent, independent 6.0 percent, others 10.1 percent; seats by party - LP 115, NPC 42, NUP 23, NP 24, UNA 11, other 19, independent 4, party-list 59

Judicial Branch:

Highest Court(s): Supreme Court (consists of a chief justice and 14 associate justices)

Judge Selection and Term of Office: justices are appointed by the president on the recommendation of the Judicial and Bar Council, a constitutionally created, 6-member body that recommends Supreme Court nominees; justices serve until age 70

Subordinate Courts: Court of Appeals; Sandiganbayan (special court for corruption cases of government officials); Court of Tax Appeals; regional, metropolitan, and municipal trial courts; sharia courts

Political Parties and Leaders:

Akbayon [Machris Cabreros]
Laban ng Demokratikong Pilipino (Struggle of
Filipino Democrats) or LDP [Edgardo Angara]
Lakas ng EDSA-Christian Muslim Democrats or
Lakas-CMD [Ferdinand Martin Romualdez]
Liberal Party or LP [Francis Pangilinan]
Nacionalista Party or NP [Manuel "Manny"
Villar]

Nationalist People's Coalition or NPC [Eduardo Cojungco, Jr.]

National Unity Party or NUP [Albert Garcia] PDP-Laban [Aquilino Pimentel III] People's Reform Party or PRP [Narcisco Santiago]

Puwersa ng Masang Pilipino (Force of the Philippine Masses) or PMP [Joseph Estrada] United Nationalist Alliance or UNA Political pressure groups and leaders: Black and White Movement or BWM [Vicente Romano]

People Action (Kilosbayan)

International Organization Participation:
ADB, APEC, ARF, ASEAN, BIS, CD, CICA
(observer), CP, EAS, FAO, G-24, G-77, IAEA,
IBRD, ICAO, ICC (national committees), ICCt,
ICRM, IDA, IFAD, IFC, IFRCS, IHO, ILO, IMF,
IMO, IMSO, Interpol, IOC, IOM, IPU, ISO,
ITSO, ITU, ITUC (NGOS), MIGA, MINUSTAH,
NAM, OAS (observer), OPCW, PCA, PIF
(partner), UN, UNCTAD, UNESCO, UNHCR,
UNIDO, Union Latina, UNMIL, UNMOGIP,
UNOCI, UNWTO, UPU, WCO, WFTU (NGOS),
WHO, WIPO, WMO, WTO

Diplomatic Representation in the US:

Chief of Mission: Ambassador Jose Manuel del Gallego ROMUALDEZ (since 29 November 2017)

Chancery: 1600 Massachusetts Avenue NW, Washington, DC 20036 Telephone: [1] (202) 467-9300 FAX: [1] (202) 328-7614

Consulate(s) General: Chicago, Honolulu, Los Angeles, New Yoek, Saipan (Northern Mariana Islands), San Francisco, Tamuning (Guam)

Diplomatic Representation from the US:

Chief of Mission: Ambassador Sung KIM (since 6 December 2016)

Embassy: 1201 Roxas Boulevard, Manila 1000 Mailing address: PSC 500, FPO AP 96515-1000

Telephone: [63] (2) 301-2000 FAX: [63] (2) 301-2017

Flag Description:

Two equal horizontal bands of blue (top) and red; a white equilateral triangle is based on the hoist side; the center of the triangle displays a yellow sun with eight primary rays; each corner of the triangle contains a small, yellow, five-pointed star; blue stands for peace and justice, red symbolizes courage, the white equal-sided triangle represents equality; the rays recall the first eight provinces that sought independence from Spain, while the stars represent the three major geographical divisions of the country: Luzon, Visayas, and Mindanao; the design of the flag dates to 1897

Note: in wartime the flag is flown upside down with the red band at the top

National Symbol(s):

Three stars and sun, Philippine eagle; national colors: red, white, blue, yellow

National Anthem:

Name: "Lupang Hinirang" (Chosen Land)

Lyrics/Music: Jose PALMA (revised by Felipe PADILLA de Leon)/Julian FELIPE

Note: music adopted 1898, original Spanish lyrics adopted 1899, Filipino (Tagalog) lyrics adopted 1956; although the original lyrics were written in Spanish, later English and Filipino versions were created; today, only the Filipino version is used

Economy - Overview:

The economy has been relatively resilient to global economic shocks due to less exposure to troubled international securities, lower dependence on exports, relatively resilient domestic consumption, large remittances from about 10 million overseas Filipino workers and migrants, and a rapidly expanding outsourcing industry. During 2016, the current account balance narrowed to its lowest level since the

2008 global financial crisis, but nevertheless mustered a surplus for a 14th consecutive year. International reserves remain at comfortable levels and the banking system is stable.

Efforts to improve tax administration and expenditures management have helped ease the Philippines' debt burden and tight fiscal situation. The Philippines received investment-grade credit ratings on its sovereign debt under the former AQUINO administration and has had little difficulty financing its budget deficits. However, weak absorptive capacity and implementation bottlenecks have prevented the government from maximizing its expenditure plans. Although it has improved, the low tax-to-GDP ratio remains a constraint to supporting increasingly higher spending levels and sustaining high and inclusive growth over the longer term.

Economic growth has accelerated, averaging 6.1 percent per year from 2011 to 2016, compared with 4.5 percent under the MACAPAGAL-ARROYO government; and competitiveness rankings have improved. Although 2016 saw a record year for net foreign direct investment inflows, FDI to the Philippines has continued to lag regional peers, in part because the Philippine constitution and other laws restrict foreign ownership in important activities/sectors - such as land ownership and public utilities.

Although the economy grew at a faster pace under the AQUINO government, challenges to achieving more inclusive growth remain. Wealth is concentrated in the hands of the rich. The unemployment rate declined from 7.3 percent to 5.5 percent between 2010 and 2016 but the jobs are low paying and tedious. Underemployment hovers at around 18 percent to 19 percent of the employed. At least 40 percent of the employed work in the informal sector. Poverty afflicts more than a fifth of the population. More than 60 percent of the poor reside in rural areas, where the incidence of poverty (about 30 percent) is more severe - a challenge to raising rural farm and non-farm incomes. Continued efforts are needed to improve governance, the judicial system, the regulatory environment, the infrastructure, and the overall ease of doing business.

2016 saw the election of President Rodrigo Duterte, who has pledged to make inclusive growth and poverty reduction his top priority. Duterte believes that illegal drug use, crime and corruption are key barriers to economic development among the lower income class.

This administration wants to reduce the poverty rate to 14 percent and graduate the economy to upper-middle income status by the end of President Duterte's term in 2022. Key themes under the government's Ten-Point Socioeconomic Agenda include continuity of macroeconomic policy, tax reform, higher investments in infrastructure and human capital development, and improving competitiveness and the overall ease of doing business. The administration has vowed to address spending bottlenecks and is pushing for congressional passage of a Comprehensive Tax Reform Program to help finance more aggressive infrastructure and social spending, starting in 2018. The government also supports relaxing restrictions on foreign ownership, except for land.

GDP (Purchasing Power Parity):

\$806.3 billion (2016 est.)

\$744.6 billion (2015 est.)

\$694.5 billion (2014 est.)

Note: data are in 2016 dollars

Country comparison to the world: 30

GDP (Official Exchange Rate):

\$304.9 billion (2016 est.)

GDP - real growth rate:

6.9 percent (2016 est.)

6.1 percent (2015 est.)

6.1 percent (2014 est.)

Country comparison to the world: 13

GDP - Per Capita (PPP):

\$7,700 (2016 est.)

\$7,400 (2015 est.)

\$7,100 (2014 est.)

Note: data are in 2016 dollars

Country comparison to the world: 154

Gross National Saving:

24.5 percent of GDP (2016 est.)

23.7 percent of GDP (2015 est.)

24.3 percent of GDP (2014 est.)

Country comparison to the world: 57

GDP - Composition, by end use:

Household consumption: 73.6 percent

Government consumption: 11.1 percent

Investment in fixed capital: 24.6 percent

Investment in inventories: -0.3 percent

Exports of goods and services: 28 percent

Imports of goods and services: -37 percent (2016

est.)

GDP - Composition, by sector of origin:

Agriculture: 9.7 percent

Industry: 30.8 percent

Services: 59.5 percent (2016 est.)

Agriculture - Products:

Rice, fish, livestock, poultry, bananas, coconut/copra, corn, sugarcane, mangoes, pineapple, cassava

Industries:

Semiconductors and electronics assembly, food and beverage manufacturing, construction, electric/gas/water supply, chemical products, radio/television/communications equipment and apparatus, petroleum and fuel, textile and garments, non-metallic minerals, basic metal industries, transport equipment

Industrial Production Growth Rate:

8.4 percent (2016 est.)

APPENDICES

Labor Force:

43.2 million (2016 est.)

Country comparison to the world: 16

Labor Force - By Occupation:

Agriculture: 26.9 percent

Industry: 17.5 percent

Services: 55.6 percent (2016 est.)

Unemployment Rate:

5.5 percent (2016 est.)

6.3 percent (2015 est.)

Country comparison to the world: 72

Population Below Poverty Line:

21.6 percent (2015 est.)

Household Income or Consumption by

Percentage Share:

lowest 10 percent: 3.2 percent

highest 10 percent: 29.5 percent (2015 est.)

Distribution of Family Income - Gini Index:

44.4 (2015 est.)

46 (2012 est.)

Country comparison to the world: 45

Budget:

Revenues: \$46.24 billion

Expenditures: \$53.68 billion (2016 est.)

Taxes and Other Revenues:

15.2 percent of GDP (2016 est.)

Country comparison to the world: 187

Budget Surplus (+) or Deficit (-):

-2.4 percent of GDP (2016 est.)

Country comparison to the world: 96

Public Debt:

42.1 percent of GDP (2016 est.)

44.8 percent of GDP (2015 est.)

Country comparison to the world: 128

Fiscal Year:

Calendar year

Inflation Rate (Consumer Prices):

1.8 percent (2016 est.)

1.4 percent (2015 est.)

Country comparison to the world: 121

Central Bank Discount Rate:

3.56 percent (31 December 2016)

6.19 percent (31 December 2015)

Country comparison to the world: 100

Commercial Bank Prime Lending Rate:

5.64 percent (31 December 2016 est.)

5.58 percent (31 December 2015 est.)

Country comparison to the world: 127

Stock of Narrow Money:

\$61.62 billion (31 December 2016 est.)

\$56.56 billion (31 December 2015 est.)

Stock of Broad Money:

\$183.5 billion (31 December 2016 est.)

\$171 billion (31 December 2015 est.)

Country comparison to the world: 40

Stock of Domestic Credit:

\$184.6 billion (31 December 2016 est.)

\$166.7 billion (31 December 2015 est.)

Country comparison to the world: 47

Market Value of Publicly Traded Shares:

\$290.4 billion (31 December 2016 est.)

\$286.1 billion (31 December 2015 est.)

\$318 billion (31 December 2014 est.)

Country comparison to the world: 29

Current Account Balance:

\$601 million (2016 est.)

\$7.266 billion (2015 est.)

Country comparison to the world: 44

Exports:

\$43.44 billion (2016 est.)

\$43.2 billion (2015 est.)

Country comparison to the world: 50

Exports - Commodities:

Semiconductors and electronic products, machinery and transport equipment, wood manufactures, chemicals, processed food and beverages, garments, coconut oil, copper concentrates, seafood, bananas/fruits

Exports - Partners:

Japan 20.8 percent, US 15.5 percent, Hong Kong 11.7 percent, China 11 percent, Singapore 6.6 percent, Germany 4.1 percent (2016)

Imports:

\$77.52 billion (2016 est.)

\$66.51 billion (2015 est.)

Country comparison to the world: 37

Imports - Commodities:

Electronic products, mineral fuels, machinery and transport equipment, iron and steel, textile fabrics, grains, chemicals, plastic

Imports - Partners:

China 17.3 percent, Japan 11.1 percent, US 8.4 percent, Thailand 7.3 percent, South Korea 6.1 percent, Singapore 6.1 percent, Indonesia 5.1 percent (2016)

Reserves of Foreign Exchange and Gold:

\$80.69 billion (31 December 2016 est.)

\$80.67 billion (31 December 2015 est.)

country comparison to the world: 30

Debt - External:

\$75.01 billion (31 December 2016 est.)

\$77.73 billion (31 December 2015 est.)

country comparison to the world: 57

Stock of Direct Foreign Investment - At Home:

\$64.25 billion (31 December 2016 est.)

\$58.52 billion (31 December 2015 est.)

Country comparison to the world: 54

Stock of Direct Foreign Investment - Abroad:

\$45.38 billion (31 December 2016 est.)

\$41.02 billion (31 December 2015 est.)

APPENDICES

Exchange rates: Electricity - From Fossil Fuels: Philippine pesos (PHP) per US dollar -67.5 percent of total installed capacity (2016 est.) 47.493 (2016 est.) Country comparison to the world: 108 47.493 (2015 est.) **Electricity - From Nuclear Fuels:** 45.503 (2014 est.) 0 percent of total installed capacity (2016 est.) 44.395 (2013 est.) Country comparison to the world: 172 42.23 (2012 est.) **Electricity - From Hydroelectric Plants: Electricity Access:** 16.9 percent of total installed capacity (2016 est.) Population without electricity: 20,600,000 Country comparison to the world: 97 Electrification - total population: 88 percent **Electricity - From Other Renewable Sources:** Electrification - urban areas: 94 percent 15.6 percent of total installed capacity (2016 est.) Electrification - rural areas: 82 percent (2013) Country comparison to the world: 46 **Crude Oil - Production: Electricity - Production:** 90.8 billion kWh (2016 est.) 20,000 bbl/day (2016 est.) Country comparison to the world: 69 Country comparison to the world: 37 **Electricity - Consumption: Crude Oil - Exports:** 74.15 billion kWh (2016 est.) 4,942 bbl/day (2016 est.) Country comparison to the world: 38 Country comparison to the world: 63 **Electricity - Exports: Crude Oil - Imports:** 0 kWh (2016 est.) 215,800 bbl/day (2016 est.) Country comparison to the world: 188 Country comparison to the world: 30 **Electricity - Imports: Crude Oil - Proved Reserves:** 0 kWh (2016 est.) 138.5 million bbl (1 January 2017 es) Country comparison to the world: 192 Country comparison to the world: 68 **Electricity - Installed Generating Capacity: Refined Petroleum Products - Production:**

169,000 bbl/day (2014 est.)

Country comparison to the world: 56

21.21 million kW (2015 est.)

Refined Petroleum Products - Consumption:

390,000 bbl/day (2015 est.)

Country comparison to the world: 38

Refined Petroleum Products - Exports:

13,140 bbl/day (2014 est.)

Country comparison to the world: 78

Refined Petroleum Products - Imports:

186,100 bbl/day (2014 est.)

Country comparison to the world: 33

Natural Gas - Production:

2.6 billion cu m (2015 est.)

Country comparison to the world: 57

Natural Gas - Consumption:

2.6 billion cu m (2015 est.)

Country comparison to the world: 77

Natural Gas - Exports:

0 cu m (2016 est.)

Country comparison to the world: 171

Natural Gas - Imports:

0 cu m (2016 est.)

Country comparison to the world: 179

Natural Gas - Proved Reserves:

98.54 billion cu m (1 January 2017 es)

Country comparison to the world: 53

Carbon Dioxide Emissions From Consumption

of Energy:

88 million Mt (2013 est.)

Country comparison to the world: 44

Telephones - Fixed Lines:

Total subscriptions: 3,835,911

Subscriptions per 100 inhabitants: 4 (July 2016

est.)

Country comparison to the world: 47

Telephones - Mobile Cellular:

Total: 113 million

Subscriptions per 100 inhabitants: 110 (July 2016

est.)

Country comparison to the world: 13

Telephone System:

General assessment: good international radiotelephone and submarine cable services; domestic and interisland service adequate Domestic: telecommunications infrastructure includes the following platforms: fixed line, mobile cellular, cable TV, over-the-air TV, radio and Very Small Aperture Terminal (VSAT), fiber-optic cable, and satellite for redundant international connectivity

International: country code - 63; a series of submarine cables together provide connectivity to the US, and to countries like Hong Kong, Guam, Singapore, Taiwan, Japan, Brunei, and Malaysia, among others; multiple international

gateways (2016)

Broadcast Media:

Multiple national private TV and radio networks; multi-channel satellite and cable TV systems available; more than 400 TV stations; about 1,500 cable TV providers with more than 2 million subscribers, and some 1,400 radio stations; the Philippines adopted Japan's Integrated Service Digital Broadcast – Terrestrial standard for digital terrestrial television in November 2013 and is scheduled to complete the switch from analog to digital broadcasting by the end of 2023

(2016)

Internet Country Code: .ph

APPENDICES

Internet Users:

Total: 56,956,436

Percent of population: 55.5 percent (July 2016

est.)

Country comparison to the world: 17

National Air Transport System:

Number of registered air carriers: 11

Inventory of registered aircraft operated by air

carriers: 158

Annual passenger traffic on registered air

carriers: 32,230,986

Annual freight traffic on registered air carriers:

484,190,968 mt-km (2015)

Civil Aircraft Registration Country Code

Prefix:

RP (2016)

Airports: 247 (2013)

Country comparison to the world: 24

Airports - With Paved Runways:

Total: 89

Over 3,047 m: 4

2,438 to 3,047 m: 8

1,524 to 2,437 m: 33

914 to 1,523 m: 34

Under 914 m: 10 (2017)

Airports - With Unpaved Runways:

Total: 158

1,524 to 2,437 m: 3

914 to 1,523 m: 56

Under 914 m: 99 (2013)

Heliports:

2 (2013)

Pipelines:

Gas 530 km (2014); oil 138 km; refined products

185 km (2013)

Railways:

Total: 995 km

Narrow gauge: 995 km 1.067-m gauge (484 km

are in operation) (2015)

Country comparison to the world: 88

Roadways:

Total: 216,387 km

Paved: 61,093 km

Unpaved: 155,294 km (2014)

Country comparison to the world: 24

Waterways:

3,219 km (limited to vessels with draft less than

1.5 m) (2011)

Country comparison to the world: 30

Merchant Marine:

Total: 1,508

By type: bulk carrier 64, container ship 33,

general cargo 627, oil tanker 184, other 600

(2017)

Country comparison to the world: 18

Ports and Terminals:

Major seaport(s): Batangas, Cagayan de Oro,

Cebu, Davao, Liman, Manila

Container port(s) (TEUs): Manila (3,976,000)

(2015)

Military Expenditures:

1.28 percent of GDP (2016)

1.14 percent of GDP (2015)

1.09 percent of GDP (2014)

1.24 percent of GDP (2013)

1.16 percent of GDP (2012)

Country comparison to the world: 83

Military Branches:

Armed Forces of the Philippines (AFP): Army, Navy (includes Marine Corps), Air Force (2013)

Military Service Age and Obligation:

17-23 years of age (officers 20-24) for voluntary military service; no conscription; applicants must be single male or female Philippine citizens with either 72 college credit hours (enlisted) or a baccalaureate degree (officers) (2013)

Maritime Threats:

The International Maritime Bureau reports the territorial and offshore waters in the South China Sea as high risk for piracy and armed robbery against ships; during 2016, 10 attacks were reported in and around the Philippines including six ships that were boarded, one hijacked, one fired upon, and 18 crew were kidnapped for ransom; an emerging threat area lies in the Celebes and Sulu Seas between the Philippines and Malaysia where 12 crew were kidnapped in three incidents during the last quarter of 2016; it is believed the pirates involved are associated with the Abu Sayyaf Group (ASG) terrorist organization; during the first six months of 2017, 13 attacks were reported including 10 ships that were boarded, one was fired upon, 10 crew were kidnapped for ransom and two killed; numerous commercial vessels have been attacked and hijacked both at anchor and while underway; hijacked vessels are often disguised and cargo diverted to ports in East Asia; crews have been murdered or cast adrift

Disputes - International:

Philippines claims sovereignty over Scarborough Reef (also claimed by China together with Taiwan) and over certain of the Spratly Islands, known locally as the Kalayaan (Freedom) Islands, also claimed by China, Malaysia, Taiwan, and Vietnam; the 2002 "Declaration on the Conduct of Parties in the South China Sea," has eased tensions in the Spratly Islands but falls short of a legally binding "code of conduct" desired by several of the disputants; in March 2005, the national oil companies of China, the Philippines, and Vietnam signed a joint accord to conduct marine seismic activities in the Spratly Islands; Philippines retains a dormant claim to Malaysia's Sabah State in northern Borneo based on the Sultanate of Sulu's granting the Philippine Government power of attorney to pursue a sovereignty claim on his behalf; maritime delimitation negotiations continue with Palau

Refugees and Internally Displaced Persons:

IDPs: 359,680 (government troops fighting the Moro Islamic Liberation Front, the Abu Sayyaf Group, and the New People's Army; clan feuds; natural disasters) (2017)

Stateless persons: 4,636 (2016); note - stateless persons are descendants of Indonesian migrants

Illicit Drugs:

Domestic methamphetamine production has been a growing problem in recent years despite government crackdowns; major consumer of amphetamines; longstanding marijuana producer mainly in rural areas where Manila's control is limited

Acronyms and Abbreviations

Acronym	Definition
III MEB	Third Marine Expeditionary Brigade
ADB	Asian Development Bank
ADC	Agreement on Defense Cooperation
ADRA	Adventist Development and Relief Agency
AFP	Armed Forces of the Philippines
AFP-CMCC	AFP Civil-Military Coordination Center
AHA Center	ASEAN Humanitarian Assistance Center
APEC	Asia-Pacific Economic Cooperation
ARF	ASEAN Regional Forum
ASEAN	Association of Southeast Asian Nations
BCM	Bilateral Consultation Mechanism
BIHC	Bureau of International Health Cooperation
BIS	Bank for International Settlement
BME	Board of Medical Education
BNPP	Bataan Nuclear Power Plant
CARAT	Cooperation Afloat Readiness and Training
CCC	Climate Change Commission
CCCM	Camp Coordination and Camp Management
CD	Community of Democrats
CDC	Center for Disease Control and Prevention
CFE-DM	Center for Excellence in Disaster Management & Humanitarian Assistance
CIA	Central Intelligence Agency
CICA	Conference on Interaction and Confidence Building Measures in Asia
CMCC	Civil-Military Coordination Center
СР	Colombo Plan
CPI	Corruption Perception Index
CRG	Contingency Response Group
DART	Disaster Assistance Response Team
DESRON	Commander of Destroyer Squadron
DMHA	Disaster Management and Humanitarian Assistance
DMS	Disaster Management Services
DOD	Department of Defense
DOE	Department of Energy
DOH	Department of Health
DOS	Department of State
DOST	Department of Science and Technology
DPS	Development Partner Scorecard
DROMIC	Disaster Response Operations Monitoring and Information Center
DRR	Disaster Risk Reduction
DRRM	Disaster Risk Reduction and Management
DRRMCs	Disaster Risk Reduction and Management Councils
DSWD	Department of Social Welfare and Development
	- I - I - 1 - 1

Acronym	Definition
EAS	East Asia Summit
EU	European Union
EWS	Early Warning Systems
FAO	Food and Agriculture Organization of the United Nations
FAS	Foreign Assisted Projects
FDI	Foreign Direct Investment Inflows
G-24	Group of 24
G-77	Group of 77
GDP	Gross Domestic Product
GETI	Global Education and Training Institute
GFDRR	The Global Facility for Disaster Reduction and Recovery
HADR	Humanitarian Assistance and Disaster Relief
HCS	Helicopter Sea Combat Squadron
НСТ	Humanitarian Country Team
HDI	Human Development Index
HFA	Hyogo Framework for Action
HPM	Health Partners Meeting
HSC	Helicopter Sea Combat Squadron
IAEA	International Atomic Energy Agency
IBRD	International Bank for Reconstruction and Development
ICAO	International Civil Aviation Organization
ICC	International Chamber of Commerce
ICRM	Institute of Catastrophe Risk Management
IDA	International Development Association
IDPs	Internally Displaced Persons
IEC	Information, Education and Communication
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
IFRCs	International Federation of Red Cross and Red Crescent Societies
IHO	International Hydrographic Organization
ILO	International Labour Organization
IMF	International Monetary Fund
IMO	International Maritime Organization
IMSO	International Mobil Satellite Organization
INFORM	Index for Risk Management
INGOs	International Nongovernmental Organizations
IOC	International Olympic Committee
IOM	International Organization for Migration
IPU	Inter-Parliamentary Union
IRD	International Relations Division
ISO	International Organization for Standardization
ITSO	International Telecommunications Satellite Organization
ITU	International Telecommunication Union
ITUC	International Trade Union Confederation

Acronym	Definition
JAME	Joint Assessment and Monitoring and Evaluation
JICA	Japan International Cooperation Agency
LDRRMOs	Local Disaster Risk Reduction and Management Offices
LGTB	Lesbian, Gay, Transgender, and Bisexual
LGUs	Local Government Units
LRT	
MARFORPAC	Light Rail Transit Authority
	Marine Corps Forces Pacific
MCIP	Multinational Communications Interoperability Program
MDB-SEB	Mutual Defense Board and Security Engagement Board
MIGA	Multilateral Investment Guarantee Agency
MINURSO	United Nations Mission for the Referendum in Western Sahara
MINUSTAH	United Nations Stabilization Mission in Haiti
MMR	Measles-Mumps-Rubella
MPAT	Multinational Planning and Augmentation Team
MRT	Metro Rail Transit Authority
NAIA	Manila Ninoy Aquino International
NAM	Non-Aligned Movement
NAPWPS	National Plan on Women, Peace and Security
NCCAP	National Climate Change Action Plan
NCD	Non-Communicable Diseases
NCR	National Capital Region
NDRP	National Disaster Response Plan
NDRRMC	National Disaster Risk Reduction and Management Council
NDRRP	National Disaster Risk Reduction Plan
NGCP	National Grid Cooperation of the Philippines
NGO	Non-Government Organization
NOAH	Nationwide Operational Assessment of Hazards
NPC	National Power Corporation
OAS	Organization of American States
OCD	Office of Civil Defense
OCHA	Office for the Coordination of Humanitarian Affairs
OECD	Economic Cooperation and Development
OFW	Overseas Filipino Workers
OPCW	Organization for the Prohibition of Chemical Weapons
PA	Philippines Army
PAF	Philippine Air Force
PAGASA	Philippine Atmospheric, Geophysical, and Astronomical Services Administration
PAL	Philippine Airlines
PCA	Prudential Corporation Asia
PCOR	percent chance of rain
PHIVOLCS	Philippine Institute of Volcanology and Seismology
PIHAC	Philippines International Humanitarian Assistance Cluster
PNP	The Philippine National Police
PNR	Philippine National Railways
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Acronym	Definition
POEA	Philippines Overseas Employment Administration
PRC	Philippines Red Cross
RCHC	Resident Coordinator/Humanitarian Coordinator
Ro-Ro	Roll On-Roll Off
SDAH	Sector Development Approach for Health
SDG	Sustainable Development Goals
SME	Subject Matter Experts
SRP	Strategic Response Plan
SRR	Search, Rescue and Retrieval
TTX	Table Top Exercise
U.S.	United States
USPACOM	United States Pacific Command
UN	United Nations
UN CT/HCT	UN Country Team/Humanitarian Country Team
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
UNISDR	United Nations International Strategy for Disaster Reduction
UNMIL	United Nations Mission in Liberia
UNMOGIP	United Nations Military Observer Group in India and Pakistan
UNOCI	United Nations Operation in Côte d'Ivoire
UNSCR	United Nations Security Council Resolution
UNWTO	United Nations World Tourism Organization
UPU	Universal Postal Union
U.S.	United States
USAID	United States Agency for International Development
USAID OFDA	The U.S. Agency for International Development Office of U.S. Foreign Disaster Assistance
VAW	Anti-Violence Against Women
WASH	Water, Sanitation, And Hygiene
WCO	World Customs Organization
WFP	World Food Programme
WFTU	World Federation of Trade Unions
WHO	World Health Organization
WIPO	World Intellectual Property Organization
WMO	World Meteorological Organization
WTO	World Trade Organization

References (Endnotes)

¹ Philippines Department of Social Welfare and Development (DSWD). The Manual on Disaster Risk Reduction & Management for DSWD. November 2014. ² Regional Consultative Group. Humanitarian Civil-Military Coordination for Asia and the Pacific. Humanitarian Civil-Military Coordination in Emergencies: Towards a Predictable Model. 2017. https://www.acmc.gov. au/preparedness/predictable-model/ ³ U.S. Pacific Command. Philippine, US Troops Train Together to Provide Relief from the Sea to Remote Areas. Staff Sgt. Christopher McCullough. U.S. Marine Corps Forces, Pacific. May 18, 2017. http://www.pacom. mil/Media/News/News-Article-View/Article/1186580/ philippine-us-troops-train-together-to-provide-relieffrom-the-sea-to-remote-ar/ ⁴ U.S. Pacific Command. Armed Forces of the Philippines and U.S. Pacific Command Reinforce 'Historic Alliance'. Mass Communications Specialist 2nd Class James D. Mullen. October 2, 2017. http://www.pacom.mil/Media/ News/News-Article-View/Article/1331886/armed-forcesof-the-philippines-and-us-pacific-command-reinforcehistoric-allia/ ⁵ Regional Consultative Group. Humanitarian Civil-Military Coordination for Asia and the Pacific. Humanitarian Civil-Military Coordination in Emergencies: Towards a Predictable Model. 2017. https://www.acmc.gov. au/preparedness/predictable-model/ ⁶ UNFPA. Philippines. Emergencies. http://philippines. unfpa.org/en/node/15308 ⁷ Regional Consultative Group. Humanitarian Civil-Military Coordination for Asia and the Pacific. Humanitarian Civil-Military Coordination in Emergencies: Towards a Predictable Model. 2017. https://www.acmc.gov. au/preparedness/predictable-model/ 8 National Oceanic and Atmospheric Administration (NOAA). The Ring of Fire is a string of underwater volcanoes and earthquake sites around the edges of the Pacific Ocean. http://oceanexplorer.noaa.gov/facts/rof.html ⁹ UNFPA. Philippines. Emergencies. http://philippines. unfpa.org/en/node/15308 ¹⁰ Give2Asia. Disaster Preparedness and Resiliency: The Philippines. http://www.give2asia.org/disasterpreparedness-and-resilience-philippines/
Give to Asia. Disaster Preparedness and Resiliency: The Philippines. http://www.give2asia.org/disasterpreparedness-and-resilience-philippines/ Regional Consultative Group. Humanitarian Civil-Military Coordination for Asia and the Pacific. Humanitarian Civil-Military Coordination in Emergencies: Towards a Predictable Model. 2017. https://www.acmc.gov. au/preparedness/predictable-model/ ¹³ Regional Consultative Group. Humanitarian Civil-Military Coordination for Asia and the Pacific. Humanitarian Civil-Military Coordination in Emergencies: Towards a Predictable Model. 2017. https://www.acmc.gov. au/preparedness/predictable-model/ ¹⁴ Regional Consultative Group. Humanitarian Civil-Military Coordination for Asia and the Pacific. Humanitarian Civil-Military Coordination in Emergencies: Towards a Predictable Model. 2017. https://www.acmc.gov.

¹⁵ Prevention Web. National Disaster Risk Reduction & Management Council (NDRRMC), Philippinesgov. Philippines. National progress report on the implementation of the Hyogo Framework for Action (2013-2015). April 23, 2015. https://www.preventionweb.net/files/43379_PHL_NationalHFAprogress_2013-15.pdf ¹⁶ CFE-DM. Advances in Civil-Military Coordination in Catastrophes. How the Philippines Turned Lessons Learned from Super Typhoon Haiyan (Yolanda) Into Best Practices for Disaster Preparedness and Response. 2015. https://www.cfe-dmha.org/LinkClick.aspx?fileticket=QED CMlMtTc4%3d&portalid=0 ¹⁷ Government of the Philippines. About the Philippines: The Philippines. https://www.gov.ph/about-the-philippines ¹⁸ Philippines Statistics Authority. 2018. Statistical Figures. http://www.psa.gov.ph/ ¹⁹ Infolinks. Philippine History: Synopsis of Philippine History. http://www.philippine-history.org/ ²⁰ United Nations (UN). UN Member States. Activities of the Member States: Founding Member States. http://www. un.org/depts/dhl/unms/founders.shtml ²¹ Association of Southeast Asian Nations (ASEAN). History: The Founding of ASEAN. http://asean.org/asean/ about-asean/history/ ²² World Trade Organization (WTO). Member Information. Philippines and the WTO. https://www.wto. org/english/thewto_e/countries_e/philippines_e.htm ²³ Association of Southeast Asian Nations (ASEAN). Kuala Lumpur Declaration on the East Asian Summit Kuala Lumpur, 14 December 2005. http://asean.org/?static_ post=kuala-lumpur-declaration-on-the-east-asia-summitkuala-lumpur-14-december-2005 ²⁴ Government of the Philippines. The Philippines. https:// www.gov.ph/about-the-philippines ²⁵ United Nations Development Programme (UNDP). Philippines: About the Philippines. http://www.ph.undp. org/content/philippines/en/home/countryinfo.html ²⁶ Flags of the World. 2015. Philippines. https://fotw.info/ ²⁷ Every Culture. Countries and their culture: The Philippines. http://www.everyculture.com/No-Sa/The-Philippines.html ²⁸ Every Culture. Countries and their culture: The Philippines. http://www.everyculture.com/No-Sa/The-

Philippines.html

²⁹ Photo Credit: Bro. Jeffery Pioquinto, SJ. 2014. Street dancing in Davao City. https://www.flickr.com/ photos/90412460@N00/13180012364/in/photolist-m5F1uu ³⁰ Every Culture. Countries and their culture: The Philippines. http://www.everyculture.com/No-Sa/The-Philippines.html

³¹ Government of the Philippines. Republic of the Philippines. Office of the President. National Commission for Culture and the Arts. 2015. Philippines Fast Facts. http://ncca.gov.ph/about-culture-and-arts/culture-profile/ philippine-fast-facts/

³² Worldatlas. 2018. World Map. Asia. Philippines. Philippines Fast Facts. https://www.worldatlas.com/ webimage/countrys/asia/philippines/phfacts.htm ³³ Government of the Philippines. Republic of the Philippines. Office of the President. National Commission for Culture and the Arts. 2015. Philippines Fast Facts. http://ncca.gov.ph/about-culture-and-arts/culture-profile/ philippine-fast-facts/

au/preparedness/predictable-model/

³⁴ Every Culture. Countries and their culture: The Philippines. http://www.everyculture.com/No-Sa/The-Philippines.

Philippines.html

³⁵ The Daily Tribune. Tribune Wires. November 21, 2016. Estrada declares capital city, its 1.7 million residents '80% ready' when 'Big One' comes. http://manila.gov.ph/estrada-declares-capital-city-its-1-7-million-residents-80-ready-when-big-one-comes/

³⁶ Every Culture. Countries and their culture: The Philippines. http://www.everyculture.com/No-Sa/The-

Philippines.html

³⁷ Every Culture. Countries and their culture: The Philippines. http://www.everyculture.com/No-Sa/The-Philippines.html

³⁸ Photo Credit: chubiprince. 2015. Metro Manila Skyline. https://www.flickr.com/photos/chubiprince/27741680552/

in/photolist-5DFQT5

³⁹ Government of the Philippines. Republic of the Philippines. Office of the President. National Commission for Culture and the Arts. 2015. Philippines Fast Facts. http://ncca.gov.ph/about-culture-and-arts/culture-profile/philippine-fast-facts/

⁴⁰ Worldatlas. 2018. World Map. Asia. Philippines. Philippines Fast Facts. https://www.worldatlas.com/webimage/countrys/asia/philippines/phfacts.htm

 ⁴¹ Center for Global Education. Religion in the Philippines. https://asiasociety.org/education/religion-philippines
 ⁴² Photo Credit: Bernard Spragg. NZ. 2014. Saint Augustine Church. Paoya. https://www.flickr.com/photos/volvob12b/17133467154/in/photolist-s72uS7

⁴³ UCA News. Philippine women, children trapped in cycles of abuse. March 3, 2016.

⁴⁴ UNICEF. A Systematic Literature Review of the Drivers of Violence Affecting Children: the Philippines. October 2016.

⁴⁵ UCA News. Philippine women, children trapped in cycles of abuse. March 3, 2016.

⁴⁶ Humanist Alliance of the Philippines, International (HAPI). 2017. Written By Danielle Erika Hill and Scott Douglas Jacobsen. Women's rights in the Philippines-An overview. https://hapihumanist.org/humanism/womens-rights-philippines-overview/

⁴⁷ UCA News. Philippine women, children trapped in

cycles of abuse. March 3, 2016.

^{48'} UNFPA Philippines. Eruption in Mayon Volcano displaces pregnant women and new mothers. February 20, 2018. http://philippines.unfpa.org/en/news/eruptionmayon-volcano-displaces-pregnant-women-and-newmothers

⁴⁹ Photo source: UNFPA Philippines. Eruption in Mayon Volcano displaces pregnant women and new mothers. February 20, 2018. http://philippines.unfpa.org/en/news/eruption-mayon-volcano-displaces-pregnant-women-and-new-mothers

⁵⁰ USAID. Frontiers in Development. 2014. Ending Extreme Poverty. https://www.usaid.gov/sites/default/files/documents/1870/USAID_Frontiers_in_

Development_2014.pdf

⁵¹ Lead Inspector General Report to the United States Congress. Overseas Contingency Operations. Operation Inherent Resolve Pacific Eagle-Philippines. October 1, 2017-December 31, 2017.

⁵² USAID. Frontiers in Development. 2014. Ending Extreme Poverty. https://www.usaid.gov/sites/ default/files/documents/1870/USAID_Frontiers_in_ Development_2014.pdf

- Hope.org. 2013. Philippines: Street children at risk. http://www.hope.org.ph/street-children-at-risk.html
 Index Mundi. 2018. Philippines Economy-Overview. https://www.indexmundi.com/philippines/economy_overview.html
- 55 Index Mundi. 2018. Philippines Economy-Overview. https://www.indexmundi.com/philippines/economy_overview.html
- ⁵⁶ Every Culture. Countries and their culture: The Philippines. http://www.everyculture.com/No-Sa/The-Philippines.html
- ⁵⁷ Philippine Overseas Employment Administration (POEA). Overseas Filipino Workers. http://www.poea.gov.ph/
- ph/ ⁵⁸ Every Culture. Countries and their culture: The Philippines. http://www.everyculture.com/No-Sa/The-Philippines.html
- ⁵⁹ Every Culture. Countries and their culture: The Philippines. http://www.everyculture.com/No-Sa/The-Philippines.html
- ⁶⁰ Every Culture. Countries and their culture: The Philippines. http://www.everyculture.com/No-Sa/The-Philippines.html

⁶¹ Jane's by IHS Market. Jane's Sentinel Security Assessment-Southeast Asia. February 3, 2017.

⁶² The Diplomat. Why Is the Philippines Turning Away Foreign Aid? Can Manila afford to reject foreign aid on the grounds of donor countries imposing political conditions? May 25, 2017. Chitra Purushothaman. https://thediplomat.com/2017/05/why-is-the-philippines-turning-away-foreign-aid/

⁶³ Human Rights Watch. Philippines: Endorse UN Inquiry into 'Drug War' Killings. February 1, 2018. https://www.hrw.org/news/2018/02/01/philippines-endorse-un-inquiry-drug-war-killings

ui ug-wai-killiligs

⁶⁴ Email communication from COL Roger Luna, Warfighting Center at the AFP Command and General Staff College (CGSC). April 5, 2018.

⁶⁵ Asian Info. Philippines: Geography of the Philippines. http://www.asianinfo.org/asianinfo/philippines/progeography.htm

⁶⁶ Asian Info. Philippines: Geography of the Philippines. http://www.asianinfo.org/asianinfo/philippines/pro-

geography.htm

⁶⁷ Asian Info. Philippines: Geography of the Philippines. http://www.asianinfo.org/asianinfo/philippines/progeography.htm

⁶⁸ Asian Info. Philippines: Geography of the Philippines. http://www.asianinfo.org/asianinfo/philippines/pro-

geography.htm

 ⁶⁹ Country Studies. US Library of Congress. Philippines: Geography. http://countrystudies.us/philippines/31.htm
 ⁷⁰ Country Studies. US Library of Congress. Philippines: Geography. http://countrystudies.us/philippines/31.htm
 ⁷¹ The World Factbook. East & Southeast Asia: Philippines. https://www.cia.gov/library/publications/the-world-factbook/geos/rp.html

⁷² Asian Info. Philippines: Geography of the Philippines. http://www.asianinfo.org/asianinfo/philippines/pro-

geography.htm

⁷³ Republic of the Philippines. Philippine Atmospheric, Geophysical and Astronomical Services Administration. https://www1.pagasa.dost.gov.ph/index.php/27climatology-and-agrometeorology ⁷⁴ Asian Info. Philippines: Geography of the Philippines. http://www.asianinfo.org/asianinfo/philippines/pro-

geography.htm

The World Bank. 2013. Getting a grip on climate change in the Philippines: Executive report. http://documents. worldbank.org/curated/en/473371468332663224/Gettinga-grip-on-climate-change-in-the-Philippines-executivereport

⁷⁶ Climate Change Commission. 2012. Philippines: National climate change action plan 2011-2018. https:// www.scribd.com/document/93600643/Nation-Climate-

Change-Action-Plan-2011-2028

⁷⁷ The World Bank. 2013. Turn down the heat: climate extremes, regional impacts, and the case for resilience. http://documents.worldbank.org/curated/ en/975911468163736818/pdf/784240WP0Full00D0CONF 0to0June19090L.pdf

⁷⁸ The World Bank. 2013. Turn down the heat: Climate extremes, regional impacts, and the case for resilience. http://documents.worldbank.org/curated/ en/975911468163736818/pdf/784240WP0Full00D0CONF 0to0June19090L.pdf

⁷⁹ The World Bank. 2013. Turn down the heat: Climate extremes, regional impacts, and the case for resilience. http://documents.worldbank.org/curated/ en/975911468163736818/pdf/784240WP0Full00D0CONF

0to0June19090L.pdf

80 Photo Credit: DVIDSHUB. NOV 2013. Service members provide support during Operation Damayan (Image 3 of 10). Photo ID:1054746. Location:GUIUAN, PH. https:// www.flickr.com/photos/dvids/10928400543/in/photolisthDGUK2

81 UNFPA. Philippines. Emergencies. http://philippines. unfpa.org/en/node/15308

82 Climate Reality Project. 2016. How is climate change affecting the Philippines. https://www.climaterealityproject. org/blog/how-climate-change-affecting-philippines 83 ADRC. 2011. Philippines' Country Profile. http://www. adrc.asia/countryreport/PHL/2011/FY2011A_PHL_

84 Forbes. By Trevor Nance. January 22, 2018. Latest Mount Mayon Volcano Eruption Update: Ash and Lava Choke the Philippines. https://www.forbes.com/sites/ trevornace/2018/01/22/mount-mayon-volcano-eruptionupdate-philippines/#6d4268563796

85 ADRĈ. 2011. Philippines' Country Profile. http://www. adrc.asia/countryreport/PHL/2011/FY2011A_PHL_

CR.pdf

⁸⁶ Center for Environmental Geomatics. Manila Observatory. Mapping Philippine Vulnerability to Environmental Disasters. Geophysical Risk Maps. http:// vm.observatory.ph/geophys_maps.html

⁸⁷ Ignacio, Jose & Henry, Sabine. (2013). Assessing the vulnerability of populations at high risk to coastal river flooding in the Philippines. 78-92. 10.13140/2.1.4970.3365 https://www.researchgate.net/publication/267748256_ Assessing_the_vulnerability_of_populations_at_high_ risk_to_coastal_river_flooding_in_the_Philippines 88 Center for Environmental Geomatics. Manila Observatory. Mapping Philippine Vulnerability to Environmental Disasters. Geophysical Risk Maps. http:// vm.observatory.ph/geophys_maps.html 89 Center for Environmental Geomatics. Manila Observatory. Mapping Philippine Vulnerability to Environmental Disasters. Geophysical Risk Maps. http://

vm.observatory.ph/geophys_maps.html

90 UNISDR. 2010. ASEAN Disaster Risk Management Initiative. Synthesis Report on Ten ASEAN Countries Disaster Risks Assessment. http://www.unisdr.org/ files/18872_asean.pdf

⁹¹ Reliefweb. IFRC. Philippines: Mayon Volcano -Information Bulletin n° 1. January 16, 2018. https://reliefweb.int/report/philippines/philippines-mayonvolcano-information-bulletin-n-1

92 OCHA. Asia and the Pacific: Weekly Regional Humanitarian Snapshot (13 - 19 February 2018). https:// reliefweb.int/sites/reliefweb.int/files/resources/ROAP_ Snapshot_180219.pdf

93 Reliefweb. 2017. Tropical Cyclon Tembin-Dec 2017. Overview. https://reliefweb.int/disaster/tc-2017-000182-phl 94 Reilefweb. 2018. NDRRMC Update Sitrep No. 27 re Preparedness Measures and Effects of Tropical Storm "Urduja" (Kai Tak) as of 8:00 PM, 04 February 2018. https://reliefweb.int/report/philippines/ndrrmc-updatesitrep-no-27-re-preparedness-measures-and-effectstropical-storm

95 Reliefweb. 2017. Philippines: Earthqakes-Jul 2017. Overview. https://reliefweb.int/disaster/eq-2017-000080-

phl ⁹⁶ Reliefweb. 2017. Philippines: Earthqakes-Feb 2017. Overview. https://reliefweb.int/disaster/eq-2017-000016-

Reliefweb. 2017. Philippines: Floods and Landslides-Jan 2017. Overview. https://reliefweb.int/disaster/fl-2017-000010-phl

98 Reliefweb. 2016. Typhoon Haima-Oct 2016. Overview. https://reliefweb.int/disaster/tc-2016-000110-phl 99 Reliefweb. 2016. Philippines: Floods and Landslides- Aug 2016. Overview. https://reliefweb.int/disaster/fl-2016-000084-phl

 $^{\rm 100}$ Reliefweb. 2015. Typhoon Melor-Dec 2015. Overview. https://reliefweb.int/disaster/tc-2015-000168-phl ¹⁰¹ Reliefweb. 2015. Typhoon Koppu-Oct 2015. Overview. https://reliefweb.int/disaster/tc-2015-000143-phl ¹⁰² Reliefweb. 2014. Typhoon Hagupit-Dec 2014. Overview. https://reliefweb.int/disaster/tc-2014-000160-phl ¹⁰³ Reliefweb. 2014. Typhoon Rammasun-Jul 2014. Overview. https://reliefweb.int/disaster/tc-2014-000092-phl ¹⁰⁴ Reliefweb. 2013. Typhoon Haiyan-Nov 2013. Overview. https://reliefweb.int/disaster/tc-2013-000139-phl ¹⁰⁵ Reliefweb. 2013. Typhoon Nari-Oct 2013. Overview. https://reliefweb.int/disaster/tc-2013-000132-phl ¹⁰⁶ Legitimate Philippines. December 26, 2013. Environmental problems in the Philippines. http:// legitipines.com/blog/environment-problems-philippines/ Legitimate Philippines. December 26, 2013. Environmental problems in the Philippines. http:// legitipines.com/blog/environment-problems-philippines/ ¹⁰⁸ Legitimate Philippines. December 26, 2013. Environmental problems in the Philippines. http:// legitipines.com/blog/environment-problems-philippines/ ¹⁰⁹ Legitimate Philippines. December 26, 2013. Environmental problems in the Philippines. http:// legitipines.com/blog/environment-problems-philippines/ ¹¹⁰ INFORM. 2018. Philippines. http://www.inform-index. org/Countries/Country-profiles/iso3/PHL ¹¹¹ Regional Consultative Group. Humanitarian Civil-Military Coordination for Asia and the Pacific. Humanitarian Civil-Military Coordination in Emergencies:

Towards a Predictable Model. 2017. https://www.acmc.gov.

au/preparedness/predictable-model/

¹¹² Regional Consultative Group. Humanitarian Civil-Military Coordination for Asia and the Pacific. Humanitarian Civil-Military Coordination in Emergencies: Towards a Predictable Model. 2017. https://www.acmc.gov. au/preparedness/predictable-model/

¹¹³ ActionAid. ActionAid in the Philippines. http://

actionaid.org/philippines

¹¹⁴ ADRA Philippines. About Us. http://adra.ph/index.php/ about-us/

¹¹⁵ ADB. Typhoon Haiyan: ADB's Response. https://www. adb.org/countries/philippines/typhoon-haiyan-adbs-

¹¹⁶ Australian Government. Department of Foreign Affairs and Trade. Development assistance in the Philippines. http://dfat.gov.au/geo/philippines/development-assistance/ pages/development-assistance-in-philippines.aspx ¹¹⁷ Care. What we do. http://care-philippines.org/what-we-

¹¹⁸ Philippine Red Cross. Disaster Management Services. https://www.redcross.org.ph/what-we-do/disastermanagement-services

119 Food and Agriculture Organization of the United Nations. Philippines: Our Office. http://www.fao.org/ philippines/fao-in-philippines/en/

¹²⁰ GFDRR. Philippines. https://www.gfdrr.org/philippines 121 IOM. Philippines. Overview. https://www.iom.int/ countries/philippines

122 JICA. Philippines. https://www.jica.go.jp/philippine/

english/index.html

¹²³ OCHA. About OCHA Philippines. http://www.unocha. org/country/philippines/about-ocha-philippines/aboutocha-philippines

¹²⁴ Plan International. Disaster Risk Management in the Philippines. https://plan-international.org/philippines/ disaster-risk-management-philippines

¹²⁵ Save the Children. Philippines. http://www. savethechildren.org/site/c.8rKLIXMGIpI4E/ b.6150549/k.9681/Philippines.htm?msource=wexgg phe1012&gclid=EAIaIQobChMI5I7Virul2QIVSmp-Ch2i9g09EAAYASAAEgKyrfD_BwE

¹²⁶ UNICEF. UNICEF Philippines. https://www.unicef.org/

philippines/aboutus.html#.WoQ0lExFzx4

²⁷ UNDP. Philippines. Crisis prevention & recovery. http:// www.ph.undp.org/content/philippines/en/home/ourwork/ crisispreventionandrecovery/overview.html

¹²⁸ UNFPA. Philippines. http://philippines.unfpa.org/en/

about-unfpa-philippines

¹²⁹ USAID. Philippines: Humanitarian Assistance. https:// www.usaid.gov/philippines/humanitarian-assistance 130 World Food Program. What the World Food Programme is doing in the Philippines. http://www1.wfp. org/countries/philippines

¹³¹ World Health Organization. Typhoon- affected communities in the Philippines vulnerable to disease outbreaks. http://www.who.int/hac/crises/phl/

sitreps/28october2015/en/

¹³² World Vision. Disaster Response. https://www. worldvision.org.ph/our-work/disaster-response 133 International Federation of Red Cross and Red Crescent Societies. Our vision and mission. http://www.ifrc.org/en/ who-we-are/vision-and-mission/

¹³⁴ Email communication from Gabrielle Emery, International Federation of Red Cross and Red Crescent Societies. February 14, 2018.

¹³⁵ Philippine Red Cross. Disaster Management Services. https://www.redcross.org.ph/what-we-do/disastermanagement-services

¹³⁶ Philippine Red Cross. EU briefed on how they can contribute to PRC's Disaster Operations. January 14, 2018. https://www.redcross.org.ph/press/news/eu-briefed-onhow-they-can-contribute-to-prc-s-disaster-operations ¹³⁷ Philippine Red Cross. Philippine Red Cross Constructs Latrines for Mayon-Displaced Families. January 30, 2018. https://www.redcross.org.ph/press/news/philippine-redcross-constructs-latrines-for-mayon-displaced-families ¹³⁸ USAID. Philippines: Humanitarian Assistance. https:// www.usaid.gov/philippines/humanitarian-assistance ¹³⁹ USAID. Philippines: Humanitarian Assistance. https:// www.usaid.gov/philippines/humanitarian-assistance ¹⁴⁰ USAID. Philippines. Disaster Assistance. https://www. usaid.gov/crisis/philippines

¹⁴¹ USAID. Philippines Complex Emergency. Fact Sheet #1, Fiscal Year (FY) 2018. December 20, 2017. https://www. usaid.gov/sites/default/files/documents/1866/12.20.17_-USAID-DCHA_Philippines_Complex_Emergency_Fact_

Sheet 1.pdf

¹⁴² USAID. Philippines. https://www.usaid.gov/philippines ¹⁴³ U.S. Embassy in the Philippines. U.S. Embassy Manila. https://ph.usembassy.gov/embassy/manila/

¹⁴⁴ U.S. Embassy in the Philippines. U.S. Embassy Manila. https://ph.usembassy.gov/embassy/manila/

¹⁴⁵ Jane's by IHS Market. Jane's Sentinel Security Assessment-Southeast Asia. February 3, 2017. ¹⁴⁶ U.S. Department of State. U.S. Relations with the Philippines. Bureau of East Asian and Pacific Affairs Fact Sheet. December 15, 2016. February 1, 2018. https://www.

state.gov/r/pa/ei/bgn/2794.htm

¹⁴⁷ Jane's by IHS Market. Jane's Sentinel Security Assessment-Southeast Asia. February 3, 2017. 148 Regional Consultative Group. Humanitarian Civil-Military Coordination for Asia and the Pacific. Humanitarian Civil-Military Coordination in Emergencies: Towards a Predictable Model. 2017. https://www.acmc.gov.

¹⁴⁹ Regional Consultative Group. Humanitarian Civil-Military Coordination for Asia and the Pacific. Humanitarian Civil-Military Coordination in Emergencies: Towards a Predictable Model. 2017. https://www.acmc.gov.

au/preparedness/predictable-model/

au/preparedness/predictable-model/

¹⁵⁰ Photo credit: COMSEVENTHFLT. 131114-N-BX824-209 Tacloban, Republic of The Philippines (Nov. 14, 2013). U.S. Navy photo by Mass Communication Specialist 3rd Class Ricardo R. Guzman/Released https://www.flickr. com/photos/us7thfleet/10864374965

¹⁵¹ Photo credit: COMSEVENTHFLT. 131114-N-BX824-209 Tacloban, Republic of The Philippines (Nov. 14, 2013). U.S. Navy photo by Mass Communication Specialist 3rd Class Ricardo R. Guzman/Released https://www.flickr.

com/photos/us7thfleet/10864374965

152 International Federation of Red Cross and Red Crescent Societies. ASEAN Disaster Law Mapping. Implementing AADMER: ASEAN Country Profiles. 2017. Document provided by Gabby Emery from IFRC on February 2, 2018 via email.

¹⁵³ Regional Consultative Group. Humanitarian Civil-Military Coordination for Asia and the Pacific. Humanitarian Civil-Military Coordination in Emergencies: Towards a Predictable Model. 2017. https://www.acmc.gov. au/preparedness/predictable-model/

154 Regional Consultative Group. Humanitarian Civil-Military Coordination for Asia and the Pacific. Humanitarian Civil-Military Coordination in Emergencies: Towards a Predictable Model. 2017. https://www.acmc.gov. au/preparedness/predictable-model/

¹⁵⁵ Regional Consultative Group. Humanitarian Civil-Military Coordination for Asia and the Pacific. Humanitarian Civil-Military Coordination in Emergencies: Towards a Predictable Model. 2017. https://www.acmc.gov. au/preparedness/predictable-model/

¹⁵⁶ Prevention Web. Philippines: The National Disaster Risk Reduction and Management Plan (NDRRMP) 2011-2028. https://www.preventionweb.net/english/policies/v.

php?id=35457&cid=135 157 Strengthening Disaster Risk Reduction in the Philippines: Strategic National Action Plan 2009-2019. http://www.adrc.asia/countryreport/PHL/2009/PHL_ attachment.pdf

¹⁵⁸ NDRRMC. National Disaster Response Plan (NDRP)

Earthquake and Tsunami Version 2.

159 Regional Consultative Group. Humanitarian Civil-Military Coordination for Asia and the Pacific. Humanitarian Civil-Military Coordination in Emergencies: Towards a Predictable Model. 2017. https://www.acmc.gov. au/preparedness/predictable-model/

¹⁶⁰ NDRRMC and MMDRRMC. Metro Manila Earthquake Contingency Plan. 2015. http://www.pha.org.ph/images/

letters/oplan_metro_yakal_plus.pdf

161 AFP Contingency Plan "PAGLIGTAS" Response Plan to the 7.2 Magnitude Earthquake (West Valley Fault Movement). 2017.

 $^{\rm 162}$ Government of the Philippines. Philippines Presents Phl National Chemical, Biological, Radiological and Nuclear Action Plan. December 19, 2014. https://genevapm.dfa.gov. ph/embassy-news/153-philippines-presents-phl-nationalchemical-biological-radiological-and-nuclear-action-plan ¹⁶³ Ready or not? Third progress report on the implementation of the Guidelines for the domestic facilitation and regulation of international disaster relief and initial recovery assistance. November 2015. http:// www.ifrc.org/Global/Photos/Secretariat/201506/IDRL%20

¹⁶⁴ Republic of the Philippines Office of Civil Defense (OCD) Department of National Defense. Capacity Building and Training Service. https://trainingalphasite.

wordpress.com/about-us/

Progress%20Report%20(final).pdf

¹⁶⁵ Prevention Web. Mainstreaming Disaster Risk Reduction and Climate Change Adaptation into Development Policies and Planning Workshop - Manila, Philippines. https://www.preventionweb.net/events/ view/47230?id=47230

¹⁶⁶ The Guardian. UN hails Philippines' Typhoon Koppu response as model for others to follow. Carla Kweifio-Okai. October 23, 2015. https://www.theguardian.com/globaldevelopment/2015/oct/23/philippines-typhoon-koppu-unhails-model-response-disaster-risk-reduction ¹⁶⁷ GOVPH. Republic of the Philippines. Disaster Information, Mitigation and Management. https://www. gov.ph/disaster-information-mitigation-and-management $^{\rm 168}$ IRIN. Mobile phone app could help disaster preparedness. October 19, 2012. http://www.irinnews.org/ report/96588/philippines-mobile-phone-app-could-helpdisaster-preparedness

¹⁶⁹ Photo Source: David Swanson/IRIN. Mobile phone app could help disaster preparedness. October 19, 2012. http:// www.irinnews.org/report/96588/philippines-mobilephone-app-could-help-disaster-preparedness

¹⁷⁰ Republic of the Philippines. Department of Science and Technology Regional Office No. XII. Flood Prone Areas in N. Cotabato to Receive Early Warning Devices. October 3, 2017. http://region12.dost.gov.ph/index.php/14-news-andannouncements/161-flood-prone-areas-in-n-cotabato-toreceive-early-warning-devices

¹⁷¹ Reliefweb. Government of the Philippines. DOST brings early warning system IEC to CAR provinces. January 5, 2016. https://reliefweb.int/report/philippines/dost-brings-

early-warning-system-iec-car-provinces

¹⁷² Republic of the Philippines. Philippine Atmospheric, Geophysical and Astronomical Services Administration. Products and Services. https://www1.pagasa.dost.gov.ph/ index.php/products-and-services

¹⁷³ Department of Science and Technology Service Institute. Philippine Institute of Volcanology and Seismology (PHIVOLCS). May 8, 2008. http://www.phivolcs.dost.gov. ph/index.php?option=com_content&view=article&id=13& Îtemid=300075

¹⁷⁴ Regional Consultative Group. Humanitarian Civil-Military Coordination for Asia and the Pacific. Humanitarian Civil-Military Coordination in Emergencies: Towards a Predictable Model. 2017. https://www.acmc.gov. au/preparedness/predictable-model/

¹⁷⁵ Regional Consultative Group. Humanitarian Civil-Military Coordination for Asia and the Pacific. Humanitarian Civil-Military Coordination in Emergencies: Towards a Predictable Model. 2017. https://www.acmc.gov. au/preparedness/predictable-model/

¹⁷⁶ Regional Consultative Group. Humanitarian Civil-Military Coordination for Asia and the Pacific. Humanitarian Civil-Military Coordination in Emergencies: Towards a Predictable Model. 2017. https://www.acmc.gov. au/preparedness/predictable-model/

¹⁷⁷ Asian Development Bank. Philippines Transport Sector Assessment, Strategy, and Road Map. 2012. https://www.adb.org/sites/default/files/institutional-document/33700/ files/philippines-transport-assessment.pdf ¹⁷⁸ Jane's By IHS Market. Jane's Sentinel Security Assessment-Southeast Asia. February 3, 2017.

¹⁷⁹ World Economic Forum. Competitiveness Rankings. http://reports.weforum.org/globalcompetitiveness-report-2015-2016/competitiveness-

rankings/#indicatorId=GCI.A.02

¹⁸⁰ The Daily Tribune. Tribune Wires. November 21, 2016. Estrada declares capital city, its 1.7 million residents '80% ready' when 'Big One' comes. http://manila.gov.ph/estradadeclares-capital-city-its-1-7-million-residents-80-readywhen-big-one-comes/

¹⁸¹ IRIN. Anti-flood measures announced for Manila. September 14, 2012. http://www.irinnews.org/ news/2012/09/14-0

¹⁸² Photo Source: Jason Gutierrez/IRIN. Image ID# 201208100940420825. August 9, 2012. http://www. irinnews.org/photo/201208100940420825/2012081009404 20825jpg

¹⁸³ Jane's By IHS Market. Jane's Sentinel Security Assessment-Southeast Asia. February 3, 2017. ¹⁸⁴ Jane's By IHS Market. Jane's Sentinel Security Assessment-Southeast Asia. February 3, 2017. 185 Jane's By IHS Market. Jane's Sentinel Security Assessment-Southeast Asia. February 3, 2017. ¹⁸⁶ Jane's By IHS Market. Jane's Sentinel Security Assessment-Southeast Asia. February 3, 2017. ¹⁸⁷ Jane's By IHS Market. Jane's Sentinel Security Assessment-Southeast Asia. February 3, 2017.

¹⁸⁸ Asian Development Bank. Philippines Transport Sector Assessment, Strategy, and Road Map. 2012. https://www. adb.org/sites/default/files/institutional-document/33700/ files/philippines-transport-assessment.pdf ¹⁸⁹ Jane's By IHS Market. Jane's Sentinel Security Assessment-Southeast Asia. February 3, 2017. ¹⁹⁰ Asian Development Bank. ADB \$380 Million Loan to Improve Roads in Mindanao, Philippines. December 15, 2017. https://www.adb.org/news/adb-380-million-loanimprove-roads-mindanao-philippines ¹⁹¹ Republic of the Philippines. Department of Public Works and Highways. About Us. http://www.dpwh.gov.ph/ dpwh/content/about-dpwh Asian Development Bank. Philippines Transport Sector Assessment, Strategy, and Road Map. 2012. https://www.adb.org/sites/default/files/institutional-document/33700/ files/philippines-transport-assessment.pdf ¹⁹³ CNN. Philippines' brightly decorated jeepneys face an uncertain future. November 12, 2017. https://www.cnn. com/style/article/jeepney-philippines-cultural-icon/index. 194 Photo Source: Manila by Patrick Kranzlmuller. https:// www.flickr.com/photos/sehmaschine/2466755579 ¹⁹⁵ Tripsavvy. Guide to Manila's Commuter Train System. Michael Aquino. November 24, 2017. https://www. tripsavvy.com/guide-to-manilas-commuter-trainsystem-1629569 196 Jane's By IHS Market. Jane's Sentinel Security Assessment-Southeast Asia. February 3, 2017. ¹⁹⁷ Philippine National Railways. Route Map. http://www. pnr.gov.ph/getting-around/route-map ¹⁹⁸ Jane's By IHS Market. Jane's Sentinel Security Assessment-Southeast Asia. February 3, 2017. 199 Photo Source: Basco, Batanes by Glendale Lapastora. https://www.flickr.com/photos/glendale2000/26221398964/ ²⁰⁰ Republic of the Philippines Department of Education. About DepEd. http://www.deped.gov.ph/mandate ²⁰¹ UNESCO. Asia and Pacific Regional Bureau for Education. 2014. Education Policy Research Series Discussion Document No. 5. Education Systems in ASEAN+6 Countries: A Comparative Analysis of Selected Educational Issues. http://unesdoc.unesco.org/ images/0022/002267/226757E.pdf $^{\rm 202}$ Republic of the Philippines Department of Education. K to 12 Basic Education Curriculum. http://www.deped.gov. ph/k-to-12/bec-cgs/als-program ²⁰³ Relief Web. IRIN. Teaching disaster preparedness in schools. November 28, 2012. https://reliefweb.int/report/ philippines/teaching-disaster-preparedness-schools ²⁰⁴ Jane's By IHS Market. Jane's Sentinel Security Assessment-Southeast Asia. February 3, 2017. ²⁰⁵ IRIN. Mobile phone app could help disaster preparedness. October 19, 2012. http://www.irinnews.org/ report/96588/philippines-mobile-phone-app-could-helpdisaster-preparedness ²⁰⁶ Jane's By IHS Market. Jane's Sentinel Security Assessment-Southeast Asia. February 3, 2017. ²⁰⁷ Central Intelligence Agency. The World Factbook. East & Southeast Asia: Philippines. https://www.cia.gov/library/ publications/the-world-factbook/geos/rp.html

8 Jane's By IHS Market. Jane's Sentinel Security

²⁰⁹ Central Intelligence Agency. The World Factbook. East

& Southeast Asia: Philippines. https://www.cia.gov/library/

Assessment-Southeast Asia. February 3, 2017.

publications/the-world-factbook/geos/rp.html

²¹⁰ Eco-Business. By Medilyn Manibo. 2014. Hydro, Wind power booms in Philippines in 2014. http://www. eco-business.com/news/hydro-wind-power-boomsphilippines-2014/ ²¹¹ Index Mundi. 2018. Philippines Electricity Access. https://www.indexmundi.com/philippines/electricity_ access.html ²¹² National Grid Corporation of Philippines (NGCP). 2018. Operations. https://www.ngcp.ph/operations.asp ²¹³ Republic of the Philippines National Power Corporation (NPC). https://www.napocor.gov.ph/ ²¹⁴ KPMG. 2014. The Energy Report, Philippines 2013-2014. https://home.kpmg.com/ph/en/home/ insights/2014/01/2013-2014energyreport.html ²¹⁵ Republic of the Philippines National Power Corporation (NPC). Bataan Nuclear Power Plant. https://www.napocor. gov.ph/index.php/bataan-nuclear-power-plant 216 International Bank for Reconstruction and Development. The World Bank. 2015. Water supply and sanitation in the Philippines: Service delivery assessment. https://www.wsp.org/sites/wsp.org/files/publications/WSP-Philippines-WSS-Turning-Finance-into-Service-for-the-Future.pdf ²¹⁷ International Bank for Reconstruction and Development. The World Bank. 2015. Water supply and sanitation in the Philippines: Service delivery assessment. https://www.wsp.org/sites/wsp.org/files/publications/WSP-Philippines-WSS-Turning-Finance-into-Service-for-the-Future.pdf ²¹⁸ WHO. 2017. Country Cooperation Strategy. http:// apps.who.int/iris/bitstream/10665/136828/1/ccsbrief_phl_ en.pdf. ²¹⁹ WHO. 2017. Philippines-WHO. Country Cooperation Strategy 2017-2022. http://iris.wpro.who.int/bitstream/ handle/10665.1/13584/WPRO-2017-DPM-003-eng. pdf?ua=1 ²²⁰ WHO. 2017. Philippines, Country Cooperation Strategy 2017-2022. http://iris.wpro.who.int/bitstream/ handle/10665.1/13584/WPRO-2017-DPM-003-eng. pdf?ua=1 Department of Health. Retrieved 29 Jan 2017. Policies and Laws. http://www.doh.gov.ph/house-bills ²²² Philippines Department of Health. Retrieved 29 Jan 2018. DOH Organizational Chart. http://www.doh.gov.ph/ DOH_organizational_chart ²²³ Philippines Department of Health. Retrieved 29 Jan 2018. Universal Health Care in the Philippines. https://csis-prod.s3.amazonaws.com/s3fs-public/ legacy_files/files/attachments/131112_EnriqueOna_ PublicHealthinthePhilippines.pdf ²²⁴ The Borgen Project. 2017. 10 Facts About Healthcare in the Philippines. https://borgenproject.org/healthcare-inthe-philippines/ ²²⁵ Republic of the Philippines, Department of Health. Retrieved 26 Jan 2018. Bureau of International Health Cooperation. http://www.doh.gov.ph/orgchart-bihc ²²⁶ World Health Organization. Retrieved 25 January 2018. Philippines. http://www.wpro.who.int/philippines/areas/ communicable diseases/continuation communicable diseases/en/ ²²⁷ IAMAT. Retrieved 31 Jan 2018. Country Health Advice:

risk/dengue

island-in-cebu

Philippines. https://www.iamat.org/country/philippines/

²²⁸ ABSCBN News. 2017. Cholera outbreak declared in

Bohol sito, island in Cebu. http://news.abs-cbn.com/news/03/01/17/cholera-outbreak-declared-in-bohol-sitio-

²²⁹ IAMAT. Retrieved 31 Jan 2018. Country Health Advice: Philippines. https://www.iamat.org/country/philippines/ risk/chikungunya

²³⁰ IAMAT. Řetrieved 31 Jan 2018. Country Health Advice: Philippines. https://www.iamat.org/country/philippines/

risk/typhoid-fever

²³¹ WHO. Retrieved 9 March 2018. Philippines NCD. http:// www.wpro.who.int/philippines/areas/noncommunicable_ diseases/continuation_ncd_area_page/en/

²³² World Health Organization. Noncommunicable Diseases (NCD) Country Profiles, 2014. http://www.who. int/nmh/countries/phl_en.pdf?ua=1

²³³ Professional Regulation Commission. 1959. Republic Act No. 2382. http://www.prc.gov.ph/uploaded/documents/

MEDICAL%20LAW.pdf

²³⁴ Professional Regulation Commission. 2002. Republic Act No. 9173. http://www.prc.gov.ph/uploaded/documents/ REPUBLIC%20ACT%20No.%209173_Nursing%20Law.pdf ²³⁵ Peace Women. Retrieved 27 Jan 2018. Philippines: National Action Plan on Women, Peace, and Security. http://www.peacewomen.org/resource/philippinesnational-action-plan-women-peace-and-security-napwps ²³⁶ World Economic Forum. Retrieved 26 Jan 2018. The Global Gender Gap Report 2016. http://reports.weforum. org/global-gender-gap-report-2016/

²³⁷ Rappler. Retrieved 9 March 2018. Closing the Gender Gap in Economic Opportunities. https://www.rappler. com/thought-leaders/134739-gender-equality-economic-

opportunities-philippines
²³⁸ Humanist Alliance of the Philippines International. 2017. Women's Rights in the Philippines. https:// hapihumanist.org/humanism/womens-rights-philippines-

²³⁹ UNFPA. Philippines. Emergencies. http://philippines.

unfpa.org/en/node/15308

²⁴⁰ Ĉlimate Reality Project. 2016. How is climate change affecting the Philippines. https://www.climaterealityproject. org/blog/how-climate-change-affecting-philippines ²⁴¹ Asian Info. Philippines: Geography of the Philippines. http://www.asianinfo.org/asianinfo/philippines/pro-

geography.htm $^{\rm 242}$ International Federation of Red Cross and Red Crescent Societies. ASEAN Disaster Law Mapping. Implementing AADMER: ASEAN Country Profiles. 2017. Document provided by Gabby Emery from IFRC on February 2, 2018

via email.

²⁴³ Regional Consultative Group. Humanitarian Civil-Military Coordination for Asia and the Pacific. Humanitarian Civil-Military Coordination in Emergencies: Towards a Predictable Model. 2017. https://www.acmc.gov.

au/preparedness/predictable-model/

²⁴⁴ The Guardian. UN hails Philippines' Typhoon Koppu response as model for others to follow. Carla Kweifio-Okai. October 23, 2015. https://www.theguardian.com/globaldevelopment/2015/oct/23/philippines-typhoon-koppu-unhails-model-response-disaster-risk-reduction

²⁴⁵ IRIN. Mobile phone app could help disaster preparedness. October 19, 2012. http://www.irinnews.org/ report/96588/philippines-mobile-phone-app-could-help-

disaster-preparedness

²⁴⁶ Regional Consultative Group. Humanitarian Civil-Military Coordination for Asia and the Pacific. Humanitarian Civil-Military Coordination in Emergencies: Towards a Predictable Model. 2017. https://www.acmc.gov. au/preparedness/predictable-model/

²⁴⁷ Regional Consultative Group. Humanitarian Civil-Military Coordination for Asia and the Pacific. Humanitarian Civil-Military Coordination in Emergencies: Towards a Predictable Model. 2017. https://www.acmc.gov. au/preparedness/predictable-model/

²⁴⁸ WHO. 2017. Country Cooperation Strategy. http:// apps.who.int/iris/bitstream/10665/136828/1/ccsbrief_phl_

en.pdf.

²⁴⁹ ÎRIN. Anti-flood measures announced for Manila. September 14, 2012. http://www.irinnews.org/ news/2012/09/14-0

²⁵⁰ U.S. Pacific Command. 2017. U.S. and Philippine Armies Refine Skills during SALAKNIB Practical Exercise. http://www.pacom.mil/Media/News/News-Article-View/ Article/1382254/us-and-philippine-armies-refine-skillsduring-salaknib-practical-exercise/

²⁵¹ U.S. Pacific Command. 2017. U.S., Philippine Airmen Join Forces for Pacific Responder 17. http://www.pacom. mil/Media/News/News-Article-View/Article/1346020/usphilippine-airmen-join-forces-for-pacific-responder-17/ ²⁵² U.S. Pacific Command. 2017. Exercise KAMANDAG begins in the Philippines. http://www.pacom.mil/Media/ News/News-Article-View/Article/1331713/exercise-

kamandag-begins-in-the-philippines/

²⁵³ U.S. Pacific Command. 2017. Philippines, U.S. Begin Balikatan 2017 with Opening Ceremony. http:// www.pacom.mil/Media/News/News-Article-View/ Article/1176795/philippines-us-begin-balikatan-2017with-opening-ceremony/

²⁵⁴ U.S. Pacific Command. 2016. Philippine Amphibious Landing Exercise 33 Opening Ceremony. http:// www.pacom.mil/Media/News/News-Article-View/ Article/967470/philippine-amphibious-landing-exercise-

33-opening-ceremony/

²⁵⁵ U.S. Pacific Command. 2016. Balikatan Exercise Strengthens U.S.-Philippine Relationship. http:// www.pacom.mil/Media/News/News-Article-View/ Article/714954/balikatan-exercise-strengthens-usphilippine-relationship/

²⁵⁶ PACOM. 2016. Pacific Partnership Concludes 2016 Mission. http://www.pacom.mil/Media/News/News-Article-View/Article/939672/pacific-partnership-

concludes-2016-mission/

²⁵⁷ PACOM. 2015. PH, US Concluded Participation in Tempest Express-27 Multinational Staff Planning Workshop. http://www.pacom.mil/Media/News/ Article/612322/ph-us-concluded-participation-in-tempestexpress-27-multinational-staff-plannin/

²⁵⁸PACOM. 2015. US Marines, Filipino Forces Begin Partnership Exercise. http://www.pacom.mil/Media/ News/Article/621708/us-marines-filipino-forces-begin-

partnership-exercise/ ²⁵⁹ PACOM. 2015. Multinational Communications Interoperability Program Planning Staff Workshop 1 Held in Papua New Guinea. http://www.pacom.mil/Media/ News/Article/672168/multinational-communicationsinteroperability-program-planning-staff-workshop-1/ ²⁶⁰ PACOM. 2015. Pacific Angel Philippines Mass Casualty Exercise Improves Emergency Response. http://www. pacom.mil/Media/News/Article/614913/pacific-angelphilippines-mass-casualty-exercise-improves-emergencyresponse/

²⁶¹ PACOM. 2015. Military Exercises Begin in Ukraine, Philippines. http://www.pacom.mil/Media/News/ Article/586184/military-exercises-begin-in-ukraine-

philippines/

²⁶² Navy.mil. Amphibious Landing Exercise 2014. http:// www.public.navy.mil/surfor/Pages/PHIBLEX-2014.aspx#. WmeŶ5PmnFhÉ

²⁶³ PACOM. 2015. ASEAN Regional Forum Bio-Preparedness Exercise Prepares Partners for National Response. http://www.pacom.mil/Media/News/ Article/613408/asean-regional-forum-bio-preparednessexercise-prepares-partners-for-national-r/

²⁶⁴ PACOM. 2014. 20th Annual CARAT Philippines 2014 to Commence Late June. http://www.pacom.mil/Media/ News/News-Article-View/Article/564287/20th-annualcarat-philippines-2014-to-commence-late-june/

²⁶⁵ Jane's by ÎHS Market. Jane's Sentinel Security Assessment-Southeast Asia. February 3, 2017. ²⁶⁶ Jane's by IHS Market. Jane's Sentinel Security Assessment-Southeast Asia. February 3, 2017. ²⁶⁷ The Diplomat. 2017. Why is the Philippines Turning

Away Foreign Aid? https://thediplomat.com/2017/05/whyis-the-philippines-turning-away-foreign-aid/

²⁶⁸ The Diplomat. Why Is the Philippines Turning Away Foreign Aid? Can Manila afford to reject foreign aid on the grounds of donor countries imposing political conditions? May 25, 2017. Chitra Purushothaman. https://thediplomat. com/2017/05/why-is-the-philippines-turning-awayforeign-aid/

²⁶⁹ PhilStar Global. 2017. Talking about 'allies': The Philippines' new partners. http://www.philstar.com/ news-feature/2017/01/16/1663257/talking-about-allies-

philippines-new-partners

²⁷⁰ PhilStar Global. 2017. Talking about 'allies': The Philippines' new partners. http://www.philstar.com/ news-feature/2017/01/16/1663257/talking-about-allies-

philippines-new-partners ²⁷¹ Council on Foreign Relations. 2017. Duterte Woos Russia. https://www.cfr.org/blog/duterte-woos-russia ²⁷² The Diplomat. 2017. Chinese Premier to Visit the Philippines to Strengthen Ties. https://thediplomat. com/2017/11/chinese-premier-to-visit-the-philippines-to-

²⁷³ Xinhua News. 2017. China, Philippines confirm twice-yearly bilateral consultation mechanism on South China Sea. http://www.xinhuanet.com/english/2017-

05/19/c_136299206.htm

²⁷⁴ U.S. Department of State. Philippines. Retrieved 11 Jan 2018. https://travel.state.gov/content/travel/en/ international-travel/International-Travel-Country-Information-Pages/Philippines.html

²⁷⁵ U.S. Department of State. Philippines. Retrieved 11 Jan 2018. https://travel.state.gov/content/travel/en/ international-travel/International-Travel-Country-Information-Pages/Philippines.htm

²⁷⁶ OANDA. Philippine Peso. Retrieved 11 Jan 2018. https:// www.oanda.com/currency/iso-currency-codes/PHP. ²⁷⁷ U.S. Department of State. Philippines. Retrieved 11 Jan 2018. https://travel.state.gov/content/travel/en/

international-travel/International-Travel-Country-

Information-Pages/Philippines.html

²⁷⁸ CDC. Retrieved 11 Jan 2018. https://wwwnc.cdc.gov/ travel/destinations/traveler/none/philippines

²⁷⁹ CDC. Retrieved 11 Jan 2018. https://wwwnc.cdc.gov/ travel/destinations/traveler/none/philippines

²⁸⁰ U.S. Department of State. Philippines. Retrieved 11 Jan 2018. https://travel.state.gov/content/travel/en/ international-travel/International-Travel-Country-Information-Pages/Philippines.html

²⁸¹ PreventionWeb.net. Chart of the Sendai Framework for Disaster Risk Reduction 2015-2030. http://www. preventionweb.net/files/44983_sendaiframeworkchart.pdf ²⁸² UNISDR. Sendai Framework for Disaster Risk Reduction. https://www.unisdr.org/we/coordinate/sendaiframework

²⁸³ PreventionWeb.net. Chart of the Sendai Framework for Disaster Risk Reduction 2015-2030. http://www. preventionweb.net/files/44983_sendaiframeworkchart.pdf ²⁸⁴ UNISDR. Sendai Framework for Disaster Risk Reduction. https://www.unisdr.org/we/coordinate/sendaiframework

²⁸⁵ PreventionWeb.net. Chart of the Sendai Framework for Disaster Risk Reduction 2015-2030. http://www. preventionweb.net/files/44983 sendaiframeworkchart.pdf Prevention Web. National Disaster Risk Reduction & Management Council (NDRRMC), Philippinesgov. Philippines. National progress report on the implementation of the Hyogo Framework for Action (2013-2015). April 23, 2015. https://www.preventionweb. net/files/43379_PHL_NationalHFAprogress_2013-15.pdf

