

#### Cover and section photo credits

Cover Photo: "Boudhanath Nepal" (Dillibazar, Central, Nepal) by Neiljs is licensed under CC BY-2.0. https://www.flickr.com/photos/neiljs/3922463756/in/photolist-6YBDPs

Country Overview Section Photo: "Kirtipur, Nepal" (Kirtipur, Central, Nepal) by Juan Antonio Segal is licensed under under CC BY-2.0. https://www.flickr.com/photos/jafsegal/23636718751/in/photolist-C1GmZD-47xWZT

Disaster Overview Section Photo: "Justine Greening visits quake-hit Nepal" (Chautara, Central, Nepal) by DFID-UK is licensed under under CC BY-2.0. https://www.flickr.com/photos/dfid/17269813153/in/photolist-uA98pp

Organization Structure for DM Section Photo: "John Ball and Darcy Continue searching in Chautara, Nepal" (Chautara, Central, Nepal) by DFID-UK is licensed under under CC BY-2.0. https://www.flickr.com/photos/dfid/17125896918/in/photolist-s6mGuN

Infrastructure Section Photo: "Kathmandu, Nepal" (Kathmandu, Nepal) by Jonny is licensed under under CC BY-2.0. https://www.flickr.com/photos/jonnyscholes/33332052656/in/photolist-SMrtZ3

Health Section Photo: "Nyaya Health" (Seti, Farwest, Nepal) by Possible is licensed under under CC BY-2.0. https://www.flickr.com/photos/nyayahealth/6853072479/in/photolist-brzMG4

Women, Peach and Security Section Photo: "Women at work - Outside Lumbini - Nepal" (Nepal) by Adam Jones is licensed under under CC BY-2.0. https://www.flickr.com/photos/adam\_jones/13871029373/in/photolist-n8JDLR

Conclusion Section Photo: "37795-Kathmandu" (Kathmandu, Nepal) by xiquinhosilva is licensed under under CC BY-2.0. https://www.flickr.com/photos/xiquinho/7991777047/in/photolist-dbcWTr

Appendices Section Photo: "Looking up the Khumbu to Everest and Lhotse" (Sagarmatha, East, Nepal) by Steve Hicks is licensed under under CC BY-2.0. https://www.flickr.com/photos/shicks/2515223961/in/photolist-b5BiZB

# Table of Contents

Welcome - Note from the Director	9
About the Center for Excellence in Disaster Management & Humanitarian Assistance	
Disaster Management Reference Handbook Series Overview	11
Executive Summary	12

Country Overview	14
Culture	14
Demographics	15
Ethnic Makeup	15
Key Population Centers	15
Language	16
Religion	17
Vulnerable Groups	17
Economics	18
Government	19
Environment	21
Geography	21
Borders	21
Climate	
Climate Change	22

Disaster Overview	24
Hazards	24
Flooding	24
Glacial Lake Outburst Flooding (GLOF)	

Landslides	
Earthquakes	25
Drought	27
Wildfires	27
Recent History of Natural Disasters	27
Country Risk	
Infectious Disease	

Lead Government Agencies in Disaster Response
National Reconstruction Authority
Government Security Forces
International Agencies in Nepal
U.S. Government Agencies in Nepal
Participation in International Organizations
Foreign Disaster Relief and Emergency Response40
Laws, Policies, and Plans on Disaster Management40
Education and Training42
Disaster Management Communications43
Early Warning Systems43
Earthquake Monitoring44
Responsible Agencies for Flood and Storm Warning
Security Forces Role in Disaster Relief44
Foreign Assistance and International Partners46
Coordination Mechanisms Between Nepal and Development Partners

Infrastructure	50
Airports	
Land Routes	
Roads	

Railways	52
Waterways	53
Schools	53
Communications	53
Utilities	53
Power	53
Hydropower	54
Water and Sanitation	54

Health	56
Health Overview	56
Health Care System (Structure)	56
Plans and Policies	56
Challenges in the Health	58
Health Assistance	59
Communicable Diseases	58
Non-Communicable Diseases	60
Training for Health Professionals	60

Women, Peace, and Security.	62
-----------------------------	----

Conclusion	64
Conclusion	64

Appendices	66
DMHA Engagements in the Past Five Years	66
Force Protection/Pre-Deployment Information	68
Passport/Visa	68
Emergency Contact Information	68
Currency Information	68
Travel Health Information	68

Sendai Framework	70
HFA Country Progress Report	72
Country Profile	75
Acronyms and Abbreviations	
References (Endnotes)	92

## List of Figures

Figure 1: Map of Nepal	22
Figure 2: Nepal's Reported Losses Between 1990-2014 (EM-DAT)	28
Figure 3: INFORM Country Risk Profile for Nepal	29
Figure 4: Disaster Management Structure	32
Figure 5: Key Government Agencies in Nepal	33
Figure 6: National Cluster System	41
Figure 7: Key Policies, Frameworks, and Plans for Civil-Military Coordination in Nepal	42
Figure 8: Key Military Responsibilities in Disasters	45
Figure 9: Nepal Hydro Key Facts	54
Figure 10: Health Organizational Structure in Nepal	57
Figure 11: Top Ten Causes of Death in Nepal	60
Figure 12: UN Sendai Framework for Disaster Risk Reduction 2015-2030	71
Figure 13: HFA Level of Progress Achieved	72

## List of Tables

Table 1: Chronological History of Major Earthquakes in Nepal	26
Table 2: International Agencies in Nepal	35
Table 3: List of Airports	50
Table 4: Nepal National Progress Report HFA 2013-2015	72
Table 5: HFA Country Progress Report Future Outlook Areas, Nepal	74

## List of Photos

Photo 1: Nepalese Culture	15
Photo 2: Urban Housing, Kathmandu, Nepal	16
Photo 3: Vibrant Colors of Nepal	17
Photo 4: Spices	19
Photo 5: Pokhara and Machapuchhre	21
Photo 6: DFID-UK Search and Rescue Operations	24
Photo 7: Students Practice Earthquake Drill	25
Photo 8: Community Water Tap	30
Photo 9: Security Forces Squadron sharing crowd control techniques. PACAF, 2009	44
Photo 10: Tenzing-Hillary Airport	52
Photo 11: Nepalese Army Engagements with USPACOM	66
Photo 12: Nepalese Army Disaster Response Exercise, 2016	66
Photo 13: U.S. and Nepal Disaster Relief Best Practices Exchange	67
Photo 14: USAID DART Teams Response to the 2015 Earthquake	67

# 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 government's 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 Non-Governmental Organization (NGO) home pages, Relief Web, United Nations Development Program (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.

# Welcome - Note from the Director

Dear Reader,

The United States (U.S.) Department of Defense (DOD) has a long history of military-to-military engagement in Nepal that began well before the April 2015 7.8 magnitude earthquake disaster. The U.S. DOD has set up emergency operations centers; provided training on how to quickly repair airports; engaged in bilateral disaster-reduction exercises; and set up an earthquake-resistant blood bank in Nepal.<sup>1</sup> The relationship between the U.S. and Nepalese militaries, and the military training exchanges between them, has allowed them to easily work together as they conduct disaster management and humanitarian relief operations during disasters.<sup>2</sup> The U.S. Army and Nepalese Army have participated together in the Pacific Resilience Disaster Response Exercise and Exchange (DREE). The bi-lateral disaster exercise is an example of a multi-national collaboration effort to better prepare for natural disasters in the Indo-Asia-Pacific region.<sup>3</sup>

At Nepal's request, the U.S. military forces responded to the April 2015 earthquake and subsequent May 12 earthquake disaster (Operation Sahayogi Haat). These two major earthquakes affected the Gorkha district of Nepal and surrounding area, killing almost 9,000 people and destroying 600,000 homes.<sup>4</sup> A U.S. Special Forces team was training in Nepal when the earthquake struck and they immediately transitioned to help with the relief efforts. The soldiers provided logistical help and medical assistance to the injured and helped in search and rescue. U.S. Pacific Command worked closely with both the U.S. Embassy in Nepal and the U.S. Agency for International Development (USAID) to determine how the DOD could best support the U.S. government response. A DOD Joint Humanitarian Assessment Support Team (JHAST) with approximately 20 military personnel were sent to Nepal. The USAID Office of Foreign Disaster Assistance (OFDA) sent a Disaster Assistance Response Team (DART) and an Urban Search and Rescue (USAR) team, which arrived via U.S. Air Force C-17 cargo aircraft. USAID also activated a Response Management Team in Washington D.C. to help coordinate assistance at the national level.<sup>5</sup>

The Nepalese Armed Forces play a key role in disaster response as a primary responder including the 2015 Nepal earthquakes and they, the government, and civilian actors have been working to improve the civil-military coordination process. Nepal has developed coordination processes and mechanisms for facilitating international assistance in the event of a large-scale disaster. During the 2015 earthquake response, the activation of a Multi-National Military Coordination Center (MNMCC) to coordinate international military assistance as well as a Humanitarian-Military Operations Coordination Center also known as a Joint Command Center (HuMOCC/ JCC) was formed.<sup>6</sup>

This Nepal Disaster Management Reference Handbook provides the reader a baseline of understanding of regional-specific factors, which influence disaster management. CFE-DM provides education, training and research about disaster management and humanitarian assistance, particularly in international settings that require coordination between the DOD and civilian agencies.



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 civilmilitary 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 UN agencies, international NGOs, 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.

# **Executive Summary**

Nepal is highly vulnerable to natural disasters. Disasters such as extreme droughts, floods, landslides, fires, and epidemics affect the nation annually. Nepal's geographic location also makes it extremely susceptible to seismic activity from the nearby Indian and Tibetan plates.<sup>7</sup> Additionally, Nepal's mountainous landscape contributes to challenges in the improvement and further development of the transportation and utilities sectors in the country. The Himalayan Mountains extend in the northern region of Nepal along with other high mountains and create physical barriers to development. Transportation is limited in rural areas where roads are underdeveloped and Nepal relies heavily on India for transit facilities. The southern regions of Nepal consist of low-lying plains and rivers originating from the mountains which contribute to annual flooding. The country's vulnerability to disasters is associated with poor human development indicators, increased population in urban areas, conflict, and poor infrastructure due to disparities in the implementation of building codes, and climate change.8

The Government of Nepal is working progressively to advance the nation's disaster resiliency. Preparedness has become a national priority. Through the enactment of the Natural Calamity Relief Act, the Central Natural Disaster Relief Committee is the primary committee to implement policies and programs for disaster response in Nepal. Additionally, relief committees exist at all levels in the Nepalese government and coordination occurs amid all levels of the government.<sup>9</sup>

Climate change presents extreme challenges for Nepal. Globally, the nation ranks fourth with regards to climate vulnerability due to its exposure to natural hazards and varying weather patterns. Climate assessments of the nation predict increased climate variability and frequency in disaster events. The Government of Nepal recognizes the urgency in addressing climate change concerns and has implemented policy changes and climate change programs.<sup>10</sup>

Historically, Nepal has been prone to significant disasters resulting in mass destruction and claiming thousands of lives. Most recently, on 25 April 2015, a 7.8 magnitude earthquake struck in the Gorkha District (located 81 kilometers northwest of Kathmandu) and resulted in the loss of life of thousands of Nepalese residents. The earthquake affected over 50 districts in Nepal and caused an avalanche on Mount Everest killing at least 20 people and injuring hundreds more. This earthquake was recorded as the most significant disaster to affect Nepal since the earthquake of 1934.<sup>11</sup>



# **NEPAL** Country Overview

Disaster Management Reference Handbook | August 2017

1944123

Constanting of the

# **Country Overview**

In 2006, a decade-long People's Revolution by the Communist Party of Nepal (Maoist) along with several weeks of mass protests by all major political parties of Nepal signed a peace accord, which dethroned King Gyanendra Shah and officially established the Federal Democratic Republic of Nepal. The Constituent Assembly (CA) elections were successfully held in 2008. The 2008 elected Constituent Assembly were tasked with uniting the peace process and drafting a new national constitution. However, the CA failed to complete an approved constitution before the end of their term in 2012. In the lead-up to the CA's dissolution, Nepal suffered increased tensions among ethnic groups, political parties, and government institutions. Overcoming the previous failure of the First Constituent Assembly, the Second Constituent Assembly successfully drafted a new constitution. On 20 Sept, 2015 which replaced the Interim Constitution of 2007.<sup>12</sup>

Nepal is a founding member of the South Asian Association for Regional Cooperation (SAARC) since its formation in 1985. The SAARC Secretariat is based in Kathmandu and is headed by the Secretary General for a three year term. The Secretariat coordinates and monitors the implementation of activities, prepares for meetings, and is the communication channel between the Association and the member states and other regional organizations.<sup>13</sup>

Nepal is a landlocked nation located in South Asia. In 2015, the estimated population of Nepal reached 28.5 million.<sup>14</sup> The People's Republic of China and the Republic of India share borders with Nepal. China shares the northern border to Nepal and India shares borders to the east, south and west. Nepal is formally known as the Federal Democratic Republic of Nepal. The country works progressively to maintain a balance between the two neighbors in their foreign policy while remaining an independent nation. Nepal extents roughly 56,827 square miles and is located in the Tropic of Cancer, giving it a moderate climate. Nepal is well-known for its extreme mountains; several of the world's highest mountain peaks including the Himalayan Mountains and Mount Everest are located within its borders.15

Nepal fosters a unique biodiversity comprised of 118 ecosystems, 75 classes of flora, and 35 variations of natural forests. Nepalese residents in rural and impoverished regions of the country are heavily dependent on naturally occurring resources for their survival. As a result, a large portion of Nepal's economy is originated from climate-sensitive industries such as cultivation, forestry, and ecotourism.<sup>16</sup>

Climate change has resulted in noticeable changes in the ground water levels and precipitation patterns in Nepal; directly affecting the livelihoods of agricultural regions. As an effect of climate change declining water levels and rising temperatures have resulted in decreased agricultural production in a nation that is deeply reliant on agriculture. To help mitigate the negative effects of climate change, it is crucial that the Government of Nepal implement procedures to evaluate and adopt modern technologies such as micro-irrigation systems and expand the economic options for agricultural communities who rely on rainfall and crop production for their livelihoods.<sup>17</sup>

## Culture

The culture of Nepal boasts various traditions and customs throughout the nation and is as rich and diverse as its people. Nepal's culture has been greatly influenced by music, architecture, religion and literature. Nepal is culturally diverse with thirty-six different ethnic groups, the practice of multiple religions and over 100 spoken languages. Nepal fosters an eclectic mixture of ethnic and cultural traditions and practices which meld together in the capital city of Kathmandu, and form a national identity. Nepalese culture is heavily influenced by religion and is reflected in the art and architecture of sacred temples, shrines and fountains which are located throughout the nation.<sup>18</sup> Photo 1 depicts the vibrate colors and handmade textiles common in the Nepalese culture.19

In 2006 as a newly founded federal democratic republic nation the Nepalese people established the right to religious freedom creating a multireligious nation. Approximately 81 percent of the populations are Hindu, but many other religions are present and practiced in the country.<sup>20</sup> Nepal's cultural diversity allows for religious freedom and for cultural traditions to be passed down from one generation to the next.

In 2014 Nepal was ranked as 126 out of 175 on the Transparency International's Corruption Perception Index (CPI). Nepal earned a score of a score of 29 out of 100.<sup>21</sup> Political corruption has been an on-going concern for private



Photo 1: Nepalese Culture

and public ventures from foreign countries seeking business opportunities in Nepal. In Nepal bribes are prevalent in the country's procurement and business registration process. This type of corruption increases the costs of starting up business in Nepal compared to other parts of South Asia. In 2002, the Prevention of Corruption Act was established, and is the main anti-corruption legislation which forbids corruption, bribery, money laundering, abuse of office and facilitation payments in the public and private sectors. Implementation and enforcement of this act is not effective and corruption in the country remains a concern.<sup>22</sup>

## Demographics

Understanding the demographic context of Nepal provides insight into socio-cultural factors which affect disaster management effectiveness, disaster vulnerabilities, and resident capabilities. It is important to reflect on gender, ethnicity, economics, and vulnerable groups in the planning and implementation of disaster preparedness, mitigation, and response activities to address gaps and risks.

### Ethnic Makeup

The 2011 Nepal National Population and Housing Census released in 2012 list 125 caste ethnicity groups present in Nepal. The two major groups in Nepalese society are the Mongoloids from the north and the Aryans from the south. The Chhetri (4,398,053) and Brahmin-Hill (3,226,903) are considered the two highest castes in the country; accounting for over eight million residents.<sup>23</sup>

## **Key Population Centers**

Nepal has an annual population growth rate of 1.24 percent.<sup>24</sup> Nepal is largely a rural country; however; urbanization is happening at a rapid pace. The sustainability of urbanization in the country is in danger due to ineffective planning and growing infrastructure shortages. The Central Highlands is the most densely populated region. Most recently there has been an increase of migration to the Terai region. Population density at the national level is 197.2 people per square kilometer, and the highest population density is the Kathmandu district with 4,416 people per square kilometer.<sup>25</sup> The Kathmandu Valley is growing at 4 percent a year, making it one of the fastest growing metropolitan areas in South Asia. The unplanned urban development in the Kathmandu Valley has led to increased vulnerability to disasters due to poor infrastructure. Kathmandu is at an increased risk of disaster because it is highly vulnerable to earthquakes. Pokhara is also expanding quickly with an annual population

growth rate of 5 percent.<sup>26</sup> Urbanization has been accompanied by low economic growth compared to other South Asian countries. On March 10, 2017 the Government of Nepal implemented new administrative division based on Federal Structure. Country is divided into 7 States: No 1 State lies in Eastern Region, No 2 State in Eastern Southern Region, No 3 State in Central Region, No 4 State in Western Region, No 5 State in Mid-Western Region, No 6 State is in North Western Region and No 7 State lies in the Far-Western Region. Likewise, the government of Nepal has adopted 744 local body system fulfilling the requirement of the new constitution of Nepal 2015. Local level administrations are divided into four levels of self-government: metropolitan city (mahanagar), sub-metropolitan city (upamahanagar), Municipality (nagar-palika) and Rural Municipality (Gaun-Palika). There are 6 Metropolitan Cities including the capital city of Nepal, Kathmandu. Other 5 metropolitan Cities are Lalitpur, Biratnagar, Birgunj, Bharatpur and Pokhara.<sup>27</sup> Photo 2 depicts urban housing in Kathmandu in the Central Region of Nepal.<sup>28</sup>

Nepal's administrative divisions are divided into 5 Development Regions: Eastern Region, Central Region, Western Region, Mid-Western Region, and the Far-Western Region. These Development Regions are then grouped into 14 administrative zones; Bagmati, Bheri, Dhawalagiri, Gandaki, Janakpur, Karnali, Koshi, Lumbini, Mahakali, Mechi, Narayani, Rapti, Sagarmatha, and Seti. The administrative zones are then further divided into 75 districts.<sup>29</sup>

In 2016, the government formed the Local Level Restructuring Commission (LLRC) to determine the number and boundaries of local units in the new federal set-up. As per the new arrangement, Nepal now has 246 municipalities and 481 rural municipalities. In March, 2017 the government of Nepal restructured the country's village development committees and municipalities and they now have 744 local level units.<sup>30</sup>

Kathmandu is the capital and the largest city in Nepal. According to World Population Review the 2017 population of Kathmandu increased to 1.26 million. Kathmandu makes up the core of the largest urban cluster in the city in the Kathmandu Valley, which also includes Kirtipur, Lalitpur, Bhaktapur, Madhyapur Thimi, and smaller regions. Kathmandu accounts for 8.3 percent of Nepal's total population and is the central gateway to Nepal's tourism industry. The metropolitan area spans 19.5 square miles with a population density of 3,000 per square mile.<sup>31</sup>

#### Language

The official language of Nepal is Nepali, and is spoken by 44.6 percent of the population. Additionally, over 100 other languages including; Maithali 11.7 percent, Bhojpuri 6 percent, Tharu 5.8 percent, Tamang 5.1 percent, Newar 3.2 percent, Magar 3 percent, Bajjika 3 percent,



Photo 2: Urban Housing, Kathmandu, Nepal



Photo 3: Vibrant Colors of Nepal

Urdu 2.6 percent, Avadhi 1.9 percent, Limbu 1.3 percent, Gurung 1.2 percent, other 10.4 percent, and unspecified 0.2 percent are spoken in Nepal.<sup>32</sup>

#### Religion

The prominent religion in Nepal is Hindu accounting for 81.3 percent of the population. Other least common religions practiced in the country include; Buddhist 9 percent, Muslim 4.4 percent, Kirant 3.1 percent, Christian 1.4 percent, other 0.5 percent, and unspecified 0.2 percent (2011 est.).<sup>33</sup> Nepal practices religious freedom and therefore a variety of religious traditions contribute to the national culture and identity. Photo 3 depicts an assortment of colorful items that may be purchased at the Janaki Temple, a Hindu temple in Janakpur in the Mithila region of Nepal, dedicated to the Hindu goddess Sita. It is the primary temple of Maithali native indigenous to Nepal.<sup>34</sup>

## **Vulnerable Groups**

#### Refugees

According to the Displacement Tracking Matrix (DTM) 2016 report there are currently 65 active sites, 3,753 households and the total IDP population in the IDP sites is 15, 595. The UNHCR office in Nepal is coordinating the resettlement of Bhutanese refugees in

coordination with the government of Nepal. The focus of the agency is advocating for less stringent visa-waiver processes for refugees accepted for resettlement. UNHCR seeks to implement safer transit of Tibetans through Nepal. The group resettlement program for the Bhutan refuges began in 2007 and since the inception of the program more than 101,200 refugees have resettled to eight different countries-Australia (5,620), Canada (6,646), Denmark (874), the Netherlands (327), New Zealand (1,002), Norway (566), the United Kingdom (358), and the United States (85,829). UNHCR along with the Government of Nepal seek other durable solutions for those who opt to remain in camps. Resettlement remains the primary durable solution for urban refugees and UNHCR continues its advocacy with the authorities to simplify the visa-waiver process for those who are accepted for resettlement.<sup>35</sup>

The Government of Nepal no longer permits new Tibetan migrants with limited status. Beginning in 1989 the Nepalese government began allowing Tibetans to pass thru Nepal on their way to India, with the aid of the Tibetan Refugee Reception Center (TRRC) and the UNHCR. The TRRC located in Kathmandu offers a transitory shelter and basic medical services for Tibetans who are on their way to India by way of Nepal. The center also coordinates the exit documents and travel for crossing into India.<sup>36</sup>

## COUNTRY OVERVIEW

#### Women

Nepal in general is a patriarchal civilization; however, there are various policies recognizing the egalitarianism of women. Nepal's poor legal security policies have led to increased domestic violence. With regards to the condition of women and children in Nepal, the government must continue to bolster its legislative agenda to safeguard their protection. Advances in the provision of women's protection have been implemented through the ratification of various human rights channels and with the government's declared support for an inclusive democracy and gender equality, yet there is still much progress to be made.<sup>37</sup>

Village Development Committees (VDCs) have the right to incorporate projects which will advance women as part of their Village Development Plans. Disparities persist related to equality in education, literacy, income, and property ownership. The most recent census (2011) stated the number of female-headed households increased over the past decade by nearly 10 percent.<sup>38</sup>

#### Human Trafficking

According to the United States Department of State 2016 Trafficking in Persons (TIP) Report, Nepal continues to rank in the Tier 2 category. A tier 2 country is a country whose government does not fully comply with the Trafficking Victims Protection Act's (TVPA) minimum standards, but are making notable efforts to attain compliance with the standards. The earthquake in 2015 challenged the Government of Nepal and resulted in an increase in the number of prosecuted traffickers in the nation. The TIP report describes Nepal as a transit, and destination country for men, women, and children who are subjected to forced labor and sex trafficking. The Government of Nepal has shown mixed anti-trafficking law enforcement efforts. The Human Trafficking and Transportation (Control) Act (HTTCA) prohibits many but not all forms of trafficking in persons. Significant strides are being made by the government in regards to the elimination of trafficking.39

The 2016 TPI Report designates Nepal as a source, transit, and destination for high occurrence of forced labor and sex trafficking. Nepali women and girls are subjected to sex trafficking and forced labor in Nepal, and in many other countries. Nepali men, women, and children are forced into the adult entertainment industry, hard labor industries, and sex industries internationally. A significant number of Nepalese who travel through India are exceptionally susceptible to involuntary labor and sex trafficking.<sup>40</sup>

The National Task Force in the Ministry of Women, Children and Social Welfare (MOWCSW) in Nepal is responsible for the coordination and the response to trafficking cases for the country. Trafficking amongst women and girls is a priority issue for the ministry. MOWCSW also formulates national plans and policies on women and children to integrate them into the national development process.<sup>41</sup>

#### Caste System

In 1963 the Nepali government shifted to a democracy and with the governmental transition ethnic and caste-based discrimination was abolished. However, ethnic and caste-based discrimination is still prominent in the Nepalese culture and in legislation. Some significant contributors to ethnic-based discrimination exist in language and literacy barriers. Many members of least common ethnicities are unable to effectively participate in programs and discussions outside of their communities and do not receive crucial information in regards to policy, preparedness and government due to language barriers or the inability to read.<sup>42</sup> The Nepalese culture is fraught with castes which are commonly associated with varying identifiers that affect their livelihoods, their family traditions, family structure, and how they dress. Ultimately, this determines their way of life. Nepal has many castes in various communities largely in the hills, valleys, and plains except for communities located in the high mountains who do not follow the caste system.<sup>43</sup> The four main Caste in Nepal are the Brahman (Priest class), Chhetri (Warrior class), Baishya (Businessmen or Craftsman/Skilled class), and Shudra (Lower Caste).44

## **Economics**

Nepal is a low income country and is the poorest country in South Asia. Nepal currently ranks as 19<sup>th</sup> globally (out of 176 countries) on the scale for poorest countries. Nepal has high levels of poverty with nearly 25 percent of the nation living below the national poverty line. Many of the economic disparities exist within the caste system among different ethnic groups and correspond with geographic regions.<sup>45</sup> Nepal's economic freedom score is 55.1, classifying its economy the 125th freest in the 2017 index. Their score has increased by 4.2 points from the prior year mostly due to improvements in freedom from corruption. Out of the 42 countries in the Asia-Pacific region, the country ranked 26<sup>th</sup>, below the world and regional average.<sup>46</sup>

The national Gross Domestic Product (GDP) is 70.1 billion.<sup>47</sup> Natural disasters coupled with weak trade distributions caused the GDP annual growth to slow significantly in 2016 with a mere 0.8 percent growth rate. However, Nepal's economic growth is projected to increase to a growth rate of 5.6 percent in fiscal year 2017 and to continue to gain momentum into fiscal year 2018. Nepal's future economic growth is dependent on higher trade rates and improved investments in order to sustain increased economic growth into the future.<sup>48</sup> Key contributors for Nepal to sustain economic growth will rely on improved agriculture outputs and enhanced expenditure on rebuilding infrastructure. Stagnate growth in worker remittances, the major source of foreign exchange in the nation, is contributing to the economic growth deficit. Reform to boost international and domestic investment is crucial to increasing economic growth.

Nepal fosters a robust tourism industry. The Kathmandu Valley is the hub of national tourism. The Kathmandu valley provides ample accommodations such as hotels, food, adequate roads and international transportation. Additional areas with increased tourism include Pokhara and the Mount Everest area. The tourism industry is a significant contributor for the country's economic growth and provides over 750,000 jobs.<sup>49</sup>

Agriculture is a major industry in Nepal. Approximately 76 percent of the population is employed in the agriculture sector. Agriculture accounts for near 40 percent of Nepal's GDP. The Terai Region is the agricultural hub of the nation and major crop production includes wheat and rice. The annual monsoon rains have an effect on the economy as it impacts agricultural produce. Livestock farming is the second most important contributor to the Nepalese economy. Animals farmed in Nepal include, oxen, yaks, sheep, goats, and poultry.<sup>50</sup> Photo 4 depicts a variety of local spices at the Kathmandu Asian Market.51

Followed by the agriculture, migration for foreign employment and the remittances sent back home is another major contributor for socio-economic development of the country and it shares 29.2 per cent of total GDP of the country.

## Government

The local government is made up of municipal and rural municipal assemblies headed by municipal and rural municipal executives. All members elected within a municipality are responsible for development planning, policy-making, tax collection, local legislations, administration, and disbursement of benefits and local development funds.<sup>52</sup>

Nepal has 75 districts that are governed by a district assembly. The district assembly elects a district coordination committee as an executive branch at the district level. Each district coordination committee is made up of a maximum of nine members. The district coordination committee coordinates with state and federal governments, monitors local developmental efforts, and identifies local development issues.<sup>53</sup>

In addition to Nepal's 75 districts, it has 7 federal provinces, 5 regions, and 14 administrative zones. There are regional and district disaster relief committees that work with Nepalese Army representatives, Nepal Police, development institutions, and the Nepal Red Cross Society (NRCS) during and after disasters. Key government agencies include the Ministry of Home Affairs, the Ministry of Health, and the Ministry of Foreign Affairs.<sup>54</sup>



Photo 4: Spices

1) There is government instability in Nepal. In the last eight years, ten different governments have been formed. After much politicking and procrastination, a new constitution was finally agreed in September 2015, partly stimulated by the devastating earthquake in April that year. Nevertheless, this new constitution provoked violent protests. Some groups felt that it failed to address the issue of inclusion by minority communities, particularly southern plains communities, particularly Madhesis and others, who oppose the Kathmandu-based upper caste elite and/or who wanted justice for wartime abuses committed during the 1996-2006 civil war. Justice commissions were set up to deliver justice to the victims but there is criticism that nothing has been done yet. In addition, there have been tensions in Nepal for the governments' lack of real effort to stop the country's high rate of child marriage. In 2017, Sher Bahadur Deuba took over the position of Prime Minister of Nepal from Pushpa Kamal Dahal (also known as Prachanda (fierce)), the former leader of the Maoist insurgency. There is also instability in the nation because the government received aid for earthquake assistance but the funds as of last year have not been disbursed.55

Nepal's government is a federal democratic republic. Previously, Nepal was a Hindu monarchy. The decade long civil war and Maoist uprising had an effect on that, as well as delaying the 2002 elections.<sup>56</sup> Nepal is currently in a transitional period because three sets of elections (local, provincial, and national) are set to take place before January 2018. These elections are important because it included the first local elections in 20 years.<sup>57</sup> Local election 2074 (2017) is occurring in three phases. The first phase was in May 2017, the second phase was in June 2017, and the third phase is scheduled to be underway for September 2017. Provincial and national elections have not been completed yet and it will require more than a single phase of elections. The Election Commission is holding provincial elections in October 2017 and national assembly election and parliament elections by November 2017.58

Nepal's recovery has been slow as a result of several circumstances; (1) The lack of preparedness of the Government of Nepal and national stakeholders, (2) political instability resulting in a blockage of reconstruction supplies, (3) severe weather conditions, (4) Government deferments in formation of the National Reconstruction Authority (NRA), and (5) the isolated locations of numerous affected villages.<sup>59</sup>

Nepal had many issues that escalated during the aftermath of the earthquakes. To start, the government did not have an emergency response unit, system, or plan in place that could handle a crisis of this scale. The lack of airfields able to receive goods was limited to one international airport, with one runway. This was particularly a problem since immediately after the disaster, countries flocked in to help with rescue teams and emergency supplies, but were met with painfully long waits to land. The lack of coordination after receiving supplies was also evident.<sup>60</sup>

All of these issues led to the establishment of the National Reconstruction Authority (NRA). The NRA was created to become the central body responsible for reconstruction of quakedestroyed houses and infrastructures. It took nine months after the earthquake for the NRA to start running.<sup>61</sup>

According to the NRA Act, the NRA's mission is to complete reconstruction work of the structures damaged during the earthquakes of 2015, in a sustainable, resilient and planned manner to promote national interest and provide social justice by making resettlement and translocation of the persons and families displaced by the earthquake.<sup>62</sup>

The objectives of the NRA as articulated in the National Reconstruction Policy are:<sup>63</sup>

- To reconstruct, retrofit and restore partially- and completely-damaged residential, community and government buildings and heritage sites, to make them disaster-resistant using local technologies as needed;
- To reconstruct (restore) damaged cities and ancient villages to their original form, while improving the resilience of the structures;
- To build resilience among people and communities at risk in the earthquake-affected districts;
- To develop new opportunities by revitalizing the productive sector for economic opportunities and livelihoods;
- To study and research the science of earthquakes, their impact including damages and effects, and post-earthquake recovery, including reconstruction, resettlement, rehabilitation and disaster risk reduction; and
- To resettle the affected communities by identifying appropriate sites.

## Environment

Environmental considerations influence disaster management in profound ways, from the types of risks that are prevalent to natural protections that mitigate disasters. This section outlines some of the key environmental factors that contribute to Nepal's disaster hazards and affect potential response operations.

## Geography

Nepal is a landlocked nation. Nepal is home to some of the most rugged and difficult mountain terrain in the world with approximately 75 percent of the country covered by mountains. The country spans 147,181 square kilometers and is the world's 93rd largest country by land mass. The country can be divided into three physical belts from north to south, each extending from east to west: the Terai, Hill, and Mountain regions.<sup>64</sup> Nepal is one of the most vulnerable countries to earthquakes. Nepal's susceptibility to earthquakes is due to its geographic location on a major fault line. Nepal is located where the Indian subcontinent meets the continent of Asia. India's tectonic plate continues to push northward approximately 1.7 inches annually.65 Photo 5 depicts the rugged mountain terrain of Nepal.66

The Terai region is a northern extension of the Gangetic Plain. The region has rich agricultural land which stretches along the southern area of

the region. The northern area contains a marshy area filled with wild animals and where malaria is endemic. The Hill region accounts for nearly 65 percent of Nepal's total land area. Kathamandu, the nation's capital city is located within this region. Elevations in the Hill region reach 3,000 meters above sea level. The Himalayan mountain range is located in this region and creates Nepal's northern border. This region is home to many mountain ranges which lie between the Mahabharat Range and the Himalayas and vary between 8,000 to 14,000 feet. The Mahabharat Range ridges are steep towards the south but provide a gentle slope to the north. The Kathmandu and Pokhara Valleys are located in this region and are flat basins covered with lakes from water originating from rivers and glaciers in the ranges.<sup>67</sup>

## **Borders**

Nepal is located in South Asia between India to the east, south, and west, and China's Tibet Autonomous Region to the north. The country runs roughly 500 miles (1024 kilometers) from east to west, and around 90 to 150 miles from north to south. Border disputes between Nepal and India date back decades and recently, the two countries met to discuss the specific areas of Kalapani and Susta, which are located on the western and eastern borders. Kalapani is where Nepal, India, and China meet. The Mahakali River defines the border, but both India and Nepal each claim the river originates in different



Photo 5: Pokhara and Machapuchhre

# ICOUNTRY OVERVIEW

places. The Narayani River forms the Indian-Nepali border in Susta. Large floods have reshaped the river causing infringement of India into Nepal. Future discussions are set to continue this border talk.<sup>68</sup> Figure 1 depicts Nepal's borders.<sup>69</sup>

### Climate

The climate in Nepal is influenced by its diverse topographical landscapes. The climate is altering extremely fast in Nepal and weather is seriously affected by it. Nepal experiences four seasons: summer, autumn, winter and spring. Climate varies in each of the country's regions: subtropical monsoon



Figure 1: Map of Nepal

conditions in the Terai which create fertile lands and warm temperatures. The Hill region offers moderate weather and temperatures. The mountain region of Nepal fosters warm temperatures in lower elevations and frigid temperatures with increased elevations. The Himalayan Mountains block cold winds from Central Asia in the winter and forms the northern limit of the monsoon wind patterns. The temperature is below freezing at altitudes above 16,000 feet with the surfaces covered in ice and snow. In the eastern part of the Terai and in the mountain region, rainfall is abundant. Biratnagar is located in the Terai region and in the mountains experience almost 75 inches of rainfall occur each year. Western Nepal is drier and only experiences up to 35 inches of rain a year.70

### **Climate Change**

Climate change in Nepal has created significant changes in the ground water levels and precipitation patterns. Changes in ground water levels and precipitation patterns have directly affected the nation's agriculture sector and many communities which are dependent on farming for their livelihoods. Increased temperatures and decreased rainfall have resulted in lower crop output. Agriculture is Nepal's most important industry, employing over 75 percent of the nation's population, and climate change impacts are affecting the overall economy.<sup>71</sup> Nepal ranks as the 4th most climate-vulnerable country in the world.<sup>72</sup> The country is exposed to many water related hazards such as flooding and droughts along with varying weather patterns. Climate projections predict increased climate variability, higher frequency and greater intensity of extreme events. Smallholder farmers are the most vulnerable population because they are unable to mitigate or adapt to the impacts of climate change. Nepal is substantially affected by climate change and urgently addressing the issue by formulating policy and implementing programs.<sup>73</sup>

The effects of climate change are far reaching in the Nepalese economy. Climate impacts have negatively affected the agriculture production, the nation's food security, water resources, forests, health, biodiversity, tourism, and infrastructures. Disasters brought on by the climate have caused damage and loss of life, property and livelihood.<sup>74</sup> The Climate Change Management Division of the Ministry of Science, Technology and Environment (MoSTE) is responsible for the coordination of climate change response. The National Planning Commission and the Ministry of Finance are responsible for orchestrating the integration of climate change responses into the annual planning process. The Climate Change Council under the MoSTE was established in 2009 as guiding body for climate change policies.75



# **NEPAL** Disaster Overview

Disaster Management Reference Handbook | August 2017

# Disaster Overview Hazards

The most common and devastating disasters in Nepal come from natural hazards. The country is extremely vulnerable to extensive damage due to its relatively natural environment, diverse typography, and active tectonic plates. The majority of natural disasters in Nepal consist of flooding or landslides, and devastation caused by earthquakes in the region. Heavy precipitation combined with human factors such as deforestation, rapid population growth, and unplanned settlements leave many Nepalese vulnerable.<sup>76</sup>

The frequency and intensity of disasters in Nepal coupled with poor infrastructure and a weak economy pose a severe threat to Nepal's national development. The Government of Nepal is dedicated to implement measures to reduce the effects of disasters in the development process. The Ministry of Home Affairs has initiated the process of developing a national hazard and risk profile for the country.<sup>77</sup> Due to its location on the Alpide belt (Alpine-Himalayan), the country is highly susceptible to damage from a wide range of natural disasters. Contributing to the high risks are factors such as a lack of coordination amongst government agencies, weak infrastructure, lack of public awareness, and extreme poverty. Nepal faces many economic, environmental and social challenges in improving its disaster preparedness. Photo 6 depicts Department for International Development of the United Kingdom (DFID-UK) conducting search and rescue operations in Chautara, Nepal.<sup>78</sup>

## Flooding

Floods are the most common disaster Nepal experiences. Floods in Nepal have far-reaching economic effects and often devastate entire regions and uproot impoverished communities. There are approximately 6,000 rivers and streams flowing through Nepal. During the monsoon season (June-September) the rivers swell and cause severe flooding in low-lying communities and farm lands.<sup>79</sup> The flood generally originates from the hills (mainly from the Siwaliks) and pose high flood hazards to the Terai.

## Glacial Lake Outburst Flooding (GLOF)

GLOF is common in the Himalayas region of Nepal as a secondary impact of monsoons rains. These floods cause extensive damages in lowlying regions, have resulted in loss of life, and create an economic impact on the country.



Photo 6: DFID-UK Search and Rescue Operations

Glacial lakes are formed when glaciers when the Himalaya Mountains melt rapidly. The rapid melting of the glaciers is attributed to climate change in the region. The glacier lakes in Nepal are dammed by moraine, a mass of rocks and sediments carried down and deposited by a glacier, typically as ridges at its edges. Moraine dams are naturally created and therefore they are highly vulnerable to the environment, the slightest change in the natural environment can result in the dam breaking and releasing a massive amount of water and creating excessive flooding for anything in its path.<sup>80</sup>

### Landslides

The Hill Region of Nepal is highly vulnerable to landslides. The rigid, steep slopes of the Hill Region, unstable geology often rendered weak by active neo-tectonic movements and excessive rainfall in the region combined with rapid deforestation, and unplanned communities all contribute to the increased occurrence of landslides in the area. Because of the steep topography and their delicate ecosystems the hilly districts of Nepal located in the Siwalik, Mahabharat range, Mid-land, and the Himalaya region are more vulnerable to landslides.<sup>81</sup>

### Earthquakes

Nepal is the 11<sup>th</sup> most vulnerable nation in regards to being ranked one of the most at-risk countries in the world to earthquakes.<sup>82</sup> The country is located upon the Alpine-Himalayan or

Alpide belt, where 17 percent of the world's most significant earthquakes have occurred. Here, the Indian plate pushes upwards into the Eurasian plate, creating stress and causing massive earthquakes. A total of 92 active faults have been identified throughout the country by the Seismic Hazard Mapping and Risk Assessment for Nepal carried out as part of the Building Code Development Project – 1992-1994. The entire country falls in a high earthquake intensity belt: almost the whole of Nepal falls in high intensity scale of MMI IX and X for the generally accepted recurrence period. The seismic zoning map of Nepal, which depicts the primary (shaking hazard), divides the country into three zones elongated in northwest-southeast direction; the middle part of the country is slightly higher than the northern and the southern parts. Photo 7 depicts students practicing an earthquake drill at a secondary school located in Matatirtha village in Kathmandu, Nepal.<sup>83</sup>

Historically, Nepal has been fraught with destructive earthquakes. The 1934 Great Nepal Bihar Earthquake resulted in massive destruction. The Bihar earthquake, an 8.4 on the Richter scale, resulted in over 8,500 human casualties, damaged more than 125,000 homes, and destroyed approximately 80,000 buildings. The economy took a massive hit.<sup>84</sup> Most recently, the 2015 Nepal Earthquake, a 7.8 magnitude quake, resulted in 70 aftershocks, and the deadliest avalanche on Mount Everest, killing 20 hikers.



Photo 7: Students Practice Earthquake Drill

# **IDISASTER OVERVIEW**

	Major Earthquakes in Nepal in the last 100 years				
Year	Location	Magnitude	Damages	Cost	
1934	Nepal	8.4	10,700 dead 126,355 houses damaged 80,893 buildings destroyed	206,500 rupees (USD 2,012) (Kathmandu Valley only)	
1980	Baitadi Bajhang Darchula	6.5	125 dead 248 seriously injured 13,414 buildings damaged 11,604 buildings destroyed	Unknown	
1988	Eastern Development region Some parts of Central Development region	6.8	721 dead 6,553 injured 65,432 buildings damaged 1,566 livestock dead 22 districts of eastern Nepal affected	5 billion rupees (USD 48,713,000)	
1993		Unknown	1 dead 11 injured 72 houses destroyed 451 buildings damaged	48.39 million rupees (USD 471,444)	
1994	Midwestern region	Unknown	12 injured 623 affected 84 houses destroyed 287 buildings damaged	16.35 million rupees (USD 159,292)	
1997	Central region Far Western region	Unknown	1 injured 1,489 affected 196 houses destroyed 60 buildings damaged	51.29 million rupees (USD 499,698)	
2015	Northwest of Kathmandu	7.8	8,700 deaths 22,200 injured 288,793 buildings damaged 254,114 building partially damaged	10 billion rupees (USD 97,426,000)	
2015	Northeast of Kathmandu - Sindhupalchok District	7.3	153 deaths 3,275 injured	Estimated 1 billion rupees in additional damages (USD 9,742,600) <sup>86</sup>	

Table 1 lists the major earthquakes in Nepal over the last one hundred years.<sup>85</sup>

Table 1: Chronological History of Major Earthquakes in Nepal

## Drought

Droughts are common in Nepal due to irregular rainfall patterns which have been attributed to climate changes in the region. Low amounts of regular rainfall combined with the lack of adequate access to irrigation for farming exacerbates the effects of drought, affecting crop production in the region and resulting in loss of crops and livestock. Droughts have had detrimental effects on the livelihoods of farmers in the region. The worst recorded drought in Nepal took place in 1994 and affected 35 districts of western Hilly and Terai regions.<sup>87</sup>

## Wildfires

Wildfires are a major cause of natural disasters in Nepal. Approximated, 78 percent of households are agro-base households. In the rural areas it is estimated that over 85 percent of domestic dwellings are made up of natural elements such as, earthen wire, stone and wood. Additionally, a majority of the, residential households are developed in clusters, which increases their vulnerability to catching fire and further provide a means for fires to spread rapidly. Wildfire vulnerability is exacerbated during the dry seasons where high temperatures combined with dry land and dry air provide an ideal condition for fires, predominately in the Hill Region. In the Terai Region, the wildfires occur mainly in the dry season.<sup>88</sup> Nepal approved the Forest Fire Management Strategy in 2010 in order to implement measures to mitigate the frequent occurrence of wildfires in the country.<sup>89</sup>

## **Recent History of Natural Disasters**

Nepal is highly susceptible to natural disasters such as earthquakes, floods, landslides, and droughts. The following is a list of the most recent history of natural disasters in Nepal.

#### Floods and Landslides - August 2017

Floods triggered by heavy rainfall affected up to 1.7 million people across 35 of 75 district. The floods displaced approximately 461,000 people and destroyed 65,000 houses. According to the GoN Ministry of Home Affairs (MOHA) and the Nepal Red Cross Society (NRCS), 10 health clinics and 80 schools have also been destroyed. In addition, damaged roads and bridges continued to limit ground access to nearly 70 affected villages.

#### Floods and Landslides - July 2016

A flash flood swept away at least 38 houses in Tatopani, Nayabasti and Bharabishe area of Sindhupalchok district. The Sindhupalchok branch of Nepal Red Cross Society, in support of the Sindhupalchok District Disaster Relief Committee (DDRC), dispatched food and nonfood items in the affected area via helicopter in the Tatopani area. Monsoon rains triggered floods and landslides across 25 districts. Almost 750 local Red Cross volunteers were helping authorities with search and rescue.<sup>90</sup>

#### Earthquakes-April/May 2015

A 7.8 magnitude earthquake struck Nepal on 25 April 2015, with the epicenter in Barpak village of Gorkha District (north-east) of Kathmandu. The earthquake caused extensive casualties and damage. A Flash Appeal for the Response to the Nepal Earthquake was requested on 29 April. On 12 May, a new earthquake measuring 7.3 magnitude struck Nepal. The epicenter was southeast of in the Sindhupalchok District, Northeast of Kathmandu, 76 km northeast of Kathmandu which was an area already affected by the April earthquake.<sup>91</sup>

#### Landslides and Floods-August 2014

On 2 August, 2014, heavy rain caused massive landslides in Jure, Mankhaa Village in Nepal's Central Region. The landslide created a high artificial dam across the Saptakoshi River, which blocked the flow of water completely. A total of 34,760 families (173,800 people) were affected and 53 people were confirmed dead. The floods and landslides damaged roads, bridges, markets, vehicles, livestock, and crops. More than 1,240 houses were destroyed and 435 houses damaged.<sup>92</sup>

#### Floods and Landslides-June 2013

Monsoon rains caused massive flooding and landslides in 29 out of 75 districts, with 59 people dead and over 12,000 people displaced.<sup>93</sup>

#### Floods and Landslides-July 2012

Monsoon rains triggered floods and landslides across the country. A total of 145 families were displaced and another estimated 2,200 households were affected by a flash flood in the Dang District.<sup>94</sup>

# **IDISASTER OVERVIEW**

#### Flash Floods-May 2012

A landslide near Machhapuchhre Mountain in Kaski district triggered a catastrophic flash flood in the Seti River on 5 May 2012, causing settlements to be washed away. Approximately 30 people died, and 50 missing. Twenty houses, two temples, and a community building were swept away by the flooding. In addition, two water supply systems were damaged.<sup>95</sup>

#### Cold Wave-December 2011

Nepal experienced a severe cold wave from December 2009 to January 2010. Thirty-five people died in the Terai Regions.<sup>96</sup>

#### Himalayan Earthquake-September 2011

Nepal was affected by a 6.8-magnitude earthquake that hit northeast India on 18 September 2011 in the small, landlocked Himalayan state of Sikkim. The epicenter of the quake was 64 kilometer northwest of Gangtok, Nepal. The earthquake killed seven people, injured 88, caused 47,000 people to be displaced, destroyed almost 8,000 houses, and caused damage to more than 13,000 homes, several hundred schools and classrooms, as well as dozens of health posts and public buildings.<sup>97</sup>

## **Country Risk**

Figure 2 reflects internationally reported losses in terms of frequency, mortality, and economics for Nepal spanning from 1990-2014. The research is from the EM-DAT International Disaster Database. For a disaster to be entered into the database at least one of the following criteria must be fulfilled; ten (10) or more people

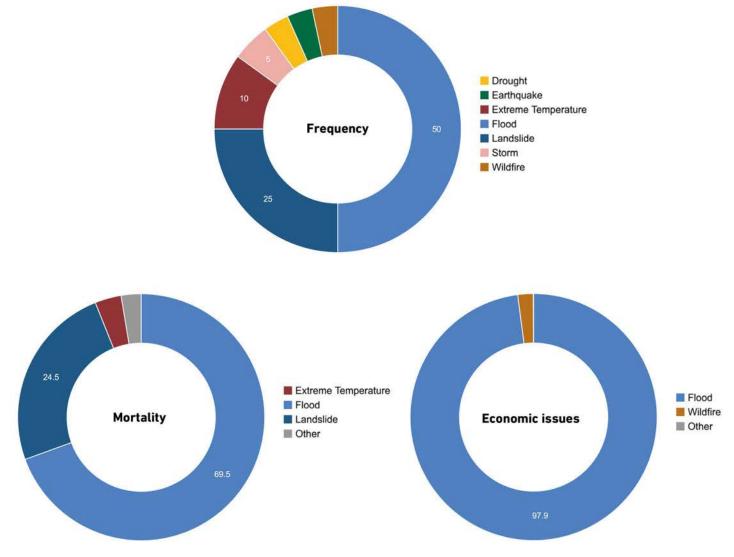
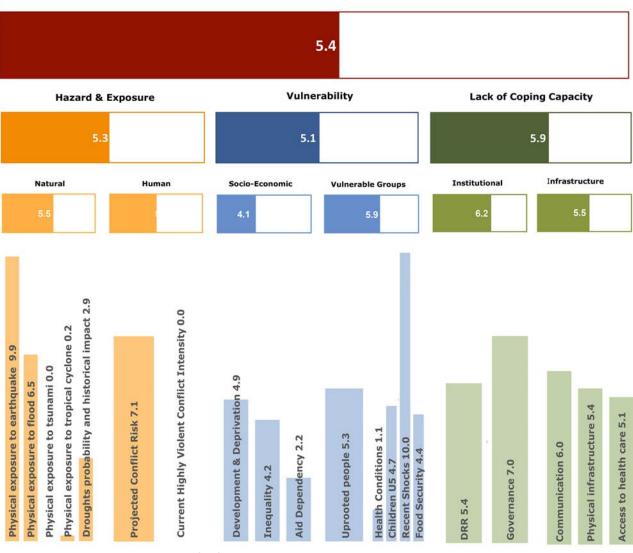


Figure 2: Nepal's Reported Losses Between 1990-2014 (EM-DAT)

reported killed; a hundred (100) or more people reported affected; a declaration of a state of emergency is made; or a call for international assistance is requested. From the frequency circle graph, floods and landslides are the most frequently occurring hazard. From the mortality circle graph floods cause the most deaths (69.5 percent). Floods also cost the most economic destruction (97.9) as seen on the economic circle graph.<sup>98</sup>

Figure 3 shows INFORM's (Index for Risk Management) risk profile for Nepal. 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). The index results are published once every year. They give each country an overall risk score of 1-10 (1 being the lowest and 10 the highest) for each of the dimensions, categories, and components of risk. 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. Nepal has a 2017 Hazard and Exposure risk of 5.3/10; a Vulnerability score of 5.1/10; and a Lack of Coping Capacity score of 5.9/10. Physical exposure to earthquakes, floods, and projected conflict risk rate the highest.<sup>99</sup>

#### **RISK PROFILE**



INFORM

Figure 3: INFORM Country Risk Profile for Nepal

# **IDISASTER OVERVIEW**

# **Infectious Disease**

#### Infectious Disease and Endemic Conditions

Infectious disease is prevalent throughout Nepal an epidemic of contagious diseases is considered as the number one killer with an average human casualties of 410 per year. About 70 percent of all health problems and deaths are due to infectious diseases. Nepal has a long history with cholera, with the first epidemic recorded in 1823, and five other outbreaks occurring in the same century. Cholera, endemic to Nepal, is a disease which is waterborne. Symptoms of Cholera include diarrhea and severe dehydration. The severity of the disease varies and may be fatal if left untreated. Poor sanitation and polluted water sources create environments conducive to Cholera. In vulnerable populations, such as displaced Nepalese, infections may develop into an epidemic.<sup>100</sup>

Cholera outbreaks are a concern for a country like Nepal. Not only does Nepal face floods and landslides during the rainy season every year, it has a steady increase in urban population density accompanied by inadequate supplies of safe drinking water and high rates of open defecation. The hill districts of the mid-western and far western development regions are particularly at high risk due to inadequate public health facilities and poor water and sanitation conditions.<sup>101</sup>

Malaria is prevalent in Nepal. More than 80 percent of the population is at an elevated risk of contracting Malaria. Malaria is a mosquitoborne disease. Symptoms include fever, vomiting, fatigue, and flu-like symptoms. Malaria may be fatal if left untreated. Nepal faces huge challenges for long-term malaria elimination strategies due to poor sanitation especially in poverty stricken communities.<sup>102</sup>

Tuberculosis (TB) is highly endemic in Nepal and is a major problem. Nearly 45 percent of the Nepalese population is infected with TB. Confirmed cases in adults account for approximately 60 percent of all cases in the nation. TB results in approximately 5,000-7,000 deaths each year.<sup>103</sup>

Lymphatic filariasis (LF) is a neglected tropical disease transmitted by mosquitoes. Nepal has implemented a national effort to eliminate LF by 2020 through mass drug administration (MDA) using diethylcarbamazine (DEC) and albendazole (ALB).<sup>104</sup> Photo 8 depicts a community water tap located in Ridikot.<sup>105</sup>



Photo 8: Community Water Tap



# **NEPAL** Organizational Structure

Disaster Management Reference Handbook | August 2017

# Organizational Structure for Disaster Management

To date, disaster operations in Nepal fall under the Natural Calamity Relief Act of 1982. The Relief Act also established the the Central Natural Disaster Relief Committee (CNDRC). The CNDRC is responsible for preparing national compliance on preparedness, response and recovery, and ensuring their implementation stockpiling relief and rescue materials; collecting and disseminating relief materials and funds during emergency operations; and, providing direction to the district and local committees.<sup>106</sup> Responsibility for disaster response in Nepal is decentralized to district and local levels. All five regions of Nepal have Regional Disaster Relief Committees (RDRC), and all 75 districts have a Distric Disaster Relief Committee (DDRC). Both, the RDCD and the DDRC coordinate with Emergency Operation Centers (EOCs) when they are established at a subnational level.

The Local Governance Act of 1999 enhances the roles and responsibilities of local government responding to disasters. This Act makes local authorities, the District Development Committees (DDCs), the Village Development Committees (VDCs), and all municipalities responsible for response. All 75 districts in Nepal have disaster preparedness and response plans, which are updated on an annual basis.

Figure 4 depicts the Disaster Management Structure of Nepal.<sup>107</sup>

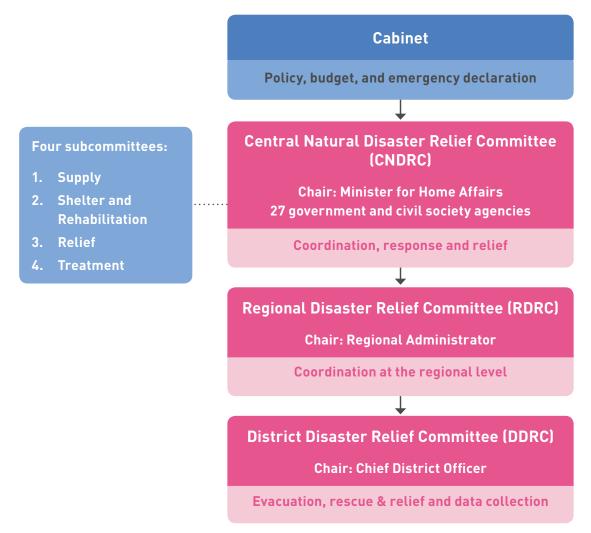
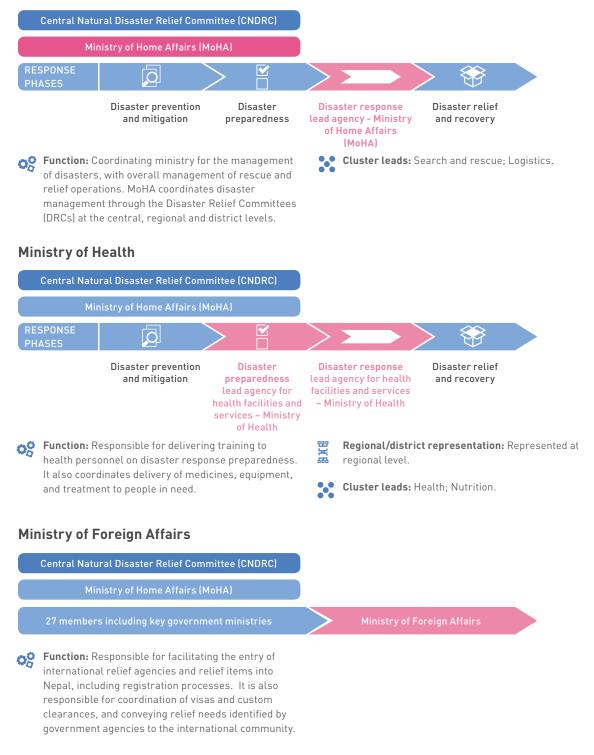


Figure 4: Disaster Management Structure

# Lead Government Agencies in Disaster Response

The National Strategy for Disaster Risk Management (NSDRM) 2009, outlines the responsibilities of disaster management policymaking, execution, and coordination. The Ministry of Home Affairs is considered the main responsible agency for the implementation of disaster management in Nepal. Figure 5 highlights the Key Government Agencies that respond to disasters in Nepal.<sup>108</sup>

#### **Ministry of Home Affairs**



#### Figure 5: Key Government Agencies in Nepal

# **ORGANIZATIONAL STRUCTURE**

## National Reconstruction Authority

The National Reconstruction Authority (NRA) is a coordinating and facilitating body formed by the Government of Nepal to manage, oversee, and coordinate the reconstruction work. It is the primary institution to facilitate Nepal's effort to build back better during the reconstruction policy. The NRA assesses the damages caused by the 2015 earthquake and its aftershocks, examines reconstruction, prepares policies, plans and programs, and facilitates implementation. It is responsible for ensuring that reconstruction is carried out in the prescribed manner, in accordance with established safety standards. The NRA is also responsible for coordinating the work of, and collaborating with, nongovernmental organizations, private sector or communities as they relate to reconstruction efforts. The NRA is able to raise financial resources for reconstruction. It is also responsible for carrying out technical reviews of damaged or unsafe physical structures and order safe demolition.109

## **Government Security Forces**

Nepal Army is only defense force of Nepal which is made up of nearly 100,000 volunteers. It is under the Ministry of Defense with primary role to safeguard the national unity, territorial integrity, sovereignty and independence of Nepal.<sup>110</sup> Additionally, as secondary roles assist the government in the internal security, development work, nature conservation, provide support for humanitarian assistance and to coordinate disaster relief operations. Nepal army has Disaster Management Directorate under the Director General of Military Operations. Under the directorate there are two disaster management battalions fully committed in disaster management role. First battalion is in Sundarijal, Kathmandu and Second Battalion is located in Rasaudi, Chitawan. Recently Disaster Management Training School is established to conduct different level trainings in disaster and emergency management. Besides that Nepal Army Aviation, Army Medical Corps, Combat Engineers, Signals and Ranger and Special Forces are other components of the Nepal Army playing crucial role in disaster response operations. Infantry Units deployed in all districts of Nepal are also committed to support local governments

on humanitarian assistance and disaster response operations.<sup>111</sup>

In Nepal the Armed Police Force (APF) is a paramilitary force with the basic functions of facilitating and upholding law and order. The primary functions of APF are to manage conflict in the country, provide disaster relief, guard the national borders, protect crucial public infrastructures, and to assist the Nepalese Army in an external invasion.<sup>112</sup>

The APF coordinate both border control and have a disaster management division at the central government level. The APF has Disaster Management Training Center. Besides that One Disaster Management Battalion in Kathmandu, and 46 members Disaster Management Team in all development regions. For water induce disaster APF have maintained a team of Deep Diving in Pokhara. The APF is directly under the Ministry of Home Affairs.

Nepal Police is formal civil police of Nepal. They are also directly under the command of Ministry of Home Affairs. It is deployed throughout the country from Central to community level for enforcement of law and order. Since there are no any viable option of disaster related component at the community level, Nepal Police is performing task of disaster response from the government side at the community level. At the central level Nepal Police have Disaster Management Division with 447 total dedicated personnel in 3 different Task Forces. At the regional level Task Force have been organized with 125 purely dedicated personnel in each task force in 5 different region.<sup>113</sup>

Historically, Nepal has provided troops for UN peacekeeping missions in other countries. The troops have been trained in humanitarian assistance and often distribute food and medical supplies to those in need. In 2010, the Army deployed a force for the Haiti earthquake relief. The Army has taken part in multi-national training and exercises for large scale disaster relief operations.<sup>114</sup>

# International Agencies in Nepal

Nepal counts with several International Agencies that provide support to the Nepalese people. Table 2 depicts a list of International Agencies in Nepal.

Adventist Development and Relief Agency	Country Office	adra @adrabd.org 977 1 555 5913	ADRA established an office and began activities in Nepal in 1987. ADRA serves people without regard to their ethnic, political or religious association. It simply helps people in need, especially those most vulnerable such as women, children, and the elderly. <sup>115</sup>
ADB Asian Development Bank	Resident Mission	adbnrm @adb.org 977 1 400 5120	ADB has been working as a key development partner with Nepal since 1966. ADB's country partnership strategy for 2013-2017 supports the government's development objective of accelerated and inclusive economic growth. It seeks to address the infrastructure bottlenecks in the areas of energy, air and road transport, water supply and sanitation, and irrigation, creating an enabling environment for increased business and employment opportunities. <sup>116</sup>
Department of Foreign Affairs and Trade	Country Office (located inside Australian Embassy)	977 1 437 1678	Australia's relationship with Nepal spans over 50 years. They support the Government's development priorities and their presence enables assistance during Nepal's frequent natural disasters. Australia is the twelfth largest donor in Nepal, and will likely remain a modest donor. <sup>117</sup>
Food and Agriculture Organization	Liaison Office	FAO-NP@fao. org 977 1 552 3200	Nepal became a member of the FAO November 1951. Since then Nepal and FAO have been cooperating to improve the agricultural and rural development of Nepal. Through its Emergency Centre, FAO has been assisting the Government in strengthening its capacities to control and contain transboundary animal diseases such as Avian Influenza. <sup>118</sup>
<b>German</b> Development Cooperation	Country Office	Giz-nepal@ giz.de 977 1 552 3228	GIZ has been in Nepal since 1975 opened its own office in 1979. The goal of GIZ is to reduce poverty, to ensure inclusive development and to improve the country's economic and political framework. Priority areas include: sustainable economic development, trade, renewable energies, energy efficiency and health. <sup>119</sup>

Table 2: International Agencies in Nepal

# ORGANIZATIONAL STRUCTURE

	Country Off	t	Negal because an IOM
	Country Office	iomnepal @iom.int 977 1 442 6250	Nepal became an IOM member in 2006 and signed an MOU in 2007 to encourage cooperation and the delivery of services to Nepal. IOM's focus has diversified its areas of cooperation with the GoN into various fields. <sup>120</sup>
International Organization for Migration			
Nepal Red Cross Society	Nepal Red Cross Society	nrcs@nrcs.org 977 1 427 0650	Nepal Red Cross Society (NRCS) came into being in 1963. NRCS has, over the years, grown to be the largest humanitarian
International Federation of Red Cross			organization in Nepal, with its network of District Chapters (DCs) extended in each of the 75 districts of the country. <sup>121</sup>
jîca	Country Office	np_oso_rep @jica.go.jp 977 1 442 5636	The JICA office established in 1978. JICA supports the following: poverty reduction, agriculture and rural development, education, health, democracy, and economic infrastructure. <sup>122</sup>
Japan International Cooperation Agency			
Save the Children.	Country Office	post.nepal@ savethechildren.org 977 1 446 8130	Save the Children in Nepal focuses on education, especially early childhood development and primary education, as well as basic health, including maternal child health and HIV and AIDS prevention and care. In addition, Significant support to children and families who were affected by the country's ten-year-long civil war. <sup>123</sup>
The Asia Foundation The Asia Foundation	Country Office	nepal.general@ asiafoundation.org 977 1 444 3316	The Asia Foundation is supporting and encouraging a smooth political transition; conflict transformation at national and subnational levels; enhanced women's rights and security; accountable local governance; and broadened economic opportunity. <sup>124</sup>
United Nations Children's Fund	Country Office	kathmandu @unicef.org 977 1 552 3200 ext. 1100	UNICEF began working with Nepal in 1964. Today, UNICEF/Nepal's country program is one of the 18 largest UNICEF programs in the world. The program seeks to advance the respect, protection and fulfilment of the human rights of children and women in Nepal. <sup>125</sup>
United Nations Development Programme	Country Office	registry.np @undp.org 977 1 552 3200	UNDP in Nepal concentrates its efforts for greater impact in the most remote, poor, and/or conflict-affected areas. Currently the overarching priority of their work in Nepal is to help the Government and its people build a lasting peace and achieve the Millennium Development Goals (MDGs). <sup>126</sup>

### Table 2: International Agencies in Nepal (cont.)

United Nations Human Settlements Programme United Nations	Country Office	unhabitat.nepal @unhabitat.org.np 977 1 5542816 registry-np @unfpa.org	UN-HABITAT in Nepal supports the following priorities: Promoting shelter for poor and vulnerable population including slum and squatter, promoting water and environmental sanitation, disaster preparedness and recovery, supporting climate change management issues, and raising urban agenda through Nepal Urban Forum. <sup>127</sup> UNFPA's support to Nepal began in 1971. An evaluation of the sixth country programme, 2008-2012, cited a number of achievements. UNFPA helped to: position UNFPA within the health-sector programme; enhance the national response to gender-based violence by
Population Fund			working with United Nations organizations and other donors; and implement the population and housing census. <sup>128</sup>
WORLD BANK	Country Office	infonepal@ worldbank.org 977 1 423 6000	The World Bank has 20 active projects with a net commitment of about \$1.506 billion. Activities are concentrated in education, livelihoods and safety nets, energy, roads, health, agriculture and irrigation, water, and
The World Bank			state-building and country systems. <sup>129</sup>
World Health Organization	Representative Office	linaung @searo.who.int 977 1 552 3200	WHO provides support mostly in policy planning and program development; human resources development; prevention and control of major communicable diseases, polio eradication, leprosy elimination; health promotion; healthy environment; and health technology and pharmaceuticals. <sup>130</sup>
world Vision World Vision	Country Office	info_nepal @wvi.org 977 1 554 8877	World Vision is working to address the immediate poverty issues confronting children and vulnerable communities in Nepal integrating its work efforts in advocacy, development and humanitarian emergency affairs. <sup>131</sup>
United Nations High Commissioner for Refugees	Country Office	nepka@unhcr.org 977 1 441 4989	UNHCR aids the resettlement of refugees from Bhutan. It will continue to advocate a simpler visa-waiver process for urban refugees who are accepted for resettlement and ways to assure the safe transit of Tibetans to India. UNHCR will also seek the issuance of documentation for the long-staying Tibetan population. <sup>132</sup>
International Labour Organization International Labour Organization	Country Office	kathmandu@ilo.org 977 1 555 5777	Nepal joined the ILO in 1966 and established their office in 2000. They focus on jobs for peace through local economic development, child labour, indigenous peoples, migration, HIV/AIDS, and other development challenges. The overall purpose of ILO is its support the implementation of the Decent Work Country Programme. <sup>133</sup>

Table 2: International Agencies in Nepal (cont.)

# **IORGANIZATIONAL STRUCTURE**

International Corganization International Labour Organization	Country Office	kathmandu@ilo.org 977 1 555 5777	Nepal joined the ILO in 1966 and established their office in 2000. They focus on jobs for peace through local economic development, child labour, indigenous peoples, migration, HIV/AIDS, and other development challenges. The overall purpose of ILO is its support the implementation of the Decent Work Country Programme. <sup>133</sup>
International Monetary Fund	Resident Representative Office	RR-NPL@imf.org 977 1 441 1977	Nepal joined the Fund in 1961.
Unites States Agency for International Development	Mission Office	usaidnepal @usaid.gov 977 1 423-4260	USAID programs in Nepal seeks to reinforce recent gains in peace and security, stabilize the transitional government, strengthen the delivery of essential social services, expand proven health interventions, and address the global challenges of food insecurity and climate change. <sup>134</sup>
WFP wfp.org World Food Programme	Country Office	WFP.Kathmandu @wfp.org 977 1 5260607	WFP's work in Nepal primarily targets the most food insecure and hard to reach districts of the Mid- and Far-Western Hills and Mountains. These areas of Nepal experience both the greatest need for assistance and the greatest gap in government and NGO partner support on the ground. <sup>135</sup>
United Nations Office for the Coordination of Humanitarian Affairs	Country Office	Rchco.nepal @one.un.org 977 1 552 3200	OCHA has been present in Nepal since 2005 and sits within the Resident Coordinator's Humanitarian Support Unit. OCHA facilitates the Nepal Risk Reduction Consortium Flagship Programme II on emergency preparedness. They also facilitate the cluster-specific disaster response contingency plan processes. <sup>136</sup>

Table 2: International Agencies in Nepal (cont.)

# **U.S. Government Agencies in Nepal**

# U.S. Embassy in Nepal

Address: U.S. Embassy Kathmandu Maharajgunj, Kathmandu, Nepal Tel: 977-1-423-4000 Fax: 977-1-400-7272 Website: https://np.usembassy.gov/ The mission of the U.S. Embassy in Nepal is to assist Nepal's development as a peaceful, prosperous, and democratic nation that contributes positively to regional stability. In pursuit of this goal, the United States encourages multi-party democracy, including respect for human rights and the rule of law, and sustainable, market-oriented, and private-sectorled economic development.<sup>138</sup>

### Nepal -U.S. Agency for International Development (USAID)

Address: U.S. Embassy Maharajgunj Kathmandu, Nepal Postal Code - M PO Box: 295 Tel: 977-1-423-4260 Fax: 977-1-400-7285 Email: usaidnepal@usaid.gov Website: https://www.usaid.gov/nepal

USAID partners with Nepal on three U.S. presidential development initiatives including Feed the Future, Global Climate Change and Global Health. Across all sectors, USAID focuses on strengthening gender and social equality, reducing disaster risk, and working with the Government of Nepal to improve its institutional capacity, inclusiveness and accountability.<sup>139</sup>

# Nepal - Department of State

Tel: +(977)(1) 423-4000 or 400-7200 Emergency After-Hours Telephone: +(977)(1) 423-4000 Fax: +(977)(1) 400-7281 Email: consktm@state.gov Website: https://www.state.gov/r/pa/ei/bgn/5283.htm

U.S. assistance seeks to cement gains in peace and security, further the democratic transition, support the continued delivery of essential social services, scale up proven and effective health interventions, reduce extreme poverty and address the challenges of food insecurity and climate change.<sup>140</sup>

# Nepal - Peace Corps

Tel: +977 1 4016027 Email: infonepal@peacecorps.gov Website: https://www.peacecorps.gov/nepal/

There are more than 60 volunteers in Nepal working with their communities on agriculture projects. During their service in Nepal, volunteers learn to speak Nepali. More than 3,760 Peace Corps volunteers have served in Nepal since the program was established in 1962.<sup>141</sup>

# Participation in International Organizations

Nepal participates in a number of international organizations:

Asia Development Bank (ADB), Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), Community of Democrats (CD), Food and Agriculture Organization (FAO), 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) (NGOs), International Development Association (IDA), International Finance Corporation (IFC), International Federation of Red Cross and Red Crescent Societies (IFRCS), International Labour Organization (ILO), International Monetary Fund (IMF International Organization for Migration (IOM), Interpol, International Olympic Committee (IOC), Inter-Parliamentary Union (IPU), International Organization for Standardization (ISO), International Telecommunications Satellite Organization (ITSO), International Telecommunication Union (ITU), International Trade Union Confederation (ITUC) (NGOs), Multilateral Investment Guarantee Agency (MIGA), UN Mission for the Referendum in Western Sahara (MINURSO), United Nations Multidimensional Integrated Stabilization Mission in Mali (MINUSMA), United Nations Organization Stabilization Mission in the Democratic Republic of the Congo (MONUSCO), Non-Aligned Movement (NAM), Organization for the Prohibition of Chemical Weapons (OPCW), South Asian Association for Regional Cooperation (SAARC), South Asia Co-operative Environment Programme (SACEP), United Nations (UN), African Union/United Nations Hybrid operation in Darfur (UNAMID), United Nations Conference on Trade and Development (UNCTAD), United Nations Educational, Scientific, Cultural Organization (UNESCO), United Nations High Commissioner for Refugees (UNHCR), United Nations Industrial Development Organization (UNIDO), United Nations Interim Force in Lebanon (UNIFIL), United Nations Mission in Liberia (UNMIL), United Nations Mission in South Sudan (UNMISS), United Nations Operation in Côte d'Ivoire (UNOCI), World Tourism Organization (UNWTO), Universal Postal Union (UPU), World Customs Organization (WCO), World Federation of Trade Unions (WFTU) (NGOs), World Health Organization (WHO), World Intellectual Property Organization (WIPO), World Meteorological Organization (WMO), World Trade Organization (WTO).

# **IORGANIZATIONAL STRUCTURE**

# Foreign Disaster Relief and Emergency Response

In an event of a mega disaster in Nepal, the National Disaster Response Framework (NDRF) details the process to request international assistance. The MoHA coordinates international assistance using the Guidelines for Accepting International Assistance and Early Registration. The Ministry of Foreign Affairs oversees the process of granting visas for International Humanitarian Communities (IHC) at the time of entry to Nepal, and the issuance of visas at port facilities for materials arriving to Nepal via India.<sup>142</sup>

The NDRF states the following:<sup>143</sup>

- 1. The Government of Nepal Cabinet shall declare a state of emergency in the case of a mega disaster that is beyond the existing capacity of the government and as recommended by the Central Natural Disaster Relief Committee.
- The Government of Nepal Cabinet 2. may request international assistance in terms of funding or services to respond to a disaster through national and regional efforts. The assistance will be requested from the United Nations Humanitarian Coordinator, national and international governments, Red Cross movement, regional organizations, donor communities, international nongovernmental organizations (INGOs)/ (NGOs), political parties, professionals, resident and non-resident Nepalese citizens, foreign citizens, and other international courses. The request from the Cabinet occurs during a large disaster situation, however during normal circumstances the Ministry of Finance would be consulted for an appeal.
- 3. Upon the Nepal Government's request, the United Nations and the Red Cross Movement shall appeal for international assistance for disaster response.
- 4. The Ministry of Home Affairs facilitates and organizes the overall management of the Humanitarian Communities utilizing the Guidelines for Accepting International Assistance and Early Registration and in consultation with the Ministry of Finance. The ministry will list, register, and identify

priority response areas for the assisting humanitarian actors.

- 5. Provisions to grant immediate visas, exemptions for visa fees and custom duty fees at land and air entry points, and entry of relief goods, search and rescue equipment, medical equipment and accessories for the Humanitarian Communities are established by the Nepal Government under the Model Agreement for Emergency Customs Procedure 2007.
- 6. The Government facilitates the entry visas issued to the international community members traveling to Nepal to assist with search and rescue and humanitarian support during a major disaster. The Government will also facilitate the provision of transit visas for the international humanitarian community traveling through India to Nepal and the port facility for relief items shipped to Nepal.
- 7. The UN Humanitarian Coordinate activates the Nepal cluster system and the Nepal Government will assign focal points for each cluster to support the process for a large scale disaster. The Central Natural Disaster Relief Committee has the ability to activate clusters as needed.

When the Nepalese Government requests and/or accepts international assistance, coordination between the Humanitarian Country Team (HCT) agency co-leads for the clusters, the Humanitarian Coordinator and the national response systems and bodies including MoHA and CNDRC, is initiated. Twenty-four members of the UN, private sector, donor agencies, and international non-government organizations form the HCT. The HCT is run by the UN Resident Coordinator/Humanitarian Coordinator. There are 11 clusters and 5 subclusters all led by government departments and agencies, as well as the HCT agency co-leads. These can be seen in Figure 6.<sup>144</sup>

# Laws, Policies, and Plans on Disaster Management

# Constitution of Nepal, 2015

The new Constitution of Nepal includes provisions for the role of the Armed Forces, stating that in the event of a natural disaster the

# NATIONAL CLUSTER SYSTEM

	CLUSTER LEADS CLUSTER CO-LEADS (GOVERNMENT) (HUMANITARIAN AGENCIES)					ESPONSE CLUSTERS
	Ministry of Health (MoH)	•••••	WHO	•••••		Health <ul> <li>Injury Rehabilitation</li> <li>Mental Health</li> <li>Reproductive Health</li> </ul>
	Ministry of Urban Development (MoUD)	•••••	UNICEF	•••••		Water, Sanitation and Hygiene (WASH)
	Ministry of Urban Development (MoUD)	•••••	IFRC/UN Habita	at •••••		Emergency Shelter
	Ministry of Agricultural Development (MoAD)	•••••	WFP/FA0	•••••		Food Security
encies	Ministry of Home Affair (MoHA)	5	WFP/FA0	••••••	<b>×</b> .	Search, Rescue, Retrieval & Logistics
Government Lead Agencies	Ministry of Urban Development (MoUD)	•••••	IOM	•••••		Camp Coordination and Camp Management
srnmei	Ministry of Education (MoE)	•••••	UNICEF/SC	•••••		Education Custors
Gove	Ministry of Women, Childre Social Welfare (MoWCSW Nepal Human Rights Commission (NHRC)		UNHCR/UNICER UNFPA	F/		<ul><li>Protection</li><li>Child Protection</li><li>Sexual and Gender- Based Violence</li></ul>
	Ministry of Information and Communication (MoIC)	•••••	WFP	•••••		Emergency Telecommunications
	Ministry of Health (MoH)	•••••	WFP	•••••		Nutrition
	Ministry of Federal Affairs and Local Development (MoFALD)	•••••	UNDP	•••••	<b>)</b>	Early Recovery
IFRC IOM Ir MoAD MoE N	ood and Agriculture Organiz International Federation of th International Organization for Ministry of Agricultural Dev Ministry of Education	ne Red Cross Migration elopment		NHRC Nepal Human R SC Save the Children UNDP United Nations UNFPA United Nations	ights Commi Development Population I	: Programme Fund
MoHA MoH I MOIC	LD Ministry of Federal Affair Ministry of Home Affairs Ministry of Health Ministry of Information and ( Ministry of Urban Developm	Communications		UNHCR United Nation UNICEF United Nation WFP World Food Prog WHO World Health Org	s Children's I ramme	, and the second s
Figur	e 6. National Cluster Svs	tem				

# Figure 6: National Cluster System

Nepalese Army may be mobilized without prior authorization of the parliament.

# Natural Calamity Relief Act, 1982

The Act mandates the Ministry of Home Affairs (MoHA) as the lead agency for immediate rescue and relief work, as well as disaster preparedness activities. The Act also outlines the roles and responsibilities of the Central Natural Disaster Relief Committee (CNDRC) as well as detailing functions of the sub-committees and regional, district and local relief committees, including the role of the Nepalese Army and Nepal Police.

# Armed Police Force Act, 2001

The Armed Police Force Act details provisions for its particular role in providing assistance in disaster response.

# National Disaster Response Framework (NDRF), 2013

NDRF provides guidance on the roles and responsibilities of government agencies in disaster response as well as preparedness, and the functions of national coordination mechanisms. It highlights the primary role of the Nepalese Army in disaster response, and outlines core responsibilities for the direction and coordination of foreign military assistance. It also designates the government lead agency and relevant international co-lead of each cluster. Following the earthquakes in 2015, the government is revising the NDRF.

# National Strategy for Disaster Risk Management, 2009

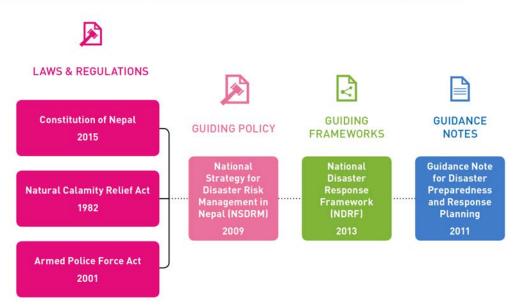
NSDRM provides the basis for the formation of the new National Council for Disaster Management. A draft strategy has been developed, incorporating key aspects of the pending Disaster Management Act, and provides a broader focus on preparedness, mitigation and risk reduction. A Guidance Note for Disaster Preparedness and Response Planning developed by MoHA also details further processes for planning at subnational levels. Other laws govern disaster response with respect to local self-governance, disaster funds, rescue and relief standards and local disaster risk management guidelines. To align with the Sendai Framework, revision of the NSDRM is in process.<sup>145</sup>

Figure 7 depicts the Key Policies, Frameworks, and Plans for Civil-Military Coordination in Nepal.<sup>146</sup>

# **Education and Training**

The Government of Nepal has made substantial achievements in incorporating disaster risk reduction curriculum into their education system as well as education materials, and training. Over a period of time, the disaster risk management concepts have been incorporated into schools, universities, and other training curricula.<sup>147</sup>

Some of the achievements include:



# KEY POLICIES, FRAMEWORKS AND PLANS FOR CIVIL-MILITARY COORDINATION

Figure 7: Key Policies, Frameworks, and Plans for Civil-Military Coordination in Nepal

- Secondary level disaster risk reduction reference materials have been prepared together with teacher orientation packages which have been used by 2526+ teachers.
- Development of university level disaster management courses and integration into university programs such as engineering, geology, glaciology, and public health.
- Inclusion of disaster management into the Local Development Training Academy, Staff College, Nepal Army, and Nepal Police courses.
- The Armed Police Force operates basic to advance disaster management trainings for the cadres at the Kurintar training center.
- The school disaster preparedness program has been implemented at some schools and the school disaster library and disaster committees have been established.
- School level disaster preparedness plans specific to Water, Sanitation, and Hygiene (WASH) are developed and DRR/WASH training provided.

An important aspect of any Disaster Risk Management (DRM) initiative is to anticipate requirements for disaster related public awareness, education, and training. Ultimately, those affected by the disaster are responsible for knowing how to mitigate disasters, respond in times of disasters, and develop capacities to cope in the aftermath. The planning and education process is an extremely important aspect of DMR, it allows communities to prepare and plan before a disaster strikes. Nepal has several different government organizations, NGOs, and community based organizations (CBOs) conducting different DRM trainings to educate the community. Many times these organizations fail to streamline their teachings and double their efforts.148

The main programs identified under the theme of public awareness, training, and education are:<sup>149</sup>

• Promote public awareness at the national level: This can be done though effective implementation of a national public awareness program for disaster preparedness.

Promote awareness within schools: This can be achieved through the introduction of DM related subjects in the school curriculum, and through awareness campaigns and publications produced in Nepali.

- Promote awareness and train university students by incorporating DRR into the university curriculum: The integration of information on DM within different subjects at university, such as urban planning, civil engineering and architecture would help promote awareness and will help with DRR planning in the future. This has already been implemented in some universities, but needs to be addressed on a larger scale.
- Increased awareness of DRM within the school curriculum: DM would not be a new subject area in the curriculum, but instead should be integrated into existing subjects.
- Promote awareness among professional groups and key decision makers through training: This would involve training on disaster preparedness and reduction at a number of different levels, including entry level, refresher training, and in service training of government staff at various levels.
- Increase capacity among key institutions through the training of officials and the provision of training tools and resources.
- Integrate DRM training within development and educational initiatives: Professionals who are involved in planning, implementation, financial management and so on need to understand the implications of DRM and the positive impact it will have on sustaining development efforts.
- National awareness campaign on public safety in disasters.

# **Disaster Management Communications**

# **Early Warning Systems**

Nepal continues to make advances in the implementation and development of their national Early Warning Systems (EWS) for natural disasters. Nepal's EWS have been developed and implemented throughout the country and have been tested to ensure they meet all EWS requirements. Local communities have been educated on the EWS and training has been integrated into the implementation process. The Government of Nepal developed the Early Warning Strategic Action Plan to assist in the development of the framework for the installation, operation, and maintenance of

# **IORGANIZATIONAL STRUCTURE**

the early warning system. As of January 2015, the plan was in the pending approval phase as outlined in the National Progress Report for the Hyogo Framework for Action (2013-2015).<sup>150</sup>

Nepal's Basic Level EWS is active in seven major river basins, two for glacial lake outburst flood (GLOFs) and two for landslides. The agency responsible for national level EWS is the Department of Hydrology and Meteorology. Increased efforts to build robust Community Based Disaster Management (CBDM) initiatives in Nepal have led to effective community based early warning systems. The community base EWS have been successfully installed and tested to build resilient communities. Positive outcomes have resulted in the integration of early warning systems in upstream and downstream communities.<sup>151</sup>

# Earthquake Monitoring

Nepal's National Emergency Operations Centre (NEOC) and the National Seismological Center monitor all earthquake activity registering as a magnitude of 4.0 or higher on the Richter magnitude scale. Earthquake information and updates are publicly posted on the NEOC and National Seismological websites as a means of mass information distribution. Nationally, 21 seismological stations, three broad band stations, seven accelerometers, and 29 permanent GPS stations are utilized to collect data.<sup>152</sup>

# Responsible Agencies for Flood and Storm Warning

The Department of Hydrology and Meteorology website provides real-time information 24 hours on temperature, sedimentation, rainfall, and water levels of rivers collected from over 50 stations. The website displays real-time data, manually observed data, current forecast, community outreach, projects, publications, river watch, and rainfall watch. Communities located downstream from potential hazardous conditions are notified by mobile phone, radio, television, and community based organizations. In some river basins, flood forecasting, Glacial Lake Outburst Flood (GLOF), and information dissemination is effectively deployed.

# Secuirty Forces Role in Disaster Relief

The Chief of General Staff of Nepal Army is included as a member of the Central Natural Disaster Relief Committee Chaired by the Minister of Home Affairs. During a disaster, a command post will be established in the National Emergency Operations Center (NEOC) to mobilize rescue and relief teams in a timely manner. The NEOC is responsible for the coordination of disasters, humanitarian assistance, information collection, information dissemination and to promote preparedness activities to central and local governments. The Director of Disaster Management Directorate of Nepal Army will be attached in the command post with liaison team. Military representatives support the key national level committees to assist with national level guidance and decisionmaking. They are a member of the the National Council for Disaster Management" (Natural Calamity Act of 1982 / NDRF/ Nepal Army in the Aftermath of the Gorkha Earthquake of 2015).153

Photo 9 depicts the U.S. Airforce 154<sup>th</sup> Security Forces Squadron sharing crowd control techniques with Nepalese Army Soldiers during the U.S. Pacific Command's Operation Pacific Angel in Nepal on 9 September 2012.<sup>154</sup>

The Nepalese Armed Forces has an integral role in disaster response in Nepal. Civil-military coordination has been shaped by large-scale natural disasters, in particular earthquakes and flooding, as well as conflict and recent internal instability in the southern region of the country.

The Nepalese Armed Forces is a primary responder in disaster operations, and its role is articulated in Nepal's disaster-related laws and policies, as well as the country's national



Photo 9: Security Forces Squadron sharing crowd control techniques. PACAF, 2009

coordination structures. In recent years the military has played a key role in disaster response as a primary responder, including in the 2015 earthquakes, the 2008 Koshi floods, the 2009 epidemic in Jarjarkot, and the avalanche and blizzards in the western region of the country in 2014.<sup>155</sup> Figure 8 depicts the Key Military Responsibilities in Disasters.<sup>156</sup>

# **KEY MILITARY RESPONSIBILITIES IN DISASTERS**

# Role of the Nepalese Armed Forces

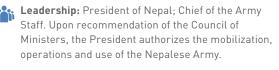
The Nepalese Armed Forces has an integral role in disaster response. This is articulated in disaster-related laws and policies, military doctrine, and the Armed Forces' role in the national disaster coordination structures. The Armed Forces and the Armed Police Force are designated members of the Central Natural Disaster Relief Committee (CNDRC). The Armed Police Force Act details its particular role in providing assistance in disaster response.<sup>13</sup> The new Constitution of Nepal contains provisions for the rapid mobilization of the Armed Forces without prior authorization of the parliament in a disaster context.

### COMPONENTS OF THE NEPALESE ARMED FORCES



# Nepalese Armed Forces

Established: 1945.



**Components:** Nepalese Army, Nepalese Army Air Service and the Armed Police Force.

No. of active personnel: 130,000.

- Headquarters: Kathmandu.
- Activation in disaster response: Activation is undertaken in two ways: 1. Under the Constitution, the Chief of the Army Staff has the authority to immediately mobilize the Nepalese Army, and 2. On recommendation of the National Security Council to the President via the Council of Ministers.
- **Divisions:** Far-western division, mid-western division, western division, middle division, valley division and eastern division.
  - Logistics Operations Center: Established at the Army Headquarters to coordinate the operational aspects of relief distribution.

# KEY FUNCTIONS IN DISASTER RESPONSE Search and Rescue activities. Undertake damage assessments and identify requirements.

Provision of **logistics and transport capabilities** for the distribution of relief.

- Provision of **medical assistance** through the Medical Corps of the Nepalese Army.
- Transportation and **support to foreign military** teams where necessary.

Figure 8: Key Military Responsibilities in Disasters

# **IORGANIZATIONAL STRUCTURE**

# Foreign Assistance and International Partners

# India-Nepal Relations Post 2015

In August 2014, Indian Prime Minister Narendra Modi made the first official Indian visit since 1997. As a result of negotiations, Nepal was provided with an additional USD 1 billion in its line of credit for the purpose of development. Following the April 2015 earthquake, India provided funds for reconstruction aid in early 2016. Indian armed forces, in conjunction with the Nepal army conducted Operation Maitri to rescue the injured while it also backs the ongoing Operation Sankat Mochan, tasked with recovery of bodies. When a new constitution was promulgated in September 2015, violent protests erupted among the Madhesi people of the Terai region, related to articles concerning the new state borders and citizenship issues. Nepal accused India of compounding the crisis by block checkpoints in unaffected border, an accusation the Indian foreign minister denies. Nevertheless, this has exacerbated anti-Indian sentiment across Nepal. Fears that the Madhesis could be used as proxies by India are commonplace within the media.157

### **China-Nepal Relations Post 2015**

The Nepal earthquakes of April-May 2015 have significantly transformed Nepal-China relations and presented a new stage for Beijing to act as a global humanitarian player. Chinese efforts to provide humanitarian assistance, restore infrastructure, and reopen transport corridors with Nepal symbolizes Beijing's increasingly close relationship with Kathmandu and demonstrates how China's new humanitarian actors aimed to fill a void left open by both the Government of Nepal and the international aid sector.<sup>158</sup>

# Non-Aligned Movement (NAM)

Nepal was a founding member of the NAM, which developed as an alternative to alignment with either the United States or the Soviet Union during the Cold War. The fading importance of the NAM as an organization since the end of the Cold War has led to a decrease in the attention given to this institution in recent years. However, Nepal's membership of the NAM demonstrated the country's independent-minded standpoint. Nepal continues to take a pro-active role in the NAM. The vice-president attended the 17th NAM Summit in Venezuela in 2016.<sup>159</sup>

### World Trade Organization (WTO)

Nepal initially applied for membership of the WTO in 1998, and at the time, it was hoped that the process would be completed by 2000. This was soon extended to mid-2001 and, following negotiations in August 2003, the country was unofficially accepted into the organization. The move was formally addressed in the September 2003 meeting of WTO ministers in Cancun, Mexico, where an official invitation was extended, which came into effect in April 2004. Along with Cambodia, Nepal is the first of the WTO's Less Developed Countries (LDCs) to complete full negotiations and, to some degree, has pursued a platform highlighting the concerns and policy issues pertinent to these countries. The timing of the countries' accession was influenced by the impending phase-out of the Multi-Fibre Arrangement in 2005 and the consequent elimination of quotas placing restrictions on the textiles trade, which resulted in a dramatic fall in Nepal's garment exports. Sections of Nepal's economy expressed concerns regarding its entry into the organization. Once tariff structures are fully liberalized, the country will lose an estimated 20 percent of its revenues through a loosening of its customs structures, as opposed to the typical 1percent that a developed country might expect to lose. With limited progress in the Doha trade talks, and Nepal beset by domestic political problems, the country's membership of the WTO has had little effect on the economy, and critics remain skeptical of the long-term benefits. However, in early 2017, the parliament ratified the Trade Facilitation Agreement at the behest of the WTO. This document sets measures for the release, clearance, and movement of goods. It is believed this could reduce Nepal's trade costs by 14 percent.160

# United Nations (UN)

As part of its non-aligned foreign policy, Nepal sought to join a number of international organizations from the 1950s. The United Nations was one such partner and even prior to its full membership in 1955, Nepal was already active in a number of UN agencies. Numerous UN aid-development projects have been conducted in Nepal in the subsequent decades, and the United Nations has been closely involved in the decommissioning of arms and supervision of former combatants that form part of the peace process. The United Nations Mission in Nepal (UNMIN) was established in January 2007, and initially mandated for one year, but had its mandate repeatedly extended as a result of the ongoing political crisis. The last extension added a further four months to the mandate, taking it to 15 January 2011. The Maoists were keen to see the mandate extended still further, but the United Nations expressed its frustration with the political stagnation in Nepal and called for the country's politicians to "immediately begin to make the necessary arrangements for its withdrawal". The other political parties in Nepal had long argued that the UNMIN favored the Maoists, placing minimal pressure on them to complete the decommissioning process. As a result, the caretaker government voted against requesting an extension of the mandate after January 2011, and formed a Special Committee Secretariat to take over the UN's monitoring and supervision operations. UNMIN's role had been to oversee the demobilization process and the camps housing bout 19,000 former Maoist fighters. It also played a vital role in providing technical assistance to Nepal's Election Commission during the April 2008 Constituent Assembly elections. With the end of its mandate, the UNMIN left Nepal on 15 January 2011. Shortly before its departure on 15 January 2011, UNMIN chief Karin Landgren drew criticism from some parties in Nepal when she addressed the United Nations Security Council, stating that a lack of progress in the peace process could result in a resumption of guerrilla warfare by the Maoists, the seizure of executive power by the president, or even an army-backed coup. Relations were not always harmonious; in early 2005, the United Nations closed down one of its major projects after suspected Maoist rebels targeted the agency's workers. The UN intervention in the refugee issue with Bhutan has also prompted resentment from Nepal's authorities.161

### Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)

Nepal was accepted into the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) group alongside Bhutan in 2004. The body was created in 1997, initially comprising Bangladesh, India, Sri Lanka, and Thailand, with Myanmar joining later the same year. Its central aim is to foster socio-economic and security co-operation. A number of conventions have been signed, including the Convention on Cooperation in Combating International Terrorism, Trans-National Organized Crime and Illicit Drug Trafficking in December 2009. However, attempts to introduce a free-trade agreement, and other measures such as a three-year business visa, have proven no more successful than similar initiatives in its larger, more influential regional partner, the South Asian Association for Regional Cooperation (SAARC). The creation of BIMSTEC and its moves towards free trade reflect India's "look east" foreign policy, and possibly a calculation that an organization excluding Pakistan could hold more potential for progress.<sup>162</sup>

# South Asian Association for Regional Cooperation (SAARC)

Nepal joined the South Asian Association for Regional Cooperation (SAARC) when it was established in 1985 along with Bangladesh, Bhutan, India, Maldives, Pakistan, and Sri Lanka), but the fundamental weaknesses of the association - largely a consequence of disputes between India and Pakistan - have meant that despite Nepal's active involvement, the country has gained little from the relationship. The SAARC has no overarching common security perspective (although statements on counterterrorism have been issued); nor does it retain great economic significance, despite the January 2004 South Asian Free Trade Agreement (SAFTA), which came into effect on 1 January 2006. The SAFTA will attempt to create a twotiered tariff-reduction system, with the lessdeveloped nations moving towards the free-trade regime at a slower pace.<sup>163</sup>

A more compreĥensive list can be found in the International Agencies in Nepal section.

# Coordination Mechanisms Between Government and Development Partners

# National and International Assistance and Coordination Structure

The National Disaster Response Force (NDRF) is responsible for the coordination structure for disasters, cluster support, and key coordination features for the national and international disaster assistance in Nepal. The NDRF coordinates and supports the national government in disaster response with the following functions:

1. Official requests for international military assistance is made by the Government of Nepal (GoN). The GoN will manage international assistance in accordance with

# **IORGANIZATIONAL STRUCTURE**

the Guidelines for Accepting International Military Assistance and the Guidelines for the Civil and Military Defense Assets.

- 2. The GoN is responsible for the preparation of bilateral and multilateral agreements. Agreements are implemented with neighboring countries for disaster response support activities and a preestablished. Bilateral and Multilateral Agreements with neighboring countries outline the guidelines for and procedures for entry of international Search and Rescue (SAR) teams into Nepal during post disaster response and are clearly established.
- 3. The Nepal UN Humanitarian Coordinator is responsible for the coordination of International Urban Search and Rescue (USAR) teams and operates under the provision and procedures of the International Search and Rescue Advisory Group (INSARAG) and the UN Disaster Assessment and Coordination Team.
- 4. The GoN coordinates and ensures the establishment of the Reception and Departure Center for all international SAR teams. The Reception and Departure Center is set-up at the airport and are utilized as a base camp for all SAR teams to facilitate coordination efforts and ensure proper procedures for entry and departure of Nepal are adhered to.
- 5. The Nepal National Emergency Operations Center (NEOC) is responsible for the development of work plans for all SAR team members, the Humanitarian Assistance group, and ensures the transportation of SAR resources by way of land or air transport.
- 6. The NEOC is accountable for monitoring the movement of all SAR team members and humanitarian assistance groups. It is the responsibility of all team members to notify the NEOC upon their return to the center after completing their missions.
- 7. As per the NDRF Nepal Army coordinate with International Military through Multinational Military Coordination Center (MNMCC). The MNMCC is establish for systematic mobilization and coordination of international search and rescue teams that arrived in Nepal in the form of multinational military assistance. There is a provision of Liaison Officer from Nepal Army to each of International

military teams to mobilize them in a systematic and coordinated manner.<sup>164</sup>

- 8. Humanitarian Staging Area (HSA) was established within the Cargo Complex of Tribhuvan International Airport, Kathmandu on March 26, 2015 just one month before the 2015 earthquake. Primary purpose of HSA is to receive humanitarian cargo and provide space for short period then dispatch that to affected areas. It is a common platform for government and humanitarian stakeholders for emergency purpose. HS A was effectively used to coordinate logistics operation during earthquake of 2015 by government of Nepal and WFP through Nepal Logistics Cluster.<sup>165</sup>
- A Regional Crisis Management Center was established at the Nepal Army Ranger Battalion premises, Chhauni Kathmandu. This facility can be used for multinational military coordination during humanitarian response and disaster response operations.<sup>166</sup>

# **Cluster Assignment**

The GoN coordinates and operates under a national cluster approach. The national cluster approach is the primary disaster response mechanism. The nationally coordinated cluster approach implements 11 established clusters. The cluster mechanism is utilized to synchronize and coordinate the response efforts of the GoN and humanitarian partners. Each cluster incorporates early recovery planning. Additional post disaster recovery issues are incorporated into the overall contingency planning.<sup>167</sup>



# **NEPAL** Infrastructure

Disaster Management Reference Handbook | August 2017

I

T

Ш

wie CT

Ped

A.

HI

# INFRASTRUCTURE

# Infrastructure

# **Airports**

Due to Nepal's road infrastructure being inadequate, the country relies on the aviation sector, making it an important aspect of their transportation network. Even though aviation is a critical aspect of the transportation sector, it is deemed unsafe due to several small craft accidents over the past years.<sup>168</sup> Nepal currently has twenty-eight international airlines operating in the country. These include three Nepalese airlines that operate to and from Tribhuvan International Airport, connecting 26 destinations in 13 countries.<sup>169</sup>

Nepal has 50 airports, however; only 30 of those provide a routine service. Currently there are six domestic airports under construction in the regions of Kalikot, Argakhachi, Khijichandeshwori of Okhaldhunga, Shitaleshwor of Lamjung, Simichaur of Gulmi, and Sukilumba of Ilam.<sup>170</sup> Plans for a second International Airport in the Baradistrict are underway. It is expected for the Gautam Buddha International Airport to be completed and functioning by July 2018.<sup>171</sup> Table 3 lists the Airports in Nepal.<sup>172</sup>

					Elevation		RWY		
S. No.	AERODROMES	Location Indicator	District	Aerodrome Reference Point	Ft (AMSL)	Designation	Dimension (m)	Surface	Remarks
1	Bhojpur Airport	VNBJ	Bhojpur	270851N/0870303E	3962 ft	17/35	545*20 m	Gravel	
2	Baglung Airport	VNBL	Baglung	281246N/0833959E	3248 ft	01/19	608*30 m	Earthen	Not in Operation
3	Baitadi Airport	VNBT	Baitadi	292755N/0803257E	4127 ft	03/21	500*30 m	Earthen	Not in Operation
4	Bajhang Airport	VNBG	Bajhang	293220N/0811107E	4127 ft	07/25	654*30 m	Earthen	Not in Operation
5	Bajura Airport	VNBR	Bajura	293013N/0814006E	4606 ft	09/27	600*20 m	AC	
6	Bharatpur Airport	VNBP	Chitwan	291626N/0821123E	679 ft	02/20	1158*30 m	AC	
7	Biratnagar Airport	VNVT	Morang	291626N/0821123E	236 ft	09/27	1524*30 m	AC	
8	Chandragadhi Airport	VNCG	Bhadrapur	291626N/0821123E	308 ft	10/28	1800*30 m	AC	
9	Chaurjahari Airport	VNCJ	Rukum	283738N/0821136E	2431 ft	03/21	600*20 m	AC	
10	Dang Airport	VNDG	Dang	280644N/0821733E	2080 ft	16/34	750*30 m	AC	Not in Operation
11	Darchula Airport	VNDL	Darchula	294009N/0803254E	2218 ft	07/25	590*30 m	Earthen	Not in Operation
12	Dhangadhi Airport	VNDH	Dhangadhi	284512N/0803455E	577 ft	09/27	1670*30 m	AC	
13	Dhorpatan Airport	VNDR	Baglung	283100N/0830200E	8950 ft	09/27	365*30 m	Earthen	Not in Operation
14	Dolpa Airport	VNDP	Dolpa	285909N/0824909E	8212 ft	16/34	560*20 m	Gravel	
15	Doti Airport	VNDT	Doti	291547N/0805610E	1893 ft	14/32	427*30 m	Earthen	Not in Operation
16	Gautam Buddha Airport	VNBW	Bhairahawa	273026N/0832505E	344 ft	10/28	1500*30	AC	

Table 3: List of Airports

S.		Location		Aerodrome	Elevation		RWY		
No.	AERODROMES	Indicator	District	Reference Point	Ft (AMSL)	Designation	Dimension (m)	Surface	Remarks
17	Janakpur Airport	VNJP	Janakpur	291626N/0821123E	233 ft	09/27	5000*100 m	AC	
18	Jiri Airport	ILNV	Dolakha	273733N/0861350E	6063 ft	14/32	365*18 m	Earthen	Not in Operation
19	Jomsom Airport	VNJS	Mustang	284652N/083432E	8976 ft	06/24	739*20 m	AC	
20	Jumla Airport	VNJL	Jumla	291626N/0821123E	7792 ft	09/27	675*20 m	AC	
21	Kangeldanda Airport	VNKL	Solukhumbu	272500N/0863818E	6880 ft	11/29	520*26 m	Earthen	Not in Operation
22	Khanidanda Airport	VNKD	Khotang	271051N/0864611E	4435 ft	08/26	510*27 m	AC	
23	Lamidanda Airport	VNLD	Khotang	271511N/0864012E	4026 ft	08/26	516*30 m	Earthen	
24	Langtang Airport	VNLT	Rasuwa	281200N/0853600E	11998 ft	09/27	420*30 m	Earthen	Not in Operation
25	Lukla Airport	VNLK	Solukhumbu	274116N/0864353E	9337 ft	06/24	527*20 m	AC	
26	Mahendranagar Airport	VNMN	Kanchanpur	285748N/0800953E	709 ft	17/32	884*30 m	Earthen	Not in Operation
27	Manang Airport	VNMA	Manang	283829N/0840521E	11093 ft	11/29	650*20 m	AC	Not in Operation
28	Masinechaur Airport	VNMC	Dolpa	290333N/0824487E	9200 ft	14/32	590*30 m	Earthen	Not in Operation
29	Meghauli Airport	VNMG	Chitwan	273438N/0841342E	498 ft	08/26	1067*46	Earthen	Not in Operation
30	Nepalgunj Airport	VNNG	Banke	280606N/0813959E	518 ft	08/26	1505*30 m	AC	
31	Palungtar Airport	VNGK	Gorkha	280220N/0842757E	1455 ft	02/20	1067*46 m	Earthen	Not in Operation
32	Phaplu Airport	VNPL	Solukhumbu	273053N/0863510E	8097 ft	02/20	680*20 m	AC	
33	Pokhara Airport	VNPK	Kaski	281200N/0835854E	2696 ft	04/22	1444*30 m	AC	
34	Rajbiraj Airport	VNRB	Saptari	263038N/0864418E	243 ft	11/29	1700*30 m	Gravel	Not in Operation
35	Ramechhap Airport	VNRC	Ramechhap	272338N/0860341E	1617 ft	03/21	518*30 m	AC	
36	Rara Airport	VNRR	Mugu	293100N/0820900E	8924 ft	18/36	570*20 m	AC	
37	Rolpa Airport	VNRP	Rolpa	281659N/0824659E	4088 ft	06/24	457*30 m	Earthen	Not in Operation
38	Rumjatar Airport	VNRT	Okhaldhunga	271813N/0863302E	4498 ft	17/35	549*30 m	AC	
39	Salley Airport	VNSL	Rukum	283814N/0822658E	5184 ft	16/34	580*20 m	AC	
40	Sanfebagar Airport	VNSR	Achham	291410N/0811256E	1955 ft	03/21	517*30 m	Earthen	Not in Operation
41	Simara Airport	VNSI	Bara	270945N/0845854E	445 ft	01/19	1192*30 m	AC	1
42	Simikot Airport	VNST	Humla	295816N/0814908E	9751 ft	10/28	650*20 m	AC	
43	Surkhet Airport	VNSK	Surkhet	283509N/0813807E	2054 ft	02/20	1255*30 m	AC	
44	Syangboche Airport	VNSB	Solukhumbu	274837N/0864243E	12348 ft	13/31	405*30 m	Earthen	Not in Operation
45	Taplejung Airport	VNTJ	Taplejung	272103N/0874145E	7936 ft	07/25	900*30 m	AC	
46	Thamkharka Airport	VNTH	Khotang	270245N/0865115E	5200 ft	18/36	560*30 m	Earthen	
47	Tikapur Airport	VNTP	Kailali	283120N/0810720E	515 ft	05/23	573*30 m	Gravel	Not in Operation
48	Tribhuvan International Airport	VNKT	Kathmandu	274149.778N/ 0852128.535E	4390 ft	02/20	3056*46 m	AC	6
49	Tumlingtar Airport	VNTR	Sankhuwasava	271902N/0871143E	1316 ft	16/34	1220*30 m	AC	

Table 3: List of Airports (cont.)

Photo 10 depicts Tenzing-Hillary Airport, also known as Lukla Airport. This airport has been called "the most dangerous airport in the world".<sup>173</sup>

# Land Routes

# Roads

Nepal's geography means that bridges are crucial as the hilly and mountainous areas feature many deep gorges and rivers that have to be crossed. Due to the climate and vehicle overload, these bridges are deteriorating.

In recent years, the World Bank assisted with a grant that will improve the country's bridges. The Ministry for Physical Infrastructure and Transport inaugurated the program for upgrades and maintenance work. The grant, assisted with US\$148 million towards work on 26 new structures and 98 bridges requiring major maintenance. The program also extended to 230 bridges requiring minor maintenance work and a further 95 needing light maintenance.

So far, since the implementation of the road construction program funded by the World Bank, 25,115km of roads have been built, according to the Ministry of Physical Planning Works and Transport Management. Out of those, 11,565km (7,180 miles) are made up of dirt road, 6,077km (3776 miles) is gravel road, and 7,474km (4644 miles) is asphalt paved road.<sup>174</sup> Due to Nepal's geographical location and it being landlocked, it relies on its transport links with China and India for trade, as well as the nearest port of Kolkata (Calcutta). Nepal's current infrastructure is greatly affected by weather conditions. Water flow rates can be vast due to run-off from mountain glaciers, becoming worse still during monsoon season, which brings heavy amounts of rain. Of the existing roads, up to 60 percent become unusable during the monsoon season, which includes most of the rural road connections.<sup>175</sup>

# Railways

Nepal's first railway opened in 1927, and it ran from Raxaul (India) to Amlekhganj, a distance of about 48km. It was built to 2ft 6in (762 mm) gauge, but it closed in 1965. Part of the route was later used as part of a 6km broad gauge (5ft 6in, 1675 mm) branch line from Raxaul to the Inland Container Depot at Sirsiya. The new line opened in 2005, however; is it exclusively used by freight trains operated by Indian Railways.<sup>176</sup>

In 1937, a new line of 2ft 6in (762 mm) gauge line joined the original line. This added about 53km from Bizalpura via Janakpur to Jaynagar (India), where there was interchange with a line of the Indian Railways network. However, a bridge collapse forced the closure of the railway from Bizalpura to Janakpurin 2001. The remaining 29km of the line from Janakpur



Photo 10: Tenzing-Hillary Airport

to Jaynagar continued in operation, although not consistently, until 2014. In 2014, the line completely closed leaving people stranded in their towns.<sup>177</sup> Plans to reopen in November 2017, as part of the Indian Railways are still underway.<sup>178</sup>

# Waterways

Although Nepal is a landlocked country, it has multiple rivers. However, the topography does not allow for the river network to be utilized as a method of transportation, which is one of Nepal's greatest challenges. Most of the use from the rivers is by tourism companies looking to offer rafting and other water activities. The rivers in Nepal also provide a significant amount of hydroelectricity, with the capability of adding more.<sup>179</sup>

# **Schools**

The Ministry of Education and Sports was established in 1951, and oversees all aspects of education in Nepal. Prior to 1951, schooling in Nepal was reserved primarily for elite groups and the royal family, it served just 250 students. Although the political reform of 1951 opened access to schools participation rates increased, Nepal still continues to have a low attendance in comparison to other countries in the region.

The government has committed to achieving the goals of UNESCO's Education for All initiative, which would give access to education to any student seeking it. Currently, Nepal has over 34,000 primary and secondary schools, and nine university-level institutions with over 1,000 colleges and affiliated campuses.

Nepal's school system consists of primary, lower secondary, secondary, and higher secondary education; equaling 12 years of formal education.<sup>180</sup> Typically, the academic year in Srawan (July-August), starts at the same time as the government's fiscal year.<sup>181</sup>

# **Communications**

# Telephone

Nepal is equipped with good cellular as well as landline services. Since the network is relatively new, it is modern and on par with Western technology. Phone booths and kiosks are still common in Nepal, local calls are cheap and so are national long distance calls. However, international calls are expensive, compared to rates of other countries in South-Asia.<sup>182</sup> Nepal's mobile and internet usage has grown rapidly in the past few years. By the end of 2011, mobile devises had reached 46 percent of the population. There are three telecommunications companies serving Nepal, Telecom (partly private), Ncell, and Smart Mobile. Pre-paid market growth is expected to be particularly strong. Requests to upgrade the network to 4G have been submitted to Long-Term Evolution (LTE) and WiMAX spectrums.<sup>183</sup>

# Internet

By the end of 2011, Internet had exponentially grown in Nepal; usage grew approximately 30 percent. By the end of 2011, there were 180,000 subscribers, or 0.6 percent of the population.<sup>184</sup> Internet prices have continued to drop and internet cafes are available thought major cities.<sup>185</sup>

# **Television and Radio**

During the time of armed conflict there was censorship system which was already lifted. Now there is no censorship applied as mentioned in draft, however, some regulations and code of conduct must be followed by the Television and Radio Station.<sup>186</sup>

# Newspapers and Magazines

Nepal counts with daily and weekly publications, but like television and radio, these are also censored. The censorship makes the information published less credible. Most of these publications are in Nepalese, with the exception of newspapers found in high-end hotels.<sup>187</sup>

# Utilities

# Power

Because of Nepal's geographical location, it is difficult to reach remote communities and there are no known oil, gas, or coal reserves. Traditionally, citizens meet their energy needs by using biomass, human labor, imported kerosene, and/or traditional water powered vertical axis mills, yet per capita energy consumption is low, with one-third of the average for Asia as a whole and less than one-fifth the worldwide average.<sup>188</sup>

The state-owned utility NEA was founded in 1985. They are responsible for the generation, transmission, and distribution of electricity, and the development and operation of the electricity grid.<sup>189</sup>

The electricity consumption and consumers is increasing at a rate of approximately nine percent per year, according to the Nepal Electricity Authority (NEA). The increase in consumption has created a shortage of power supply, which forced the NEA in 2009, to cut power to 20 hours per day in some regions.<sup>190</sup>

# Hydropower

Because Nepal has 2.27 percent of the world's water resources, 818,500 Hectare of total water surface area, about 6,000 rivers including rivulets and tributaries totaling about 45,000 km in length, it is the second richest country in inland water resources.<sup>191</sup>

Due to the resources Nepal has to offer, it creates the ideal location to develop hydropower. The hydropower potential of the country in terms of electrical energy is 727,000 GWh and 145,900 GWh per year respectively based on average and 95 percent exceedance flow. In terms of megawatts, the potential is estimated at 83,000 MW, of which half i.e. 40,000 MW is considered to be technically and economically viable. However, Nepal to date has been able to develop approximately 680 MW of hydropower.<sup>192</sup>

Figure 9 depicts the Nepal Hydro Key Facts.<sup>193</sup>

# Water and Sanitation

The terrain in Nepal makes it difficult for various communities to reach a water sources; this is due to the distance water needs to travel and the naturally occurring arsenic that often pollutes the water. In Nepal, it is estimated that only 31 precent of the population has a safe place to use a toilet.<sup>194</sup>

Handwashing in Nepal is not a common practice, and superstitions regarding handwashing make it difficult to make improvements in that area. On average, 600 children under the age of five die every year from diarrhea causing diseases caught by dirty water and poor sanitation conditions. This accounts for a third of all child deaths overall.<sup>195</sup>

# Nepal Hydro Key Facts

- Second richest country in inland water resources
- Possess 2.27% of world water resource
- 818,500 ha of total water surface area (5% of total surface area of the country)
- Multiple sources of water include glaciers, snowmelt from the Himalayas, rainfall, and ground water
- 6,000 rivers including rivulets and tributaries totaling about 45,000 km in length
- Hydropower potential in terms of electrical energy - 727,000 GWh
- Theoretical hydropower potential -83,000 MW; technically and economically viable potential - 40,000 MW
- Installed capacity: 600 MW
- Population with access to electricity -40%

Figure 9: Nepal Hydro Key Facts



# HEALTH

# Health Health Overview

In the last two decades, Nepal has made improvements in life-expectancy at birth; reduced the maternal mortality rate; and reduced the under-five mortality rate. Nepal has also made progress towards the prevention and control of communicable and noncommunicable diseases. The Ministry of Health has played an important role in achieving these outcomes by implementing policies and strategies.<sup>196</sup> The guiding documents are the Constitution of Nepal 2015, Nepal Health Policy 2014, and Nepal Health Sector Strategy 2015-20.<sup>197</sup>

The life expectancy at birth in Nepal is 69.2 years. Life expectancy provides indication of overall mortality of a country's population.<sup>198</sup> However, there is a measurable disparity between districts. For instance life expectancy of people in the Bhaktapur district is 71 years and in the Mugu district it is only 44 years.<sup>199</sup> Nepal's total expenditure on health as share of GDP equals to 5.8 percent.<sup>200</sup>

Previous major health problems in Nepal have been Malaria, Tuberculosis (TB), Diarrhea, respiratory diseases, Typhoid, Chickenpox, Whopping Cough, Diphtheria, Tetanus, Filariasis, Kala Ajar, Trachoma and HIV, but these diseases are in control and in a descending trend. Smallpox and polio have been eradicated. Leprosy and maternal and neonatal tetanus has been eliminated. A campaign for control of filarial disease is ongoing.<sup>201</sup>

The Ministry of Health and Population (MoHP) has more than 30,000 employees, of them more than 24,000 are technical personnel and 6,300 are administrative staff. Department of Health Services (DoHS) has about 24,000 work force including all five development region's health facilities and of them 196 post (technical and administrative) for all divisions and sections under the DoHS.<sup>202</sup>

# Health Care System (Structure)

The Ministry of Health plays the leading role in the healthcare and health system in Nepal. In Nepal, the Department of Health Services (DoHS) is responsible for delivering preventive, promotive, diagnostic and curative health services. The Director General (DG) is the head of the DoHS. The current organizational structure is shown in Figure 10. At the regional level there are five Regional Health Directorates (RHDs). There are regional, sub-regional and zonal hospitals.

In addition the healthcare system is divided into divisions. They include the following:

- Management Division with infrastructure, budget & planning, monitoring and supervision (M&E) quality of care, management information system, information technology (IT), nursing services, oral and mental health, PAM activities, and free medication & treatment for very severe disease to impoverished Nepalise citizens;
- Child Health Division covering EPI, nutrition and CB-IMCI and newborn care;
- Family Health Division with the responsibility of reproductive health care, including safe motherhood and neonatal health, family planning and Female Community Health Volunteers (FCHVs);
- Logistics Management Division covers procurement, supplies and management of logistics, equipment and services required by DoHS and below level;
- Epidemiology and Disease Control Division with the responsibility of controlling epidemics, pandemic and endemic diseases as well as treatment of animal bites; and
- Primary Health Care Revitalization Division with the responsibility of carrying out activities for primary health care.<sup>203</sup>

# **Plans and Policies**

Nepal's guiding documents in health include:

# Nepal Health Policy 2071 (2014)

Note: The National Health Policy 2048 has been revoked because it was insufficient to ensure citizen's right to quality healthcare through appropriate response to the major issues and challenges listed in the next section. As a result, the Nepal National Health Policy 2071 (2014) was implemented.<sup>204</sup>

# Nepal Health Sector Strategy 2015-2020

The Nepal Health Sector Strategy (NHSS) 2015-2020 addresses the current health challenges, in addition to providing a roadmap towards universal health coverage of basic health services as preserved in the constitution of Nepal

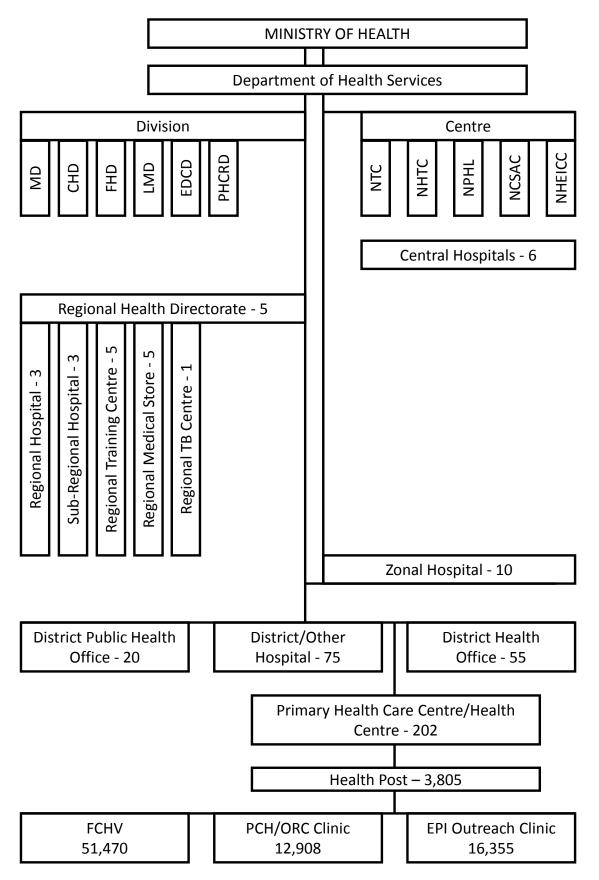


Figure 10: Health Organizational Structure in Nepal

# HEALTH

2015. This strategy was endorsed by the Ministry of Health (MoH). The strategy has four major principles including equity in health systems, quality of health services for all, health system reform and multi-sectoral collaboration.<sup>205</sup>

# National Health Communication Policy, 2012

The Government of Nepal endorsed the National Health Communication Policy 2012, to help address health communication needs and challenges. The main goal of this policy is to sustain healthy life styles of all citizens by; (1) Promoting health services, programs and healthy behavior; (2) Preventing and controlling disease; and (3) Increasing accessibility and utilization of health services. Nepal has a National Health Education, Information and Communication Centre (NHEICC). The general objective of the NHEICC program is to raise the health awareness as a way to promote positive health status among all citizens and to prevent disease through the efforts of the people themselves and utilization of available resources. The NHEICC conducts major health communication activities at the central, regional, and district level.<sup>206</sup>

# **Challenges in Health**

Despite considerable achievements in the health sector, there are still many problems which need to be addressed. Access to clean water and hygiene are two of the major public health concerns.<sup>207</sup> Healthcare waste poses a concern in the health section. Used medical supplies are often not disposed of properly and they are found back on the black market.<sup>208</sup>

Other major issues and challenges include:<sup>209</sup>

Major Issues:

- Citizens of all localities, levels, classes, groups, and communities do not have yet easy and affordable access to health care as aspired by the constitution.
- Despite the continuous effort of the state, about a half of under 5 children and women of reproductive age and undernourished whereas the problem of obesity is growing among urban population.
- Health problems created by the situations like climate change, raising food insecurity and natural disasters are on the rise.
- Prevalence of cancer, hypertension, diabetes, and illnesses related to heart, kidneys, liver, lungs, along with other

non-communicable diseases like mental illnesses, dental problems are on the rise. Likewise, deaths due to road injuries are increasing.

- State has not been able to provide adequate priority on primary health care programs in urban areas, health of senior citizens, mental disorders, genetic and congenital diseases, environmental health, occupational hazard, sexual and reproductive health of adolescents and health promotion on school-age children, etc.
- Access to quality medicine for people, right use of medicine, production and distribution of essential drugs and medical equipment within the country are not effective and people oriented.
- Laboratory services and medical equipment are not yet up to the quality standard.
- The issues such as complexities seen in rational production of various skilled health professionals that take social responsibility, drain of health professionals, transfer of health and other personnel, continuous presence of health personnel in health facilities, security of health personnel, etc., have not been addressed in a planned way.
- Not been able to mobilize private-sector investment in health for the benefit of the people and divert their investment to appropriate areas.
- Not been able to effectively regulate health sector according to law and rules. There is a lack of sufficient harmony between the organizations producing health personnel and the organizations utilizing them.

Major Challenges:

- There is a need for appropriate implementation of a two way referral system in order to improve the quality standard of health care services.
- There is a need for immediate management of highly infectious diseases (ie. Bird-flu) or potential new diseases, controlling of epidemic, emergency preparedness for minimizing human casualty due to earthquake and other natural disasters and retrofitting of hospitals and other health institutions.
- In order to reduce new born, child, and maternal mortality rate, there is a need for

maximizing the effectiveness of controlling diarrhea, acute respiratory infections, malaria, kala azar, encephalitis, filariasis, dengue, tuberculosis, leprosy, HIV, and other diseases that can be prevented through immunization.

- It has been difficult to control the spread of human and animal related diseases due to the open border with neighboring countries.
- There is a need for creating opportunities by strengthening health institutions down to the grass root level and establishment of a social health insurance system so that health services, health education and information are equally available for all citizens.
- There is a need for increasing state's investment to the health sector in proportion to the population growth.
- There is a need for urgently addressing regional disparity in health indicators.
- There is a need for implementing health related acts, rules, policies, strategies, and action plans in a comprehensive and integrated manner.
- Nepal needs to increase investment for providing all necessary health services to persons with disabilities.
- There is a need for empowering local government and holding them accountable for health services along with improving participation in rural health programs.

# **Health Assistance**

Health in a country can be greatly affected by natural disasters. This happened following the April 2015 earthquake in Nepal. Several months after the earthquake, families were still living in temporary shelters and disease outbreaks challenged relief agencies that were already assisting with the earthquake devastation. With USAID's Office of U.S. Foreign Disaster Assistance (USAID/OFDA) and other donor support, the UN World Health Organization (WHO) launched the WHO Emergency District Support (WEDS) program to strengthen health systems and address health needs and outbreaks in the districts that were most affected by the earthquake. WEDS worked with health officials and facilitated the investigation of and response to disease outbreaks, provide vaccinations, replenish medical supplies, and promote awareness among at-risk families. The WEDS

program also implemented emergency response efforts and prepared for the next monsoon season and winter months by restocking supplies at the health centers. They supported district health offices with the reporting on acute malnutrition, respiratory illnesses, skin infections, waterborne diseases, and maternal and infant health.<sup>210</sup>

Frequent natural disasters negatively affect health and food security. Many people in four earthquake-affected districts were highly foodinsecure after the 2015 earthquakes. A joint programme was organized by the Government of Nepal, the United Nations Resident Coordinator's Office, and the United Kingdom Department for International Development and World Food Program (WFP) in May 2017. The Nepal Country Programme [CP 200319 (2013-2017)] supports the Government of Nepal in enhancing the food and nutrition security of vulnerable communities and increasing resilience to disasters. The CP covers four areas: (1) Livelihood creation providing seasonal employment and livelihood training, rehabilitation of rural roads and trails, irrigation channels and other community assets; (2) Education support to the Ministry of Education to achieve holistic approaches to student well-being by improving nutritional intake through school meals; (3) Implementation of the Mother and Child Health and Nutrition (MCHN) programme in partnership with the Ministry of Health to prevent chronic malnutrition amongst expectant mothers and children aged 6 to 23 months; and (4) Established the Nepal Food Security Monitoring System, known as NeKSAP.211

There are many female community health volunteers who are strengthening Nepal's health system from a grassroots level. The Government of Nepal started the program with support from USAID, UNICEF, UNFPA, and local nongovernmental organizations in 1988.<sup>212</sup>

# **Communicable Diseases**

Kala-azar is a major public health concern in 12 districts in Eastern and Central Tarai. The cases have been decreasing in the last several years. At the district level incidence per 10,000 in areas at risk populations ranged from 0.47 in Morang to 0.01 in Bara (this reflects the incidence of .25 per 10,000 in 12 programme districts excluding foreign cases).<sup>213</sup>

Lymphatic Filariasis (LF) is also a public health concern in Nepal. LF (also known as elephantiasis) is caused by parasitic filarial

# HEALTH

worms. The worms are spread by the bites of infected mosquitos. Prevention can be achieved by treating entire groups in which the disease exists. Over the last 12 years, more than 90 million at risk populations gave been treated with Mass Drug Administration (MDA) medicines.<sup>214</sup>

The incidence of emerging diseases such as dengue, chikungunya, and leptospirosis, has increased in recent years.<sup>215</sup> Dengue was first detected in 2005. In the fiscal year 2071/72 (2013/2014) the total number of dengue cases reported from 12 districts were equal to 302. The majority were reported from Chitwan (119 cases), and from the Parsa district (114 cases). The remaining 69 cases were reported from Jhapa, Rupandehi, Kathmandu, Nawalparasi, Kailali, Kanchanpur, Makawanpur, Doti, Dadeldhura, and Bhaktapur.<sup>216</sup>

Zoonotic diseases have been identified in Nepal as emerging and re-emerging diseases that have the potentials to be a major health concern. They include taeniosis/cysticercosis/ neurocysticercosis, leptospirosis, hydatidosis, brucellosis, toxoplasmosis, and avian influenza. <sup>217</sup> Any disease or infection that is naturally transmissible from vertebrate animals to humans and vice-versa is classified as a zoonosis.<sup>218</sup> Nepal has about 15,000 to 18,000 cases of snake bites annually which adds to the risk of transmitting this disease.<sup>219</sup>

HIV, tuberculosis (TB), and malaria is still a major public health problem in Nepal. In 2014/15, 34,121 cases of TB were registered. The overall treatment success rates (all forms) nationally of drug susceptible TB was 91.5 percent. The TB program in Nepal was able to save 32,973 lives in 2014/15 fiscal year; however, 978 deaths were reported.<sup>220</sup> HIV/AIDS and sexually transmitted infections affects 39,249 people in Nepal.<sup>221</sup>

During the reporting year 2071/72 (2013/2014), 3053 new leprosy cases were detected and were put under multi drug therapy. Single dose rifampicin (SDR) is given to contacts of newly diagnosed leprosy patients to decrease their risk of developing leprosy. A Leprosy Post Exposure Prophylaxis (LPEP) programme has been implemented in Morang, Jhapa and Parsa districts and is planned to be extended in Dhanusa, Kapilvastu and other districts.<sup>222</sup>

# Non-Communicable Diseases Non-

Communicable Diseases (NCD)affect Nepal's population. Chronic obstructive pulmonary disease was the leading cause of death at 9.2 percent, killing 17.2 thousand people. Heart disease, stroke, and lower respiratory disease follow. Figure 11 shows the top ten causes of death in Nepal, many being NCDs.<sup>223</sup>

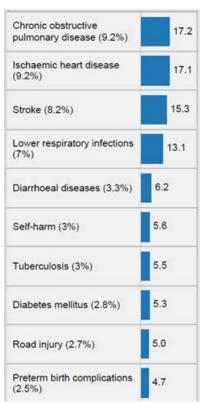


Figure 11: Top Ten Causes of Death in Nepal

# **Training for Health Professionals**

The National Health Training Centre (NHTC) is the apex body that coordinates and implements all training programs of the respective divisions. Its training activities are in line with National Training Strategy. In-service training is delivered through a network of National Health Training Programs, which provide managerial and technical training at all levels. There are five regional training centers, one sub-regional training center, and 75 district training units. A training working group (TWG) comprising various supporting partners was formed under leadership of NHTC with the purpose of ensuring the efficient running of national health training programs, maintaining the quality of the training and improving the coordination of all training provided under the NHTC. To date the NHTC does not have adequate policies to address the wide range of training activities of the health sector and their accreditation. Although NHTC provides a wide range of public health, clinical and managerial training, they are not linked with the carrier development and health service act and regulation.<sup>224</sup>



# **NEPAL** Women, Peace, and Security

Disaster Management Reference Handbook | August 2017

# Women, Peace, and Security

The U.N. Security Council adopted resolution 1325 (UNSCR 1325) on October 31, 2000 reaffirming the important role of women in the prevention and resolution of conflicts and in peace building. Seven more resolutions have been adopted since that combine to form women, peace, and security. UNSCR 1325 stresses the importance of women's equal and full participation in the prevention and resolution of conflicts; and full involvement in all efforts for the maintenance and promotion of peace and security, and the need to increase women's role in decision-making with regard to conflict prevention and resolution.<sup>225</sup>

Cultural norms that run strong in Nepal often prevent women from having and active and productive role in society. Nepal has a patriarchal social structure that may restrict progress in major development sectors for women. In order for Nepal to be considered a more democratic society, it must provide women and girls equal access to resources and decision-making opportunities.<sup>226</sup> However, Nepal is making progress; Nepalese politicians elected Bidhya Devi Bhandari who is a longtime women's rights campaigner and Nepal's first female president in October of 2015.<sup>227</sup> Violence against women is a major obstacle to Nepal's development.<sup>228</sup> Gender-based violence is the leading cause of death for women age 19 to 44 in Nepal.<sup>229</sup>

Nepali women were directly and indirectly affected by the ten-year (1996-2006) civil war.<sup>230</sup> They were targets for different forms of physical, mental, and sexual violence during the conflict. They were victims of Maoist combatants demanding support, and anti-Maoist security forces reacting angrily to any support for Maoists. Villagers often suffered harsh questioning, beatings, and other abuses during search operations. Different kinds of violence, especially acts of sexual violence targeting women and girls, escalate during the time of armed conflict.<sup>231</sup> Even a decade after the conflict, many of the women display signs of trauma and sexual assault.232 Many women who were displaced as a result of the conflict and due to lack of education or skill were compelled to work in risky and oppressive conditions making

them vulnerable to sexual and other forms of violence.<sup>233</sup>

The Nepali Government has acknowledged sexual assault during the conflict. In February 2011, almost five years after the Comprehensive Peace Agreement was signed, Nepal's government introduced the National Action Plan on Implementation of United Nations Security Council Resolutions 1325 and 1820.<sup>234</sup> In this plan, the Nepali government acknowledged that "women also suffered from sexual violence during the conflict as well as the transition period due to the weak law and order situation." The Government of Nepal has adopted different policies and action plans in an attempt to incorporate issues pertaining to the security of women. They include the National Plan of Action against Gender Based Violence, the National Plan of Action on the Implementation of the Convention on the Elimination of All Kinds of Discrimination Against Women (CEDAW), the National Plan of Action on Gender Equality and Empowerment of Women, the Three-Year Human Rights National Action Plan, and the requirements for working procedure of the Local Peace Committees. However, for women and girls living in situations of armed conflict, participation, protection and assistance, and accountability for gender-based crimes still remains to be seen.<sup>235</sup> The issue of taking action against the perpetrators in crimes including sexual violence against women during the past armed conflict is very challenging.236

There are organizations and offices in Nepal that support women's rights, development, and representation. The UN Women Nepal Country Office was established in April 2012. UN Women works to strengthen women's leadership and participation in the peace and security agenda by supporting the implementation of national commitments, specifically the implementation and monitoring of the National Action Plan on UNSCRs 1325 and 1820.237 There are nonprofit non-government organizations that support empowerment of women including Didi Bahini. Peace Enabling Awareness and Conflict Transformation Enterprise (PEACE) is one of the programs undertaken by Didi Bahini in joint venture with Community Action Center Nepal (CAC-N) and with the technical and financial support of Academy for Educational Development (AED). The program aims at the causes of internal and external conflict that is prevalent in the society.<sup>238</sup>



# **NEPAL** Conclusion

Disaster Management Reference Handbook | August 2017

# ICONCLUSION

# Conclusion

Nepal is vulnerable to many natural hazards such as earthquakes, floods, landslides, and droughts. Nepal is still recovering from the devastating earthquakes of April and May 2015. Significant work is underway to assist the earthquake-affected citizens and help rebuild the country. Despite the significant response in the months following the earthquakes, the road to recovery and reconstruction has been challenging. The earthquake caused 8,790 deaths, more than 22,300 injuries, and damaged manufacturing, and production and trade in agriculture, thereby weakening Nepal's economy.<sup>239</sup>

The National Reconstruction Authority (NRA) launched a large-scale recovery program which involved coordinating financial and human resources as well as developing a policy and institutional framework called the Reconstruction and Rehabilitation Policy 2072 (2016) and the Post-Disaster Recovery Framework (PDRF). One key objective to strategic recovery was to restore and improve disaster resilient housing, government and cultural buildings in both rural areas and cities. Another important objective to the Post-Disaster Recovery Framework is to strengthen the capacity of people and communities to reduce their risk and vulnerability. This way they are addressing both post-disaster recovery as well as disaster risk reduction.<sup>240</sup>

Nepal faces some overall challenges in disaster management. The emergency response and relief approach is so embedded into the current system that it may take a long time to shift to a more comprehensive disaster risk management approach. Capacity building is needed at both the national and community levels. Nepal is lacking a mechanism to assess disaster resiliency of projects, plans, and policies.<sup>241</sup>

In previous years, emergency response has been the main focus on disaster risk management. The focus did not effectively address the risks that face Nepal. The development of institutional mechanisms need to be improved and relief funds need to be guided rather than on an ad-hoc basis. However, the establishment of the National Emergency Operation Center (NEOC), corresponding Regional and District Emergency Operation Centers (R/DEOCs) and Disaster Relief Committees is positive for Nepal's emergency response.<sup>242</sup>

Nepal is currently in a transitional period because three sets of elections (local, provincial, and national) which are set to be completed by January 2018. Nepal faces instability in governments because ten different governments have been formed in the last eight years. The 1996-2006 civil war and Maoist uprising has had a large effect on government as well as other aspects of the country. In many ways, the Nepal is still recovering. Nepal also has a relatively new constitution, which was put into effect in September 2015. The new constitution has been controversial because some ethnic communities are unhappy at the boundaries of the new provinces. Other criticism is that it was a rushed constitution not allowing time for grievances. However, many are relieved that the Nepal has a new constitution after years of turmoil.



# **NEPAL** Appendices

Disaster Management Reference Handbook | August 2017

# APPENDICES

# Appendices DMHA Engagements in the Past Five Years

The list below describes the DMHA Engagements that the U.S. has had with Nepal in the last five years.

# Exercise Shanti Prayas III, March 2017

Exercise Shanti Prayas is a multinational United Nations peacekeeping exercise designed to provide pre-deployment training to U.N. partner countries in preparation for real-world peacekeeping operations. Exercise Shanti Prayas III took place on March 24, 2017 at the Birendra Peace Operations Center in Panchkhal, Nepal. Shanti It is a Global Peace Operations Initiative (GPOI) capstone exercise designed to build partner capacity by training defense personnel for real-world U.N. peacekeeping missions. Multinational instructors promoted the role of women in peacekeeping operations and the inclusion of gender perspective into U.N. missions during the Field Training Events (FTEs) at exercise Shanti Prayas III. Through U.S. Pacific Command's annual GPOI capstone exercises, including Shanti Prayas, they continue to inform and educate multinational forces about the importance of women, peace and security. Throughout their peacekeeping efforts over the years, women have played a vital role within the Nepalese Army. For Shanti Prayas III, half of the Nepalese platoons were made up of women. Photo 11 shows an Army Sgt. providing training to female soldiers from the Nepalese Army during the exercise.<sup>243</sup>



Photo 11: Nepalese Army Engagements with USPACOM

### Pacific Resilience Disaster Response Exercise and Exchange (DREE), September 2016

Members of the Nepalese Army, U.S. Army Pacific, and more than nine other nations participated in the four-day exercise from Sept. 20-23 2016. Participants in the DREE were able increase interoperability and multinational collaboration efforts for disaster response and humanitarian aid operations. The bi-lateral disaster exercise, focused on earthquake preparedness, is part of the enduring collaboration between the U.S. and Nepalese governments to prepare for natural disasters in the Indo-Asia-Pacific Theater. Search and rescue, and massive casualty evaluation and evacuation were discussed. Communication and humanitarian aid and logistics were also tested through complex exercise injections that forced all the individual agencies to collaborate to meet one collective mission. In Photo 12, Kul Prasad Chudal, Nepal joint secretary ministry of defense (left), offers his concluding remarks during the DREE on Sept. 22, 2016.<sup>244</sup>



Photo 12: Nepalese Army Disaster Response Exercise, 2016

# Disaster Relief Best Practices Subject Matter Exchange, Nepal, June/July 2016

More than twenty members from the Nepal Army, Nepal Police, Armed Police Force, and Civil Aviation Authority of Nepal joined ten Airmen assigned to the 36th Contingency Response Group at Andersen Air Force Base at a subject matter exchange at the Tribhuvan International Airport in Kathmandu. During the exchange, they collaborated on the different aspects of disaster relief efforts and work together to ensure capabilities helps deliver aid. Photo 13 shows participants being trained on cargo transportation techniques.<sup>245</sup>



Photo 13: U.S. and Nepal Disaster Relief Best Practices Exchange

# U.S. Disaster Assistance and Response Team (DART), April 2015

The U.S. Disaster Assistance and Response Team (DART) deployed to assist with relief and recovery efforts in coordination with the Nepal Government, the international community, and relief agencies, after the April 25, 2015 earthquake in Nepal. The U.S. Government on-the-ground emergency relief and recovery comprised of nearly 130 members, also including Urban Search and Rescue Teams from Fairfax and Los Angeles Counties, and 45 square tons of cargo.<sup>246</sup> Photo 14 depicts the USAID DART's urban search-and-rescue teams pulling out a 15-year-old child from the rubble, five days after the Nepal earthquake.<sup>247</sup>



Photo 14: USAID DART Teams Response to the 2015 Earthquake

# Tribhuvan International Disaster Response Plan Exercise, September, 2014

During this four day exercise, civilian aviation leaders, along with members of Nepal's military and police and worked with civilian and military professionals from U.S. Army Pacific, the U.S. Army Corps of Engineers, the Pacific Disaster Center (PDC), and numerous international agencies including the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA), WFP, and the International Civil Aviation Office. The scenario had them work together to practice a plan developed to deal with a large earthquake at Nepal's only international airport.<sup>248</sup>

# Nepal Disaster Response Exercise and Exchange, September 2013

This was at the time, the second humanitarian assistance/disaster relief engagement between the U.S. Army Pacific (USARPAC) and the Nepalese Army and served to follow-up the tabletop exercise co-hosted by the Nepalese Army and the III Marine Expeditionary Force in February 2013. By training together they improve the capabilities of both the U.S. and Nepal, while strengthening the partnership between the nations.<sup>249</sup>

# 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.<sup>250</sup>

# Passport/Visa

You must have a passport valid for at least six months beyond the date of your intended arrival in Nepal. It is recommended that all U.S. citizens who visit or live in Nepal enroll in the Smart Traveler Enrollment Program ("STEP") to register their planned itinerary with the U.S. Embassy, and monitor the security situation before traveling. U.S. government employees on official travel to Nepal must seek approval before traveling outside of Kathmandu Valley. A tourist VISA is required.<sup>251</sup>

You may encounter immigration difficulties when traveling across the Nepal-China border on land in either direction. Chinese authorities often require U.S. citizens and other foreign tourists to organize "group" tours through established travel agencies as a prerequisite for obtaining visas and entry permits into Tibet. The Chinese authorities have occasionally closed the border, often around the anniversary of significant events in Tibet.<sup>252</sup>

# **Emergency Contact Information**

If you are a U.S. citizen with an emergency, please contact the U.S. Embassy in Kathmandu:<sup>253</sup>

# U.S. Embassy Kathmandu

Address: Maharajgunj Kathmandu, Nepal Tel: +(977)(1)423-4000 or 400-7200 Emergency After-Hours Telephone: +(977)(1)423-4000 Fax: +(977)(1)400-7281 Website: consktm@state.gov

# **Currency Information**

The currency for Nepal is the Rupee. The symbols used for the Rupee is Rs. When you leave Nepal from the Kathmandu airport, you will be limited on how many Rupees you can convert back to foreign currency.<sup>254</sup>

# **Travel Health Information**

# Medical Care

Nepal medical care is limited and below U.S. standards. Most care providers overseas only accept cash payments. Make sure your health insurance plan provides coverage overseas. Serious medical issues and injuries suffered while hiking in remote areas may require evacuation by helicopter to Kathmandu. It is strongly recommended to have supplemental insurance to cover medical evacuation, as medical evacuations can be expensive. Payment will be expected in cash before the medevac can take place, if there is no insurance coverage.<sup>255</sup>

# Prescriptions

Bring current medication supply for the duration of your stay. Carry prescription medication in original packaging, along with your doctor's prescription.<sup>256</sup>

# Vaccinations

Before visiting Nepal, the U.S. CDC advises ALL travelers to get the following vaccines:<sup>257</sup>

• Measles-mumps-rubella (MMR) vaccine, diphtheria-tetanus-pertussis vaccine, varicella (chickenpox) vaccine, polio vaccine, and your yearly flu shot.

The CDC advises MOST travelers to get the following vaccines:

- Hepatitis A: The CDC recommends this vaccine because you can get hepatitis A through contaminated food or water in Nepal, regardless of where you are eating or staying.
- Typhoid: You can get typhoid through contaminated food or water in Nepal. 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.
- The CDC advises SOME travelers (depending on where they will be going, their length of stay, what they will be doing, and if you are traveling from a country other than the US.) to get the following vaccines:
- Hepatitis A: The CDC recommends this vaccine because you can get hepatitis A through contaminated food or water in Nepal, regardless of where you are eating or staying.

- Typhoid: You can get typhoid through contaminated food or water in Nepal. 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: 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: You may need this vaccine if your trip will last more than a month, depending on where you are going in Nepal and what time of year you are traveling. You should also consider this vaccine if you plan to visit rural areas in Nepal 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.
- Malaria: When traveling in Nepal, 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.
- Rabies: Rabies can be found in dogs, bats, and other mammals in Nepal, so the CDC recommends this vaccine for the following groups: 1.) Travelers involved in outdoor and other activities that put them at risk for animal bites. 2.) People who will be working with or around animals 3.) People who are taking long trips or moving to Nepal. 4.) 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.

Note: There is no risk of yellow fever in Nepal. The government of Nepal 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.

# Eat and Drink Safely

- Unclean food and water can cause diarrhea and other diseases. Reduce your risk by sticking to safe food and water habits.<sup>258</sup>
- Eat
- Food that is cooked and served hot;
- Hard-cooked eggs;
- Fruits and vegetables you have washed in clean water or peeled yourself; and
- 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; and
- "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; and
- 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); and
- Unpasteurized milk.

# **Prevent Bug Bites**

Bugs (like mosquitoes, ticks, and fleas) can spread a number of diseases in Nepal. Many of these diseases cannot be prevented with a vaccine or medicine. You can reduce your risk by taking steps to prevent bug bites.<sup>259</sup>

# 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.

# APPENDICES

For protection against ticks and mosquitoes: Use a repellent that contains 20 percent or more DEET for protection that lasts up to several hours.

For protection against mosquitoes only: Products with one of the following active ingredients can also help prevent mosquito bites. Higher percentages of active ingredient provide longer protection. Always use insect repellent as directed.

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

# Safety and Security

Nepal does have some violent political activity in the Terai (the southern plains region of Nepal bordering India). Demonstrations have on occasion turned violent, although these activities generally are not directed at U.S. citizens. There have been small-scale improvised explosive device (IED) incidents in various parts of Nepal in the past, particularly during periods of heightened political tension. However, these incidents were not directed toward westerners or western interests. Crime has risen in Kathmandu and throughout the country has risen in some categories. However, it still remains low. You should minimize nighttime travel within Kathmandu and avoid nighttime road travel outside the Kathmandu Valley due to insufficient street lighting and hazardous road conditions.<sup>260</sup>

# Sendai Framework for Disaster Reduction

The Sendai Framework is the global blueprint and fifteen year plan to build the world's resilience to natural disasters.<sup>261</sup> 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:

- 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.

It 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. Figure 12 shows the Sendai DDR Framework.<sup>262</sup>

# **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

	Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to people by 2030
	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 number of countries with national and local disaster risk reduction strategies by 2020
Targets	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
	Reduce direct disaster economic loss in relation to global gross domestic product (GDP) by 2030
	Substantially reduce the number of affected people globally by 2030, aiming to globally by 2030, aiming to figure per 100,000 between 2020-2030 compared to 2005-2015
	Substantially reduce global disaster mortality by 2030. aiming to lower average per 100,000 global mortality between 2020-2030 between 2020-2030 compared to 2005-2015

# Figure 12: UN Sendai Framework for Disaster Risk Reduction 2015-2030

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

Investing in disaster risk reduction for resilience

Priority 2 Strengthening disaster risk governance to manage disaster risk

Priority 1 Understanding disaster risk

Priority 3

Priority 4

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.

**Priorities for Action** 

# APPENDICES

# 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 Interim HFA for Nepal are represented in Figure 13 and Table 4. Table 5 provides an overview of the overall challenges and the future outlook statement from the HFA report.263

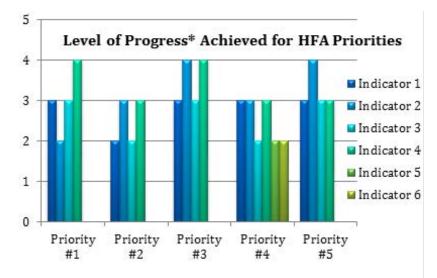


Figure 13: HFA Level of Progress Achieved

Priority for Action #1: Ensure that disaster risk reduction is a national and a local priority with a strong	r
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.	3
2	Dedicated and adequate resources are available to implement disaster risk reduction plans and activities at all administrative levels.	2
3	Community Participation and decentralization is ensured through the delegation of authority and resources to local levels.	3
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.	2
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.	2
4	National and local risk assessments take account of regional / trans- boundary risks, with a view to regional cooperation on risk reduction.	3

Table 4: Nepal National Progress Report, HFA 2013-2015

Priority #3: U	Jse knowledge, innovation and education to build a culture of safety and re	esilience 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.).	3
2	School curricula, education material and relevant trainings include disaster risk reduction and recovery concepts and practices.	4
3	Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.	3
4	Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.	4
Priority #4: R	educe 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.	2
2	Social development policies and plans are being implemented to reduce the vulnerability of populations most at risk.	3
3	Economic and productive sectorial policies and plans have been implemented to reduce the vulnerability of economic activities.	2
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.	2
6	Procedures are in place to assess the disaster risk impacts of major development projects, especially infrastructure.	2
Priority #5: S	trengthen 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.	3
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.	3

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 capacities

5 - Comprehensive achievement with sustained commitment and capacities at all levels

Table 4: Nepal National Progress Report, HFA 2013-2015 (Cont.)

<b>Future Outlook Area 1:</b> 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:	There is a lack of tools to assess the contribution of an investment in development sectors towards disaster resiliency of a community and/or nation. There is a need to devise a mechanism to assess disaster resiliency of the project itself and also of its contribution toward disaster resiliency of a community plans and policies. There is a lack of comprehensive DM Act to replace the existing Natural Calamity Relief Act. The integration of DRM and CRM measures in the development policies could be a key steps to achieve the sustainable development. DRM/CRM mainstreaming is needed in order to assure livelihoods of people thus ultimate reduction of vulnerability in terms of various types of disasters is possible afterwards. Enforcement of sufficient building codes, climate change adaptation policies, local resilience and capacity building, and incorporating timely revision and monitoring is needed.	
Future Outlook Priorities:	The multi-hazard and risk assessment of newly declared municipalities are to be incorporated in the risk assessment programs. Significant and visible plans and policies, primarily affordable from the local resources are to be developed for improving livelihoods and reducing vulnerabilities.	
<b>Future Outlook Are</b> all levels, in particula hazards.	<b>Future Outlook Area 2:</b> 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	
Challenges:	The emergency response and relief approach is so entrenched in the current system that it will take time to mobilize the system to more comprehensive disaster risk management approach. Other challenges are: -Put into operation the proposed DM Bill -Utilization of existing local resources -Reduce dependency syndrome to district headquarter -Capacity building at national and community levels -Linking the network of community level to district level network -DRR concept incorporated in cooperative efforts at VDC Level -Use of resources even to increase risk, need to minimize -Strengthening of academic institutions for risk reduction integration	
Future Outlook Priorities:	Build capacity of the local government to ensure risk assessment and mitigation in each development planning in the community level. Need to develop policies and tools which demonstrate the role of integrated disaster risk management and sustainable development.	
Future Outlook Are implementation of e affected communitie	ea 3: The systematic incorporation of risk reduction approaches into the design and mergency preparedness, response and recovery programs in the reconstruction of es.	
Challenges:	Emergency response has been the main focus on disaster risk management in the previous years, but this focus was sporadic and did not effectively address the risks that face Nepal. The development of institutional mechanisms are weak and relief funds are distributed in an ad-hoc basis. The newly established NEOC and the corresponding R/DEOCs is a positive step in strengthening emergency response. However, there is a need to develop and strengthen a network of EOCs across the country from central to local levels. The challenge is to shift focus from an emergency response approach to a more comprehensive disaster risk management approach, which ultimately replace the existing reactive approach by proactive approach. This requires a change in practice, attitude and commitment from government officials and civil society actors.	
Future Outlook Priorities:	Sectoral capacity development at the central and local levels will be required to ensure strengthened disaster risk reduction at the national and community level. This includes strengthening institutional capacities, such as the development of the NDMA as envisioned in NSDRM and developing orientations at the community level to identify risks and utilize traditional knowledge/technology, innovations and practices of communities to reduce vulnerabilities. The ongoing efforts on develop- ment of PDNA tools and strengthened network of NEOC and all R/D/MEOCs would be instrumental in response, relief and recovery.	

Table 5: HFA Country Progress Report Future Outlook Areas, Nepal

## **Country Profile**

The information in the Country Profile section is sourced directly from the CIA World Fact book.<sup>264</sup>

## **Background:**

During the late 18th-early 19th centuries, the principality of Gorkha united many of the other principalities and states of the sub-Himalayan region into a Nepalese Kingdom. Nepal retained its independence following the Anglo-Nepalese War of 1814-16 and the subsequent peace treaty laid the foundations for two centuries of amicable relations between Britain and Nepal. (The Brigade of Gurkhas continues to serve in the British Army to the present day.) In 1951, the Nepali monarch ended the century-old system of rule by hereditary premiers and instituted a cabinet system that brought political parties into the government. That arrangement lasted until 1960, when political parties were again banned, but was reinstated in 1990 with the establishment of a multiparty democracy within the framework of a constitutional monarchy.

An insurgency led by Maoists broke out in 1996. The ensuing 10-year civil war between Maoist and government forces witnessed the dissolution of the cabinet and parliament and the re-assumption of absolute power by the king in 2002. A peace accord in 2006 led to the promulgation of an interim constitution in 2007. Following a nationwide Constituent Assembly (CA) election in 2008, the newly formed CA declared Nepal a federal democratic republic, abolished the monarchy, and elected the country's first president. After the CA failed to draft a constitution by a May 2012 deadline set by the Supreme Court, then-Prime Minister Baburam Bhattarai dissolved the CA. Months of negotiations ensued until March 2013 when the major political parties agreed to create an interim government headed by then-Chief Justice Khil Raj Regmi with a mandate to hold elections for a new CA. Elections were held in November 2013, in which the Nepali Congress won the largest share of seats in the CA and in February 2014 formed a coalition government with the second place Communist Party of Nepal-Unified Marxist-Leninist and with Nepali Congress President Sushil Koirala as prime minister. Nepal's new constitution came into effect in September 2015, at which point the CA became the Legislature Parliament. Khagda Prasad

Sharma Oli served as the first post-constitution prime minister from October 2015-August 2016, when a new coalition led by Maoist leader Pushpa Kamal Dahal (aka "Prachanda") took over the premiership. The constitution provides for a transitional period during which three sets of elections – local, provincial, and national – must take place before 21 January 2018. The government scheduled local elections, the first in 20 years for May 2017.

## Location:

Southern Asia, between China and India

## **Geographic Coordinates:**

28 00 N, 84 00 E

## Area:

Total: 147,181 sq km

Land: 143,351 sq km

Water: 3,830 sq km

Country comparison to the world: 94

## Area – Comparative:

Slightly larger than New York State

## Land Boundaries:

Total: 3, 159 km

Border countries (2): China 1,389 km, India 1,770 km

## **Coastline:**

0 km (landlocked)

Maritime Claims:

None (landlocked)

## Climate:

Varies from cool summers and severe winters in north to subtropical summers and mild winters in south

## Terrain:

Tarai or flat river plain of the Ganges in south; central hill region with rugged Himalayas in north

## **Elevation:**

Mean elevation: 2,565 m

Elevation extremes: lowest point: Kanchan Kalan 70 m

Highest point: Mount Everest 8,850 m (highest peak in Asia and highest point on earth above sea level)

### Natural Resources:

Quartz, water, timber, hydropower, scenic beauty, small deposits of lignite, copper, cobalt, iron ore

### Land Use:

Agricultural land: 28.8 percent

Arable land 15.1 percent; permanent crops 1.2 percent; permanent pasture 12.5 percent

Forest: 25.4 percent

Other: 45.8 percent (2011 est.)

## **Irrigated Land:**

13,320 sq km (2012)

## Natural Hazards:

Severe thunderstorms; flooding; landslides; drought and famine depending on the timing, intensity, and duration of the summer monsoons Environment - Current Issues: Deforestation (overuse of wood for fuel and lack of alternatives); contaminated water (with human and animal wastes, agricultural runoff, and industrial effluents); wildlife conservation; vehicular emissions

#### **Environment - International Agreements:**

**Party to:** Biodiversity, Climate Change, Climate Change-Kyoto Protocol, Desertification, Endangered Species, Hazardous Wastes, Law of the Sea, Ozone Layer Protection, Tropical Timber 83, Tropical Timber 94, Wetlands (Signed but not ratified: Marine Life Conservation).

### **Geography - Note:**

Landlocked; strategic location between China and India; contains eight of world's 10 highest peaks, including Mount Everest and Kanchenjunga - the world's tallest and third tallest mountains - on the borders with China and India respectively

### **Population:**

29,033,914 (July 2016 est.)

Country comparison to the world: 46

#### Nationality:

Noun: Nepali (singular and plural)

Adjective: Nepali

#### **Ethnic Groups:**

Chhettri 16.6 percent, Brahman-Hill 12.2 percent, Magar 7.1 percent, Tharu 6.6 percent, Tamang 5.8 percent, Newar 5 percent, Kami 4.8 percent, Muslim 4.4 percent, Yadav 4 percent, Rai 2.3 percent, Gurung 2 percent, Damai/Dholii 1.8 percent, Thakuri 1.6 percent, Limbu 1.5 percent, Sarki 1.4 percent, Teli 1.4 percent, Chamar/ Harijan/Ram 1.3 percent, Koiri/Kushwaha 1.2 percent, other 19 percent

Note: 125 caste/ethnic groups were reported in the 2011 national census (2011 est.)

#### Languages:

Nepali (official) 44.6 percent, Maithali 11.7 percent, Bhojpuri 6 percent, Tharu 5.8 percent, Tamang 5.1 percent, Newar 3.2 percent, Magar 3 percent, Bajjika 3 percent, Urdu 2.6 percent, Avadhi 1.9 percent, Limbu 1.3 percent, Gurung 1.2 percent, other 10.4 percent, unspecified 0.2 percent Note: 123 languages reported as mother tongue in 2011 national census; many in government and business also speak English (2011 est.)

## **Religions:**

Hindu 81.3 percent, Buddhist 9 percent, Muslim 4.4 percent, Kirant 3.1 percent, Christian 1.4 percent, other 0.5 percent, unspecified 0.2 percent (2011 est.)

## Age Structure:

0-14 years: 30.93 percent (male 4,646,048/female 4,333,105)

15-24 years: 21.86 percent (male 3,176,158/ female 3,169,721)

25-54 years: 35.99 percent (male 4,707,264/ female 5,740,985)

55-64 years: 6.22 percent (male 877,288/female 927,202)

65 years and over: 5.02 percent (male 723,523/ female 732,620) (2016 est.)

## **Dependency Ratios:**

Total dependency ratio: 61.8

Youth dependency ratio: 52.9

Elderly dependency ratio: 9

Potential support ratio: 11.1 (2015 est.)

## Median Age:

Total: 23.6 years

Male: 22.4 years

Female: 24.8 years (2016 est.)

Country comparison to the world: 165

## **Population Growth Rate:**

1.24 percent (2016 est.)

Country comparison to the world: 92

## **Birth Rate:**

19.9 births/1,000 population (2016 est.)

Country comparison to the world: 82

### **Death Rate:**

5.7 deaths/1,000 population (2016 est.)

Country comparison to the world: 174

## **Net Migration Rate:**

-1.9 migrant(s)/1,000 population (2016 est.)

Country comparison to the world: 163

Most of the population is divided nearly equally, between a concentration in the southern-most plains of the Tarai region and the central hilly region; overall density is quite low

## Urbanization:

Urban population: 18.6 percent of total population (2015)

Rate of urbanization: 3.18 percent annual rate of change (2010-15 est.)

## Major Urban Areas - Population:

Kathmandu (capital) 1.183 million (2015)

## Sex Ratio:

At birth: 1.04 male(s)/female

0-14 years: 1.07 male(s)/female

15-24 years: 1 male(s)/female

25-54 years: 0.82 male(s)/female

55-64 years: 0.95 male(s)/female

65 years and over: 0.86 male(s)/female

Total population: 0.95 male(s)/female (2016 est.)

Mother's mean age at first birth:

20.1 years

Note: Median age at first birth among women 25-29 (2011 est.) Maternal Mortality Rate: 258 deaths/100,000 live births (2015 est.) Country comparison to the world: 60 **Infant Mortality Rate:** Total: 28.9 deaths/1,000 live births Male: 30.2 deaths/1,000 live births Female: 27.5 deaths/1,000 live births (2016 est.) Country comparison to the world: 66 Life Expectancy at Birth: Total population: 70.7 years Male: 70.1 years Female: 71.3 years (2016 est.) Country comparison to the world: 155 **Total Fertility Rate:** 2.18 children born/woman (2016 est.) Country comparison to the world: 99 **Contraceptive Prevalence Rate:** 49.6 percent (2014) Health Expenditures: 5.8 percent of GDP (2014) Country comparison to the world: 125 **Drinking Water Source:** Improved: Urban: 90.9 percent of population Rural: 91.8 percent of population Total: 91.6 percent of population

## Unimproved:

Urban: 9.1 percent of population Rural: 8.2 percent of population Total: 8.4 percent of population (2015 est.) Sanitation Facility Access: Improved: Urban: 56 percent of population Rural: 43.5 percent of population Total: 45.8 percent of population Unimproved: Urban: 44 percent of population Rural: 56.5 percent of population Total: 54.2 percent of population (2015 est.) HIV/AIDS - Adult Prevalence Rate: 0.2% (2016 est.) Country comparison to the world: 94 HIV/AIDS - People Living with HIV/AIDS: 39,400 (2015 est.) Country comparison to the world: 65 **HIV/AIDS** - Deaths: 2,300 (2015 est.) Country comparison to the world: 56 Major infectious diseases: Degree of risk: high Food or waterborne diseases: Bacterial diarrhea, hepatitis A and E, and typhoid fever Vector borne diseases: Japanese encephalitis, malaria, and dengue fever (2016)

## **Obesity - adult prevalence rate:**

2.9 percent (2014)

Country comparison to the world: 189

### Children Under the Age of 5 Years Underweight:

30.1 percent (2014)

Country comparison to the world: 17

### **Education Expenditures:**

3.7 percent of GDP (2015)

Country comparison to the world: 87

## Literacy:

Definition: age 15 and over can read and write

Total population: 63.9 percent

Male: 76.4 percent

Female: 53.1 percent (2015 est.)

# School Life Expectancy (Primary to Tertiary Education):

Total: 12 years

Male: 12 years

Female: 13 years (2015)

## Child Labor - Children Ages 5-14:

Total number: 2,467,549

Percentage: 34 percent (2008 est.)

## Unemployment, Youth Ages 15-24:

Total: 3.5 percent

Male: 4.2 percent

Female: 2.9 percent (2008 est.)

### **Country Name:**

Conventional long form: Federal Democratic Republic of Nepal

Conventional short form: Nepal

Local long form: Sanghiya Loktantrik Ganatantra Nepal

Local short form: Nepal

Etymology: the Newar people of the Kathmandu Valley and surrounding areas apparently gave their name to the country; the terms "Nepal," "Newar," "Nepar," and "Newal" are phonetically different forms of the same word

**Government type:** Federal parliamentary republic

Capital: Kathmandu

Geographic Coordinates: 27 43 N, 85 19 E

**Time Difference:** UTC+5.75 (10.75 hours ahead of Washington, DC, during Standard Time)

## Administrative División:

14 zones (anchal, singular and plural); Bagmati, Bheri, Dhawalagiri, Gandaki, Janakpur, Karnali, Kosi, Lumbini, Mahakali, Mechi, Narayani, Rapti, Sagarmatha, Seti

## Independence:

1768 (unified by Prithvi Narayan Shah)

## National Holiday:

Republic Day, 28 May (2008); note - marks the abdication of Gyanendra Shah, the last Nepalese monarch, and the establishment of a federal republic

## **Constitution:**

History: several previous; latest adopted 20 September 2015

Amendments: proposed as a "bill" by either house of the Federal Parliament; bills affecting a state border or powers delegated to a state must be submitted to the affected state assembly; passage of such bills requires a majority vote of that state assembly membership; bills not requiring state assembly consent require at least two-thirds majority vote by the membership of both houses of the Federal Parliament; parts of the constitution on the sovereignty, territorial integrity, independence, and sovereignty vested in the people cannot be amended; amended January 2016 (2017)

## Legal System:

English common law and Hindu legal concepts International Law Organization Participation: Has not submitted an ICJ jurisdiction declaration; non-party state to the ICCT

## **Citizenship:**

Citizenship by birth: yes

Citizenship by descent: yes

Dual citizenship recognized: no

Residency requirement for naturalization: 15 years

## Suffrage:

18 years of age; universal

## **Executive Branch:**

Head of state: President Bidhya Devi Bhandari (since 29 October 2015); Vice President Nanda Bahadar Pun (since 31 October 2015) Head of Government: Prime Minister Sher Bahadur Deuba (since 7 June 2017); note - Prime Minister Pushpa Kamal Dahal resigned on 25 May 2017 as part of a rotational power-sharing arrangement between the CPN-MC and NC Cabinet: Council of Ministers appointed by the prime minister; cabinet dominated by the Communist Party of Nepal (Maoist Center) and the Nepali Congress Elections/Appointments: president indirectly elected by an electoral college of the Federal Parliament and of the state assemblies for a 5-year term (eligible for a second term); prime minister indirectly elected by the Federal Parliament

**Election Results:** Bidhya Devi Bhandari elected president; Constituent Assembly vote count -

Bidhya Devi Bhandari (CPN-UML) 327, Kul Bahadur Gurung (NC) 214; Bhandari is Nepal's first woman president

### Legislative Branch:

**Description:** bicameral Federal Parliament (per the new constitution but not implemented as of March 2017) consists of the National Assembly (59 seats; 56 members, including at least 3 women, 1 Dalit, 1 member with disabilities, or 1 minority indirectly elected by an electoral college of state and municipal government leaders, and 3 members, including 1 woman nominated by the president of Nepal on the recommendation of the Government; members serve 6-year terms with renewal of one-third of the membership every 2 years) and the House of Representatives (275 seats; 165 members directly elected in single-seat constituencies by simple majority vote and 110 members directly elected in a single nationwide constituency by party-list proportional representation vote; members serve 5-year terms)

**Elections:** last held for the second Constituent Assembly on 19 November 2013 (first election for the Federal Parliament NA)

**Election results:** percent of vote by party - NA; seats by party - NC 196, CPN-UML 175, CPN-MC 80, Rastriya Prajatantra Party Nepal 24, Madhesi parties 35, NDP 13, Sadhavanna Party 6, CPN-ML 5, Federal Socialist Party 5, Nepal Workers and Peasanrs Party 4, other 32

## **Judicial Branch:**

**Highest Court(s):** Supreme Court (consists of the chief justice and up to 20 judges) Judge Selection and Term of Office: the Supreme Court chief justice appointed by the president on the recommendation of the Constitutional Council, a 5-member, high-level advisory body headed by the prime minister; other judges appointed by the president on the recommendation of the Judicial Council, a 5-member advisory body headed by the chief justice; the chief justice term of office is 6 years; judges serve until age 65

**Subordinate Courts:** High Court; Court of Appeal; district courts

**Note:** Nepal's judiciary was restructured under its 2007 Interim Constitution

## **Political Parties and Leaders:**

**Note:** 164 political parties are registered with the Election Commission of Nepal as of early 2017; 122 political parties participated in the 19 November 2013 election and the 30 parties listed below were elected to serve in the Constituent Assembly; however only 26 of the 30 are considered "national" parties Awami League or AL [Sheikh Hasina]

Akhanda Nepal Party [Kumar Khadka]

Bahujan Shakti Party [Bishwendra Pashwan]

Communist Party of Nepal (Maoist Centre) or CPN-MC [Pushpa Kamal Dahal, also known as Comrade Prachanda]

Communist Party of Nepal-Marxist Leninist or CPN-ML [C.P. Mainali]

Communist Party of Nepal-Unified Marxist-Leninist or CPN-UML [Khadga Prasad Sharma Oli]

Communist Party of Nepal (United) or CPN (United) [Jaydev Joshi]

Dalit Janajati Party Nepal [Yashoda Kumari Lama]

Federal Socialist Forum-Nepal [Upendra Yadav]

Federal Socialist Party [Ashok Rai]

Jana Jagaran Party Nepal (Awareness Party Nepal) [Lok Mani Dhakal]

Khambuwan Rastriya Morcha-Nepal [Ram Kumar Rai]

Madhesi People's Rights Forum-Democratic [Bijay Kumar Gachchadar]

Madhesi People's Rights Forum-Republican [Raj Kishore Yadav]

Madhesh Samata Party Nepal [Meghraj Sahani]

National Madhes Socialist Party [Sharat Singh Bhandari]

Nepal Rastriya Party [Prem Bahadur Singh]

Nepal Pariwar Dal [Ek Nath Dhakal]

Nepal Workers and Peasants Party [Narayan Man Bijukchhe]

Nepali Congress or NC [Bahadur Deuba]

Nepali Janata Dal [Hari Charan Shah]

Rastriya Janamorcha Nepal [Chitra Bahadur K.C.]

Rastriya Janamukti Party [Malwar Singh Thapa]

Rastriya Prajatantra Party [Kamal Thapa]

Sadbhavana Party [Rajendra Mahato]

Samajbadi Janata Party [Prem Bahadur Singh]

Sanghiya Sadbhavana Party [Anil Kumar Jha]

Sanghiya Loktantrik Rastriya Manch [Rukmini Chaudhary]

Terai Madhesh Democratic Party [Mahantha Thakur]

Terai-Madhesh Sadbhavana Party-Nepal [Mahendra Yadav]

Tharuhat Terai Party Nepal [Bhanuram Chaudary]

## **Political Pressure Groups and Leaders:**

Other: various groups advocate regional autonomy such as the Federal State Limbuwan Council in far eastern Nepal; others have called for an independent Madhesh; the National Federation of Indigenous Nationalities advocates for the rights of indigenous nationalities in Nepal; Tharu Kalyankari Sabha advocates for the rights of Tharus

## **International Organization Participation:**

ADB, BIMSTEC, CD, CP, FAO, G-77, IAEA, IBRD, ICAO, ICC (NGOS), ICRM, IDA, IFAD, IFC, IFRCS, ILO, IMF, IMO, Interpol, IOC, IOM, IPU, ISO, ITSO, ITU, ITUC (NGOS), MIGA, MINURSO, MINUSMA, MINUSTAH, MONUSCO, NAM, OPCW, SAARC, SACEP, UN, UNAMID, UNCTAD, UNDOF, UNESCO, UNIDO, UNIFIL, UNMIL, UNMISS, UNOCI,

## UNTSO, UNWTO, UPU, WCO, WFTU (NGOs), WHO, WIPO, WMO, WTO

## **Diplomatic Representation in the U.S.:**

Chief of mission: Ambassador Arjun Kumar Karki (since 18 May 2015)

Chancery: 2131 Leroy Place NW, Washington, DC 20008

Telephone: [1] (202) 667-4550

FAX: [1] (202) 667-5534

Consulate(s) general: Cleveland (OH), New York

### Diplomatic representation from the US:

Chief of mission: Ambassador Alaina B. Teplitz (since 7 October 2015)

Embassy: Maharajgunj, Kathmandu

Mailing address: use embassy street address

Telephone: [977] (1) 423-4000

FAX: [977] (1) 400-7272

## **Flag Description:**

Crimson red with a blue border around the unique shape of two overlapping right triangles; the smaller, upper triangle bears a white stylized moon and the larger, lower triangle displays a white 12-pointed sun; the color red represents the rhododendron (Nepal's national flower) and is a sign of victory and bravery, the blue border signifies peace and harmony; the two right triangles are a combination of two single pennons (pennants) that originally symbolized the Himalaya Mountains while their charges represented the families of the king (upper) and the prime minister, but today they are understood to denote Hinduism and Buddhism, the country's two main religions; the moon represents the serenity of the Nepalese people and the shade and cool weather in the Himalayas, while the sun depicts the heat and higher temperatures of the lower parts of Nepal; the moon and the sun are also said to express the hope that the nation will endure as long as these heavenly bodies

**Note:** Nepal is the only country in the world whose flag is not rectangular or square

### National Symbol(s):

Rhododendron blossom; national color: red

### National Anthem:

Name: "Sayaun Thunga Phool Ka" (Hundreds of Flowers)

Lyrics/music: Pradeep Kumar Rai/Ambar Gurung

Note: adopted 2007; after the abolition of the monarchy in 2006, a new anthem was required because of the previous anthem's praise for the king

#### **Economy Overview:**

Nepal is among the poorest and least developed countries in the world, with about one-quarter of its population living below the poverty line. Nepal is heavily dependent on remittances, which amount to as much as 30 percent of GDP. Agriculture is the mainstay of the economy, providing a livelihood for almost two-thirds of the population but accounting for only one-third of GDP. Industrial activity mainly involves the processing of agricultural products, including pulses, jute, sugarcane, tobacco, and grain. Nepal has considerable scope for exploiting its potential in hydropower, with an estimated 42,000 MW of commercially feasible capacity. Nepal and India signed trade and investment agreements in 2014 that increase Nepal's hydropower potential, but political uncertainty and a difficult business climate have hampered foreign investment.

Nepal was hit by massive earthquakes in early 2015, which damaged or destroyed infrastructure and homes and set back economic development. Political gridlock in the past several years and recent public protests, predominantly in the southern Tarai region, have hindered post-earthquake recovery and prevented much-needed economic reform. Additional challenges to Nepal's growth include its landlocked geographic location, persistent power shortages, and underdeveloped transportation infrastructure.

## **GDP** (Purchasing Power Parity): \$71.52 billion (2016 est.) \$71.12 billion (2015 est.) \$69.24 billion (2014 est.) Note: data are in 2016 dollars Country comparison to the world: 98 GDP (official exchange rate): \$21.15 billion (2016 est.) **GDP** - real growth rate: 0.6 percent (2016 est.) 2.7 percent (2015 est.) 6 percent (2014 est.) Country comparison to the world: 185 GDP - per capita (PPP): \$2,500 (2016 est.) \$2,500 (2015 est.) \$2,500 (2014 est.) Note: data are in 2016 dollars Country comparison to the world: 199 **Gross National Saving:** 42.9 percent of GDP (2016 est.) 43.9 percent of GDP (2015 est.) 45.7 percent of GDP (2014 est.) Country comparison to the world: 5 GDP - composition, by end use: Household consumption: 82 percent Government consumption: 10.9 percent Investment in fixed capital: 25 percent

Investment in inventories: 8.9 percent

Exports of goods and services: 10.7 percent

Imports of goods and services: -37.5 percent (2016 est.)

## GDP - composition, by sector of origin:

Agriculture: 32 percent

Industry: 14 percent

Services: 54 percent (FY 2016 est.)

## **Agriculture - Products:**

Pulses, rice, corn, wheat, sugarcane, jute, root crops; milk, water buffalo meat

## Industries:

Tourism, carpets, textiles; small rice, jute, sugar, and oilseed mills; cigarettes, cement and brick production

## Industrial production growth rate:

-6.3 percent (2016 est.)

Country comparison to the world: 197

## Labor Force:

15.6 million

Note: severe lack of skilled labor (2014 est.)

Country comparison to the world: 39

Labor Force - by occupation:

Agriculture: 69 percent

Industry: 12 percent

Services: 19 percent (2014 est.)

## **Unemployment Rate:**

3.3 percent (2013 est.)

2.7 percent (2008 est.)

Country comparison to the world: 28

Population below poverty line:
25.2 percent (2011 est.)
Household income or consumption by percentage share:
Lowest 10 percent: 3.2 percent
Highest 10 percent: 29.5 percent (2011)
Distribution of family income - Gini index:
32.8 (2010)
47.2 (2008 est.)
Country comparison to the world: 108
Budget:
Revenues: \$4.976 billion
Expenditures: \$5.596 billion (FY2016 est.)
Taxes and other revenues:
23.5 percent of GDP (FY2016 est.)
Country comparison to the world: 126
Budget surplus (+) or deficit (-):
2.9 percent of GDP (FY2016 est.)
Country comparison to the world: 103
Public debt:
27.6 percent of GDP (FY 2016 est.)
25.7 percent of GDP (FY 2015 est.)
Country comparison to the world: 153
Fiscal year:
16 July - 15 July
Inflation rate (consumer prices):
9.9 percent (FY 2016 est.)
7.2 percent (FY 2015 est.)
Country comparison to the world: 205
84 Center for Excellence in Disaster Management & H

Central bank discount rate: 7 percent (30 October 2016) 7 percent (30 October 2015) Country comparison to the world: 45 Commercial bank prime lending rate: 8.6 percent (30 October 2016 est.) 9.5 percent (30 October 2015 est.) Country comparison to the world: 98 Stock of narrow money: \$5.051 billion (30 October 2016 est.) \$4.348 billion (30 October 2015 est.) Country comparison to the world: 99 Stock of broad money: \$22.16 billion (30 October 2016 est.) \$18.72 billion (30 October 2015 est.) Country comparison to the world: 86 Stock of domestic credit: \$16.87 billion (30 October 2016 est.) \$14.36 billion (30 October 2015 est.) Country comparison to the world: 92 Market value of publicly traded shares: \$14.03 billion (30 April 2016 est.) \$11.81 billion (31 October 2015 est.) \$9.574 billion (31 October 2014 est.) Country comparison to the world: 69

Current account balance:	Debt - external:	
\$1.339 billion (2016 est.)	\$3.578 billion (FY 2016 est.)	
\$1.067 billion (2015 est.)	\$3.273 billion (FY 2015 est.)	
Country comparison to the world: 40	Country comparison to the world: 139	
Exports:	Stock of direct foreign investment - At home:	
\$604.7 million (FY2016 est.)	\$103 million (31 July 2013 est.)	
\$866.5 million (FY2015 est.)	Country comparison to the world: 127	
Country comparison to the world: 170	Stock of direct foreign investment - Abroad:	
Exports - commodities:	\$NA	
Clothing, pulses, carpets, textiles, juice, jute	Exchange rates:	
goods	Nepalese rupees (NPR) per US dollar -	
Exports - partners:	108.8 (2016 est.)	
India 58.6 percent, US 10 percent, Germany 4 percent (1 January - 30 October 2016)	102.41 (2015 est.)	
Imports:	102.41 (2014 est.)	
\$6.667 billion (FY2016 est.)	99.53 (2013 est.)	
\$7.886 billion (FY2015 est.)	85.2 (2012 est.)	
country comparison to the world: 114	Electricity access:	
Imports - commodities:	Population without electricity: 6,600,000	
Petroleum products, machinery and equipment,	Electrification - total population: 76 percent	
gold, electrical goods, medicine	Electrification - urban areas: 97 percent	
Imports - partners:	Electrification - rural areas: 72 percent (2013)	
India 61.5 percent, China 15.4 percent (1 January - 30 October 2016)	Electricity - production:	
Reserves of foreign exchange and gold:	3.342 billion kWh (FY 2016 est.)	
\$10.17 billion (30 October 2016 est.)	Country comparison to the world: 126	
\$8.88 billion (30 October 2015 est.)	Electricity - consumption:	
Country comparison to the world: 75	3.746 billion kWh (FY 2016 est.)	
	Country comparison to the world: 127	

Electricity - exports:	Crude oil - imports:	
3.25 million kWh (FY 2016 est.)	0 bbl/day (2016 est.)	
Country comparison to the world: 94	Country comparison to the world: 111	
Electricity - imports:	Crude oil - proved reserves:	
1.758 billion kWh (FY 2016 est.)	0 bbl (1 January 2016 est.)	
Country comparison to the world: 56	Country comparison to the world: 176	
Electricity - installed generating capacity:	Refined petroleum products - production:	
855,900 kW (FY 2016 est.)	0 bbl/day (2013 est.)	
Country comparison to the world: 133	Country comparison to the world: 182	
Electricity - from fossil fuels:	Refined petroleum products - consumption:	
6.2 percent of total installed capacity (FY 2016	27,000 bbl/day (2014 est.)	
est.)	Country comparison to the world: 126	
Country comparison to the world: 202	Refined petroleum products - exports:	
Electricity - from nuclear fuels:	0 bbl/day (2013 est.)	
0 percent of total installed capacity (FY 2016 est.)	Country comparison to the world: 215	
Country comparison to the world: 156	Refined petroleum products - imports:	
Electricity - from hydroelectric plants:	25,870 bbl/day (2013 est.)	
93.8 percent of total installed capacity (FY 2016 est.)	Country comparison to the world: 107	
Country comparison to the world: 10	Natural gas - production:	
Electricity - from other renewable sources:	0 cu m (2013 est.)	
0 percent of total installed capacity (FY 2016 est.)	Country comparison to the world: 111	
Country comparison to the world: 207	Natural gas - consumption:	
Crude oil - production:	0 cu m (2013 est.)	
0 bbl/day (2016 est.)	Country comparison to the world: 180	
Country comparison to the world: 176	Natural gas - exports:	
Crude oil - exports:	0 cu m (2013 est.)	
0 bbl/day (2016 est.)	Country comparison to the world: 157	
Country comparison to the world: 172		

## Natural gas - imports:

0 cu m (2013 est.)

Country comparison to the world: 109

### Natural gas - proved reserves:

0 cu m (1 January 2014 es)

Country comparison to the world: 180

# Carbon dioxide emissions from consumption of energy:

4.2 million Mt (2013 est.)

Country comparison to the world: 131

## **Communications:**

## **Telephones - fixed lines:**

Total subscriptions: 846,940

Subscriptions per 100 inhabitants: 3 (July 2015 est.)

Country comparison to the world: 85

## Telephones - mobile cellular:

Total: 27.516 million

Subscriptions per 100 inhabitants: 87 (July 2015 est.)

Country comparison to the world: 52

## **Telephone system:**

General assessment: fair radiotelephone communication service and mobile-cellular telephone network

Domestic: mobile service has been extended to all 75 districts covering 90 percent of Nepal's land area

International: country code - 977; radiotelephone communications; microwave and fiber landlines to India; satellite earth station - 1 Intelsat (Indian Ocean) (2016)

### Broadcast media:

State operates 3 TV stations, as well as national and regional radio stations; 88 independent TV channels are registered with only 25 in regular operation; 672 FM radio stations are licensed with 588 operational (2016)

## Internet country code:

.np

### Internet users:

Total: 12.293 million

Percent of population: 42.3 percent (2016)

Country comparison to the world: 80

### **Transportation:**

## National air transport system:

Number of registered air carriers: 4

Inventory of registered aircraft operated by air carriers: 15

Annual passenger traffic on registered air carriers: 510,341

Annual freight traffic on registered air carriers: 4,536,371 mt-km (2015)

Civil aircraft registration country code prefix: 9N (2016)

## Airports:

47 (2013)

Country comparison to the world: 95

## Airports - with paved runways:

Total: 11

Over 3,047 m: 1

1,524 to 2,437 m: 3

914 to 1,523 m: 6

Under 914 m: 1 (2013)

## Airports - with unpaved runways:

Total: 36

1,524 to 2,437 m: 1

914 to 1,523 m: 6

Under 914 m: 29 (2013)

### **Railways:**

Total: 53 km

Narrow gauge: 53 km 0.762-m gauge (2014)

Country comparison to the world: 131

#### **Roadways:**

Total: 27,990 km

Paved: 11,890 km

Unpaved: 16,100 km (2016)

country comparison to the world: 132

#### Military and Security:

#### Military expenditures:

1.52 percent of GDP (2016)

1.54 percent of GDP (2015)

1.63 percent of GDP (2014)

1.54 percent of GDP (2013)

1.43 percent of GDP (2012)

#### Military branches:

Nepal Army (2012)

#### Military service age and obligation:

18 years of age for voluntary military service; no conscription (2014)

#### **Transnational Issues:**

#### **Disputes - international:**

Joint border commission continues to work on contested sections of boundary with India, including the 400 sq km dispute over the source of the Kalapani River; India has instituted a stricter border regime to restrict transit of illegal cross-border activities

#### Refugees and internally displaced persons:

Refugees (country of origin): 13,509 (Tibet/ China) (2016); 9,804 (Bhutan) (2017) IDPs: 50,000 (remaining from ten-year Maoist insurgency that officially ended in 2006; figure does not include people displaced since 2007 by inter-communal violence and insecurity in the Terai region; 2015 earthquakes) (2016) Stateless persons: undetermined (2016); note - the UNHCR is working with the Nepali Government to address the large number of individuals lacking citizenship certificates in Nepal; smaller numbers of Bhutanese Hindu refugees of Nepali origin (the Lhotshampa) who were stripped of Bhutanese nationality and forced to flee their country in the late 1980s and early 1990s - and undocumented Tibetan refugees who arrived in Nepal prior to the 1990s - are considered stateless

## Illicit drugs:

Illicit producer of cannabis and hashish for the domestic and international drug markets; transit point for opiates from Southeast Asia to the West

## Acronyms and Abbreviations

Acronym	Definition	
ADB	Asian Development Bank	
AED	Academy for Educational Development	
ALB	Albendazole	
APF	Armed Police Force	
BIMSTEC	Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation	
CA	Constituent Assembly	
CAC-N	Community Action Center Nepal	
CBDM	Community Based Disaster Management	
СВО	Community Based Organizations	
CD	Community of Democrats	
CDC	Center for Disease Control and Prevention	
CEDAW	Convention on the Elimination of All Kinds of Discrimination Against Women	
CFE-DM	Center for Excellence in Disaster Management and Humanitarian Assistance	
CIA	Central Intelligence Agency	
DART	Disaster Assistance Response Team	
DDRC	District Disaster Relief Committee	
DEC	Diethylcarbamazine	
DEOC	Distric Emergency Operation Center	
DFID-UK	Department for International Development - United Kingdom	
DG	Director General	
DMHA	Disaster Management and Humanitarian Assistance	
DOD	Department of Defense	
DOHS	Department of Health Services	
DOS	U.S. Department of State	
DREE	Disaster Response Exercise and Exchange	
DRR	Disaster Risk Reduction	
EWS	Early Warning Systems	
FAO	Food and Agriculture Organization	
FCHVS	Female Community Health Volunteers	
FTE	Field Training Events	
G-77	Group of 77	
GDP	Gross Domestic Product	
GLOF	Glacial Lake Outburst Flooding	
GoN	Government of Nepal	
GPOI	Global Peace Operations Initiative	
HTTCA	Human Trafficking and Transportation (Control) Act	
HuMOCC	Humanitarian Military Operations Coordination Center	
IAEA	International Atomic Energy Agency	
IBRD	International Bank for Reconstruction and Development	
ICAO	International Civil Aviation Organization	
ICC	International Chamber of Commerce	
IDA	International Development Association	
IED	Improvised Explosive Device	

Acronym	Definition	
IFC	International Finance Corporation	
IFRCS	International Federation of Red Cross and Red Crescent Societies	
ILO	International Labour Organization	
INFORM	Index for Risk Management	
IOC	International Olympic Committee	
IOM	International Monetary Fund (IMF International Organization for Migration	
IPU	Inter-Parliamentary Union	
ISO	International Organization for Standardization	
ITSO	International Telecommunications Satellite Organization	
ITU	International Telecommunication Union	
ITUC	International Trade Union Confederation	
JCC	Joint Command Center	
IHAST	Joint Humanitarian Assessment Support Team	
LDC	Less Developed Countries	
LF	Lymphatic Filariasis	
LPEP	Leprosy Post Exposure Prophylaxis	
MCHN	Mother and Child Health and Nutrition	
MDA	Mass Drug Administration	
MIGA	Multilateral Investment Guarantee Agency	
MINURSO	UN Mission for the Referendum in Western Sahara	
MINUSMA	United Nations Multidimensional Integrated Stabilization Mission in Mali	
MNMCC	Multi-National Military Coordination Center	
MMR	Measles-Mumps-Rubella	
MoHP	The Ministry of Health and Population	
MONUSCO	United Nations Organization Stabilization Mission in the Democratic Republic of the Congo	
MoSTE	Ministry of Science, Technology and Environment	
MOWCSW	Ministry of Women, Children and Social Welfare	
NAM	Non-Aligned Movement	
NCD	Non-Communicable Diseases	
NDRF	National Disaster Response Force	
NEOC	National Emergency Operations Centre	
NGO	Non-Governmental Organization	
NHSS	Nepal Health Sector Strategy	
NHTC	National Health Training Center	
NRA	National Reconstruction Authority	
NRCS	Nepal Red Cross Society	
OFDA	Office of Foreign Disaster Assistance	
OPCW	Non-Aligned Movement	
PDC	Pacific Disaster Center	
PDRF	Post-Disaster Recovery Framework	
PEACE	Peace Enabling Awareness and Conflict Transformation Enterprise	
RHD	Roads and Highway Department	
SAARC	South Asian Association for Regional Cooperation	
SAFTA	South Asian Free Trade Agreement	

Acronym	Definition	
SACEP	South Asia Cooperative Environment Programme	
SDR	Single Dose Rifampicin	
STEP	Smart Traveler Enrollment Program	
ТВ	Tuberculosis	
TIP	Trafficking in Persons	
TRRC	Tibetan Refugee Reception Center	
TVPA	Trafficking Victims Protection Act's	
TWG	Training Working Group	
U.S.	United States	
UN	United Nations	
UNAMID	United Nations UN, African Union/United Nations Hybrid Operation in Darfur	
UNCTAD	United Nations Conference on Trade and Development	
UNDP	United Nations Development Program	
UNFPA	United Nations Population Fund	
UNESCO	United Nations Educational, Scientific, Cultural Organization	
UNHCR	United Nations High Commissioner for Refugees	
UNICEF	United Nations Children's Fund	
UNIDO	United Nations Industrial Development Organization	
UNIFIL	United Nations Interim Force in Lebanon	
UNMIL	United Nations Mission in Liberia	
UNMIN	United Nations Mission in Nepal	
UNMISS	United Nations Mission in South Sudan	
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs	
UNOCI	United Nations Operation in Côte d'Ivoire	
UNSCR 1325	U.N. Security Council Resolution 1325	
UNWTO	World Tourism Organization	
UPU	Universal Postal Union	
US	United States	
USAID	United States Agency for International Development	
USAID/OFTA	USAID's Office of U.S. Foreign Disaster Assistance	
USAR	Urban Search & Rescue	
USARPAC	U.S. Army Pacific	
USPACOM	U.S. Pacific Command	
VDCs	Village Development Committees	
WCO	World Customs Organization	
WEDS	WHO Emergency District Support	
WFP	World Food Program	
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)**

<sup>1</sup> U.S. Pacific Command (USPACOM), DoD News, Defense Media Activity. DoD Likely Lessened Nepal Quake's Effects, Official Says. Terri Moon Cronk. May 21, 2015. http://www.pacom.mil/Media/News/Article/589498/dodlikely-lessened-nepal-quakes-effects-official-says/ <sup>2</sup> U.S. Pacific Command (USPACOM). U.S. Military Role in Assistance to Nepal. May 1, 2015. http://www.pacom.mil/ Media/News/article/587121/us\_military\_role in assistance

Media/News/article/587121/us-military-role-in-assistanceto-nepal/ <sup>3</sup> U.S. Pacific Command (PACOM). Nepalese Army

Disaster Response Exercise Closes. September 30, 2016. Staff Sgt. Christopher Brown. http://www.pacom.mil/ Media/News/News-Article-View/Article/960801/nepalesearmy-disaster-response-exercise-closes/

<sup>4</sup> 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/

<sup>5</sup> U.S. Pacific Command (USPACOM). U.S. Military Role in Assistance to Nepal. May 1, 2015. http://www.pacom.mil/ Media/News/article/587121/us-military-role-in-assistanceto-nepal/

<sup>6</sup> 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/

<sup>7</sup> Livescience. 2015. By Alina Bradford. Nepal: Facts about geology and culture. https://www.livescience.com/50734-nepal-facts.html

<sup>8</sup> Spotlight Nepal. 2014. By Purushotam Ghimire. Managing disaster risk and climate change. DRR and climate change situation. Published: Vol: 08 No. -7 September. 12- 2014 (Bhadra 27, 2071). https://www. spotlightnepal.com/2014/09/11/managing-disaster-riskand-climate-change/

 <sup>9</sup> Global Facility For Disaster reduction and recovery (GFDRR). 2017. Nepal. https://www.gfdrr.org/nepal
 <sup>10</sup> The World Bank. 2013. Building climate resilience for Nepal's vulnerable population. http://www.worldbank. org/en/news/press-release/2013/10/07/building-climateresilience-for-nepals-vulnerable-populations

<sup>11</sup> Huffington Post. 2015. By Charlotte Alfred. Huge earthquake kills hundreds in Nepal, triggers Everest avalanche. http://www.huffingtonpost.com/2015/04/25/ nepal-earthquake-avalanche\_n\_7141944.html

<sup>12</sup> USAID. 2017. Nepal. Democracy, human rights, and governance. https://www.usaid.gov/nepal/democracy-human-rights-and-governance

<sup>13</sup> SAARC. 2017. Secretary General. http://saarc-sec.org/ secretary\_general <sup>14</sup> The World Bank. 2015. Nepal. Population, total. http:// data.worldbank.org/indicator/SP.POP.TOTL

<sup>15</sup> Referebce.com. 2017. Which countries border Nepal? https://www.reference.com/geography/countries-bordernepal-84e3a24d2fab2270#

<sup>16</sup> USAID. 2017. Nepal. Environment and global change. https://www.usaid.gov/nepal/environment-and-globalclimate-change

<sup>17</sup> USAID. 2017. Nepal. Initiative for climate change adaptation (ICCA) project. https://www.usaid.gov/nepal/ fact-sheets/initiative-climate-change-adaptation-iccaproject

<sup>18</sup> Nepal.com. 1995-2017. Explore the fascinating culture of Nepal. http://www.nepal.com/culture/

<sup>19</sup> Photo Source: David Hennessey. 2014. Nepal Culture. https://www.flickr.com/photos/ davidhennessey/12026413306/in/photolist-jjJvFy-jjEtMDjjCYEU-jjL2Jz-jjFpaR-jjDbvP-jjCUVD-jjKSE2-jjFmjbjjBFmj-jjyKdR-jjCTEe-dxW4QV-83SGuc-eHsnGJjjD8MH-jjCEhm-jjKQpR-jjCyRF-jjCyCX-jjznSU-jjJQkNjjHpfu-jjNK8L-q9xz5s-jjFyrC-jjGCTb-jjCqAH-jjJzc8jjHBUY-jjEyY1-jjAxMT-jjzDru-jjBTRB-jjAY3g-jjG891jjxA54-ozSWA5-eSDSCx-5MY3iq-6t77qC-e3Poh9ehwNG1-jjBypF-jjBR7i-jjFQs5-jjFMTY-jjEVc6-jjH555jjEMed

<sup>20</sup> Nepal Link. 2017. Nepal: Culture & Religion. Culture and religion in Nepal. http://www.nepallink.com/nepal/culture-religion.html

<sup>21</sup> Transparency International. 2014. The 2014 Corruption Perceptions Index. Nepal. https://www.transparency.org/ cpi2014/

<sup>22</sup> GAN Business Anti-Corruption Portal. 2016. Nepal Corruption Report. Snapshot. http://www.business-anticorruption.com/country-profiles/nepal

 <sup>23</sup> Government of Nepal. 2012. National Planning Commission Secretariat. Central Bureau of Statistics. National Population and Housing Census 2011 (National Report). http://cbs.gov.np/image/data/Population/ National%20Report/National%20Report.pdf
 <sup>24</sup> Index Mundi. 2016. Nepal Population Growth Rate.

http://www.indexmundi.com/nepal/population\_growth\_ rate.html

<sup>25</sup> Country Meters. 2017. Nepal Population. Population Density. http://www.countrymeters.info/en/ Nepal/#population\_density

<sup>26</sup> Government of Nepal. 2012. National Planning Commission Secretariat. Central Bureau of Statistics. National Population and Housing Census 2011 (National Report). http://cbs.gov.np/image/data/Population/ National%20Report/National%20Report.pdf

<sup>27</sup> World Bank. 2013. Managing Nepal's Urban Transition. https://www.worldbank.org/en/news/feature/2013/04/01/ managing-nepals-urban-transition

<sup>28</sup> Photo Source: Silvia Martin. 2017. Kathmandu. https:// www.flickr.com/photos/smartinmolina/32704845274 <sup>29</sup> One World. Nations Online. 1998-2017. Administrative map of Nepal. About Nepal. http://www.nationsonline.org/oneworld/map/nepal-administrative-map.htm
<sup>30</sup> The kathmandupost. New local level units come into existence. March 11, 2017. http://kathmandupost. ekantipur.com/printedition/news/2017-03-11/new-local-level-units-come-into-existence.html

<sup>31</sup> World Population Review. 2017. Kathmandu Population 2017. http://worldpopulationreview.com/world-cities/ kathmandu-population/

<sup>32</sup> The World Factbook. 2017. Center for Intelligence Agency. Nepal: People and society. https://www.cia.gov/ library/publications/the-world-factbook/geos/np.html <sup>33</sup> The World Factbook. 2017. Center for Intelligence Agency. Nepal: People and society. https://www.cia.gov/ library/publications/the-world-factbook/geos/np.html <sup>34</sup> Photo Source: Abhishek Singh. 2011. Colors. Janakpur, Central, Nepal. https://www.flickr.com/photos/ aksinc/5407816000/in/photolist-9eSthU-aHjwU2aHixMH-9eO7Mc-9eTbyu-9os9wa-5Piz9t-4Akkcj-9eT1Uq-9ePhdp-4oRjHH-4AkkFY-bzHYuE-4Ag6Ki-4Ag5Bi-4AkmWo-aHjoxa-aHjHrK-4Ag63z-4Ag5eT-9eSzku-4Aknfb-4AkmPm-4Ag4SH-4Ag5J8-4Akm3W-4AknQQ-4Ag69t-4Ag5ne-aHjBDZ-4AknsY-4Ag6XXpZF2Wm-8FtWZs-q5WkKW-T26KJ3-4iVjVj-vQktuNrRZaoT-s8bkDi-pi25jU-ABvKGh-989zpb-NwzP4C-Nfg8f1-NDHpZs-NDHgto-e32RoQ-e2W9SH-dA1HD6 <sup>35</sup> UNHCR. January 2016. Nepal Fact Sheet. http:// reporting.unhcr.org/sites/default/files/UNHCR%20 Nepal%20Factsheet%20-%20JAN2016.pdf <sup>36</sup> International Campaign for Tibet. 2017. Tibetan Refugees. http://www.savetibet.org/resources/tibetanrefugees/

 <sup>37</sup> Asian Development Bank. Social Protection Project Briefs. Protecting Vulnerable Women and Children in Nepal. http://www.adb.org/sites/default/files/ publication/28604/nep-protecting-vulnerable-women.pdf
 <sup>38</sup> IFRC. 2014. Regulatory barriers to providing emergency and transitional shelter after disasters. Country case study: Nepal. http://www.ifrc.org/Global/Publications/IDRL/ country%20studies/Nepal%20Shelter%20Summary%20 Report%20FINAL.pdf

<sup>39</sup> US Department of State. 2016. Office to Monitor and Combat Trafficking in Persons. 2016 Trafficking in Persons Report. https://www.state.gov/j/tip/rls/tiprpt/ countries/2016/258829.htm

<sup>40</sup> US Department of State. 2016. Office to Monitor and Combat Trafficking in Persons. 2016 Trafficking in Persons Report. https://www.state.gov/j/tip/rls/tiprpt/ countries/2016/258829.htm

<sup>41</sup> Government of Nepal. Ministry of Women, Children and Social Welfare. Department of Women and Children. http://www.dwd.gov.np/ <sup>42</sup> IFRC. 2014. Regulatory barriers to providing emergency and transitional shelter after disasters. Country case study: Nepal. http://www.ifrc.org/Global/Publications/IDRL/ country%20studies/Nepal%20Shelter%20Summary%20 Report%20FINAL.pdf

<sup>43</sup> Nepal.com. 2017. Caste System in Nepal. http://www. nepal.com/blog/caste-system-in-nepal

 <sup>44</sup> Giles, Christopher. 2013. The Telegraph. As long as Nepal is crippled by caste, it shall remain an economic untouchable. http://www.telegraph.co.uk/news/worldnews/ asia/nepal/10248100/As-long-as-Nepal-is-crippled-bycaste-it-shall-remain-an-economic-untouchable.html
 <sup>45</sup> USAID. 2017. Nepal. Economic Growth and Trade. https://www.usaid.gov/nepal/economic-growth-and-trade
 <sup>46</sup> Heritage Foundation. 2017. Index of Economic Freedom. Nepal. http://www.heritage.org/index/country/nepal
 <sup>47</sup> Heritage Foundation. 2017. Index of Economic Freedom. Nepal. http://www.heritage.org/index/country/nepal
 <sup>48</sup> Asian Development Bank. Nepal: Economy. http://www. adb.org/countries/nepal/economy

 <sup>49</sup> Anbarasan Ethirajan. 2013. BBC News. Kathmandu, Nepal. Nepal seeks to attract more tourists from Asian nations. http://www.bbc.com/news/business-21826181
 <sup>50</sup> Nepal.com. 2017. The economy of Nepal. http://www. nepal.com/economy/

<sup>51</sup> Photo Source: Cgabt Crtstak, 2012. Spices. https:// www.flickr.com/photos/chanycrystal/7922946422/in/ photolist-d58aWw-f3ZW9E-CfyJHz-q2SgSL-qgS91o-EMfir-5nQkan-iepgQF-b7EGqH-uQXhPy-4CKXYLuA5s22-p42yYQ-f6cK15-J2JSrL-dEHxtY-jygrANyXVdbs-dSE9Pt-paeA41-d58rq9-qdbwYv-aXNNTZ-C3qLmj-KuGmM-KZo4w-csJaFm-pXx9cq-eTY2dzq55y65-NcyWaX-pHSTC7-DsCzvL-b7EBEa-qbbMpLyKGAEY-KBs1R-6WUiz2-ojXi4-dRscos-5L83Kj-bnCjyK-VsZXxW-49sRup-fUCq36-qjkn6e-KZwgR-e9DAFHxCnBj6-d58i25

 <sup>52</sup> Asia-Pacific International Foundation for Electoral Systems. Elections in Nepal. 2017 Local Elections. May 10, 2017. https://www.ifes.org/sites/default/files/2017\_ifes\_ nepal\_local\_elections\_faqs.pdf

 <sup>53</sup> Asia-Pacific International Foundation for Electoral Systems. Elections in Nepal. 2017 Local Elections. May 10, 2017. https://www.ifes.org/sites/default/files/2017\_ifes\_ nepal\_local\_elections\_faqs.pdf

<sup>54</sup> 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/

 <sup>55</sup> Human Rights Watch. Nepal. Events of 2016. https:// www.hrw.org/world-report/2017/country-chapters/nepal
 <sup>56</sup> India. Nepal Local Election Results 2017: Counting underway, result expected to be out tomorrow. http://www. india.com/news/world/nepal-local-elections-results-2017live-news-updates-2132576/ <sup>57</sup> Asia-Pacific International Foundation for Electoral Systems. Elections in Nepal. 2017 Local Elections. May 10, 2017. https://www.ifes.org/sites/default/files/2017\_ifes\_ nepal\_local\_elections\_faqs.pdf

<sup>58</sup> The Himalayan Times. Parliament and Provincial Assembly elections not possible in single phase: CEC Yadav. July 1, 2017. https://thehimalayantimes.com/nepal/ parliament-provincial-assembly-elections-not-possiblesingle-phase-cec-yadav/

<sup>59</sup> University for Peace and Conflict. By Jini Agrawal. 2016. Nepal's recovery process since the 2015 earthquake. http:// www.monitor.upeace.org/innerpg.cfm?id\_article=2104
<sup>60</sup> University for Peace and Conflict. By Jini Agrawal. 2016. Nepal's recovery process since the 2015 earthquake. http:// www.monitor.upeace.org/innerpg.cfm?id\_article=2104
<sup>61</sup> London School of Economics. 2016. Nepal after the Constitution: An expert discussion. http://eprints.lse. ac.uk/74779/1/blogs.lse.ac.uk-Nepal%20after%20the%20 Constitution%20An%20expert%20discussion.pdf
<sup>62</sup> Government of Nepal. About National Reconstruction Authority. http://nra.gov.np/pages/details/about
<sup>63</sup> Government of Nepal. About National Reconstruction

Authority. http://nra.gov.np/pages/details/about

<sup>64</sup> Nepal.com. 2017. The Geography of Nepal. http://www. nepal.com/geography/

<sup>65</sup> Livescience. 2015. By Alina Bradford. Nepal: Facts about geology and culture. https://www.livescience.com/50734-nepal-facts.html

<sup>66</sup> Photo Source: Dhilung Kirat. 2008. Nepal-Panning Pokhara. https://www.flickr.com/photos/ dhilung/2955677360/in/photolist-5vbBUu-6gHdSS-5J7Jrj-5MG6eg-6AoDAm-CdfQ8m-BWcoKq-JFuunF-BbyYb6-K1Y3mi-BG3KXe-HS9qkU-6aa2d1-5REaP9-cMgqgb-BxgZET-B5rwNc-HU8gjh-5cEYU1-JwAD7s-d2BXdUcYqHfA-6Yj5wy-6X2Sog-6K1JuA-6BzqW3-dxW4QV-6YBr9L-bFivG4-s2CrCB-AqCv3w-66EzGc-6WhoV9d2BTY1-6xcXpM-6hcVsj-5weKvm-nUSK8x-AH3NQr-V2H3UQ-6xEH2D-61Tf8H-64MjrV-6dJRxm-3VChAM-3g45SS-WE7r2X-d4Mtkj-zyFwB3-xegTK1

<sup>67</sup> Nepal.com. 2017. The Geography of Nepal. http://www. nepal.com/geography/

<sup>68</sup> Steven Groves. 2014. The Diplomat. India and Nepal tackle boarder disputes. http://thediplomat.com/2014/09/india-and-nepal-tackle-border-disputes/

<sup>69</sup> Nepal.com. 2017. Nepal Map and Area Guide. http:// www.nepal.com/map/

<sup>70</sup> Himalayas Facts. 2017. Nepal Weather. http:// himalayasfacts.com/nepal-weather/

<sup>71</sup> USAID. 2016. Fact Sheet. Initiative for Climate CHnge Adaptation (ICCA) Project. https://www.usaid.gov/sites/ default/files/documents/1861/SEED%20-%20ICCA.pdf
<sup>72</sup> The World Bank. 2013. Building climate resilience for Nepal's vulnerable population. http://www.worldbank. org/en/news/press-release/2013/10/07/building-climateresilience-for-nepals-vulnerable-populations  <sup>73</sup> The World Bank. 2013. Building climate resilience for Nepal's vulnerable population. http://www.worldbank. org/en/news/press-release/2013/10/07/building-climateresilience-for-nepals-vulnerable-populations
 <sup>74</sup> Government of Nepal. 2011. Climate Change Policy 2011. http://nepalpolicynet.com/images/documents/ environment/Policy/2011\_Climate%20Change%20Policy. pdf

<sup>75</sup> Government of Nepal. 2017. Ministry of Science and Technology. http://moste.gov.np/home

<sup>76</sup> DPNet Nepal. 2017. Hazard in Nepal. http://dpnet.org.np/ index.php?pageName=hazard

<sup>77</sup> ADPC. Nepal Hazard Risk Assessment. http://www.adpc. net/igo/category/ID276/doc/2013-b27Iym-ADPC-NHRA\_ Report.pdf

<sup>78</sup> Photo Source: Jessica Lea. DFID-UK Department for International Development. 2015. John Ball with rescue dog Darcy in Chautara, Nepal. https://www.flickr.com/ photos/dfid/17127450669/in/photolist-s6uEnB-sKwYyN-5jjHoZ-skE6S9-sdLXCd-snUNra-rr97dZ-s6uHYzrqWQqQ-snX8nr-s6nUWb-hkWwf2-pCwJ1k-da6Nkss7WFGH-stNSQr-pF47QB-ddiPaG-d85MEQ-rqWViWda97vf-d84D35-d82QWW-ddN82z-snX9Yn-snURfrrqWTxG-s6mGuN-hf57HT-s6mET1-hkVCBo-rr97rzskE4G7-hkViwS-d8ajHo-d9TPHt-d8bha1-db6QRbhgu8EQ-d82uGW-daDPJa-skhCA7-d85yWW-d84fcjda7DAh-s6nVvY-s5w81Z-ddMVMo-rr99un-hf4ref <sup>79</sup> Nepal Disaster Knowledge Network. Hazard Profile. http://www.saarc-sadkn.org/countries/nepal/hazard\_profile. aspx

<sup>80</sup> Nepal Disaster Knowledge Network. Hazard Profile. http://www.saarc-sadkn.org/countries/nepal/hazard\_profile. aspx

<sup>81</sup> Nepal Disaster Knowledge Network. Hazard Profile. http://www.saarc-sadkn.org/countries/nepal/hazard\_profile. aspx

<sup>82</sup> Nepal Disaster Knowledge Network. Hazard Profile. http://www.saarc-sadkn.org/countries/nepal/hazard\_profile. aspx

<sup>83</sup> Photo Source: Jim Holmes. Department of Foreign Affairs and Trade (DFAT). 2013. Jana Bikash Secondary School, Matatirtha. Students practice earthquake drill. https://www.flickr. com/photos/dfataustralianaid/10727121626/in/ photolist-hkViwS-d8ajHo-d9TPHt-d8bha1-db6QRbhgu8EQ-d82uGW-daDPJa-skhCA7-d85yWWd84fcj-da7DAh-s6nVvY-s5w81Z-ddMVMo-rr99unhf4ref-ddNgxG-ddMXnf-ddMR17-ddMRFj-da6S1Jda7284-rqWRPb-d83KKf-smZ8by-hgu1Lk-daCxxAd8272u-d9UgTS-daDrmZ-da6KC7-rqWUub-s6mHrNhkUEic-d8aCkQ-da9Aoc-rq9hiA-da9bRp-d89iT1-da9oM-A-da8T39-ddiKAB-rqWS13-ddNnQj-da9eA7-daEfF1s4BZjv-dcGC1X-daDSCv  <sup>84</sup> National Society for Earthquake Technology-Nepal (NSET). Hazards in Nepal. Other Hazards. http://nset.org. np/nset2012/index.php/menus/menuid-58/submenuid-89
 <sup>85</sup> National Society for Earthquake Technology-Nepal (NSET). Hazards in Nepal. Chronological History. http:// nset.org.np/nset2012/index.php/menus/subsubmenudetail/ menuid-58/submenuid-137/subsubmenuid-48
 <sup>86</sup> CNN. 2015. By Charles Riley. Nepal's second quake piles on the pain. http://money.cnn.com/2015/05/12/news/

nepal-second-earthquake-damages/index.html

<sup>87</sup> Nepal Disaster Knowledge Network. Hazard Profile. http://www.saarc-sadkn.org/countries/nepal/hazard\_ profile.aspx

<sup>88</sup> Nepal Disaster Knowledge Network. Hazard Profile. http://www.saarc-sadkn.org/countries/nepal/hazard\_ profile.aspx

<sup>89</sup> Nepal Disaster Knowledge Network. Hazard Profile. http://www.saarc-sadkn.org/countries/nepal/hazard\_ profile.aspx

 <sup>90</sup> Relief Web. Nepal: Floods and Landslides-Jul 2016. http://reliefweb.int/disaster/fl-2016-000068-npl
 <sup>91</sup> Relief Web. Nepal: Earthquake-Apr 2015. http:// reliefweb.int/disaster/eq-2015-000048-npl
 <sup>92</sup> Relief Web. Nepal: Floods and Landslides-Aug 2014. http://reliefweb.int/disaster/ls-2014-000103-npl
 <sup>93</sup> Relief Web. Nepal: Floods and Landslides-Jun 2013. http://reliefweb.int/disaster/fl-2013-000070-ind
 <sup>94</sup> Relief Web. Nepal: Floods and Landslides-Jul 2012. http://reliefweb.int/disaster/fl-2012-000132-npl
 <sup>95</sup> Relief Web. Nepal: Floods -May 2012. http://

reliefweb.int/disaster/fl-2012-000071-npl

<sup>96</sup> Relief Web. Nepal: Cold Wave-Dec 2011. http://reliefweb. int/disaster/cw-2011-000203-npl

 <sup>97</sup> Relief Web. Nepal: Himalayan Earthquake-Sep. 2011. http://reliefweb.int/disaster/eq-2011-000136-ind
 <sup>98</sup> Internationally Reported Losses 1990-2014 EMDAT. OFDA. Relief Web. http://www.preventionweb.net/ countries/npl/data/

<sup>99</sup> INFORM Index for Risk Management. 2017. Nepal http://www.inform-index.org/Portals/0/InfoRM/2017/ Country\_Profiles/NPL.pdf

<sup>100</sup> Kuhlman, Cara. 2015. Borgen Magazine. Cholera outbreak in Nepal averted following earthquake. http:// www.borgenmagazine.com/cholera-outbreak-followingearthquake/

<sup>101</sup> Johns Hopkins University. 2014 . Stop Cholera. Understanding Cholera in Nepal. https://www.stopcholera. org/blog/understanding-cholera-nepal

<sup>102</sup> Meghnath DhimalE, Bodo Ahrens and Ulrich Kuch. 2014. Malaria control in Nepal 1963–2012: challenges on the path towards elimination. Malaria Journal. http://malariajournal.biomedcentral.com/ articles/10.1186/1475-2875-13-241

<sup>103</sup> WHO. Tuberculosis (TB). Tuberculosis county profiles: Nepal. http://www.who.int/tb/country/data/profiles/en/ <sup>104</sup> Chet Raj Ojha , Basant Joshi, Khagendra Prakash KC, Shyam Prakash Dumre, Keshav Kumar Yogi, Bandana Bhatta, Tulasi Adhikari, Babu Ram Marasaini and Kathryn Crowley. 2017. Impact of mass drug administration for elimination of lymphatic filariasis in Nepal. Plos Journals. http://journals.plos.org/plosntds/article?id=10.1371/ journal.pntd.0005788

<sup>105</sup> Photo Source: Nyayahealth.org. Possible. 2012. Nyaya Health: Community water tap in Ridikot VDC. https:// www.flickr.com/photos/nyayahealth/7157254552/in/ photolist-bUsNqy-bUvCnb-bv3M5t-bv3Wee-da7DAhbUvouy-da6S1J-brzPDV-da7284-cvQQUG-bv4JKBct9ZPf-bv4JMD-eyD1uB-d9TcFq-eyD2Qn-bv4MBabfMPkt-9eLAZz-daCxxA-bUxLwG-dtTyy2-eyGar3brzQ2z-bryR6D-s919xW-bv4MdZ-ddNgxG-sqzs8ieyGaMy-bUkAaf-bv3Bw4-bv49KM-daDrmZ-ddMXnfbv3ZCH-eyGbH1-eyGbM9-hkksCH-brzPXT-brz5aa-bv4MPc-bmyUXF-bv3Wfp-bryRfB-bryRBg-bUw7Hybv3WrD-da9bRp-bv3NtK

<sup>106</sup> Regional Consultative Group HumanitarianCivil-Military Coordination for Asia and the Pacific.Humanitarian Civil-Military Coordination in Emergencies:Towards a Predictable Model. 2017.

<sup>107</sup> Regional Consultative Group HumanitarianCivil-Military Coordination for Asia and the Pacific.Humanitarian Civil-Military Coordination in Emergencies:Towards a Predictable Model. 2017.

<sup>108</sup> Regional Consultative Group HumanitarianCivil-Military Coordination for Asia and the Pacific.Humanitarian Civil-Military Coordination in Emergencies:Towards a Predictable Model. 2017.

<sup>109</sup> Government of Nepal. About National Reconstruction Authority. http://nra.gov.np/pages/details/about

<sup>110</sup> Nepalese Army. 2016. http://www.nepalarmy.mil.np/
 <sup>111</sup> Nepalese Army. 2016. The Nepalese Army in the aftermath of the Gorkha Earthquake of 2015. Part I. Nepalese Army and disaster management. http://www. nepalarmy.mil.np/opssankatmochan/english\_part1.pdf
 <sup>112</sup> Armed Police Force Nepal. 2017. Functions of APF, Nepal. http://www.apf.gov.np/pages/introduction
 <sup>113</sup> Armed Police Force Nepal. 2017. Role of APF, Nepal.

http://www.apf.gov.np/pages/role <sup>114</sup> IFRC. 2011. Nepal Red Cross Society. International Disaster Response Law (IDRL) in Nepal. A study on strengthening legal preparedness for international disaster response. http://www.ifrc.org/PageFiles/93552/1213100-Nepal%20Red%20Cross-IDRL%20Report-EN-LR04.pdf <sup>115</sup> http://www.adranepal.org/aboutus/

<sup>116</sup> https://www.adb.org/countries/nepal/contacts

<sup>117</sup> http://dfat.gov.au/geo/nepal/development-assistance/ pages/development-assistance-in-nepal.aspx

118 http://www.fao.org/nepal/en/

<sup>119</sup> http://www.giz.de/en/worldwide/378.html

<sup>120</sup> http://nepal.iom.int/jupgrade/index.php/en/iom-nepal

<sup>121</sup> http://www.nrcs.org/about-nrcs

<sup>122</sup> http://www.jica.go.jp/nepal/english/office/about/ about03.html

<sup>123</sup> http://www.savethechildren.org/site/c.8rKLIXMGIpI4E/ b.6150545/k.B8DE/Nepal.htm

124 http://asiafoundation.org/publications/pdf/204

<sup>125</sup> http://www.un.org.np/unicef

<sup>126</sup> http://www.np.undp.org/content/nepal/en/home/ operations/about\_undp/

<sup>127</sup> http://www.un.org.np/un-habitat

<sup>128</sup> http://countryoffice.unfpa.org/nepal/2009/02/12/532/ unfpa\_in\_nepal/

129 http://www.worldbank.org/en/country/nepal

<sup>130</sup> http://www.searo.who.int/nepal/about/WHOinNepal/ en/

131 http://www.wvi.org/nepal

<sup>132</sup> http://www.unhcr.org/pages/49e487856.html#NEPKA
 <sup>133</sup> http://www.ilo.org/kathmandu/whatwedo/projects/lang-en/index.htm

134 http://www.usaid.gov/nepal

<sup>135</sup> https://www.wfp.org/countries/nepal/overview

<sup>136</sup> https://www.unocha.org/legacy/asia-and-pacific/ country-profiles/nepal

<sup>137</sup> CIA The World Factbook. Nepal. https://www.cia.gov/ library/publications/the-world-factbook/geos/np.html

<sup>138</sup> US Embassy in Nepal. https://np.usembassy.gov/
 <sup>139</sup> USAID. Nepal. https://www.usaid.gov/nepal

<sup>140</sup> US Department of State. Nepal. https://www.state.gov/r/ pa/ei/bgn/5283.htm

 <sup>141</sup> Peace Corps. Nepal. https://www.peacecorps.gov/nepal/
 <sup>142</sup> IFRC. National Disaster Response Framework. 2013. http://www.ifrc.org/docs/IDRL/2011%20National%20
 Disaster%20Response%20Framework%20(unofficial%20
 translation%20).pdf

<sup>143</sup> National Progress Report on the Implementation of the Hydro Framework for Action 2013-2015. http://www.preventionweb.net/files/41755\_NPL\_ NationalHFAprogress\_2013-15.pdf

<sup>144</sup> Regional Consultative Group Humanitarian Civil-Military Coordination for Asia and the Pacific. Humanitarian Civil-Military Coordination in Emergencies: Towards a Predictable Model. 2017. https://docs.unocha. org/sites/dms/ROAP/Civil%20Military%20Coordination/ images/RCG\_05042017\_Final\_electronic.pdf

<sup>145</sup> IHS Markit. Jane's Sentinel Security Assessment-South Asia: Nepal. February 3, 2017

<sup>146</sup> Regional Consultative Group HumanitarianCivil-Military Coordination for Asia and the Pacific.Humanitarian Civil-Military Coordination in Emergencies:Towards a Predictable Model. 2017.

<sup>147</sup> Nepal National Progress Report on the Implementation of the Hyogo Framework for Action 2013-2015, Ministry of Home Affairs, January 7, 2015.

<sup>148</sup> Government of Nepal. Nepal Hazard Risk Assessment. http://www.adpc.net/igo/category/ID276/doc/2013b27Iym-ADPC-NHRA\_Report.pdf

<sup>149</sup> Government of Nepal. Nepal Hazard Risk Assessment. http://www.adpc.net/igo/category/ID276/doc/2013b27Iym-ADPC-NHRA\_Report.pdf <sup>150</sup> Prevention Web. 2015. HFA: Nepal. National progress report on the implementation of the Hyogo Framework for Action (2013-2015). http://www.preventionweb.net/ files/41755\_NPL\_NationalHFAprogress\_2013-15.pdf <sup>151</sup> Prevention Web. 2015. HFA: Nepal. National progress report on the implementation of the Hyogo Framework for Action (2013-2015). http://www.preventionweb.net/ files/41755\_NPL\_NationalHFAprogress\_2013-15.pdf <sup>152</sup> Prevention Web. 2015. HFA: Nepal. National progress report on the implementation of the Hyogo Framework for Action (2013-2015). http://www.preventionweb.net/ files/41755 NPL NationalHFAprogress 2013-15.pdf <sup>153</sup> Nepal Government. 2017. Minister of Home Affairs. National Emergency Operations Center. http://neoc.gov.np/ en/major-functions-3.html

<sup>154</sup> Photo Source: Master Sgt. Jeffery Allen, U.S. Airforce. PACAF. 2009. 120909-F-CP-197-067. https://www. flickr.com/photos/pacificairforces/7985593294/in/ photolist-daEfF1-s4BZjv-dcGC1X-daDSCv-daDBjfd852d9-daDPsu-d8aWhS-db6ygH-da9a2e-db77SkdbvQB9-da8Lw7-dcGCjK-da7vo2-d9TcFq-ddiNhpddiLtQ-ddMNmT-ddMSAy-ddMSVt-s6uEPi-rCfCAAddMTDj-snUNfP-db7fQL-d82Hwo-daE3y6-dQkA1FdQrccf-db6Fca-d8a25A-d8aRQ9-d82fHQ-daC4vzfQ6QCM-snX5Gg-d89P6q-d8bd9J-rxLiSo-da9DR-V-db6v6C-d89pTC-s6nVCS-s6mJvm-daBVNz-dQkziks4BVra-svj3uM-daCQSa

 <sup>155</sup> Manish Thapa, Out of Barracks: Civil-Military Relations in Disaster Management, A Case Study of Nepalese Army's Humanitarian Response during the 2015 Earthquake in Nepal, University for Peace, June 2016, p. 3; Nepalese Army, Lessons from the 2015 Earthquake, 2015.
 <sup>156</sup> Regional Consultative Group Humanitarian Civil-Military Coordination for Asia and the Pacific. Humanitarian Civil-Military Coordination in Emergencies:

Towards a Predictable Model. 2017. <sup>157</sup> IHS Markit. Jane's Sentinel Security Assessment-South Asia: Nepal. February 3, 2017

<sup>158</sup> University of Colorado. Natural Hazards Center. By Galen Murton. 2016.(Re)Building the State: Border infrastructure, Chinese development, and the politics of aid in post-earthquake Nepal. https://hazards.colorado.edu/ quickreport/re-building-the-state

<sup>159</sup> IHS Markit. Jane's Sentinel Security Assessment-South Asia: Nepal. February 3, 2017

<sup>160</sup> IHS Markit. Jane's Sentinel Security Assessment-South Asia: Nepal. February 3, 2017

<sup>161</sup> IHS Markit. Jane's Sentinel Security Assessment-South Asia: Nepal. February 3, 2017

<sup>162</sup> IHS Markit. Jane's Sentinel Security Assessment-South Asia: Nepal. February 3, 2017 <sup>163</sup> IHS Markit. Jane's Sentinel Security Assessment-South Asia: Nepal. February 3, 2017

<sup>164</sup> Nepal Army. 2016. Nepalese Army in the Aftermath of the Gorkha Earthquake of 2015. http://www.nepalarmy. mil.np/engsankatmochan.php

<sup>165</sup> World Food Programme (WFP). 2015. Nepal opens first humanitarian staging area, built with government & UK aid support. http://www.wfp.org/news/news-release/nepalopens-first-humanitarian-staging-area-built-governmentuk-aid-support

<sup>166</sup> Security Risk Asia. 2017. U.S. hands over regional crisis management center to Nepal Army. https://www. security-risks.com/security-trends-south-asia/nepal/u.s.hands-over-regional-crisis-management-center-to-nepalarmy-7945.html

<sup>167</sup> Regional Consultative Group Humanitarian Civil-Military Coordination for Asia and the Pacific.

Humanitarian Civil-Military Coordination in Emergencies: Towards a Predictable Model. 2017.

<sup>168</sup> IHS Markit. Jane's Sentinel Security Assessment-South Asia: Nepal. February 3, 2017.

<sup>169</sup> CAA Nepal. Civil Aviation Report 216. https://www. caanepal.org.np/wp-content/uploads/2017/01/caan-report. pdf

<sup>170</sup> CAA Nepal . Civil Aviation Report 216. https://www. caanepal.org.np/wp-content/uploads/2017/01/caan-report. pdf

<sup>171</sup> CAA Nepal . Civil Aviation Report 216. https://www. caanepal.org.np/wp-content/uploads/2017/01/caan-report. pdf

<sup>172</sup> CAA Nepal . Civil Aviation Report 216. https://www. caanepal.org.np/wp-content/uploads/2017/01/caan-report. pdf

<sup>173</sup> Photo Source: This is the World's Most Dangerous Airport. Condé Nast Traveler. 2016. http://www.cntraveler. com/stories/2016-04-12/this-is-the-worlds-mostdangerous-airport.

<sup>174</sup> World Highways. Nepal Plans Road Infrastructure Expansion. 2014. http://www.worldhighways.com/sections/ key-projects/features/nepal-plans-road-infrastructureexpansion/

<sup>175</sup> World Highways. Nepal Plans Road Infrastructure Expansion. 2014. http://www.worldhighways.com/sections/ key-projects/features/nepal-plans-road-infrastructureexpansion/

<sup>176</sup> Railways in Nepal. http://www.sinfin.net/railways/ world/nepal.html

<sup>177</sup> Railways in Nepal. http://www.sinfin.net/railways/ world/nepal.html

<sup>178</sup> Nepali Times. Coming Soon the Tibetan Train. 2016. http://nepalitimes.com/article/nation/Tibet-train-Nepal,3102

<sup>179</sup> IHS Markit. Jane's Sentinel Security Assessment-South Asia: Nepal. February 3, 2017.

<sup>180</sup> World Education News and Reviews. http://wenr.wes. org/2013/03/wenr-march-2013-academic-mobility-andthe-education-system-of-nepal

<sup>181</sup> Nepal Education System Overview. http://education. stateuniversity.com/pages/1056/Nepal-EDUCATIONAL-SYSTEM-OVERVIEW.html

<sup>182</sup> Communication in Nepal. http://www.bharatonline. com/nepal/travel-tips/communication.html

<sup>183</sup> IHS Markit. Jane's Sentinel Security Assessment-South Asia: Nepal. February 3, 2017.

<sup>184</sup> IHS Markit. Jane's Sentinel Security Assessment-South Asia: Nepal. February 3, 2017.

<sup>185</sup> Nepal Tourism. http://www.nepaltourism.info/ nepaltravelguide/communication.html.

<sup>186</sup> Shakya, R., 2015. Views on Nepal Media. Nepal: A censorship-free country. http://viewsonnepalmedia.

blogspot.com/2015/07/nepal-censorship-free-country.html <sup>187</sup> Communication in Nepal. http://www.bharatonline.

com/nepal/travel-tips/communication.html

<sup>188</sup> Nepal Energy Situation. https://energypedia.info/wiki/ Nepal\_Energy\_Situation.

<sup>189</sup> Nepal Energy Situation. https://energypedia.info/wiki/ Nepal\_Energy\_Situation.

<sup>190</sup> Nepal Energy Situation. https://energypedia.info/wiki/ Nepal\_Energy\_Situation.

<sup>191</sup> Nepal Hydropower Overview. http://www.hidcl.org.np/ nepal-hydropower.php.

<sup>192</sup> Nepal Hydropower Overview. http://www.hidcl.org.np/ nepal-hydropower.php.

<sup>193</sup> Nepal Hydropower Overview. http://www.hidcl.org.np/ nepal-hydropower.php.

<sup>194</sup> Water Aid Nepal. http://www.wateraid.org/np/what-we-do/the-crisis.

<sup>195</sup> Water Aid Nepal. http://www.wateraid.org/np/what-we-do/the-crisis.

<sup>196</sup> Government of Nepal Ministry of Health: Department of Health Services (Kathmandu) Annual Report 2071/72 (2014/2015). May 2016. http://dohs.gov.np/wp-content/ uploads/2016/06/Annual\_Report\_FY\_2071\_72.pdf

<sup>197</sup> Government of Nepal Ministry of Health: Department of Health Services (Kathmandu) Annual Report 2071/72 (2014/2015). May 2016. http://dohs.gov.np/wp-content/ uploads/2016/06/Annual\_Report\_FY\_2071\_72.pdf

<sup>198</sup> World Health Organization. Regional Office for South-East Asia. 2016 Health SDG Profile: Nepal. http://www. searo.who.int/nepal/mediacentre/sdg\_profile\_nepal\_2016. pdf?ua=1

<sup>199</sup> Journal of Nepal Public Health Association. Health Care System in Federal Nepal. Volume 6, Issue 2, No. 7, Jul-Dec 2015. http://journal.nepha.org.np/images/Health\_Care\_ System\_in\_Federal\_Nepal.pdf

<sup>200</sup> World Health Organization. Regional Office for South-East Asia. 2016 Health SDG Profile: Nepal. http://www. searo.who.int/nepal/mediacentre/sdg\_profile\_nepal\_2016. pdf?ua=1

April 2017. http://reliefweb.int/sites/reliefweb.int/ files/resources/04.25.17%20-%20USAID-DCHA%20 Success%20Story%20-%20Preventing%20Disease%20 Outbreaks%20in%20Nepal.pdf <sup>211</sup> World Food Program (WFP). WFP Nepal Country Brief. http://documents.wfp.org/stellent/groups/public/ documents/ep/wfp273247.pdf?\_ga=1.170015968.17998794 39.1481286284 <sup>212</sup> The Health Bulletin. Empowering women, saving lives. February 26, 2014. https://www.usaid.gov/sites/default/ files/documents/1861/health\_bulletin.pdf <sup>213</sup> Government of Nepal Ministry of Health: Department of Health Services (Kathmandu) Annual Report 2071/72 (2014/2015). May 2016. http://dohs.gov.np/wp-content/ html uploads/2016/06/Annual\_Report\_FY\_2071\_72.pdf

<sup>201</sup> Government of Nepal Ministry of Health: Department

of Health Services (Kathmandu) Annual Report 2071/72

(2014/2015). May 2016. http://dohs.gov.np/wp-content/

<sup>202</sup> Government of Nepal Ministry of Health: Department

of Health Services (Kathmandu) Annual Report 2071/72

(2014/2015). May 2016. http://dohs.gov.np/wp-content/

<sup>203</sup> Government of Nepal Ministry of Health: Department

of Health Services (Kathmandu) Annual Report 2071/72

(2014/2015). May 2016. http://dohs.gov.np/wp-content/

<sup>204</sup> Government of Nepal Ministry of Health: Department

of Health Services (Kathmandu) Annual Report 2071/72

(2014/2015). May 2016. http://dohs.gov.np/wp-content/

<sup>205</sup> Government of Nepal Ministry of Health: Department

of Health Services (Kathmandu) Annual Report 2071/72

(2014/2015). May 2016. http://dohs.gov.np/wp-content/

<sup>206</sup> Government of Nepal Ministry of Health: Department

of Health Services (Kathmandu) Annual Report 2071/72

(2014/2015). May 2016. http://dohs.gov.np/wp-content/

<sup>207</sup> Journal of Nepal Public Health Association. Health Care

System in Federal Nepal. Volume 6, Issue 2, No. 7, Jul-Dec

2015. http://journal.nepha.org.np/images/Health\_Care\_

<sup>208</sup> Government of Nepal Ministry of Health: Department

of Health Services (Kathmandu) Annual Report 2071/72

(2014/2015). May 2016. http://dohs.gov.np/wp-content/

<sup>209</sup> Government of Nepal Ministry of Health: Department of Health Services (Kathmandu) Annual Report 2071/72

(2014/2015). May 2016. http://dohs.gov.np/wp-content/

uploads/2016/06/Annual\_Report\_FY\_2071\_72.pdf

uploads/2016/06/Annual\_Report\_FY\_2071\_72.pdf

<sup>210</sup> USAID. Preventing Disease Outbreaks in Nepal.

uploads/2016/06/Annual\_Report\_FY\_2071\_72.pdf

uploads/2016/06/Annual\_Report\_FY\_2071\_72.pdf

uploads/2016/06/Annual\_Report\_FY\_2071\_72.pdf

uploads/2016/06/Annual\_Report\_FY\_2071\_72.pdf

uploads/2016/06/Annual\_Report\_FY\_2071\_72.pdf

uploads/2016/06/Annual\_Report\_FY\_2071\_72.pdf

System\_in\_Federal\_Nepal.pdf

<sup>214</sup> Government of Nepal Ministry of Health: Department of Health Services (Kathmandu) Annual Report 2071/72 (2014/2015). May 2016. http://dohs.gov.np/wp-content/ uploads/2016/06/Annual\_Report\_FY\_2071\_72.pdf <sup>215</sup> World Health Organization. WHO Country Cooperation Strategy Nepal, 2013-2017. http://apps.who. int/iris/bitstream/10665/161133/1/B4946.pdf?ua=1 <sup>216</sup> Government of Nepal Ministry of Health: Department of Health Services (Kathmandu) Annual Report 2071/72 (2014/2015). May 2016. http://dohs.gov.np/wp-content/ uploads/2016/06/Annual\_Report\_FY\_2071\_72.pdf <sup>217</sup> Government of Nepal Ministry of Health: Department of Health Services (Kathmandu) Annual Report 2071/72 (2014/2015). May 2016. http://dohs.gov.np/wp-content/ uploads/2016/06/Annual\_Report\_FY\_2071\_72.pdf <sup>218</sup> World Health Organization. Zoonoses. 2017. http:// www.who.int/zoonoses/en/

<sup>219</sup> Government of Nepal Ministry of Health: Department of Health Services (Kathmandu) Annual Report 2071/72 (2014/2015). May 2016. http://dohs.gov.np/wp-content/ uploads/2016/06/Annual\_Report\_FY\_2071\_72.pdf <sup>220</sup> Government of Nepal Ministry of Health: Department of Health Services (Kathmandu) Annual Report 2071/72 (2014/2015). May 2016. http://dohs.gov.np/wp-content/ uploads/2016/06/Annual\_Report\_FY\_2071\_72.pdf <sup>221</sup> Government of Nepal Ministry of Health: Department of Health Services (Kathmandu) Annual Report 2071/72 (2014/2015). May 2016. http://dohs.gov.np/wp-content/ uploads/2016/06/Annual\_Report\_FY\_2071\_72.pdf <sup>222</sup> Government of Nepal Ministry of Health: Department of Health Services (Kathmandu) Annual Report 2071/72 (2014/2015). May 2016. http://dohs.gov.np/wp-content/ uploads/2016/06/Annual\_Report\_FY\_2071\_72.pdf <sup>223</sup> World Health Organization. Nepal: WHO statistical profile. Last updated January 2015. http://www.who.int/ gho/countries/npl.pdf?ua=1

<sup>224</sup> Government of Nepal Ministry of Health: Department of Health Services (Kathmandu) Annual Report 2071/72 (2014/2015). May 2016. http://dohs.gov.np/wp-content/uploads/2016/06/Annual\_Report\_FY\_2071\_72.pdf
 <sup>225</sup> U.S. Pacific Command (USPACOM). Women, Peace, Security and the Future of U.N. Peacekeeping. Staff Sgt. Michael Behlin (8th Theater Sustainment Command). April 4, 2017. http://www.pacom.mil/Media/News/News-Article-View/Article/1140219/women-peace-security-and-the-future-of-un-peacekeeping/

<sup>226</sup> USAID. Factsheet: Gender Equality, Female Empowerment, and Social Inclusion. https://www. usaid.gov/nepal/fact-sheet/gender-equality-femaleempowerment-and-social-inclusion

<sup>227</sup> Aljazeera. Nepal elects first female president. October
 2015. http://www.aljazeera.com/news/2015/10/nepal female-president-bidhya-devi-bhandari-151029071228077.
 html

<sup>228</sup> NGO Working Group on Women, Peace, and Security. Nepal. August 15, 2015. https://www.womenpeacesecurity. org/issue/nepal/ <sup>229</sup> NGO Working Group on Women, Peace, and Security. Nepal. August 15, 2015. https://www.womenpeacesecurity. org/issue/nepal/

<sup>230</sup> NGO Working Group on Women, Peace, and Security. Nepal. August 15, 2015. https://www.womenpeacesecurity. org/issue/nepal/

 <sup>231</sup> Government of Nepal, Ministry of Peace and Reconstruction, "National Action Plan on Implementation of the United Nations Security Council Resolutions 1325 and 1820 [2011/12-2015/2016] February 1, 2011. http:// www.peacewomen.org/assets/file/nepal\_-\_nap.pdf
 <sup>232</sup> Human Rights Watch. Silenced and Forgotten: Survivors of Nepal's Conflict-Era Sexual Violence. Arantxa Cedillo. 2014. https://www.hrw.org/report/2014/09/23/silencedand-forgotten/survivors-nepals-conflict-era-sexualviolence

 <sup>233</sup> Government of Nepal, Ministry of Peace and Reconstruction, "National Action Plan on Implementation of the United Nations Security Council Resolutions 1325 and 1820 [2011/12-2015/2016] February 1, 2011. http:// www.peacewomen.org/assets/file/nepal\_-\_nap.pdf
 <sup>234</sup> Human Rights Watch. Silenced and Forgotten: Survivors of Nepal's Conflict-Era Sexual Violence. Arantxa Cedillo. 2014. https://www.hrw.org/report/2014/09/23/silencedand-forgotten/survivors-nepals-conflict-era-sexualviolence

<sup>235</sup> Human Rights Watch. Our Rights are Fundamental to Peace: Slow Implementation of UN Security Council Resolution 1325 (2000) Denies the Rights of Women and Girls in Armed Conflict. https://www.hrw.org/sites/default/ files/supporting\_resources/our\_rights\_are\_fundamental\_ to\_peace.pdf

 <sup>236</sup> Government of Nepal, Ministry of Peace and Reconstruction, "National Action Plan on Implementation of the United Nations Security Council Resolutions 1325 and 1820 [2011/12-2015/2016] February 1, 2011. http:// www.peacewomen.org/assets/file/nepal\_-\_nap.pdf
 <sup>237</sup> UN Women: Asia and the Pacific. About UN Women Nepal. http://asiapacific.unwomen.org/en/countries/nepal/ about-un-women-nepal

<sup>238</sup> Didibahini. Women and Youth in Nepal-A Brief Background. http://www.didibahini.org/index2/ womenandyouth.php

<sup>239</sup> Government of Nepal National Reconstruction Authority. Nepal Earthquake 2015: Post Disaster Recovery Framework 2016-2020. Kathmandu May 2016. http:// reliefweb.int/sites/reliefweb.int/files/resources/PDRF%20 Report\_FINAL10May.pdf

<sup>240</sup> Government of Nepal National Reconstruction Authority. Nepal Earthquake 2015: Post Disaster Recovery Framework 2016-2020. Kathmandu May 2016. http:// reliefweb.int/sites/reliefweb.int/files/resources/PDRF%20 Report\_FINAL10May.pdf <sup>241</sup> Prevention Web. 2015. Nepal National progress report on the implementation of the Hyogo Framework for Action (2013-2015). http://www.preventionweb.net/files/41755\_ NPL\_NationalHFAprogress\_2013-15.pdf
<sup>242</sup> Prevention Web. 2015. Nepal National progress report on the implementation of the Hyogo Framework for Action (2013-2015). http://www.preventionweb.net/files/41755\_ NPL\_NationalHFAprogress\_2013-15.pdf
<sup>243</sup> Photo Source: U.S. Pacific Command (USPACOM).
Women, Peace, Security and the Future of U.N.
Peacekeeping. Staff Sgt. Michael Behlin (8th Theater Sustainment Command). April 4, 2017. http://www.pacom.

mil/Media/News/News-Article-View/Article/1140219/ women-peace-security-and-the-future-of-unpeacekeeping/

<sup>244</sup> Photo Source: U.S. Pacific Command (PACOM). Nepalese Army Disaster Response Exercise Closes. September 30, 2016. Staff Sgt. Christopher Brown. http:// www.pacom.mil/Media/News/News-Article-View/ Article/960801/nepalese-army-disaster-response-exercisecloses/

<sup>245</sup> Photo Source: U.S. Pacific Command (USPACOM). U.S. Air Force, Nepal Exchange Disaster Relief Best Practices. Staff Sgt. Benjamin Gonsier, 36th Wing Public Affairs. July 1, 2016. http://www.pacom.mil/Media/News/News-Article-View/Article/823118/us-air-force-nepal-exchangedisaster-relief-best-practices/

<sup>246</sup> U.S. Pacific Command (USPACOM). Nepal: U.S. Relief and Recovery Targeting Most Affected Populations. Embassy of the U.S., Kathmandu Nepal. April 28, 2015. http://www.pacom.mil/Media/News/Article/586832/ nepal-us-relief-and-recovery-targeting-most-affectedpopulations/

<sup>247</sup> Photo Source: USAID. Canines Deployed with USAID Help in Search for Survivors in Nepal. May 21, 2015. Stephanie Bluma. https://blog.usaid.gov/2015/05/caninesdeployed-with-usaid-help-in-search-for-survivors-innepal/

<sup>248</sup> U.S. Army. Disaster Response Exercise in Nepal Concludes. Sgt. 1st Class Andrew Kosterman. https://www. army.mil/article/134011/Disaster\_Response\_Exercise\_in\_ Nepal\_Concludes/

 <sup>249</sup> U.S. Army. USARPAC, Nepalese Army Open 4-day Disaster Response Exercise. Sgt. 1st Class Mary Ferguson.
 September 9, 2013. https://www.army.mil/article/110889
 <sup>250</sup> Nepal. June 23, 2016. U.S. Passports & International Travel. https://travel.state.gov/content/passports/en/ country/nepal.html

<sup>251</sup> U.S. Department of State Bureau of Consular Affairs.
 U.S. Passports & International Travel. Last updated May
 30, 2017. https://travel.state.gov/content/passports/en/
 country/nepal.html

<sup>252</sup> U.S. Department of State Bureau of Consular Affairs.

U.S. Passports & International Travel. Last updated May 30, 2017. https://travel.state.gov/content/passports/en/country/ nepal.html

<sup>253</sup> U.S. Department of State Bureau of Consular Affairs.

U.S. Passports & International Travel. Last updated May 30, 2017. https://travel.state.gov/content/passports/en/country/ nepal.html

<sup>254</sup> OANDA. Nepalese Rupee. https://www.oanda.com/ currency/iso-currency-codes/NPR

<sup>255</sup> U.S. Department of State Bureau of Consular Affairs. U.S. Passports & International Travel. Last updated May 30, 2017. https://travel.state.gov/content/passports/en/country/ nepal.html

<sup>256</sup> U.S. Department of State Bureau of Consular Affairs.

U.S. Passports & International Travel. Last updated May 30, 2017. https://travel.state.gov/content/passports/en/country/ nepal.html

<sup>257</sup> Center for Disease Control and Prevention. Nepal. https://wwwnc.cdc.gov/travel/destinations/traveler/none/ nepal

<sup>258</sup> Center for Disease Control and Prevention. Nepal. https://wwwnc.cdc.gov/travel/destinations/traveler/none/ nepal

<sup>258</sup> Center for Disease Control and Prevention. Nepal. https://wwwnc.cdc.gov/travel/destinations/traveler/none/ nepal

<sup>260</sup> U.S. Department of State Bureau of Consular Affairs. U.S. Passports & International Travel. Last updated May 30, 2017. https://travel.state.gov/content/passports/en/country/ nepal.html

 <sup>261</sup> PreventionWeb.net. Chart of the Sendai Framework for Disaster Risk Reduction 2015-2030. http://www. preventionweb.net/files/44983\_sendaiframeworkchart.pdf
 <sup>262</sup> PreventionWeb.net. Chart of the Sendai Framework for Disaster Risk Reduction 2015-2030. http://www. preventionweb.net/files/44983\_sendaiframeworkchart.pdf
 <sup>263</sup> Prevention Web. 2015. Nepal National progress report on the implementation of the Hyogo Framework for Action (2013-2015). http://www.preventionweb.net/files/41755\_ NPL\_NationalHFAprogress\_2013-15.pdf
 <sup>264</sup> CIA World Factbook. Nepal. https://www.cia.gov/ library/publications/the-world-factbook/geos/np.html

Last Updated: November 6, 2017



Center for Excellence in Disaster Management & Humanitarian Assistance 456 Hornet Avenue, Joint Base Pearl Harbor - Hickam, Hawaii 96860-3503 Telephone: (808) 472-0518 https://www.cfe-dmha.org