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IN DISASTER MANAGEMENT & HUMANITARIAN ASSISTANCE
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NEPAL

Disaster Management Reference Handbook

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Acknowledgements

Front Cover

The Boudhanath Stupa (also known as Boudha or the Great Stupa) located near Kathmandu, Nepal is one of the most sacred among Buddhist pilgrimage sites and an example of ancient religious architecture. The stupa represents the Buddha's mind. Prayer flags of colorful rectangular cloth are strung from the top for blessings and for other purposes.

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Letter from the Director

The COVID-19 pandemic is having far reaching impacts, including for some of the poorest countries, and those most vulnerable to humanitarian crises and natural disasters, such as Nepal. This Nepal Disaster Management Reference Handbook sheds light on the Government of Nepal's Health Sector Emergency Response Plan as well as the Humanitarian Country Team's Preparedness and Response Plan to prevent further spread of COVID-19.

Along with other books in our DMHA Reference series, the update to this Handbook also provides the reader a baseline understanding of key national entities involved in disaster management, disaster response, and the military's role in disaster relief in the country. In addition, this resource details the disaster responses in Nepal, including those following the devastating 2015 earthquakes, the 2017 flooding, and others, as well as efforts toward disaster risk reduction in the country. Floods and landslides make up almost three quarters of all disasters occurring in Nepal and cause a significant number of deaths and extensive damage on a regular basis.

The United States and Nepal partner in the Nepal Pacific Resilience Disaster Response Exercise and Exchange (DREE) which brings hundreds of participants from over 14 countries to Kathmandu, Nepal to work through common earthquake scenarios, share knowledge, test common operating procedures and share recommendations for improving future disaster and planning response to the country. This exercise is typically an annual event, cohosted by the Nepali Army, Nepal Ministry of Home Affairs, the U.S. Army Pacific and is staffed by service members from U.S. Indo-Pacific Command. It is an example of the necessary collaboration of the U.S.'s commitment to partnering with regional neighbors to ensure readiness, capability and capacity in the U.S. Indo-Pacific. 2019 was the first time the DREE was organized at the sub-national level and an emergency response framework at the provincial level was tested.

Finally, this handbook depicts the structure of disaster response in Nepal carried out through internal resources and by appealing for international assistance for effective response during the time of disaster. Understanding the foreign disaster relief coordination mechanisms, emergency response process and coordination structure, and internal and external stakeholders is an integral part of understanding disaster management and response in Nepal.

Sincerely,

Joseph D. Martin, SES
Director

About the Center for Excellence in Disaster Management & Humanitarian Assistance

Overview

The Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DM) is a United States (U.S.) Department of Defense (DoD) organization comprised of nearly 30 subject matter experts that provide academic research, civil-military coordination training, and operational insights to support decision making before, during, and after crises. The Center is designed to bridge understanding between humanitarians, civilian, and military responders. CFE-DM partners with a diverse group of governmental and nongovernmental actors, as well as academic institutions to increase collaborations and capabilities in humanitarian assistance and disaster response. While maintaining a global mandate, the Indo-Pacific region is our priority of effort and collaboration is the cornerstone of our operational practice. The Center is a direct reporting unit to U.S. Indo-Pacific Command (USINDOPACOM) and is located on Ford Island, Joint Base Pearl Harbor-Hickam, Hawaii.

Vision

The Joint Force, allies, and partners are fully prepared to conduct and support foreign humanitarian assistance.

Mission

CFE-DM builds crisis response capacity, enhances coordination and collaboration, and strengthens relationships to save lives and alleviate human suffering before, during, and after humanitarian crises.

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EXECUTIVE SUMMARY

Nepal's geography, geological position, and the impact of climate change are the primary causes of disasters in the country. Rapid, unplanned urbanization and environmental degradation has further intensified the disaster risk in Nepal.[1] As a result, Nepal is one of the most disaster-prone countries in South Asia with earthquakes, frequent flooding, landslides and multiple hazards and disasters striking every year.[2]

In 2015, two powerful earthquakes hit Nepal, killing almost 9,000 people, injuring 22,000 others, and displacing hundreds of thousands more. Damages and losses are estimated at US$7 billion.[3] The recent publication by the Center for Research on the Epidemiology of Disasters (CRED) listed Nepal as one of the top 10 countries in the world in terms of disaster-related mortality. Nepal has been ranked at twentieth position among the countries in the world with regard to people affected by floods every year. Overall, floods and landslides make up almost 75% of disasters in Nepal, further creating a strong need for disaster management.[4]

Disaster Management can be defined as the organization and management of resources and responsibilities for dealing with all humanitarian aspects of emergencies, in particular, preparedness, response and recovery in order to lessen the impact of disasters.[5] In the aftermath of the Earthquakes (2015) and the Monsoon floods (2017) in Nepal, the public and private sector collaborated and partnered in the reconstruction of disaster-affected areas in the country.[6] The Nepal government and partners began short-term and long-term reconstruction efforts based on the Post Disaster Needs Assessment (PDNA) led by the National Planning Commission (NPC) with assistance of national experts and institutions, assisting countries, and developing partners. Humanitarian assistance was mobilized from all parts of the world.[7]

Nepal has made significant achievements in terms of legal framework, policy instruments, and institutional arrangements for disaster risk management. Nepal's disaster governance is guided by its Constitution 2072 (2015), the Disaster Risk Reduction and Management (DRRM) Act 2074 (2017),[8] and Local Government Operation Act, 2074 (2017)[9] The constitutional provisions regarding shared responsibility of all tiers of government have provided legal backup for institutionalizing DRM at national and sub national levels.[10]

The Government of Nepal has endorsed a National Disaster Risk Reduction Policy 2075 (2018) and Disaster Risk Reduction National Strategic Action Plan 2018-2030, which provides a comprehensive planning framework for disaster risk reduction and management in Nepal, encompassing different priority areas and guiding government actors and stakeholders to achieve targets by adopting appropriate processes.[11] In addition, the National Disaster Response Framework, 2070 (2014), and first amendment, 2075 (2019) has been formulated to ensure the role of governmental bodies and the private sector in order to effectively carry out disaster response activities.[12]

The DRRM Act 2074 (2017) was amended in March 2019. It establishes a National Disaster Risk Reduction Management Authority (NDRRMA) under the Ministry of Home Affairs (MoHA). MoHA is leading the ongoing efforts to operationalize the NDRRMA Act.[13] The Disaster Risk Reduction (DRR) policies and practices are fostered through DRM initiatives at global, national and sub national levels.[14]

COUNTRY OVERVIEW

The history of Nepal originated in the southwest corner of the Nepal Valley (present day Kathmandu Valley) with the indigenous community of the Newar.[15] In the 7th or 8th century B.C., the then capital at Matatirtha was ruled by the Gopalas and Mahishapalas until King Yalumber of the Kirantis tribe conquered the area and they ruled for many centuries. The Lichhavis from northern India overthrew the Kirantis in 300 A.D. and ruled for many years bringing their art and architecture including the UNESCO World Heritage Site famed Changu Narayan Temple near Bhaktapur depicted in Photo 1.[16] It was also during this time that the Lichhavis King Amshuvarma's daughter married a prominent Tibetan King and established good relations with Tibet.[17]

In 1200 A.D. the Mallas conquered the area and ruled for 550 years bringing a golden age of creativity to the region and responsible for many of the temples and palaces, literature, music and art in the region.[18] Following the death of King Yaksha Malla, the valley was then divided among his three sons, creating the independent kingdoms of Kathmandu, Bhaktapur, and Patan. There were also 46 small principalities in the western and eastern hills. One of the principalities, the kingdom of Gorkha, was led by a Shah King named Prithvi Narayan Shah who led a campaign to conquer all the kingdoms in the valley and succeeded in 1769. He is credited for unifying Nepal as well as relocating the capital to Kathmandu.[19] The Shah dynasty in Nepal lasted from the late 18th century until 2008 when Nepal was recognized as a Federal Democratic Republic. [20]

In the mid-19th Century, Nepal's first Prime Minister, Jung Bahadur Rana rose to power challenging the rule of the Shah Kings initiating a hereditary reign of Prime Ministers that lasted 104 years.[21] In 1923, a treaty with Britain affirmed Nepal's sovereignty.[22] The Ranas were

Photo 1: Changu Narayan Temple

overthrown in 1950 by a democratic and Anti-Rana uprising of the people, supported by the then monarch of Nepal, King Tribuhuvan, who was then reinstated as Head of State. In 1959, a new multi-party constitution was issued, and national elections were held birthing the Nepali Congress Party (NCP) and their leader Bishweshwar Prasad (B.P.) Koirala as Prime Minister. The following year in 1960, King Mehendra dissolved Parliament and in 1962, with a new constitution, introduced the Panchayat "one party" rule system also known as "His Majesty's Government" providing the king with sole power. The mid 1980s were rife with civil disobedience campaigns by the NCP to restore a multi-party system. This culminated in pro-democracy street protests in which security forces responded, resulting in deaths and mass arrests.[23] The movement to regain a democracy was finally recognized by King Birendra who agreed to constitutional reforms and established a multi-party parliament, holding its first parliamentary elections in May 1991. King Birendra established himself as Head of State with Girija Prasad Koirala as Prime Minister. The Communist government was dissolved in 1995, which also began the decade, long Maoist revolt to unseat and abolish the monarchy, in which thousands of people were killed.[24]

On 1 June 2001, several members of the royal family including King Birendra and Queen Aishwarya, were executed by the Crown Prince Dipendra, who then committed suicide. King Birendra's brother, Gyanendra survived and was then crowned king. King Gyanendra soon dismissed the elected Parliament to obtain absolute power, which resulted in protests to return to a democratic government. In July 2001, Maoist rebels' campaign of violent protests continued until a truce with the government was called toward initiation of peace talks.[25] In November 2001, a State of Emergency was declared after four days of violence in which over 100 people were killed, and the State of Emergency continued until another cease-fire in January 2003. The rebels pulled out of the truce and initiated a resurgence of violence in

August 2003. In February 2005, King Gyanendra dismissed the government, reinstated absolute monarchy, and declared a state of emergency in response to the Maoist rebel attacks. By April 2005, due to international pressure, King Gyanendra reinstated the Parliament, relinquishing his power and on 21 November 2006, the Comprehensive Peace Agreement (CPA) 2006 was signed by Prime Minister Girija Prasad Koirala and Maoist chairman Prachanda committing to democracy and peace for the country and its people. In April 2008, an election was held and on 28 May 2008, the newly elected Constituent Assembly abolished the 240-year-old monarchy and recognized Nepal as a Federal Democratic Republic. In July 2008, Ram Baran Yadav became the first President of Nepal. In September 2015, Parliament passed a landmark constitution defining Nepal as a secular country. Today, the country has a President as Head of State and the Prime Minister is Head of Government.[26] There was also a UN political mission, United Nations Mission in Nepal (UNMIN), from Jan 2007 - Jan 2011, mostly to monitor disarmament and help prepare for elections.

Culture

Nepal is a country rich in customs and traditions. The blending of cultures in the country meld together to form a rich tapestry of a national identity encompassing ethnic, tribal, and social groups and manifesting in the art, music, dance, folklore, language, literature, philosophy, and religion of the country. One of the most prominent aspects of everyday life in Nepal is religion which is colored by annual and year-round festivals and celebrations, and the food and drink of the region.[2728]

Nepalese culture is greatly influenced by Hindu and Buddhist religions which co-exist cooperatively together. Some of the oldest religious sites are revered as holy places by both Hindus and Buddhists. Many religious sites are located in the snowcapped Himalayan Mountains, requiring devotees to trek for physical and spiritual "nirvana". There are many

temples, shrines, and monasteries equally sacred to both religions. The Pashupatinath Temple is the most sacred of holy temples for Hindus and the birthplace of Lord Buddha, the Tarai is the most sacred for Buddhists. Religious themes are prevalent in most artistic works. The contributions of the ancient Newar heritage in sculpture, painting and architecture is also still on display in the approximately 2,500 temples and shrines in the Kathmandu Valley. Nepali patriotism is also emphasized in literature and poetry with King Mahendra, a well-known poet who published under the English name M.B.B. Shah, contributing to a renaissance for Nepalese art and literature in the 1960s.[29]

The Nepalese also enjoy music and dance and incorporate drums and wind instruments preserved from ancient days. The Dishka is a dance performed at weddings which features intricate footwork and arm movements and the music revolves around themes of harvest, marriage rites, war stories, longing for love and everyday stories from village life.[30]

Religious ceremonies such as Shivaratri attracts hundreds of thousands of Hindus from around Nepal and India annually. Native religious customs are still practiced including Shamanism, Pan-animism, and Witchcraft in some remote regions and Nepal is the only country with a living goddess, "Kumari." Temples, shrines, monuments, and monasteries are active with devotees singing hymns, chiming temple bells, playing drums and burning butter lamps.[31]

In Nepal, cows are revered as a symbol of motherhood, charity, and pity. It is illegal to slaughter cows in Nepal. This reflects an integral part of the religious practice of non-violence that is central to the main belief systems in the country: Hinduism, Buddhism, and Jainism.[32] Although, the slaughter of other animals does not carry the same taboo. For example, the festival, Gadhimai Mela celebrated every 5 years in southern Nepal is one of the largest mass slaughter events in the world. In 2009, up to 500,000 animals were slaughtered. In spite of a 2016 Nepalese Supreme Court passed

a prohibiting animal sacrifice, the practice continues. During the most recent festival in 2019, devotees beheaded over 3,500 buffalos, goats and birds in one day as a sacrifice to Gadhimai, an avatar of Kali, the Hindu goddess of power to bring luck and prosperity. The total number of animals slaughtered throughout the festival is estimated at 30,000, a marked reduction from the 2009 event likely due to the number of activists protesting the event.[33][34]

With regard to cuisine, a traditional Nepali meal consists of daal (lentil soup), bhat (boiled rice), tarkari (curried vegetables), and achar (pickles). Additionally, momos (steamed of fried dumpling), rotis (flat bread), and dhedo (boiled flour) are staples in Nepali homes and although curried meat is popular, it is typically reserved for special occasions.[35] The Himalayan cuisine is highly influenced by Tibetan culture with yak cheese as a regional favorite.

Woodcarving is a traditional skill of the region handed down for centuries in the Kathmandu Valley. Evidence of ancient wood carving is on display in temples and palaces and represented in arts and crafts. Nepal is also renowned for creating artful carpets, thangka (Painting of Gods), Newari wood carving, Himalayan Nepalese paper, bamboo knitted umbrellas and Mithila wall art.[36]

Nepal is also known for its 185 species of mammals and its jungles which are home to exotic animals such as the Asiatic elephant, the one-horned rhinoceros, and the Royal Bengal tiger. The Himalayan region is also known for rare and endangered species such as the snow leopard, the red panda, Himalayan black bear, Himalayan wolves, and at high altitude, the yak, blue sheep, Himalayan tahr and musk deer.[37]

Nepal uses its own official calendar known as the Nepal Sambat. The Government of Nepal recognized Nepal Sambat as the national calendar in 2007 and uses it to mark the Nepalese festivals. The calendar marks a 354-day year (vice 365) with an added month (called Analaa) every third year due to the lunar month (leap year). The calendar has been in use for 888 years.[38] Nepal counts the year 2019-2020 as

corresponding year 1140. Although Nepal Sambat is the national calendar, Bikram Sambat is the primary calendar used in the country and used for official purposes. In Bikram Sambat, 2020 converts to the year 2077.[39]

Demographics

Nepal has a young population with the majority (3/5) of the country under 30 years old. Life expectancy in the country is 70 for men and 72 for women.[40] The following sections detail additional demographic information for the country with regard to ethnicity, language, and religion.

Ethnic Makeup

Nepal has a rich culture made up of approximately 101 ethnic groups speaking 123 languages. The Northern Himalayan people live in the mountainous region and are made up of Sherpas, Dolpa-pas, Lopas, Baragaonlis, and Manangays ethnic groups. In the middle hills and valleys, the Magar, Gurungs, Tamangs, Rais, Limbus, Thamis, Sunuwars, Newars, Thakalis, Chepangs, Brahmins, Chhetris, Thakuris, Damai, Sarki, Kami and Sunar make up additional ethnic groups. The Kathmandu Valley brings together a diverse population of people from various backgrounds and has become a cultural melting pot. The Tarai region is made up of Tharus, Darai, Kumhal, Rajbangsi, Bote, Majhi, and other groups and speak north Indian dialects.[41]

There were 126 caste/ethnic groups reported in the 2011 census. Castes are the social classes that differentiate groups of people with regard to their wealth, occupation or lineage/heredity. Ethnicity on the other hand refers to the aspects that define members of a particular group such as cultural practices or shared belief systems. Chhetree is the largest caste/ethnic groups having 16.6% (4,398,053) of the total population followed by Brahman-Hill (12.2%; 3,226,903), Magar (7.1% ; 1,887,733), Tharu (6.6% ; 1,737,470), Tamang (5.8% ; 1,539,830), Newar (5% ; 1,321,933), Kami (4.8%; 1,258,554), Musalman (4.4% ; 1,164,255), Yadav (4% ;

1,054,458) and Rai (2.3% ; 620,004).[42] Figure 1 depicts the major ethnic groups in Nepal per the 2011 census.[43]

Key Population Centers

The Government of Nepal counts approximately 26 million people with absent population of 1.9 million (migrant workers staying abroad for more than 6 months) and a growth rate of 1.35% per annum.[44] However, according to Nepal's Labour Ministry, some absent migrant Nepalis returned due to the COVID-19 pandemic affecting their work abroad.[45]Approximately all Nepalese (80%) reside in villages or in the small market centers. There are no major cities outside of Kathmandu. There are some smaller urban centers along the Indian border (Biratnager, Nepalganj, Biganjm, and Pojhara in the valley). There are also some townships (Hitaura, Butwal, Dharan) in the foothills and hill areas where some economic activities have developed.[46] The most densely populated regions are in the southern Terai (or Tarai), the Kathmandu Valley and Kaski districts.[47] Figure 2 shows the Population Pyramid for Nepal and details the 2019 percentage of age groups by male and female.[48]

Language

The official language in Nepal is Nepali, although there are over 123 languages spoken originating from the mother tongues of the multitude of ethnic groups in the country. English is taught in schools and a large portion of the country understands English.

Religion

The Constitution of Nepal declares the country a secular state.[49] However, most of the population in Nepal is Hindu, observed by 81.3% (21,551,492) of the population. Buddhism is second (9%; 2,396,099), followed by Islam, (4.4%; 1,162,370), Kirat (3.1%; 807,169), Christianity (1.4%; 375,699), Prakriti (0.5%; 121,982), Bon (13,006), Jainism (3,214), Bahai (1,283) and Sikhism (609).[50] Figure 3 shows the major religious groups in the country.[51]
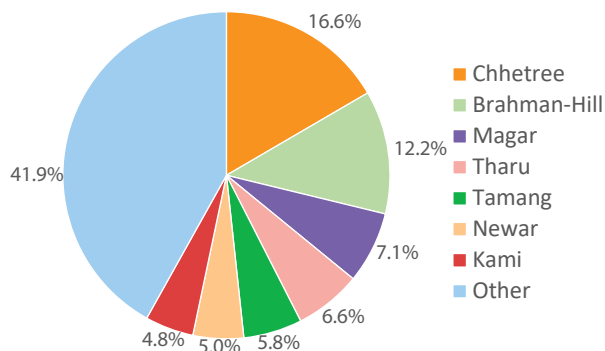
Figure 1: Nepal Caste/Ethnic Composition
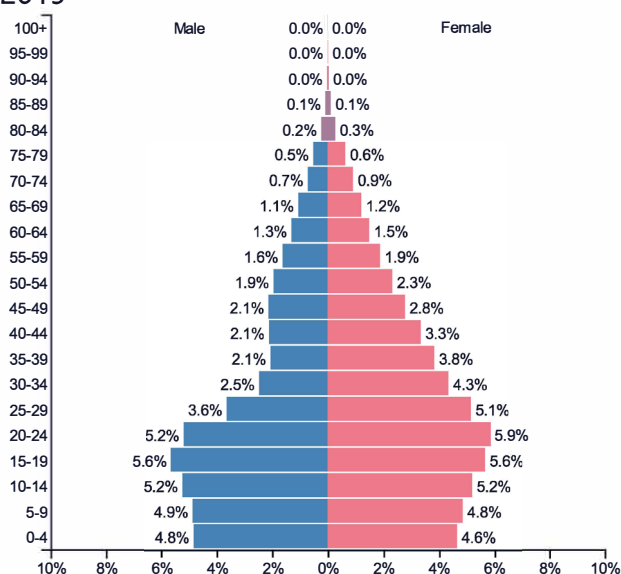
Figure 2: Nepal's Population Pyramid 2019
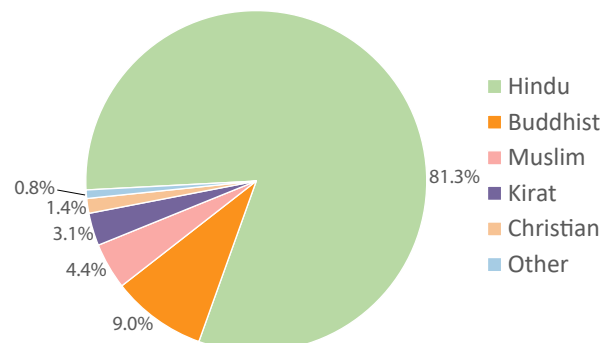
Figure 3: Nepal's Major Religious Groups

Vulnerable Groups

The Constitution of Nepal (2015) was a significant national milestone championing equal rights for women, the poor, the vulnerable, those from diverse social groups, specifically banning

gender and caste/ethnicity-based discrimination and ensuring affirmative action to addressing historical disadvantages.

Refugees

According to the UNHCR, there were 19,600 refugees (64% Tibetan and 32% Bhutanese) at the end of 2019. The country additionally hosted 60 asylum seekers and over 500 people of concern.

Tens of thousands of ethnic Nepalis living in Bhutan were arbitrarily deprived of their Bhutanese citizenship in the early 1990s and expelled from the country. Others fled to escape a campaign of arrest and detention, with many ending up stateless in Nepal with no resolution.[52] Despite joint ministerial meetings, Bhutan has remained reluctant to come to a solution or accept repatriation. This compelled the international community to step forward and western countries led by the U.S. made a generous offer of burden sharing for resettlement of the Bhutanese refugees. The U.S followed by Canada, Australia, New Zealand, Norway, Denmark, the Netherlands and the UK absorbed over 113,000 refugees. Currently 7,000 refugees remain in the UN Refugee Agency managed camps in eastern Nepal.[53]

The UNHCR reported that 100% of refugees had access to primary health care and 100% of targeted households were able to have their basic needs met through multipurpose cash grants. Additionally, 90% of primary school aged refugees and asylum seekers were enrolled in primary education with the exception of the Bhutanese refugee population whose enrollment rates were at 75%. Additionally, UNHCR facilitated resettlement of 113,500 Bhutanese refugees and aided in the transformation of the Bhutanese refugee camps into resilient, economically, and socially cohesive communities.[54]

Similarly, Tibetan refugees fled to Nepal following a 1959 uprising against Chinese rule in Lhasa where tens of thousands of Tibetans were killed. Prior to 1990, there were an estimated 15,000 Tibetan refugees in Nepal, many without any form of documentation preventing them access to education and legal employment. In

1995, the Human Rights Organization of Nepal began a campaign to advocate for refugees, but the country stopped issuing refugee cards to Tibetans including children born in Nepal to refugee parents even if their families had been in Nepal for decades. There are currently approximately 9,000 Tibetan refugees living in Kathmandu and 11 refugee settlements throughout Nepal.[55]

Women

Women make up over 50% of the population in Nepal; however, women in the country face multiple challenges in areas including access to education, health care, socio-political opportunities, and economic engagement. Literacy illustrates this divide with only 57.4% of women literate compared to 75% of men and only 22.9% of women employed outside the home to 48.2% of men. These constraints exacerbate the gender gap and diminish women's access to opportunity for quality of life advances. Another example of this gender divide is the prevalence of child marriages, with 39-51% (depending on varying sources), of children, overwhelmingly girls, marrying before the age of 18, despite years of government campaigns to end the practice.[56]

Further, while there have been significant efforts by the Government of Nepal to improve the lives of women in the country, Nepal maintains a Gender Inequality Index (GII) value of 0.476 and ranks 115 out of 162 countries. The GII reflects gender-based inequalities in reproductive health, empowerment, and economic activity. The GII looks at the percentage of representation for their assessments.[57] The 2015 constitution included protections for women guaranteeing that at least one-third of federal parliament seats would be held by women and focusing on ensuring greater equality and opportunity for girls and women.[58] Yet, challenges facing girls and women in the country persist, primarily due to the social norms and religious practices that directly affect them, limiting their voices, access to information, resources, and support systems.

Women in Nepal are also at high risk of physical, sexual, and emotional violence which one in four women have experienced.[59] Nepalese women rank highly in labor force participation but not in economic equality and many young girls work in high risk conditions where their physical safety is at risk.[60]

Additionally, women and girls are more susceptible to harm from the country's high risk of natural disasters due to the gender roles that disproportionately assign indoor chores to women. Significantly more women and girls died in the catastrophic earthquake of 2015 than men.[61] Of the 8,702 deaths resulting from the earthquake, 4,801 (55%) were women. Figure 4 depicts the number of male to female deaths from the 2015 earthquakes by location. In all but one instance, women's deaths were more than or equal to men.[62]

Additionally, poor women suffered more in terms of death, injury, displacement and other impacts of livelihood assets as a result of the 2015 earthquakes.[63] Women often also take on the bulk of stress from disasters as primary caretakers for their households, but due to the unpaid nature of household work, lack resources and support to recover in the aftermath of disasters.[64]

Another cultural practice impacting women in Nepal is chhaupadi. With over 80% of the country practicing Hinduism, many families observe chhaupadi, the practice of seclusion connected with Hindu's belief about ritual purity/impurity and that menstrual blood is unpure. In spite of Nepal's Supreme Court banning chhaupadi in 2005 calling it a human rights violation, the practice continues to threaten the safety and wellbeing of women across the country. Women are not only banished from their homes during the length of their period, but also forbidden to enter the kitchen, touch food, religious icons, cattle, and men. Additionally, they are not allowed to use community water sources, bathe, or wash clothes. Some reports detail young girls made to stay in small uncomfortable huts made of mud and straw and some freezing to death in harsh Himalayan winters. In 2017, Nepal's government was forced
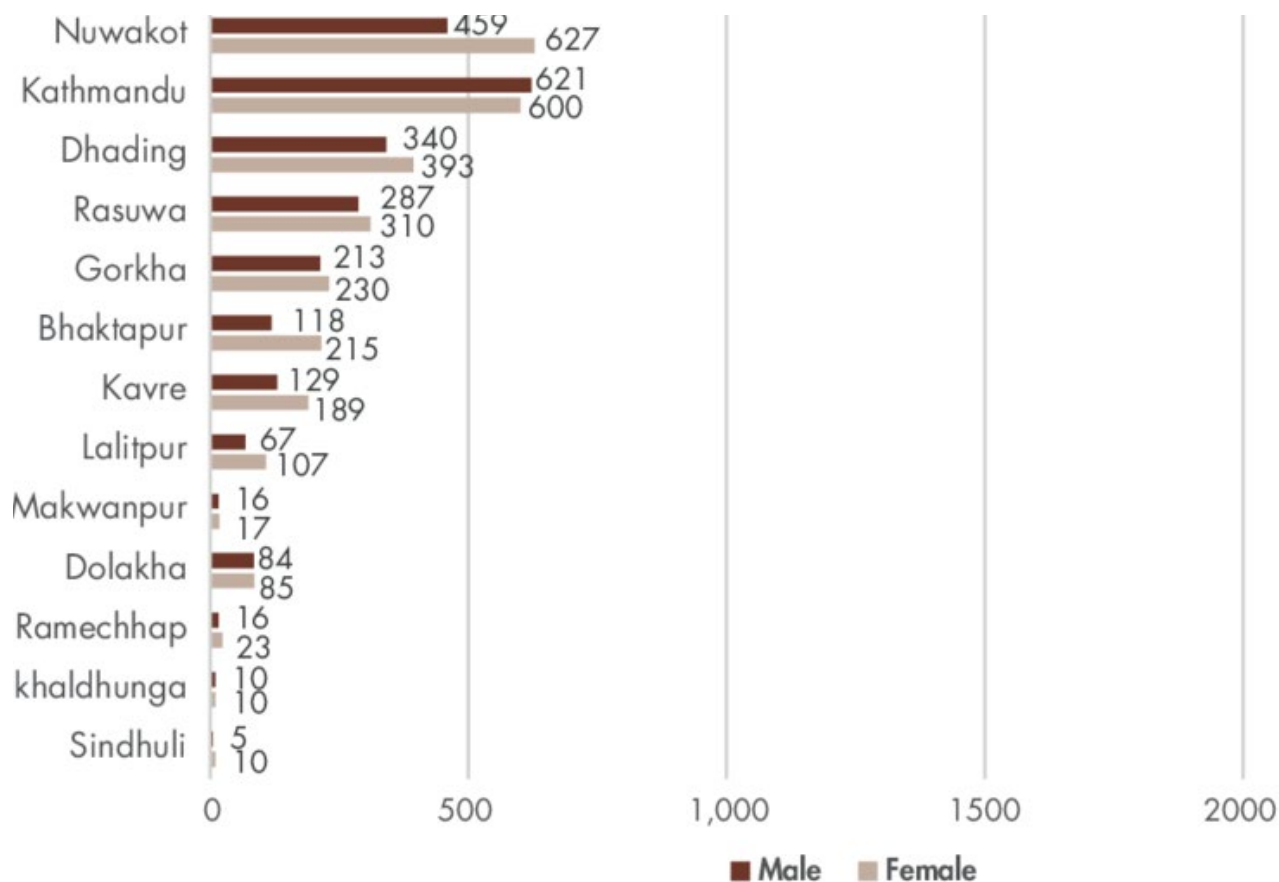
Figure 4: Male to Female Deaths Resulting from 2015 Nepal Earthquake

to respond after three girls died while secluded in sheds for chhaupadi, one from a snake bite, another from smoke inhalation and the other after freezing to death. Additional dangers of the practice include violence, rape, and a host of health problems including pneumonia while the women are secluded outdoors. Chhaupadi also banishes women for up to 10 days post childbirth, increasing the risk of infant and maternal death.[65]

Children

Nepal is a young country with 40% of the population aged 18 or under. With youth making up such a significant portion of the country, the country has rightly focused efforts toward investments in children's development and accomplishing Millennium Development Goals. Some of the major achievements include:[66]

- Extension of primary health care lowered both infant and under 5 mortality rate.
- Improvements in mental health care significantly reduced the maternal mortality ratio.
- On track for its targets on nutrition and is likely to achieve all three micronutrient goals of "A World Fit for Children."
- Legislation, policies, and programs promoting better access to education raised net enrollment rates.
- Introduced and scaled up child cash grants to address child poverty and malnutrition.

Still, children face many issues in Nepal. Several of the same issues that plague the country as a whole affect children including poverty, health disparities, child labor (17% of boys work and 25% of girls), large educational gaps, child marriage (although 18 is the legal age of marriage, 39-51% (depending on varying sources) of girls are married before they turn 18), and child trafficking. The Government has partnered with many organizations to aid in the services provided to children, including Save the Children which is the largest child-focused charity in Nepal. Save the Children works with

government and local organizations to achieve progress on child malnutrition, mortality rates, and child marriage in the country. Additionally, Save the Children has worked with children and families recovering from the 2015 earthquakes, set up literacy programs, increased enrollment and promoted hygiene in schools. Figure 5 shows some of the challenges facing the children in Nepal.[67]

Child labor in Nepal has been an enduring problem with the International Labor Organization identifying the country as having one of the highest child labor rates in the world in 2015, counting almost 1.6 million (21%) of the 7.7 million children between the ages of 5-17 employed. Many of the children are working in dangerous environments such as brick kilns, textile and garment factories, restaurants and night clubs as well as working on crowded and polluted city streets as bus attendants, street sellers and beggars which puts them at great risk. The surge of child workers and laborers is due to employers exploiting children because of low wages, fewer complaints about working conditions, and general lack of awareness of their rights.[68]

In line with its United Nations' Sustainable Development Goals targets, Nepal has pledged to eradicate forced labor, human trafficking, and child labor. The 2017-2018 National Labour Force Survey showed a reduction in the percent of children in Nepal in forced labor down from 21% to 17% and counting approximately 7 million children between 5-17 involved in work for pay. Nepal's aim is to continue the reduction of child labor to achieve the SDG target of 8.7% by 2030 which would necessitate 100,000 per year less children on an annual basis until then. Another initiative introduced by the Government of Nepal is the National Master Plan on the Elimination of Child Labour (2018-2028) which aims to not only reduce but banish the exploitative and worst forms of child labor by 2020 and eliminate all types of child labor by 2025.[69]

Dalits

Despite the criminalization of caste-based discrimination in the constitution and special laws, "untouchable" Dalits across Nepal still face discrimination and violence.[70] The national census counts about 3 million Dalits, while civil society organizations estimate there are 4.5 million Dalits in Nepal.[71]

Challenges for Children in Nepal

Nepal's children can't wait. Despite progress, children continue to face multiple challenges — including preventable child deaths, malnutrition, children forced to work and girls forced from school and into early marriage and motherhood.

- 1 child in 31 dies before their 5th birthday – 4 times that of the United States
- 40% of girls age 15+ struggle to read and write
- 36% of children suffer from stunting due to severe malnutrition
- 27% of girls ages 15-19 are married, and 1 in 15 gives birth
- 22% of children are engaged in child labor, instead of learning
- 25% of people live in poverty

Figure 5: Challenges for Children in Nepal

Caste is a system of social stratification associated with Hinduism. The caste system is complex in Nepal, and further complicated as it has become closely entwined with ethnicity. But in general, there are four castes, or varnas, with differing levels of ritual purity and social status. The highest is the Bahun, or Brahman, who were traditionally priests, scholars and educators; the second highest is the Chetri, traditionally associated with warriors and rulers; and the third highest, the last "pure" caste, is the Vaisya, which traditionally included merchants, farmers and craftspeople. The fourth varna is the Sudra, which is considered impure and associated with laborers and servants. However, an additional fifth category is comprised of "out-caste" Dalits, who are considered impure as well as physically "untouchable."[72]

Almost half of Nepal's Dalits live below the poverty line. They have a lower life expectancy and literacy rate than the national average, and experience higher rates of landlessness and poverty. Discrimination includes being denied access to religious sites, refusal by non-Dalits to handle water touched by them, and opposition to inter-caste marriages,[73] with reactions ranging from harassment to killings.[74]

Dalit women and girls are particularly vulnerable,[75] with little control over land, housing or money and more likely to being forced into trafficking and sexual slavery.[76] Their literacy rate lies between 12 and 24%, compared to the national average of 64%.[77]

The 2015 earthquakes highlighted caste inequalities. A higher proportion of low-caste people were displaced, there were instances of unequal distribution of healthcare and aid packages, and fewer low-caste politicians, relief volunteers and doctors who could advocate for the needs of the lowest castes. On the other hand, some experiences with relief efforts in camps suggests that the normal rules of caste were temporarily suspended under disaster conditions, and aid agencies were careful to provide foods that are acceptable to eat for all castes, thus showing good cultural sensitivity.[78]

Dalits with disabilities have been among the hardest hit by COVID-19 lockdowns in Nepal. Even under normal circumstances, persons with disabilities are less able to access health care, education or employment, and to participate in the community. Disability and poverty reinforce each other, leading to Dalits comprising a higher proportion of persons with disabilities, and Dalits with disabilities experiencing the most severe challenges with COVID-19 lockdowns, including food insecurity.[79]

Economics

The Ministry of Economics and Planning (MEP) was established in 1963 by the Government of Nepal with the responsibility of handling the economic affairs of the country and maintaining both micro and macroeconomic stability.[80]

Nepal is one of the least developed countries with an economic vulnerability index of 28.4.[81] The UN Committee deferred the decision to assess the country's sustainable development progress to 2021 for graduation to middle income, a deferment granted to allow additional time for the country to recover from the impacts of the devastating 2015 earthquake and also to allow for the wide ranging constitutional and political transitions expected to have positive effects on the country.[82] Economically, the country has shown significant growth in regard to its broad-based plans to alleviate poverty and lowering the percentage of the population living below the poverty line in 1996 from 42% to 25.4% in 2011.[83]

Due to its landlocked position with no access to ports, Nepal's economy is heavily dependent on imports of even basic materials, importing essential commodities such as fuel, construction material, fertilizer, metals, and most consumer goods. It depends on foreign markets for some forest and agriculture products as well. Historically and geographically, India is Nepal's primary trade partner although China and the U.S. also trade with the country. Nepal's small export market is primarily in rice, jute, timber, and textiles. But larger exportation development,

specifically with regard to utilization of the country's river systems could provide potential for hydroelectric development and potential trade to India which currently holds the principal market for power generated in Nepal. Seventy percent of the population works in agriculture, although it only accounts for 34% of GDP.[84]

Mineral resources in Nepal consist of coal, iron ore, magnesite, copper, cobalt, pyrite, limestone, and mica. The agricultural market consists of rice, corn wheat, potatoes, sugarcane, and millet which account of over half of the country's export earnings and which employ half of the country's population.

Timber is one of the country's most valuable resources and a major source of potential revenue. Approximately one third of Nepal's total area is forested and the government owned lumber processing company supplies the Kathmandu Valley with construction and furniture wood. Most of the timber however, is exported to India. Export of Nepal's forest products provide an important source of Indian rupees.

Small localized industrial operations provide a growing segment of the economy in Nepal consisting of the jute industry, sugar, sawmill and meat processing factories, brick and tile manufacturers, construction, paper and grain, cigarette, cement, and beer production. The primary areas for manufacturing are in Biratnagar, the Birganj–Hitaura corridor, and the Kathmandu Valley.

Finally, tourism is a notable and expanding industry in Nepal. It is primarily confined to the Kathmandu Valley, due to the locations necessary for lodging, food, road, and international transportation services.[85] Nepal leverages its diverse geography and activity-based tourism focusing on hiking, climbing, rafting and other mountainous activities.

The percentage of the population living below the poverty line is estimated at 21.6%. However, Nepal made good progress, halving the proportion of those living in absolute poverty (under $1 per day) from 33.5% in 1990 to 16.4% in 2013.[86] According to the World Bank, the estimated poverty headcount ratio is at 8% in 2019 down over half from 2013.[87]

The 2015 earthquakes had a significant impact on the economy of Nepal, and many are still recovering 5 years later. The agricultural sector suffered incredible loss with damaged crop lands, physical infrastructure, livestock shelters, agriculture tools, equipment, machines, mills, buildings laboratories and service centers. Livestock and crops were lost for subsequent seasons. Stored seed was buried under rubble and the agriculture-based livelihoods were severely impacted causing vulnerability to rural communities, hunger, and food insecurity. The total damages and losses to the agricultural sector cost approximately NPR 28.3 billion.[88]

The World Bank estimates economic growth in Nepal in FY2020 to fall between 1.5-2.8% reflecting results of stymied trade and tourism and wider impacts from the COVID-19 pandemic. Inflation was 6.4% in the first half of FY2020 due to increases on import duties and higher vegetable prices.[89]

Government

The people of Nepal have a complex and tumultuous history with their government. The country was a monarchy for many centuries, followed by a struggle for a democratic political system which waged for decades. A move toward a democracy began in the 1950s initiating a ban on political parties by the crown in the 1960s. The constitution of 1962 provided a constitutional monarch with the king ruling over a multitiered system of "panchayas" or councils and included a ban on political parties. The ban continued until 1990 although in the 1980s there was some ease provided to organizations such as the Nepali Congress Party and the Communist Party of Nepal who were allowed to operate. Continued unrest forced King Birendra to accept a multi-party system in 1990 and political parties were legalized. A new constitution put into effect on 9 November 1990 reduced the power of the monarch to remain head of state but giving executive power to the Prime Minister and

Council of Ministers who operated under his authority.[90]

The new constitution defined the country as an "indivisible, sovereign, secular, inclusive, democratic, socialism-oriented, federal democratic, republican state."[91] The constitution also established the House of Representatives consisting of 205 members popularly elected to five year terms with significant influence alongside the National Council consisting of 60 members with six year terms who had less power.

A Maoist insurgency demanded the abolition of the monarch in the late 1990s and violence resulted from continued tensions as the government negotiated with the insurgents until they finally agreed to drafting an interim constitution in January 2007 and the formation of an interim administration which led in April 2008 to the dissolution of the monarchy and Nepal becoming a republic.

A permanent constitution was produced in 2015 establishing a secular federal style republic consisting of seven administrative regions and a bicameral legislature with a president as head of state, and the Council of Ministers led by the prime minister as the head of government. The country has executive, legislative and judiciary branches.[92]

The current President, Bidhya Devi Bhandari, shown in Photo 2[93], is the first female president of Nepal who took office in October 2015 and is in her second term having been reelected in 2018.[94] She is the second person to hold the role of president in the country.[95] Bhandari was elected 13 March 2018 and won with 74.81% of the vote. The Vice President, the deputy head of state according to the constitution, is Nanda Bahadur Pun. The current prime minister KP Sharma Oli is in his second term, the first term from 2015-2016 and the second beginning in February 2018.[96]

Environment

Geography

Nepal is located in South Asia, north of the Tropic of Cancer with coordinates at approximately 28N and 84E and takes up

Photo 2: President of Nepal, Bidhya Devi Bhandari

147,516 square kilometers of land. The country is cylinder shaped running approximately 500 miles from east to west, and only 90 miles from north to south. It is divided into three geological regions: The Himalayan region in the north, the Mid-hill region in the middle, and the Tarai region in the south. Eight of the world's highest peaks are located in Nepal, including the highest point on earth,[97] Mt. Everest which rises 8,848 meters. Nepal's lowest point is at 60 meters in Jhapa on the Tarai plains of Kechana Kalan. [98] The World's Deepest Gorge, the Kali-Gandaki is also located in Nepal.[99]

Nepal has some of the most unique biodiversity in the world ranging from sub-tropical rain forests, to alpine deserts.[100] It is also home to the "waters of South Asia" which consists of 6,000 rivers, some originating in the Himalayas. Additionally, there are 163 documented wetlands in Nepal including nine globally distinguished Ramsar Sites such as, the Koshi Tappu Wildlife Reserve, Beeshazarital (Chitwan), Jagdishpur Reservoir (Kapilvastu), Ghodaghodi Tal (Kailali), Gokyo (Solukhumbu), Phoksundo (Dolpa), Rara (Mugu), and the Mai Pokhari (Ilam).[101]

Borders

Nepal is landlocked and shares borders with China in the north and with India in the south, east, and west. [102] Figure 6 shows the country sharing borders with its neighbors China and India. [103]

Climate

Nepal's climate is one of extremes: very hot and very cold, depending on altitude and location. The average temperature drops 6 degrees Celsius for every 1,000 feet gained. Nepal has five seasons: spring, summer, monsoon, autumn, and winter. In southern Nepal (the Tarai), summers can exceed 113 Fahrenheit (F) in some areas and range from 44 F-73 F in the winter. The Kathmandu Valley has moderate temperatures ranging from 68 – 95 F in the summer and 35-53 F in the winter. The average rainfall is 1,600 mm and 80% of all rain in the country falls during monsoon season (June-September). Table 1 shows the average temperatures and rainfalls in the summer and winter for Kathmandu, Pokhara, and Chitwan. [104]

The Government of Nepal's Ministry of Energy, Water Resources and Irrigation's Department of Hydrology and Meteorology tracks and monitors historical climate extremes for all the regions and seasons and provides long range forecasts for rainfall and temperature on their website at: *http://www.dhm.gov.np/ climate/.* [105]

Figure 6: Map of Nepal and Border Neighbors

Average temperatures and rainfall during peak summer and winter in three most popular tourist areas:

Place	Summer (May, June, July)			Winter (Dec, Jan, Feb)		
	Max (°C)	Min (°C)	Rain (mm)	Max (°C)	Min (°C)	Rain (mm)
Kathmandu	28.1	19.5	312	19.3	3.0	15.4
Pokhara	29.7	21.3	829.7	20.3	7.7	26.3
Chitwan	33.0	25.3	404.0	24.1	8.3	13.8

Table 1: Nepal's Average Temperatures and Rainfall in Summer/Winter

DISASTER OVERVIEW

Nepal is at high risk from several natural hazards such as floods, landslides, earthquakes, fires, thunder/hailstorms, and drought.[106] In 2015, earthquakes displaced approximately 2.8 million people.[107] Floods and landslides make up almost three quarters of all natural disasters occurring in the country.[108] In 2017, Nepal saw heavy rains resulting in flooding across 35 of Nepal's 77 districts. Over 190,000 houses were destroyed or partially damaged, displacing tens of thousands of people and leaving many homeless.[109]

Climate Change

In response to climate change, Nepal has made several commitments at the International and Regional level. Nepal signed the United Nations Convention Framework on Climate Change (UNFCCC) in 1992 during the Rio Earth Summit and ratified it and put it into force in 1994. The Convention is complemented by the Kyoto Protocol and was entered into force on December 2005 under the UNFCCC. In 2015, Conference of Parties (COP-supreme body of the UNFCCC) to the UNFCCC agreed to a historic climate change agreement called the "Paris Agreement" (PA). Nepal as a party to the convention signed the agreement and ratified and entered it into force in 2016. The Paris Agreement (COP 21, 2016) recognized adaptation as a global challenge, and focused to promote national actions and adaptation planning including National Action Plan (NAP) formulation and implementation and strengthening institutional arrangement.

Nepal developed and submitted their National Adaptation Programme of Action (NAPA) to the UNFCCC in 2010 with its national adaptation priorities to deal with such climatic risks and hazards. The Government of Nepal (GoN) endorsed a national climate change policy and a National Framework of Local Adaptation Plan of Action (LAPA) in 2011 to implement the NAPA

priorities. In addition, Nepal has also endorsed the National REDD+ strategy in 2018 to help regulate Reducing Emission from Deforestation and Forest Degradation (REDD+) initiatives in Nepal.[110]

Table 2 depicts climate change policies with its responses, potential impact areas, and level of governance in Nepal.[111]

Hazards

Nepal experiences the following hazards:

Floods

Flood is common in the rainy season in Nepal, and it has been the most frequent, and highly damaging among natural hazards. More than 6,000 rivers and rivulets flow in Nepal from north to south, and among these, snow fed rivers, such as the Koshi, Narayani, Karnali, and Mahakali, are perennial rivers. They originate from the Himalayas and snowcapped mountains and pass through the hills to the Terai plains. Nepal witnessed major flooding in the Tinao basin (1978), the Koshi River (1980), the Tadi River Basin (1985),the Sunkoshi Basin (1987) and with cloud burst in Kulekhani area (1993).[112]

During the summer monsoon season (June-September), almost 80% of annual precipitation falls during this period. Heavy rain during the monsoon season quickly limits the land's ability to absorb rainwater, contributing to water accumulation and subsequent flooding.[113]

Floods cause a significant number of deaths and extensive damage in Nepal on a regular basis. Floods have historically resulted from continuous rainfall and cloudbursts, snowmelt and rainfall, glacial lake outburst, floods and bishyari (breaking of dams caused by landslides falling directly into rivers).

When the monsoon season brings the right amount of rain, agriculture productivity soars; however, when there is excess, it causes tremendous loss of life and property. Monsoon

Policies/Plans and Regulations	Response		Potential Impact Areas				Level of Governance		
	Mitigation	Adaptation	Agriculture	Water resources	Forest	Disaster	Federal	Provincial	Local
Regulatory Frameworks									
Water Resource Act, 1992			*	*	*	*	*		*
Forest Act, 1993					*	*	*		*
Environment Protection Act, 1996 and its Rules 1997				*	*	*	*		*
The Local Government Operation Act (LGOA), 2017	*	*	*	*	*	*	*	*	*
Disaster Risk Reduction and Management Act,	*	*			*	*	*	*	*
Policies/plans and Strategies									
The Ninth Plan (1997-2002)	*	*				*	*		
The National Conservation Strategy (NCS) 1998	*	*	*	*	*		*		
Nepal Biodiversity Strategy, 2002	*	*	*	*	*	*	*		
Tenth Plan (2002-2007)	*	*				*	*		
World Summit on Sustainable Development (WSSD), 2002	*	*				*	*		
National Water Resources Strategy, 2002	*	*				*	*		
National Agriculture Policy, 2004	*	*	*	*	*	*	*		
National Water Plan (2005)	*	*		*		*	*		
Water Induced Disaster Management Policy, 2006	*	*		*		*	*		
Three Year Interim Plan (2007/08-2009/10)	*	*				*	*		
The National Strategy for Disaster Risk Management in Nepal (2009)	*	*				*	*		
National Adaptation Programme of Action (NAPA), 2010		*	*	*	*	*	*		
Twelve Three Year Plan (2010/11-2013/14)	*	*	*	*	*	*	*		
Climate Change Policy ,2011	*	*	*	*	*	*	*		
Local Adaptation Plan for Action (LAPA) 2011		*	*	*	*	*	*		*
Climate Resilient Planning Tool, 2011	*	*	*	*	*	*	*		
Climate Change Adaptation and Disaster Risk Management in Agriculture: Priority Framework for Action 2011–2020		*	*				*		
Local Disaster Risk Management Planning Guidelines (LDRMP), 2012		*				*			*
Thirteenth Plan (2013/14-2015/16)	*	*	*	*	*	*			
Irrigation Policy, 2014		*	*	*	*	*	*		
Sustainable Development Goals (2015-2030)	*	*				*	*		
Water Induced Disaster Management Policy, 2015		*				*	*		
Forest Policy, 2015	*	*				*	*		
National Adaptation Plans (NAPs) 2015		*	*	*	*	*	*		
National Land Use Policy, 2015	*		*		*		*		
Agriculture Development Strategy (2015-2035)			*				*		
Fourteenth Periodic Plan (2016/17-2018/19)	*	*	*	*	*	*	*		
Forestry Sector Strategy (FSS), (2016-2025)	*	*	*	*	*	*	*		
National REDD+ Strategy	*	*				*	*		
National Ramsar Strategy and Action Plan, Nepal (2018-2024)	*	*		*	*		*	*	*

Table 2: Nepal's Climate Change Policies

cloudbursts, landslides, and flash floods typically occur in the mountains. In the southern plains, the same water breaches riverbanks and inundates areas of land. Rapid urbanization in the Terai and physical construction along the embankments have interfered with the existing patterns of surface water flow and cause drainage congestion.[114]

Landslide

Landslide is common in the hilly region of Nepal. Both natural and human factors such as steep slopes, fragile geology, high intensity of rainfall, deforestation, and unplanned human settlements are the major causes. The risk of landslide is further exacerbated by improper land use, encroachment into vulnerable land slopes and unplanned development activities. Due to the steep topography and fragile ecosystem, the hilly districts of Nepal located in the Siwalik, Mahabharat range, Mid-land, and higher Himalayas are more susceptible to landslide.[115]

Glacial Lake Outburst Floods (GLOFs)

Glacial lakes are located in the high-altitude areas particularly in the foothills of mountains. These lakes contained huge volumes of water melting off glaciers and can lead to a glacial lake outburst flood (GLOF) with substantial capacity to cause great damage downstream. Out of the 2,315 glacial lakes in Nepal, 15 have been found to be substantially dangerous.[116]

Earthquake

According to Global Report on Disaster Risk, Nepal ranks the 11th position in terms of earthquake risk. Historical data and ongoing seismological studies have indicated that the entire region of Nepal is prone to earthquake and it lies in the active seismic zone V.

There is regular earthquake activity along the major active faults in east-west alignment. The seismic pattern has geographically divided into three clusters of events: western, central, and eastern Nepal. Siwalik, lesser Himalaya, and frontal part of the Higher Himalaya are the most vulnerable zones. The country has had major earthquakes in the 20th century; namely Bihar-Nepal earthquake (1934), Bajhang earthquake (1980) Udayapur earthquake (1988) and the Gorkha earthquake (2015).[117]

Fire

Almost 78% of households are agro-base households in Nepal. In the rural areas, approximately 86% of the population lives in houses made of earthen wire, stone, and wood. Residential houses are developed in a cluster basis and therefore are more susceptible to catching fire and spreading due to close proximity, especially in the dry season. During the dry season, wildfires occur more frequently, especially in the mid hill areas.[118]

Drought

Drought occurs in Nepal mainly as a result of uneven and irregular low monsoon rainfall. Some areas of Terai, mid-land and Trans-Himalayan belts of Nepal are prone to drought. The lack of irrigation facilities further exacerbates the effect of drought causing enormous loss of crop production leading to shortage and food insecurity. The 1972 and 1979 droughts were very damaging and harmful to people, livestock, and crops. In 1994 Nepal witnessed the worst drought in its history that affected 35 districts of western hilly and Terai regions.[119]

Avalanche

The high mountainous region of Nepal has rugged and steep slopes which are susceptible to avalanche. They can be triggered by natural factors like slopes, thickness of snow, or human activity. They have the capacity to carry massive amounts of snow and associated debris that make them very destructive.[120]

History of Natural Disasters

Table 3 depicts the disasters that Nepal has experienced from 1971-2018, along with accompanying information including human loss and damages to houses.[121]

Type of Disaster	Human Loss					
	No. of Incidents	Death	Missing	Injured	Affected Families	Houses Damaged
Fire	12694	1755		2176	265962	90044
Lightning	2143	1780	129	3235	7758	1000
Landslide	3729	5141	191	2053	559347	34094
Wind Storm	298	21		95	1718	1279
Flood	4368	4628	87	615	3726261	230900
Epidemic	3474	16598		44992	513409	0
Avalanche	3	17	4	7	1	0
Snow Storm	7	97	7	0	10	0
Hailstorms	134	9		24	3407	157
Earthquakes	175	9771		29142	890995	982855
Cold Waves	438	563		83	2441	0
Others*	1134	626	13	919	3214	2461
Total	28597	41006	431	83341	5974523	1342790
(Average)	608	872	9	1773	127118	28570

Table 3: Disasters in Nepal from 1971-2018

The following is a list of the most recent natural disasters in Nepal in the last ten years.

August 2020-Monsoon Flooding and Landslide

Photo 3 shows a major landslide which occurred on 14 August 2020 in Lidi, Jugal Municipality, Sindhupalchowk. [122] Approximately 25 to 26 houses were impacted out of which 13 were completely damaged and approximately 5 homes were buried from the landslide.[123] The monsoon flooding resulted in 15 landslides causing 19 deaths, 20 missing, 5 injured and 38 families affected.[124]

July 2019-Monsoon Flooding

Heavy monsoon rain beginning on 11 July 2019 resulted in flooding and landslides in several municipalities across Nepal. Figure 7 shows a map of the distribution of the heavy monsoon rains and the damage on various provinces.[125]

August 2018-Monsoon Flooding

On 27 August 2018, the Saptakoshi river flooded to six wards of Hanumannagar Kankalini Municipality (ward no. 5, 6, 7, 9, 11 and 12) and two wards of Tilathi Koiladi Rural Municipality (ward no. 4 and 5) inundating approximately 540 households. Hanumannagar Kankalini and Tilathi Koiladi Rural Municipalities and Saptari District Disaster Management Committee (DDMC) worked together with Health, Nutrition,

Photo 3: Nepal Landslide, North-East Nepal, August 14, 2020

Overview

This year monsoon started on 11 July 2019. As per Ministry of Home Affairs assessment, heavy monsoon rains have resulted in flooding and landslides in several municipalities across the country.

Incident	Deaths	Missing	Injured	Household affected
Flood	61	29	19	751
Landslide	47	9	39	223
Heavy Rainfall	9	-	22	64
Total	117	38	80	1,038

117 deaths *(MoHA)*

38 people missing *(MoHA)*

80 people injured *(MoHA)*

1,038 households affected (MoHA)

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Creation date: 28 July 2019 **Sources:** Nepal Ministry of Home Affairs (MoHA) and Nepal Survey Department

Figure 7: July 2019 Monsoon Flooding Map

Water, Sanitation, and Hygiene (WASH), Education and Child Protection clusters for immediate relief. A technical team screened the nutrition and health status of vulnerable populations including children, and pregnant and lactating women. These efforts helped save vulnerable groups from acute malnutrition during the emergency.[126]

June 2018-Monsoon Flooding and Landslides

Two consecutive days of rain from 11-12 June 2018 caused flooding in Bhaktapur. Emergency teams rescued more than one hundred people from the submerged settlements. The flooding caused severe damage to property; many structures were submerged in water including homes, factories, shops, schools, hospitals, a bridge, and a road. The low-lying areas were waterlogged as there was insufficient outlets for rising rivers. Travel between Lamjung and Manang was disconnected for 18 days when a section of Besisahar and Chame road was swept away at Marsyangdi Rural Municipality. A section spanning 3 kilometer (km) was destroyed by landslides. In addition, the heavy rain caused the landslide of Ghopte Bhir, causing damage which affected the local economy. During this monsoon, Nuwakot experienced many landslides which were triggered by incessant rain. Ghayangphedi (now Dupcheshwor) had dry landslides burying 11 houses and damaging 33 houses. 110 families were displaced. In Jajarkot, 26 houses were swept away by rising rivers and 38 families were displaced for several days. In Rasuwa, the monsoon triggered landslides in three places, causing nine deaths, displaced 5 families, and destroyed 15 houses. The District Administration Office (DAO) and the District Disaster Management Committee coordinated the response and relief activity. [127]

August 2017-Monsoon Flooding

From 11-14 August 2017, Nepal experienced a period of sustained, heavy rainfall which resulted in flooding across 35 of Nepal's 77 districts, affecting approximately 1.7 million people. Over 80% of land in the southern Terai region (as seen in Figure 8) was inundated by flood waters and

2017 FLOOD AFFECTED DISTRICTS
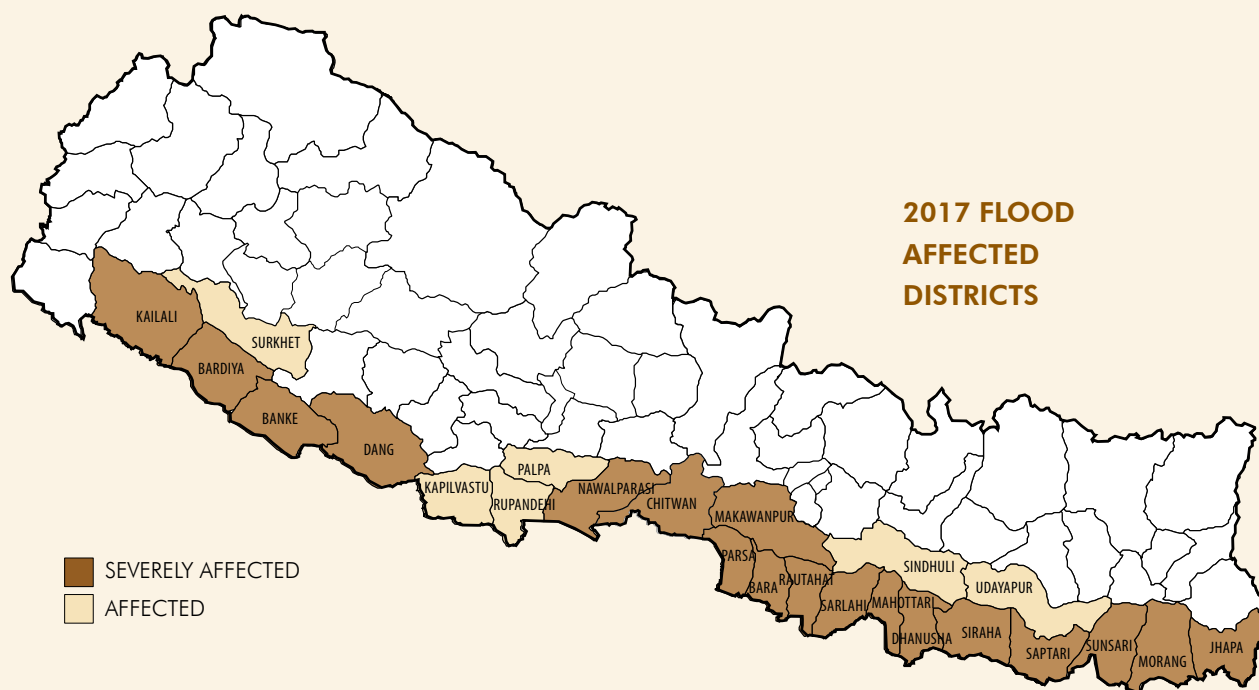
Figure 8: Monsoon Flooding in Nepal, August 2017

several districts recorded the heaviest rainfall in 60 years.[128]

More than 190,000 houses were destroyed or partially damaged, and 460,000 people were displaced. An estimated 19,000 persons were residing in informal displacements sites including in schools, and 40 other communities were inaccessible due to the flooding. Approximately 80 schools were destroyed, and another 710 schools were damaged. Ten health posts were destroyed and 64 were damaged. Approximately 64,000 hectares (ha) of standing crops were destroyed. Immediately following the floods, the Government of Nepal activated the Humanitarian Cluster System, in order to coordinate and respond to affected communities. The GoN mobilized 27,000 security personnel and civil servants to support relief efforts and provided more than US$11.3 million to affected areas. Humanitarian assistance was provided from the UN System, IFRC, Red Cross, non-governmental groups, and development partners. Based on the assessment of nine sectors, the total damage and losses caused by the floods have been estimated at NPR 60,716.6 (US$ 584.7 million) The total recovery need is estimated at

NPR 73,224.8 (US$ 705.1).[129] Figure 9 shows the timeline of events from the start of the heavy rains on 11 August, to the joint response plan which was launched on 25 August.[130]

Floods and Landslides - July 2016

A flash flood swept away at least 38 houses in Tatopani, Nayabasti and the 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 non-food 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 assisted authorities with search and rescue.[131]

Earthquakes-April/May 2015

A 7.8 magnitude earthquake struck Nepal on 25 April 2015, with the epicenter in Lamjung District (north-west) 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

Heavy rains commenced
impacting an initial 27 districts

Initial Rapid
Assessments (IRAs)
launched in 3 districts.

Search and rescue operations cease. The Government
of Nepal issues a communique welcoming
international assistance. Data from NRCS shows
301,500 families affected with nearly 45,000
households displaced. IRAs underway in 28 districts.

UNRCO commences
development of a CERF
application.

11 Aug   13 Aug   14 Aug   16 Aug   18 Aug   21 Aug   22 Aug   25 Aug

Search and rescue efforts and initial response
operations underway, led by the Government of
Nepal involving the deployment of 8,300 security
personnel and 700 civil servants.

More than 100,000 people rescued
via search and rescue efforts
(formal and informal

IRA data released showing 1.7 million people impacted
with 65,000 houses destroyed and 460,000 people
displaced. Government of Nepal support to the flood
response totals US$11.3 million.

Joint Response Plan launched.
CERF application submitted.

Figure 9: Nepal Flooding Response Timeline of Events, August 2017

magnitude struck Nepal. The epicentre was southeast of Kodari (Sindhupalchowk District), 76 km northeast of Kathmandu which was an area already affected by the April earthquake.[132]

As a result of the two major earthquakes, nearly 22,000 people were injured and 9,000 lives and over a half a million homes were destroyed. An estimated US$7 billion in damages and losses were a result of the earthquakes. The Nepal government and partners began short-term and long-term reconstruction efforts with assistance of national experts and institutions, assisting countries and developing partners. Humanitarian assistance was provided from over 60 countries as well as the United Nations and other international agencies.[133]
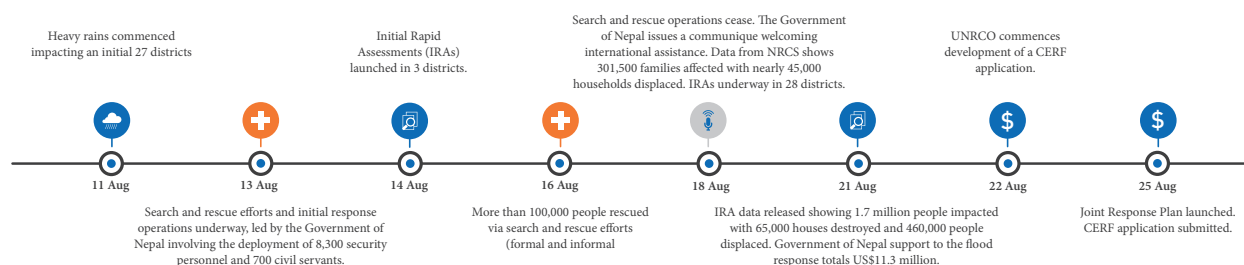
In response to the earthquakes, more than 90% of the security forces were mobilized to focus on SAR; 134 international SAR teams from 34 countries responded to Nepal's request for help. The Ministry of Home Affairs (MoHA) reported that for SAR, 4,236 helicopter flights were used (GoN/private), with 7,558 persons rescued by air and 4,689 persons rescued by land. Overall, 22,500 civil servants, 65,059 staff of the Nepal Army, 41,776 staff of Nepal Police, 24,775 staff of the Armed Police Force, as well as 4,000 government and private health workers were mobilized for rescue and relief efforts.[134] Additional information on the 2015 Earthquakes is found on page 32 of this document.

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.[135]

Floods and Landslides-June 2013

Monsoon rains caused massive flooding and landslides in 29 out of 75 districts, resulting in 59 people dead and over 12,000 people displaced.[136]

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.[137]

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 were reported missing. 20 houses, two temples, and a community building were swept away by the flooding. In addition, two water supply systems were damaged.[138]

Himalayan Earthquake-September 2011

Nepal was affected by a strong 6.8-magnitude earthquake that hit northeast India on 18 Sep 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. [139] Following the September 2011 earthquake, extreme cold which was brought by the onset of winter affected several families which were made vulnerable due to their homes being severely damaged or destroyed by the earthquake in eastern Nepal. Of the total 7,746 families displaced by the earthquake across 12 districts, some 5,000 families were suffering from extreme cold in nine districts of Ilam, Taplejung, Sankhuwasava, Panchthar, Dhankuta,Khotang, Terhathum, Bhojpur and Solukhumbu. A joint monitoring team comprising representatives from the Ministry of Home Affairs, United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA), United Nations Development Programme (UNDP), UN-Habitat and Nepal Red Cross Society (NRCS) conducted a review and lessons learnt workshop from 16 to 24 December in Taplejung, Panchthar and Ilam districts. Most of the displaced families were still taking shelter under tarpaulin provided by NRCS. Over 180 trained staff and volunteers and distributed additional blankets (two blankets per family) to over 5,000 families affected by extreme cold in the nine districts. ICRC country office in Nepal made an in-kind contribution of 2,000 blankets and the remaining procurement of 8,000 blankets was covered under the International Federation of Red Cross and Red Crescent (IFRC) Disaster Relief Emergency Fund (DREF).[140]

Country Risks

Nepal is one of the most disaster-prone countries in the world due to its topography and climate. Economic Vulnerability Analysis shows that Nepal exhibits the largest losses due to large exposure at risk and its high level of hazards. This risk can cause loss of lives and properties, pose severe threats to physical infrastructure, and also disrupt economic development.[141]

Country Risk Profile

Risk involves exposure to hazards, vulnerability, as well as institutional lack of coping capacity, all of which are important factors in Disaster Risk Management. The Index for Risk Management (INFORM) Global Risk Index (GRI) measures the risks that disasters pose to 191 countries. The INFORM GRI supports a proactive crisis management framework. INFORM GRI will be helpful for an objective allocation of resources for disaster management as well as for coordinated actions focused on anticipating, mitigating, and preparing for humanitarian emergencies. The INFORM GRI model is based on risk concepts published in scientific literature with three dimensions of risk: Hazards & Exposure, Vulnerability, and Lack of Coping Capacity. The first dimension measures the natural and human hazards that pose the risk. The second and third dimensions cover population factors that can mitigate against or exacerbate the risk. The vulnerability dimension considers the strength of individuals and households relative to a crisis situation, and the lack of coping capacity dimension considers factors of institutional strength.[142]

The INFORM GRI model is split into different levels to provide a quick overview of the underlying factors leading to humanitarian risk. INFORM gives each country a risk score of 1-10 (1 being the lowest and 10 the highest) for each of the dimensions, categories, and components of risk, as well as an overall risk score. The higher the score the more at risk a country is to disasters. In the 2020 INFORM Global Risk Index, Nepal had an overall risk of 5.4/10, which INFORM categorizes in the "High" risk class. Nepal's risk score for the first dimension, Hazard and Exposure, was 5.7/10. This first dimension is a combination of components for both natural and human hazards. The second dimension of Vulnerability was 4.7/10, and the third dimension of Lack of Coping Capacity was 5.8/10.[143]

RISK PROFILE

INFORM Risk

Hazard & Exposure 5.7	**Vulnerability** 4.7	**Lack of Coping Capacity** 5.8

Natural	Human	Socio-Economic	Vulnerable Groups	Institutional	Infrastructure
5.7		5.9	3.3	6.2	5.3

Physical exposure to earthquake 9.9
Physical exposure to flood 6.7
Physical exposure to tsunami 0.0
Physical exposure to tropical cyclone 0.2
Droughts probability and historical impact 2.8
Epidemics 6.5
Projected Conflict Risk 8.0
Current Highly Violent Conflict Intensity 0.0

Development & Deprivation 7.4
Inequality 4.2
Aid Dependency 4.5
Uprooted people 3.7
Health Conditions 2.3
Children U5 4.3
Recent Shocks 1.8
Food Security 2.7

DRR 5.4
Governance 6.9
Communication 4.7
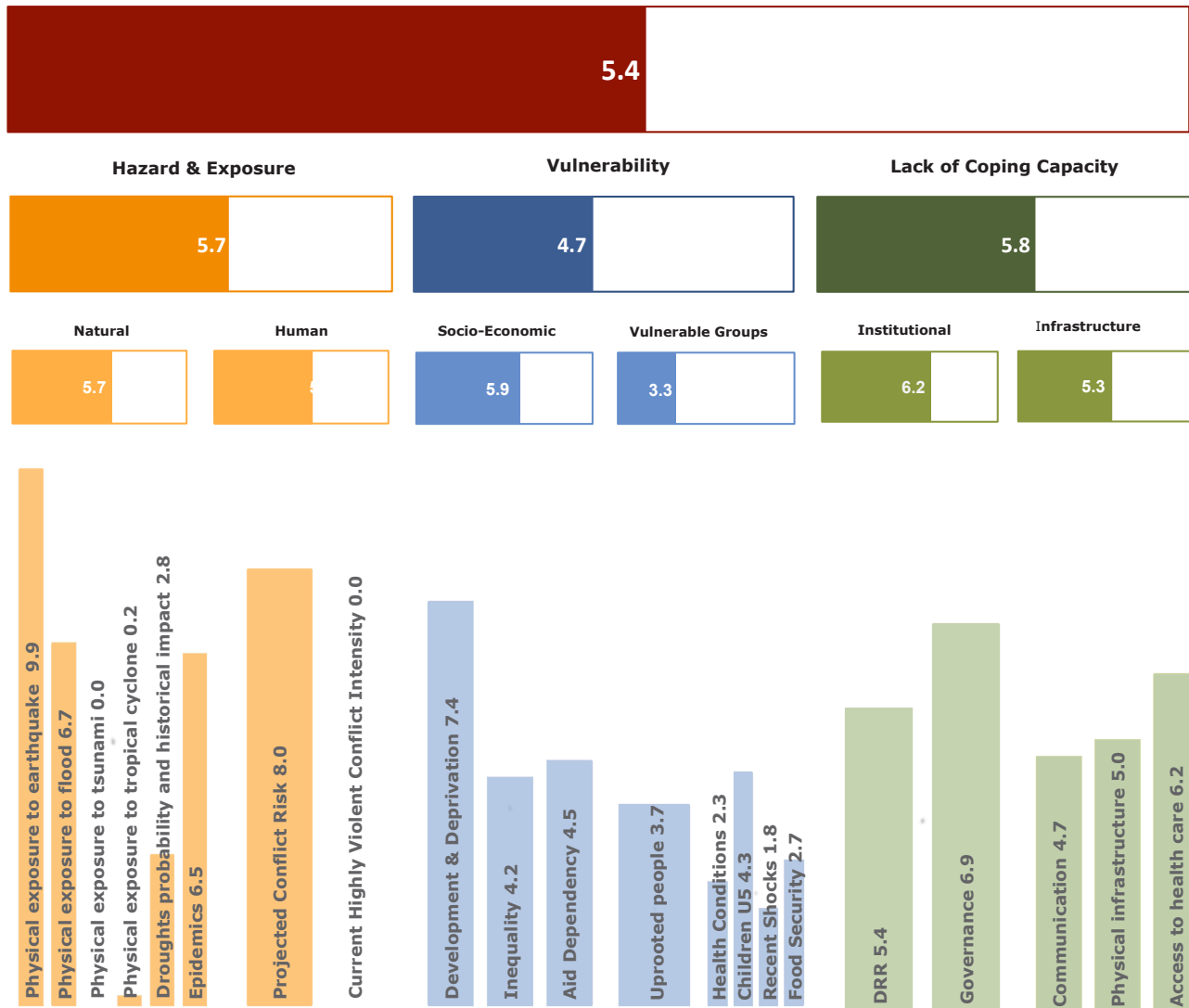Physical infrastructure 5.0
Access to health care 6.2

Figure 10: INFORM Risk Profile for Nepal, 2020

ORGANIZATIONAL STRUCTURE FOR DISASTER MANAGEMENT

Lead Government Agencies in Disaster Response

Nepal's disaster governance is guided by its Constitution 2072 (2015) the Disaster Risk Reduction and Management (DRRM) Act 2074 (2017),[144] and Local Government Operation Act, 2074 (2017).[145] The Constitution stipulates disaster risk reduction and management as a sole authority of local government, and also as a shared authority amongst federal, provincial, and local governments. The DRRM Act 2074 (2017) was amended in March 2019 as the DRRM Act 2075 (2019). It establishes a National Disaster Risk Reduction Management Authority (NDRRMA) (also referred to as NDMA) under the Ministry of Home Affairs (MoHA) and sets out the nature of disaster risk management (DRM) in a federal context. MoHA is leading the ongoing efforts to operationalize the NDRRMA Act. [146] The NDRRMA coordinates and implements DRRM-related functions in the country. The DRRM Act grants several legal, institutional and operational mandates to the federal government, with structural arrangements such as the National Council, the Executive Committee, and the NDRRMA-under MoHA, which is directed by the Home Minister. The DRRM Act assigns overall and specific mandates to the NDRRMA to lead, facilitate and support federal, provincial and local governments on disaster risk reduction, response and reconstruction. The 2019 amendment also includes a provision for a Province Disaster Management council and further specifies the structure and functions of the Provincial Disaster Management Executive Committees. [147]

Through MoHA, particularly the National Emergency Operations Centre (NEOC), international and national organizations coordinate response efforts. The MoHA is responsible for coordinating preparedness and response actions across government ministries, with the security forces and humanitarian partners both domestic and international. Local governments and provincial governments have roles in preparedness and response. In addition, Chief District Officers (CDOs) retain the ability to mobilize the security forces for the purposes of preparedness and response actions.[148] MoHA is responsible for facilitating and coordinating the overall contribution of the international community. This includes the listing and registration of international agencies. In future disaster responses and as the authority becomes more established the NDRRMA will to lead and coordinate through appropriate institutional structures and coordination mechanisms to develop national capacity for DRRM. [149]

Following earthquakes in April and May 2015, the Government of Nepal (GoN) formed the National Reconstruction Authority (NRA). Nepal is also in the phase of post-earthquake reconstruction and is rebuilding infrastructures and supporting livelihoods through the NRA. [150] In the future, it will be the newly formed NDRRMA (2019) who will lead and facilitate rehabilitation and reconstruction. [151]

Disaster Relief and Emergency Response

After receiving information from a potential disaster district or site that an emergency is about to arise, the Disaster Risk Reduction and Management Executive Committee and the NDMA holds meetings, as necessary, for immediate disaster response and coordination

with national and international governmental, non-governmental agencies and organizations working in Nepal. Relevant disaster management committees at the provincial, district, and local level cooperate from their respective sectors. In the event of a disaster in Nepal needing international assistance, the National Disaster Response Framework (NDRF) 2070 (2014), and first amendment, 2075 (2019) details the foreign disaster relief and emergency response process. Figure 11 depicts the structure of disaster response to be carried out in Nepal through internal resources and by appealing for international assistance for effective response during the time of disaster.[152]

When there is a large-scale disaster, the GoN (Council of Ministers) may appeal to the United Nations Office for the Coordination of Humanitarian Affairs, friendly nations, Red Cross Movement, regional offices, donor community, INGOs, international professional groups, and non-resident Nepalis for international humanitarian assistance for disaster response in the form of goods, services, and cash. NDMA shall, on the coordination of the Ministry of Home Affairs, carry out the necessary action for disaster response. The Government of Nepal may, in coordination with the United Nations Humanitarian Coordination, activate a cluster working in Nepal for disaster response and designate the chief or representative of the cluster as full-time point of contact. The NDMA mobilizes the cluster in disaster response functions and actions.
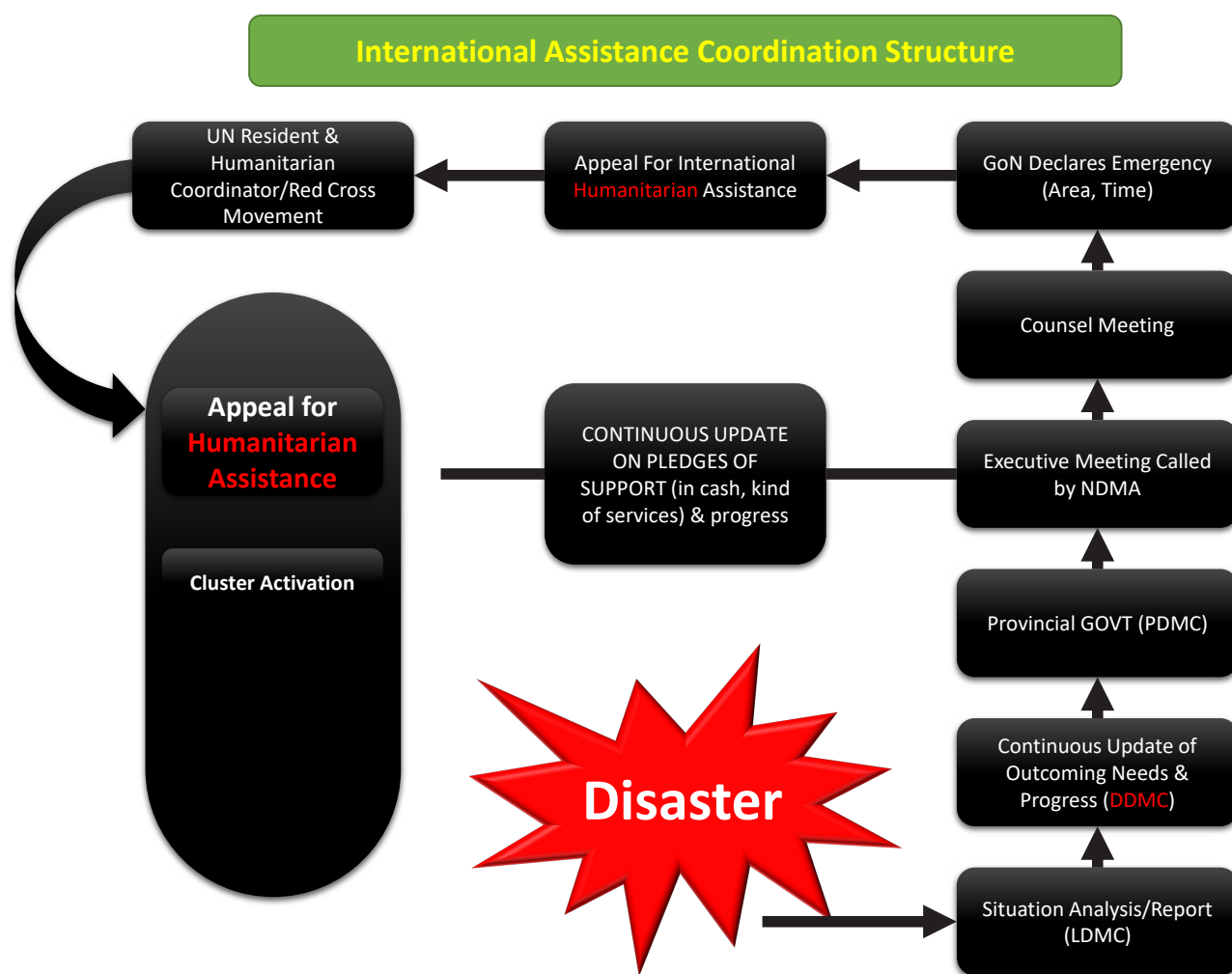
Figure 11: International Assistance Coordination Structure

In accordance with GoN directives, the Nepal-based United Nations Humanitarian Coordinator coordinates the members of the United Nations International Search and Rescue Advisory Group (UN INSARAG) and the United Nations Disaster Assessment and Coordination (UNDAC) Team who have or will come to Nepal pursuant to the GoN's emergency appeal.

According to the NDRF, 2070 (First Amendment, 2075 (2018)), a coordination mechanism shall automatically be established for disaster response, upon the supervision and guidance of the Executive Committee, by the National Disaster Risk Reduction and Management Authority (NDMA), between the National Emergency Operation Center (NEOC), the UNDAC's On-Site Operations Coordination Centre (OSOCC), the Nepalese Army Crisis Management Center (NACRIMAC), and the Multinational Military Coordination Center (MNMCC). During the time of disaster response, the NDMA shall function as the secretariat of the National Council and the Executive Committee as well as disaster control. NDMA may invite humanitarian organizations working in Nepal on search, rescue, and assistance for discussions and

meetings. The communication between OSOCC and MNMCC shall happen through the Emergency Operation Center (EOC) operated by NDMA. In coordination with the OSOCC, the Chief Executive of the NDMA will facilitate international relief efforts in the disaster-affected region, provide an operation platform for assistance, exchange information, and coordinate among national and international humanitarian assistance provider agencies. The United Nations Humanitarian Coordinator will designate a specific person and agency for the overall coordination of the OSOCC. Figure 12 depicts this coordination mechanism. [153]

The GoN may negotiate, as necessary, bilateral or multilateral agreements with neighboring and friendly nations during the time of disaster for search and rescue efforts to adopt the established procedures. In the event that international military assistance is required, international military assistance may be requested and managed in accordance to the GoN (Council of Ministers) and pursuant to the Guidelines for Accepting International Military Assistance/Military Civil Defense Guidelines. For the purposes of facilitation of military and humanitarian assistance coming to Nepal,

Coordination Mechanism Between International Actors

Figure 12: Coordination Mechanism between International Actors

arrival and departure desks may be set up at the Tribhuvan International Airport and other areas.[154]

Armed Forces Role in Disaster Relief

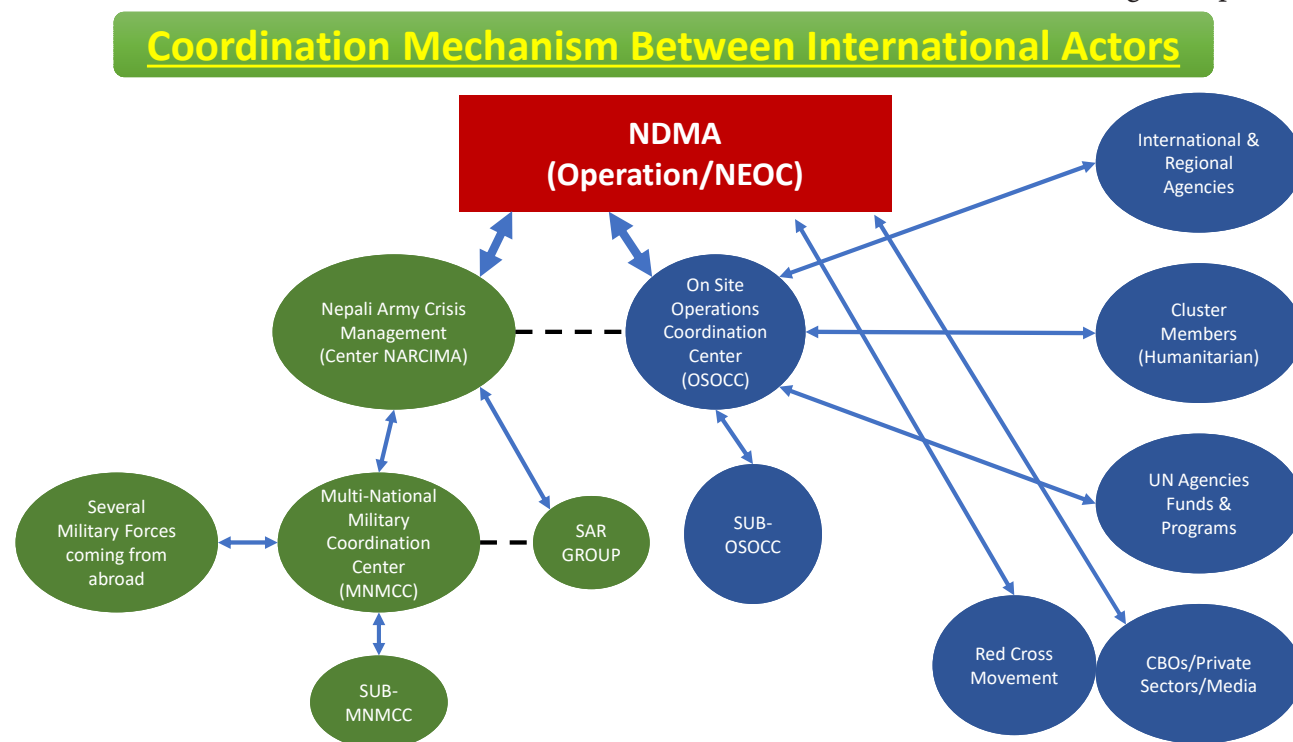The Nepal Army and the Ministry of Health are responsible for coordinating search and rescue, foreign military assets and medical teams, respectively. Should the scale of the disaster involve the deployment of foreign military forces from the regional and international level, the MNMCC will facilitate coordination between the Nepal Army/Nepal Armed Police Force and the assisting foreign military forces so as to increase the speed of response, ensure interoperability, mission effectiveness, and unity of effort. [155]

After a disaster, a command post will be established at NDMA's Operations Center (NEOC) in order to effectively carry out search, rescue, and relief efforts. The chief executive shall lead the command post, while joint-secretary of Ministry of Home Affairs, brigadier general of Nepalese Army's Disaster Management Directorate, deputy inspector general of Nepal Police, and APF deputy inspector general of the Armed Police Force, Nepal are all members of the command post. [156]

The Nepalese Army, with support from and in coordination with other stakeholders, conducted rescue and relief operation in line with the National Disaster Response Framework after the 2015 mega earthquake. It was named Operation 'SANKATMOCHAN' (Liberation from crisis).[157]

Based on the concepts outlined in the emergency plan, a Field Headquarters (HQ) jointly manned by representatives of all the security services was immediately established at the Nepalese Army HQ. This HQ executed the requests/tasks originated by the NEOC. In the same way, a MNMCC was established to coordinate and mobilize the international military humanitarian assistance, army representatives were sent to the NEOC to further coordinate the rescue and relief operations. In the affected districts, rescue and relief operations were launched in most of the municipalities

and Village Development Committees (VDCs). Similarly, maximum ground and air transport resources of the Nepalese Army were mobilized in rescue and relief distribution activities. A total of 66,069 troops were mobilized. Among these 52,870 troops were deployed covering all the municipalities and VDCs in the fourteen most affected districts.[158]

The 2015 Earthquakes: Relief Operations and External Assistance

After the 2015 Earthquakes, emergency relief and humanitarian assistance was provided to the affected population with the active support of and contribution by over 60 countries as well as the United Nations and other international agencies. [159] The Ministry of Home Affairs (MoHA) was lead for the GoN response and took the lead in responding to the disaster at the national level. The Natural Calamity Relief Act of 1982 directs MoHA to formulate, implement, and promote disaster related plans, programs, and projects. Using the NDRF 2013 as a guide, the GoN, through MoHA, mobilized response, search, and rescue teams, requested international assistance, activated the cluster framework for disaster response, and coordinated multiple foreign search and rescue assistance.[160]

Nepal's National Disaster Response Framework (NDRF) served as a key tool for coordination of earthquake response, facilitating decisions and instructions from the central government. The first meeting of the Central Disaster Relief Committee (CDRC) was held two hours after the first earthquake, with the National Emergency Operation Centre (NEOC) providing an initial report to the CDRC recommending a focus on Search and Rescue (SAR), and lifesaving actions. Financial resources from the Prime Minister's Disaster Relief Fund were immediately allocated, and the government's Cluster mechanisms were activated.[161]

Nepal's response to the disaster was largely effective, although constrained by limited resources and a very difficult geography. Nepal had the primary burden for coordinating and

responding to this disaster, while international civilian and military efforts filled critical gaps and reinforced the GoN during the initial crisis. The MNCC was the primary mechanism for coordinating the Nepali government and the international disaster response efforts during the first week following the earthquakes.[162]

After activating its national emergency operation center and convening a meeting of its Central Natural Disaster Relief Committee (CNDRC) on April 25, the GoN declared a state of emergency and requested international assistance. The GoN initial needs assessment identified several support priorities: search and rescue capacity, medical assistance, rubble removal equipment, and logistical transportation to difficult access areas. The GoN used the National Disaster Response Framework's (NDRF) humanitarian response timeline to structure their actions.[163]

A number of rapid response mechanisms were triggered after the earthquake including United Nations Disaster Assessment and Coordination (UNDAC), Humanitarian-Military Operations Coordination Centre (HuMOCC), USAR teams, the International Humanitarian Partnership (IHP), Foreign Medical Teams (FMT), and Emergency Response Roster (ERR) surge support. The mobilization of USAR teams were deployed to the response and many stayed beyond the search and rescue period to support response efforts. In total, over 100 USAR teams were deployed.[164] In the first days of the response, the Resident Coordinator's Office (RCO) and OCHA hosted the Nepal Earthquake Assessment Unit combining technical capacities OCHA, RCO, the Assessment Capacities Project (ACAPS), and MapAction. The unit worked to improve information sharing and strengthen the quality of data collected and analyzed. [165]

Disaster response occurred through the cluster approach, which was led by MOHA, and NGOs and UN agencies worked as co-leads. Coordination meetings were conducted every week and MOHA shared information with cluster members. Due to crowded inter-cluster meetings, MOHA asked the parties to have separate cluster meetings, advising them

to make decisions at the meetings and report to the government. In terms of the coordination mechanisms, the international appeal was channeled through the UN system, as well as bilaterally and regionally through South Asian Association for Regional Cooperation (SAARC). Coordination and decision making in the emergency response also went through the DRRC at all levels. Humanitarian cluster members integrated into the DRRC mechanism and participated in the coordination meetings organized by each DRRC.[166]

Though Nepal did not have an integrated national search and rescue (SAR) capacity formed prior to the event, the trained human resources of the Nepal Army (NA), Nepal Police (NP) and Armed Police Force (APF) carried out SAR. The Indian National Disaster Response Force, Indian Air Force and Indian Army Medical Corps were the first foreign contingents to arrive in Kathmandu within hours of the disaster to help launch relief operations. In total, 134 international SAR teams from 34 countries responded to Nepal's request for help. For SAR, 4,236 helicopter flights were used (GoN/private), with 7,558 persons rescued by air and 4,689 persons rescued by land, and approximately 90% of the security forces were mobilized to focus on SAR. Overall, 22,500 civil servants, 65,059 staff of the Nepal Army, 41,776 staff of Nepal Police and 24,775 staff of the Armed Police Force, as well as 4,000 government and private health workers were mobilized. [167]

A newly constructed humanitarian staging area at the Tribhuvan International Airport (TIA) facilitated the receipt of cargo by air and by truck immediately after the earthquake so that distribution around the country could commence. Aircrafts from friendly countries were engaged in carrying out numerous sorties to bring relief supplies into the country and to distribute them in remote areas. Transit shelters were established immediately in Kathmandu with official support in designated public spaces. The distribution of relief materials proved challenging because of the remoteness of many villages, rugged terrain, threat of landslides, and logistical difficulties. Many families were seeking

temporary shelter in the open due to the fear of being trapped in buildings that could or did collapse. Certain supplies such as tarpaulins, proved inadequate. [168]

The NDRF does have integration of international humanitarian norms and guidelines written into it in order to make connections to organizations coming in from abroad at a time of emergency and reduce time for coordination adjustment. However, the NDRF did not target any coordination with local/Nepali NGOs. Approximately 75 Nepali NGOs and 144 international NGOs were not considered in the NDRF. Most of the Nepali NGOs operated in the education, nutrition, health, and emergency shelter clusters. Many international NGOs also collaborated with Nepali NGOs to deliver emergency relief, and following the 2015 earthquakes, a coalition of Nepali NGOs developed an independent coordination website.[169]

According to the post disaster needs assessment from the Nepal 2015 Earthquake, the reconstruction and recovery program for the DRR sector was to be implemented by National Planning Commission (NPC) and key ministries including MoHA, Ministry of Agriculture and Livestock Development (MoFALD), Ministry of Urban Development (MoUD), Ministry of Industry (MoI), and Ministry of Science, Technology and Environment (MoSTE) collaboratively in close coordination with a national DRM focal point system including the national DRM platform and the Nepal Risk Reduction Consortium.[170] Respective ministries at federal level are responsible for leading the disaster preparedness and response clusters. For instance, the Ministry of Health and Population (MoHP) leads the health and nutrition clusters and the Ministry of Water Supply and Sanitation leads the WASH sector.[171]

Laws, Policies, and Plans on Disaster Management

The Government of Nepal has developed various legal and institutional arrangements to plan and manage disaster risk reduction and management activities. This includes the following list:[172]

- Natural Calamity (relief) Act 1982 (The Disaster Risk Reduction and Management Act 2017 replaces the 1982 Act)
- Local Self Governance Act 1998 (note: Local Government Operation Act 2018 replaces the 1998 Act).
- Building Act 1998
- National Building Code 2004
- National Strategy for Disaster Risk Management 2009 (note: The Disaster Risk Reduction National Strategic Action Plan of Action 2015-2030 replaces the 2009 version)
- Climate Change Policy 2011
- Land Use Policy 2012
- Water Induced Disaster Management Policy 2012
- National Reconstruction and Rehabilitation Policy 2015
- National Disaster Response Framework
- Basic Guideline related to Settlement Development
- Urban Planning and Building Construction 2016
- National Urban Development Strategy 2016
- Constitution of Nepal 2015
- Local Government Operation Act 2018
- Disaster Risk Reduction and Management Act 2017
- National Disaster Risk Reduction Policy (2018)
- Disaster Risk Reduction National Strategic Plan of Action (2018-2030)

The Government of Nepal (GoN) has endorsed a National DRRM Policy 2075 (2018) and Disaster Risk Reduction National Strategic Action Plan 2018-2030, which provides a comprehensive planning framework for disaster risk reduction and management in Nepal, encompassing different priority areas and guiding government actors and stakeholders to achieve targets by adopting appropriate processes.[173] In addition, the National Disaster Response Framework, 2070 (2014), and first

amendment, 2075 (2019) has been formulated to ensure the role of governmental bodies and the private sector in order to effectively carry out disaster response activities.[174]

National Disaster Response Framework (NDRF), 2070 (2014), and first amendment, 2075 (2019)

The National Disaster Response Framework (NDRF) provides guidance for an effective and coordinated response at the national level to a disaster that affects Nepal. Under the directive of the Disaster Risk Reduction and Management Executive Committee, the National Disaster Risk Reduction and Management Authority (NDRRMA) and the relevant agencies shall have the main responsibility to execute preparedness and response activities relating to the National Disaster Response Framework, 2070 (2014), and first amendment, 2075 (2019). The framework will be implemented immediately after it has been approved, on the recommendation of the Executive Committee, by the National Disaster Risk Reduction and Management Council (National Council). While having this framework implemented, the NDRRMA works in coordination with governmental agencies and organizations working in the non-governmental and humanitarian sectors at the federal, provincial, and local levels. [175]

National Disaster Risk Reduction Policy (2018)

The National Disaster Risk Reduction Policy (2018) is Nepal's first policy aimed at ensuring a long-term provision towards disaster risk reduction and management. The policy has been drafted in line with the Disaster Risk Reduction and Management Act 2074 (2017). The main objective of this policy is to substantially reduce the natural and non-natural disaster losses in lives and properties of persons, health, means of livelihood and production, physical and social infrastructures, cultural and environmental assets. The other objectives of the policy are the following: [176]

- To increase understanding on disaster risk and ensure the access of information related to the disaster risk at all levels.
- To strengthen disaster risk governance for disaster risk reduction and management.
- To mainstream disaster risk reduction in all development processes by integrating it with climate change adaptation activities.
- To enhance disaster resilience by increasing public and private investment in disaster risk reduction.
- To make disaster preparedness and response effective by improving disaster information management system and developing and expanding multi-hazard early warning system.
- To ensure "Build Back Better" approach for post-disaster recovery, rehabilitation, and reconstruction.

Disaster Risk Reduction National Strategic Plan of Action (2018-2030)

The National Disaster Risk Reduction and Management Strategic Plan of Action (2018-2030) is a legal based planning framework that covers all stages of disaster risk management in the country.[177] It was endorsed by the National Disaster Risk Reduction and Management Council at a meeting held on 18 June 2018 and has been drafted in line with the Disaster Risk Reduction and Management Act 2074 (2017). This strategic action plan takes into account the experiences gained from the implementation of National Strategy for Disaster Risk Management 2009, (which this 2018-2030 Plan replaces). This Plan of Action was formed from experiences and lessons learned from recent major disasters including the 2015 Gorkha earthquake, and initiatives on Climate Change Adaptation and Sustainable Development Goals. The action plan has four main priority areas as seen in Figure 13. [178] The Disaster Risk Reduction National Strategic Action Plan (2018-2030) proposes priority actions for 2018 to 2020 in the short-term, 2018 to 2025 in the medium-term, and 2018 to 2030 in the long-term, assigning responsibilities within relevant federal, provincial and local governments.[179]

Priority Area 2: Strengthening Disaster Risk Governance at Federal Provincial and Local Level.	**Priority Area 3:** Promoting Comprehensive Risk-Informed Private and Public Investments in Disaster Risk Reduction for Resilience.	**Priority Area 4:** Enhancing Disaster Preparedness for Effective Response and to "Build Back Better" in Recovery, Rehabilitation and Reconstruction.

Priority Area 1: Understanding Disaster Risk
Comprehensive understanding of disaster risk through common national framework for risk assessment.

Figure 13: Priority Areas for Disaster Risk Reduction in Nepal

Disaster Risk Reduction and Management Act (DRRMA) no. 2074 (2017)

Nepal's Parliament enacted the Disaster Risk Reduction and Management Act. The Act was amended in March 2019. It establishes a National Disaster Risk Reduction and Management Authority (NDRRMA) which is being established, to coordinate and implement DRRM related functions nationally.[180] It sets out the nature of disaster risk management (DRM) in a federal context. MoHA is leading the ongoing efforts to operationalize the DRRMA Act.[181] According to the DRRMA 2074 (2017), the National Council shall issue directives and exercise control in relation to disaster management; based on those directives, the Executive Committee shall formulate necessary policies, plans, and programs as well as implement them; and the NDRRMA, which shall serve as the secretariat of the Council and the Executive Committee, shall function as the responsible agency to carry out SAR, and relief relating to disaster response as well as disaster risk reduction and recovery efforts. [182]

Disaster Management Partners

Nepal has a vast network of UN agencies, international and national NGOs working on humanitarian, recovery and development programs.[183] The humanitarian system comprises a large number of organizations, which conduct similar activities in support of disaster or crisis-affected populations in the same geographical areas.

The Clusters are one element of the international humanitarian coordination system. They are groups of humanitarian organizations, both UN and non-UN, in each of the main sectors of humanitarian action, e.g. water, health, logistics, etc. They are designated at the global level by the Inter-Agency Standing Committee (IASC) and have clear responsibilities for coordination.

The Humanitarian Country Team (HCT) is a strategic and operational decision-making body comprising the key agencies and organizations providing humanitarian response in-country.[184]

Humanitarian Country Team (HCT)

The HCT is responsible for agreeing on common strategic issues related to humanitarian issues in support of a government-led response. If after a disaster, the Government of Nepal officially requests international assistance, the Humanitarian Coordinator (HC) is responsible for coordinating the Humanitarian Country Team (HCT).The RC leads the HCT as the forum for strategic and operational decision making.

The Humanitarian Country Team plus (HCT+) includes key donors to further strengthen joint response efforts. The HCT+ consists of UN agencies, Red Cross, INGOs, and donors which meet on a regular basis to coordinate and plan response efforts. In accordance with the direction of the HCT+, Cluster Support Agencies, District Level Support Agencies and humanitarian partners will ensure a coordinated response among partners. This responsibility requires coordination with the Government of Nepal, other agencies, and local NGOs. In addition to the HCT+ mechanism, the Association of I/NGOs (AIN) provides an additional forum for I/NGO partners to coordinate and align response efforts.[185]

The HCT have developed contingency plans for disasters in Nepal including monsoon flooding and earthquake preparedness:

HCT Contingency Plan: Nepal Monsoon Flooding (May 2019)

The aim of this document is to strengthen preparedness planning in seven provinces with a focus on highly flood prone areas and complement the role of the GoN as the overall lead on emergency response in Nepal. Should this plan be activated the RC would immediately convene an HCT Principals meeting. Based on a normal monsoon scenario, it is anticipated that the HCT Operational would meet on a weekly basis during the monsoon period following an HCT response, with the HCT Principals convened as required. The MoHA would be invited to attend the HCT Principals meeting as required. The NEOC and the HCT Principals would be in constant communication to ensure optimal results during any response. The HCT Principals through the NEOC would coordinate international response and relief efforts for Nepal, in coordination with the GoN. [186]

HCT Contingency Plan: Nepal Earthquake (February 2016)

This Contingency Plan focuses on new earthquake scenario modeling based on the availability of historical records, new data and methodological improvements, and engagements with partners and Durham University. This worst-case scenario describes a Megawatt (Mw) 8.6 earthquake generating high shaking intensities across an area from the Terai in the south to the Himalaya range in the north. The scenario incorporates lessons from the 2015 earthquakes response.

The Far-Western region of Nepal is likely to experience the greatest impact of the scenario: 20km Depth, 475km rupture length, max intensity 9 (violent). Overall, based on the projections of this 'worst case' scenario, the possible humanitarian consequences and needs include over 280,000 people killed, 3.5 million people injured, 7.8 million people displaced and 927,000 destroyed houses. This is exacerbated by significant damage to roads and public infrastructure impacting access and services to affected communities.[187]

HCT COVID-19 Preparedness and Response Plan (CPRP)

The HCT created a COVID-19 Preparedness and Response Plan (CPRP) which reflects the MoHP Health Sector Emergency Response Plan. The HCT and the clusters are working in collaboration with and support to the Government. The revised CPRP has a planning assumption of a caseload of 10,000 people infected with COVID-19. The CPRP includes a significant health component, but also highlights needs related to coordination planning and monitoring, protection, risk communication and community engagement, food security, water sanitation and hygiene (WASH), nutrition,

education, shelter/ CCCM, early recovery, and logistics. The HCT is working with the GoN towards having a joint COVID-19 Nepal Preparedness and Response Plan. [188]

The International Red Cross and Red Crescent Movement

International Committee of the Red Cross

The International Committee of the Red Cross (ICRC) is a private, independent humanitarian organization, headquartered in Geneva. The ICRC bases its activities on the provisions of International Humanitarian Law, and is neutral in politics, religion, and ideology. The ICRC assists with the protection of civilian victims of armed conflict and internal strife and their direct results. Within these roles, it may take any humanitarian initiative as a neutral and independent intermediary.[189]

International Federation of Red Cross and Red Crescent Societies

The International Federation of Red Cross and Red Crescent Societies (IFRC) is a humanitarian organization that provides assistance and promotes humanitarian activities by their National Societies, with a view to preventing and alleviating human suffering. It was founded in 1919 and includes 192 National Societies. The IFRC carries out relief operations to assist victims of disasters and combines this with development work to strengthen the capacities of its member National Societies.[190] IFRC in Nepal has been engaging as a co-lead of Shelter Cluster which is led cluster mechanism and also is IFRC is a Secretariat of Community Based Disaster Risk Management (CBDRM) Platform which is led by Ministry of Federal Affairs and General Administration(MoFAGA).[191]

IFRC is the world's largest humanitarian network that reaches 150 million people in 192 countries through the work of over 17 million volunteers. In Nepal, IFRC supports the Nepal Red Cross Society (NRCS) to advocate for the nationwide scale-up of community resilience-building efforts through different forums such

as the Humanitarian Country Team (HCT) and the CBDRM Platform. As a Secretariat of the CBDRM Platform, NRCS and IFRC engage in policy dialogue with various stakeholders and support the dissemination of best practices in community programming, emphasizing the role of local actors in sustaining local development strategies that leave no one behind. [192]

Nepal Red Cross Society

After the 2015 Earthquakes, the International Red Cross Red Crescent Movement (RCRC Movement) mobilized the full range of their resources to support the relief and recovery efforts. The Nepal Red Cross Society (NRCS) led the implementation and delivered immediate humanitarian assistance to more than 3.5 million people in more than 44 affected districts from 160 Village Development Committees (VDCs). NRCS activated its emergency operation centers (EOC) at national headquarters' and in affected districts and 8,000 trained volunteers from 50 districts chapters delivered immediate humanitarian assistance to the affected communities by providing emergency health care, first aid and blood services. The Movement partners supported NRCS through the deployment of health Emergency Response Units (ERUs) that ensured medical services to the affected communities.[193]

Figure 14 shows the key relief efforts from the Nepal Red Cross Society after the 2015 earthquakes. [194]

U.S. Government Agencies in Nepal

USAID has supported the Program for the Enhancement of Emergency Response since 1998. This program assists Nepal's disaster management agencies organize and conduct trainings on medical first response, collapsed structure search-and-rescue, and hospital preparedness for mass casualties following a disaster. USAID also trains communities on basic life support, light search and rescue, dead body management, and best practices on how

Key Milestones of the Operation

2015
- IFRC launched emergency appeal
- Concept of ERO put in place
- Integrated Recovery concept developed and presented
- Operational Guideline
- Concept of movement-wide plan and report
- MoU with DUDBC

2016
- Core staff recruited
- Sectorial technical guideline
- Agreement with NRA
- MoU with DWSS and most of the partners
- NRA 5W reporting introduced
- Integrated baseline survey conducted
- Institutional capacity assessment done

2017
- Web-based MIS implemented
- External mid-term review done
- Way forward meeting conducted
- Discussion started for transition planning

2018
- Joint review meeting conducted
- Transition plan drafted for recovery programme
- Transition Management Team and Consultative Body activated
- ERO structure extended by EQ steering committee until July 2018
- Implementation of transition plan with NRCS normal structure

2019
- Linking Transition model to NRCS strategic priorities
- Lesson learned workshop conducted in March 2019
- Started district wise handover process to local authorities at district level
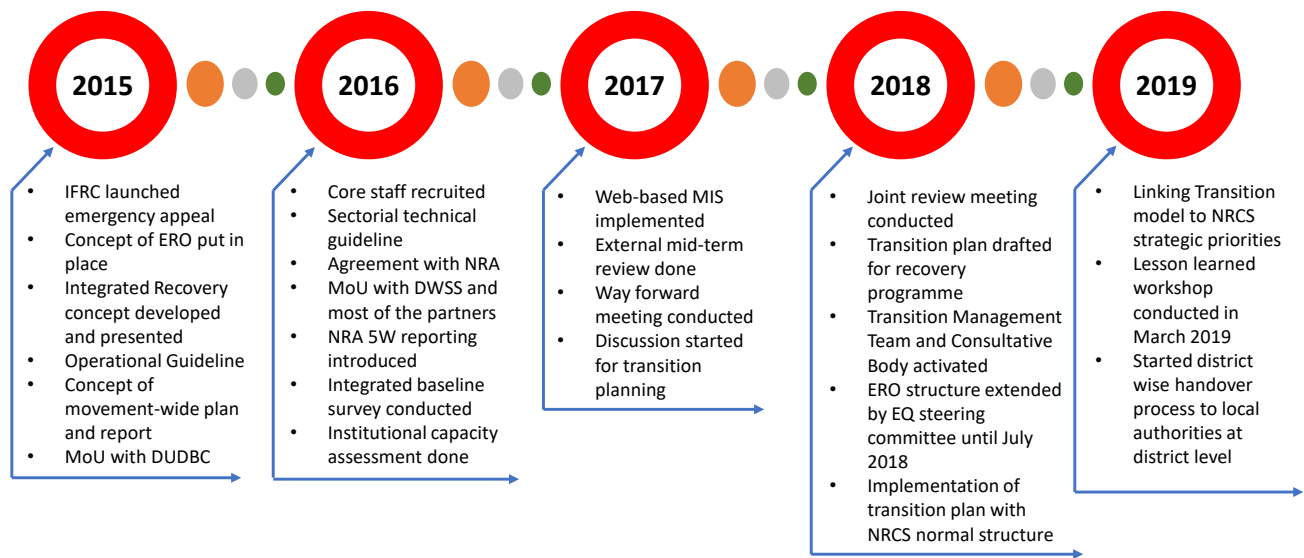
Figure 14: Overview of Nepal Red Cross Society Relief Efforts After the 2015 Earthquakes

to respond to multiple casualties through a program called Community Action for Disaster Response, in partnership with the American Red Cross and the NRCS. They also have a qualified pool of engineers and technical experts through their partnership with the Kathmandu-based National Society for Earthquake Technology. USAID trained people on how to conduct seismic risk assessments and develop earthquake preparedness plans.[195]

Immediately after the 2015 earthquakes, USAID mobilized its partners to provide recovery support.[196]

Another way USAID is supporting Nepal is through training and technical assistance. USAID is funding two housing reconstruction projects on building earthquake-resistant homes over the next five years. Establishing local-level reconstruction technology centers, demonstration homes, and offer vocational trainings are parts of these projects. In partnership with the GoN, USAID also supports communication and outreach to affected households to build back safer. [197]

USAID also has health programs in Nepal which are preventing the spread of diseases by ensuring access to clean water and proper hygiene, delivering family planning services, and counseling to women, and distributing Vitamin

A supplements to children. [198]
USAID's contact information includes:

USAID
Mission Contact
Adriana Hayes, Acting Mission Director
U.S. Embassy
Maharajgunj, Kathmandu, Nepal
PO Box: 295
Phone 977-1-423-4620
Fax 977-1-400-7285
Email *usaidnepal@usaid.gov*

USAID Contact
Sanjay R. Iyer, Desk Officer
U.S. Agency for International Development
1300 Pennsylvania Avenue, NW
Washington, DC 20523, USA
Phone: 202-712-4432
Email: *saiyer@usaid.gov*

U.S. Embassy in Kathmandu, Nepal
Address: U.S. Embassy Kathmandu
Maharajgunj, Kathmandu, Nepal
Phone: +(977)(1) 423-4000 or 400-7269.
Emergency after-hours telephone:
+(977)(1) 400-7266, 400-7269
Website: *https://np.usembassy.gov/*
Email: *consktm@state.gov*

Disaster Management Communications

Early Warning Systems

The Department of Hydrology and Meteorology (DHM) is a mandated GoN entity responsible for monitoring hydrological and meteorological activity in Nepal. The mass alert system is operated in partnership with NTC and NCell telecom service providers of the affected areas.[199] The reorganized structure of the GoN implemented on 23 February 2018 moved DHM back under the Water Resources Ministry. DHM has made achievements in their flood early warning system (EWS), which has significantly reduced the loss of lives and properties. DHM has established flood EWSs in major rivers, in a few flashing rivers and in areas downstream of two glacial lakes that are considered potentially dangerous. In June 2018, Nepal created a publication, Standard Operating Procedure for Flood Early Warning System (SOP-FEWS). Floods are predicted at the flood forecast and flood warning centers managed by DHM. Flood warnings are disseminated via Internet, display boards and SMS texts when the water level crosses a specified flood watch mark.[200] Figure 15 depicts the dissemination for flood early warning systems in Nepal.[201]

In collaboration with the Department of Hydrology and Meteorology (DHM), MoHA has already established a web-based National Emergency Operation Center (NEOC) in Kathmandu and District Emergency Operation Centers (DEOCs) in most districts in Nepal. NEOC and DEOCs are open 24 hours a day throughout the year. Similarly, DHM is a designated government entity for predicting and disseminating weather forecasts and warnings. DHM maintains hydrological and meteorological stations equipped with telemetry systems and is in the process of upgrading several of its hydrometric stations with telemetry.[202]

Non-Governmental Organizations (NGOs) are also contributing to disaster risk mitigation and monitoring in Nepal. DHM has been working with a number of NGOs on the development of a Memorandum of Understanding (MoU) in the field of information dissemination to affected communities. The roles of government agencies and NGOs engaged in disaster mitigation efforts are defined in Table 4. Information is divided by monitoring, risk assessment, forecast dissemination and capacity building categories.[203]

DHM has collaborated with the World Meteorological Organization (WMO) on different meteorological and operational hydrology activities. As a member of WMO, Nepal has access to global and regional meteorological data required for monitoring and forecasting floods. Nepal has also been
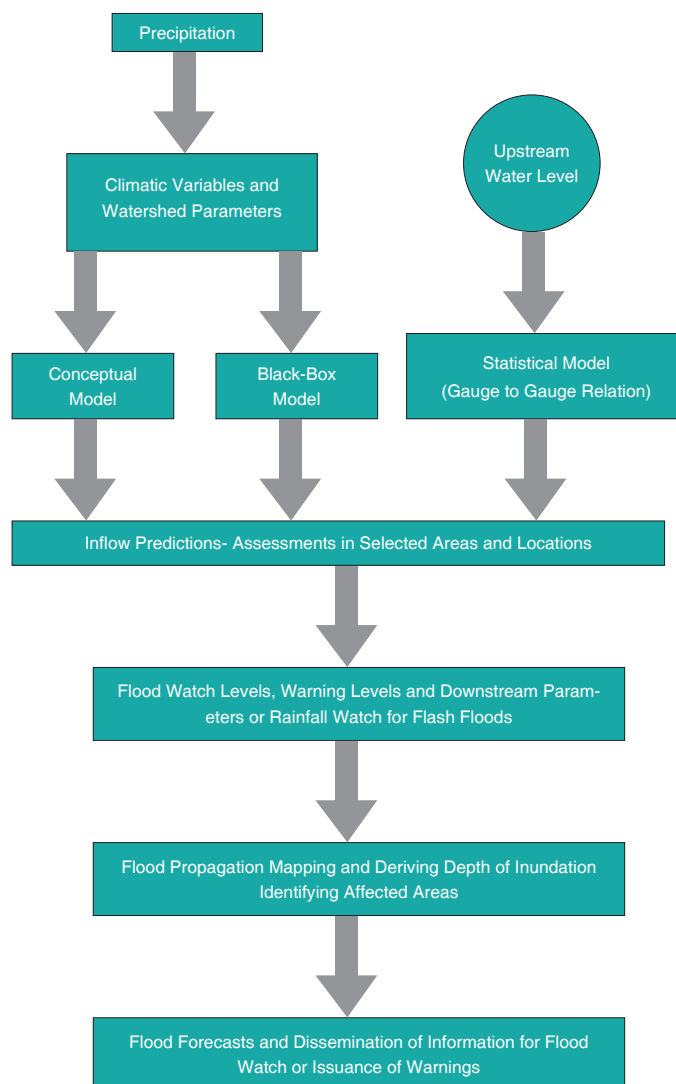

Figure 15: Flowchart of Flood Forecast and Dissemination

Component	Task	Responsibility
Monitoring	Manuals, guidelines, trainings and quality management	Flood Forecasting Center, DHM
	Operation, maintenance and upgrading of stations; maintenance of hydrological and meteorological equipment	District DHM offices
	Operation of telecommunication systems and software management	Outsourced with supervision by DHM
	Maintenance and operation of manual observation systems at monitoring sites	Community
	Processing data received from a telemetry/manual observation with necessary validation	Flood Forecasting Center, DHM
	Development of high-resolution spatial data	DHM
Risk Assessment	Hydrological and hydraulic modeling	Flood Forecasting Centre, DHM
	Floodplain mapping and risk identification with field verification	Flood Forecasting Centre, DHM
	Obtaining additional support from Common Alerting Protocol (CAP) such as Google Public Alerts and Global Flood Detection System (GFDS)	DHM
Forecast Dissemination	Disseminate flash flood watches, warnings and severe flood warnings to communities and relevant agencies	DHM, NEOC, DEOC/PEOC
	Feedback through self-assessment and feedback from communities	Flood Forecasting Centre, DHM
Capacity Building	Training	Training Section, DHM
	Awareness Programs: piloting, preparation of awareness materi-als, seminars, workshops and interactive programs, mock-drill exercises, etc.	All key stakeholders and NGOs
	Aid provision to handicapped members of local communities	Local government agencies and NGOs
	International collaboration and manage-ment of information - Decision Support System (DSS), Global Flood Detection System (GFDS), Quantitative Precipitation Forecast (QPF) from Regional Integrated Multi-Hazard Early Warning System-RIMES, National Oceanic and Atmospheric Administration-NOAA, Tropical Rainfall Measuring System (TRMM) etc.	DHM

Table 4: Government and NGO roles for Flood Early Warning Systems

working closely with their neighbor countries on upgrading its hydrological and meteorological monitoring systems. Since all the rivers of Nepal merge into the Ganga-Brahmaputra river system, Nepal has bilateral arrangements with India and Bangladesh that support the sharing of hydro-meteorological data and flood information. The National Seismological Centre (NSC) and Nepal's National Emergency Operations Center (NEOC) monitor earthquake activity. Information is posted to the NSC website. In Nepal there are several GPS Stations to utilize and collect data. Both the NSC and the NEOC post alerts and situation reports to their websites. [204]

Information Sharing

Understanding how to overcome the information challenges that civilian and military agencies experience during a typical disaster response mission is important. Knowing what the available Humanitarian Assistance and Disaster Relief (HADR) resources are, will assist Joint Task Force leaders and staff during mission planning.[205] Sharing information is critical since no single responding entity, NGO, International Governmental Organization (IGO), assisting country government, and host government can be the source of all the required information.[206]

Collaboration, information sharing (IS), and networking have been the backbone of successful disaster response and preparation. Disseminating information not only to those in-country and threatened by disaster, but also to those responding to assist in the emergency has been crucial to timely, efficient, and effective disaster response. Recent technology has advanced to aid predicting and alerting of disasters around the world which has resulted in early warning and evacuation measures and well as opportunities to react and prepare for incoming threats to countries. The following are some of the ways in which information regarding disaster risk management and response are shared. Managing information is central to the overall mechanisms within disaster preparedness and response. There are many resources, stakeholders, and

components to consider with IS before, during, and after a natural disaster. This section will discuss country-specific, humanitarian, regional, government, and DoD information sources.

Nepal Information Sources:
The Government of Nepal's disaster information management system provides valuable information:
Website: *https://bipad.gov.np/profile/*

The Government of Nepal has a Nepal Disaster Risk Reduction (DRR) Portal. It reports the number of incidents, recent news, and major updates. It also lists reports to include DRR acts and policies, the National DRR Policy and Strategic Action Plan, risk information, relief distributed, and other information.
Website: *http://drrportal.gov.np/home*

The Government of Nepal posts materials to the Ministry of Health and Population webpage.
Website: *https://heoc.mohp.gov.np*

The Health Emergency Operation Center (HEOC) has an information portal divided into the following categories:
- Training (Health Emergency and Disaster Related Training Programs)
- Portal: Disasters
- Risk Profile of Nepal
- Hub Satellite Info
- Provincial Health Emergency Operation Centers (PHEOCs)
- Health Facilities
- Health Clusters Partners
- Disaster Knowledge

The Government of Nepal posts Coronavirus disease (COVID-19) outbreak updates and resource materials to the Ministry of Health and Population webpage. The Health Emergency Operation Center (HEOC) has daily situation reports in both English and Nepali.
Website: *https://heoc.mohp.gov.np/update-on-novel-corona-virus-covid-19/*

Earthquake and weather updates are also posted to the HEOC webpage which links into the Government of Nepal's Ministry of Industry, Commerce and Supplies, Department of Mines and Geology, and National Seismological Centre.
Website: *http://seismonepal.gov.np/home*

Nepal's National Disaster Risk Reduction and Management Authority (NDRRMA) has both official twitter and Facebook pages where they post disaster related information in Nepali.
Twitter: *@NDRRMA_Nepal*
Facebook: *@NDRRMA*

Humanitarian Information Sources

United Nations Office for the Coordination of Humanitarian Affairs (OCHA) Regional Office for Asia and the Pacific (ROAP) seeks to optimize the speed, volume and quality of humanitarian assistance and coordinates emergency preparedness and response in the world's most disaster-prone region in support of national governments. ROAP covers 41 countries partnering with them for coordinated and effective international responses to emergency situations.
Website: *https://www.unocha.org/roap*

For OCHA situation reports, click on "Subscribe" button on bottom of page.

ReliefWeb is a service of UN Office for the Coordination of Humanitarian Affairs (OCHA) that consolidates information and analysis from organizations, countries, and disasters for the humanitarian community.
Website: *https://reliefweb.int/*

PreventionWeb is provided by the UN Office for Disaster Risk Reduction (UNDRR, formerly UNISDR) to consolidate disaster risk reduction information into an online, easy to understand platform.
Website: *https://www.preventionweb.net/english/*

International Federation of Red Cross and Red Crescent Societies (IFRC) is the world's largest humanitarian organization, comprised of its 192-member National Societies including Nepal Red Cross Society, a secretariat in Geneva and over 60 delegations around the world. The IFRC carries out relief operations to assist victims of disasters and combines this with development work to strengthen the capacities of its member National Societies. The IFRC's work focuses on four core areas: promoting humanitarian values, disaster response, disaster preparedness, and health and community care.[207]
Website: *https://media.ifrc.org/ifrc*

The International Committee of the Red Cross (ICRC) is an impartial, neutral and independent organization whose exclusively humanitarian mission is to protect the lives and dignity of victims of armed conflict and other situations of violence and to provide them with assistance. It also works to prevent suffering by promoting and strengthening humanitarian law and universal humanitarian principles. ICRC, together with IFRC and the 192 Red Cross Red Crescent Societies, make up the Red Cross Red Crescent Movement.[208]
Website: *https://www.icrc.org/en*

Humanitarian Response is a platform providing the humanitarian community a means to aid in coordination of operational information and related activities.
Website: *https://www.humanitarianresponse.info*

Global Disaster Alert and Coordination System (GDACS) is a cooperation framework between the United Nations, the European Commission and disaster managers worldwide to improve alerts, information exchange and coordination in the first phase after major sudden-onset disasters.
Website: *https://www.gdacs.org/alerts/*

Virtual OSOCC is a real-time online coordination tool for disaster response professionals from USAR teams, national authorities, as well as regional and international organizations at a global level.
Website: *https://vosocc.unocha.org/*

The latest alerts can be found here: *http://www.gdacs.org/Alerts/default.aspx*

To subscribe: *http://www.gdacs.org/About/contactus.aspx*

Consider other information resources, such as:

Think Hazard is a website that provides detailed information on a country. Information is provided on Nepal regarding hazards, country assessments, projects, early warning systems, and other resources. You can log onto their website at *http://thinkhazard.org*

Humanitarian Country Teams (HCT)
The HCT is a strategic and operational decision-making and oversight forum established and led by the Humanitarian Coordinator in each country. It is generally comprised of representatives from UN agencies including the IOM, international NGOs, and the IFRC as well as the respective National Society in the country. During a disaster response, HCTs often produce a Situation Report (SitRep), usually in conjunction with OCHA.
Most HCT SitReps can be found through ReliefWeb: *https://reliefweb.int/*

Humanitarian Data Exchange (HDX) is an open platform for sharing data across crises and organizations launched in 2014 with the goal of centralizing humanitarian data for easy access and analysis. HDX is managed by OCHA's Center for Humanitarian Data in the Hague.
Website: *https://data.humdata.org/*

Regional Information Sources

Changi Regional HADR Coordination Centre (RHCC)
RHCC was launched in September 2014 to support the military of a disaster affected state

in coordinating assistance with assisting foreign militaries. It aims to provide open, inclusive and flexible platforms that allow both regional and extra-regional militaries to work together effectively in a multinational disaster response. RHCC manages the OPERA CIS web portal to broadcast the updated situation status of multinational military responses to disasters to minimize duplication and gaps in the provision of foreign military assistance.
Website: *https://www.changirhcc.org/*

To subscribe to RHCC Weekly and Spot Reports, email: *Changi_RHCC@defence.gov.sg*

U.S. Government (USG) Sources

U.S. Agency for International Development (USAID)

USAID is committed to responding to crises around the world to help people and places most in need. They aim to:
- Promote Global Health
- Support Global Stability
- Provide Humanitarian Assistance
- Catalyze Innovation and Partnership
- Empower Women and Girls

USAID produces a monthly newsletter called USAID Newsletter which is available digitally at https://www.usaid.gov/news-information/newsletter.

More information and updates from USAID are available via their blog, IMPACT, at *https://blog.usaid.gov/* and on Facebook, Instagram, Twitter, and YouTube.
Website: *https://www.usaid.gov/*

Bureau for Humanitarian Assistance (BHA)

The Bureau for Humanitarian Assistance (BHA) is responsible for leading and coordinating the U.S. Government response to disasters overseas. BHA responds to an average of 65 disasters in more than 50 countries every year. BHA fulfils its mandate of saving lives, alleviating human suffering and the reduction of the social and economic impact to disasters worldwide in partnership with USAID functional and regional bureaus and other U.S. government agencies. BHA works with the international population to assist countries prepare for, respond to and recover from humanitarian crises.[209]

USAID/BHA products include situation reports and maps, which are available via email mailing lists as well as Reliefweb.org. Info products (HA Updates/Fact Sheets, etc) are also available on USAID.gov (*https://www.usaid.gov/humanitarian-assistance*)

For BHA updates on a disaster response, ask the BHA representative for the respective COCOM to add you to the email list:
- *BHA.INDOPACOM@usaid.gov*
- *BHA.SOUTHCOM@usaid.gov*
- *BHA.NORTHCOM@usaid.gov*
- *BHA.AFRICOM@usaid.gov*
- *BHA.SOCOM@usaid.gov*
- *BHA.CENTCOM@usaid.gov*
- *BHA.EUCOM@usaid.gov*

Pacific Disaster Center Global

Pacific Disaster Center (PDC) Global has trademarked an early warning and decision support system called DisasterAWARE®. DisasterAWARE® is primarily for disaster management practitioners and senior decision makers. It supports disaster risk reduction and best practices throughout all phases of disaster management from early warning to multi-hazard monitoring. It has a collection of scientifically verified, geospatial, data and modeling tools to assess hazard risks and impacts. A restricted version of DisasterAWARE is the EMOPS (Emergency Operations) system, which is specifically for the disaster management community, including government agencies and humanitarian assistance organizations serving at local, state, federal, and regional levels.[210]

PDC also provides a public version, Disaster Alert, which offers open access to a world map documenting 18 hazard types.[211] Disaster Alert also has a free, early-warning app to receive customizable maps based visual alerts of active hazards. The app offers a global notification system covering natural and man-made hazards. It is available on both iPhone and Android.[212]

Website: *https://www.pdc.org/*
https://www.pdc.org/apps/disasteraware/

Emergency Operations (EMOPS) system: (Request account): *https://emops.pdc.org/emops*/

All Partners Access Network (APAN)
    APAN is the Unclassified Information Sharing Service (UISS) for the U.S. Department of Defense. APAN provides the DoD and mission partners community space and collaboration tools to leverage information to effectively plan, train and respond to meet their business requirements and mission objectives. Importantly, APAN's technology team has been supporting humanitarian assistance and disaster response (HADR) operations for over 15 years. APAN has played an integral role in the success of disaster responses, such as the 2015 California Wildfire Response and the 2013 Typhoon Haiyan Response in which they provided organizations and militaries a centralized location to share information, increase situational awareness and decrease response time and duplicated efforts for best practices in HADR services.[213]
Website: *https://www.apan.org/*
    Note: The Multinational Communications Interoperability Program (MCIP) has an APAN site used in planning exercises and real world HADR information sharing.

    Joint Typhoon Warning Center provides advanced warning for U.S. Government agencies and organizations in relevant areas.
Website: *https://www.metoc.navy.mil/jtwc/jtwc.html*

    Daniel K. Inouye Asia-Pacific Center for Security Studies (DKI-APCSS) is a U.S. Department of Defense institute that addresses regional and global security issues, inviting military and civilian representatives of the U.S. and Asia-Pacific nations to its program of executive education and workshops.
Website: *https://apcss.org/*

The Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DM)
    The Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DM) is a U.S. Department of Defense organization that was established by U.S. Congress in 1994 and is a direct reporting unit to U.S. Indo-Pacific Command. CFE-DM provides training and education to help U.S. and foreign military personnel navigate complex issues in DMHA. They produce country focused disaster management reference handbooks, after action reports, best practices, and lessons learned for advancement in response coordination. CFE-DM also works to improve cross-coordination and reduce duplication of efforts and promote U.S. involvement in civ-mil consultations and dialogues with relevant HADR parties such as OCHA and the RHCC. CFE provides DMHA resources and updates at its website, as well as via their Facebook and Twitter accounts.
Website: *https://www.cfe-dmha.org/*

    Disaster Management Reference Handbooks are available for download at: *https://www.cfe-dmha.org/DMHA-Resources/Disaster-Management-Reference-Handbooks*
    CFE-DM Disaster Information Reports are available for download at: *https://www.cfe-dmha.org/Publications/Reports*
    Civil-Military Coordination in Foreign Disaster Relief Missions: Best Practices for Information Sharing is available here: *https://www.cfe-dmha.org/Publications*

COVID-19 Information Sharing Sources

Johns Hopkins Coronavirus Resource Center
https://coronavirus.jhu.edu/map.html COVID-19

Cases Database
https://github.com/CSSEGISandData/COVID-19

INFORM's new COVID-19 Risk Index
https://data.humdata.org/dataset/inform-covidanalysis-v01

INFRASTRUCTURE

Airports

The only commercial airline in Nepal is the Royal Nepal Airline Corporation. Along with Indian Airlines, the Royal Nepal Airlines operate from Kathmandu to India, other nearby countries and domestically. [214] Additionally, there are 18 domestic airlines in operation providing regular and chartered domestic services in country.[215]

The Tribhuvan International Airport (TIA) is the sole international airport in Nepal and is located 6km from the city center in Kathmandu Valley. It has served as an airfield since 1949 and has one domestic and one international terminal. Approximately 30 international airlines connect Nepal to destinations in Asia and the Middle East. The airport has a single 3,050 meter concrete runway.[216] Figure 16 shows a map of Airports in Nepal. [217]

Seaports

There are no seaports in Nepal as it is completely landlocked. However, it is the home to an extensive river system primarily originating in neighboring Tibet. The rivers flow through the deep gorges of the Himalayas providing substantial hydropower potential.[218]

Roads

There are a total of 27,990 kilometers of roads in Nepal (11,890 paved/ 16,100 unpaved).[219] Many of the roads are poorly maintained and dangerous due to frequent traffic jams,
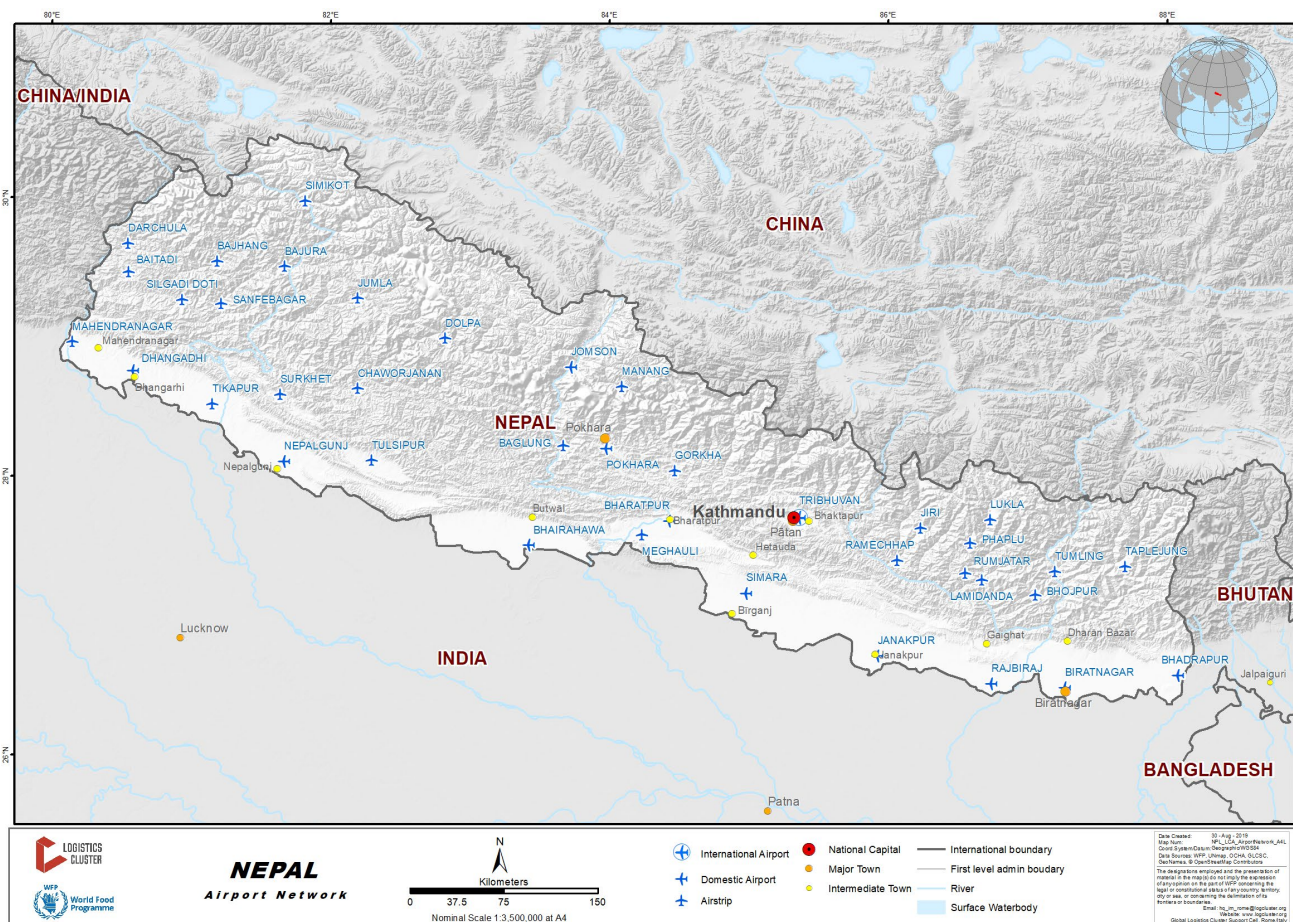

Figure 16: Airport Network in Nepal

road blockages due to landslides, washouts or collapsed bridges, unsafe drivers, broken down vehicles and frequent fuel shortages. A typical driver is recommended to plan 3-4 hours per 100km due to the likelihood of complications.[220] Poor road connectivity is also a major constraint to access and markets in Nepal. The road network comprises highways that run east to west (Mid-hills, Postal roads, or Mehendra Highway) or north to south (Tribhuvan Highway, Ratna Highway, Bhimdatta Highway, and Karnali Highway). Feeder roads connect highways and local road networks make up district and urban roads. The fact that the local road network is decentralized results in a dearth of responsibility for maintenance and improvement.[221] Nepal has been ranked 50th in the world in mortality rate caused by road accidents with analysis of data counting approximately 1,889 deaths annually due to road accidents and 13,000 injured.[222] The U.S. built an aerial ropeway, the Kathmandu–Hitaura in the 1950s which is still in use for transporting goods to the capital.[223]

Railways

There are two narrow-gauge railroads in Nepal that run from Amlekhaganj to Raxaul (India) and from Janakpur to Jaynagar (India).[224] The total rail network length in Nepal is 59 km.[225]

Waterways

There are no navigable waterways in Nepal. [226]

Schools

The formal education system in Nepal is relatively recent with historical access to school confined to only the elite and wealthy populations before the establishment of the Nepal National Education Commission in 1956. Since then, the country has grown substantially in the number of schools and enrollment rates particularly due to the challenge of the country's diverse population in terms of culture, language, and needs. Since 1990, enrollment in primary school has increased from 64% to 96% with near gender parity.[227]

Education is a priority sector in Nepal and the government allocates a large share of the budget to it and has been raising the level of public investment in education over the past decade.[228] The Ministry of Education and Culture provide administration and supervision of elementary and secondary education as well as funding for high education in the country.[229] The 2015 Constitution of Nepal was updated to include a focus on education and specifically a demand for a thorough re-orientation of the educational system through reforms of the policy and regulatory framework of the structural and functional infrastructure. This updated guidance also guarantees a fundamental "right to education" and provides the directive principles of the federal, state, provincial and locals levels on education. Additionally, the 8th Amendment of the 1971 Educational Act ensures equity in education by ensuring compatibility between educational institutions in line with the constitutional mandate.

The School Sector Development Plan (SSDP) 2016-2023 provide an ambitious framework to strengthen the access and quality of education by embracing education as a fundamental right of all citizens with the opportunities and life skills required to create a productive life despite the socio-economic disparities in the country. Additionally, the Plan aims to assist in elevating the country to a middle-income country by 2030 and achieving the Sustainable Development Goals of ensuring all children access to quality education. The cost of the SSDP is estimated at $10.58 billion for the 7-year execution. The SSDP also aims to build upon the previous education sector plans including the School Sector Reform Plan from 2009-2016. [230]

Historically, access to education has not been ensured for marginalized groups, ethnic minorities, Dalits, and children with disabilities excluded from mainstream classrooms. To reduce disparities and increase access, participation and learning outcomes, the SSDP put forth a revision of the Continuous

Assessment system, a strengthening of teacher to student ratios and increase representation of female and ethnic minority teachers, and roll out of the "languages of education" framework in line with the constitutional right to mother tongue education up to secondary level. The Constitution of Nepal was updated in 2015 to provide new guarantees of free and compulsory basic and secondary education and increased the powers of local bodies by realigning the role of school management committees.

The SSDP also includes a revision of the national curriculum framework including requisite skill, aptitude, knowledge, understanding and values necessary for student's survival and success including life skills, environmental awareness, and disaster preparedness.[231]

The 2015 earthquakes had devastating effects on the country and all aspects of life. The total cost of damages and losses to the education sector were estimated at 31.3 billion Nepalese rupees (NPR). Public schools accounted for 92% of the total damages and losses and educational services were severely disrupted.[232] The SSDP was designed to address this challenge with two major goals: improving disaster risk reduction in response to the build back better campaign following the 2015 earthquakes, and reforming the management of educational services and access in the country. The Plan lays the foundation for basic and secondary education. Another response to addressing the earthquake's impact on education was USAID's program to establish over 1,000 temporary learning centers for over 93,000 students, providing learning and recreational supplies, temporary WASH facilities, training and counseling for teachers and working with United Nations Children's Fund (UNICEF) to implement the "Zero Tolerance, Gender-based Violence Free Schools" project to reduce the prevalence of school related gender based violence and promote equitable learning outcomes in adolescent girls and boys.[233]

The country has made substantial progress toward its goal of universal primary education and has met the MDG 2 indicator on enrollment and is making progress on primary education survival and literacy in spite of setbacks from the 2015 earthquakes which had a negative impact on enrollment, retention and completion rates. [234]

Non-formal education in Nepal is a component of the basic education program and provides flexible education plans for children returning to formal education after a break and providing an alternative for older children or adults who are unable to re-enter formal education and assists in addressing the high school dropout rates and low skilled workers in the country to equip them for labor market needs. The National Literacy Campaign Program is a result of the Non-Formal Education Center which caters to primarily adult literacy. [235]

Disaster Risk Reduction in the Education Sector

Following the devastating earthquakes in April and May 2015, which destroyed over 9,300 schools and damaged many more in Nepal, schools in rural areas struggled to provide adequate learning environments for the safe learning of the children. Additionally, plans to ensure not only the physical safety but providing soft skills and training for disaster risk reduction for children and teachers in Nepal's multi-hazard environment became of upmost importance.

As a result, the Post Disaster Needs Assessment (PDNA) and Recovery Framework was initiated which identified over 45,000 classrooms that needed repair or reconstruction in addition to toilets, school walls, water supply and sanitation facilities. The response and focus on disaster risk reduction in the education sector was aimed at strengthening the education facilities in non-affected areas and that rebuilding efforts were in line with the three pillars of comprehensive school safety. The estimated budget for the disaster risk reduction and school safety activities planned under the School Safety Development Plan were estimated at US$ 1,013.92 million over 5 years.[236]

Communications

Telephones

There are less than 1 million fixed telephone lines in Nepal,[237] but mobile phone subscriptions are ubiquitous with over 97% of the population having cell phone service. The number of users in the country was almost 41 million in May 2019 according to the Nepal Telecommunications Authority (NTA) report.[238]

Internet Access

Internet use, technology and services have been rapidly expanding as many Nepalese use the internet as a basic and daily service. Data from 2017 counted 63% of the population use internet services and over 95% live within coverage of a mobile tower.[239]

There were 18.6 million internet users in 2019, an increase of 4.4 million in one year from the 14.3 million users in May 2018. Of total internet users, 79% rely on their mobile phones for access but fixed broadband internet use is also continuing to increase.[240]

In 2019, according to the NTA there were 37 companies providing internet services based on wireless, cable and Fiber connecting 821,249 subscribers (not counting mobile users accessing internet).[241]

Mass Media

Historically, the media in Nepal was centered on partisan newspaper divided by those who were for and those against the monarchy. After the establishment of the country as a democracy, and constitutional protection of freedom of the press, professional media emerged, and media became commercialized. The state remains central to the media landscape and owns the publication house Gorkhapatra Corporation which publishes two daily newspapers and magazines. Additionally, the government owns the national television network with three channels, multiple national radio broadcasts and television programs. The state also regulates all print newspapers requiring publications, radio and television broadcasts to register and acquire a license before publication or broadcast.

The high number of radio stations across the country provides a wide reach of information to the overall population and the plurality of languages in radio is a significant factor in the popularity of radio as mass media. Additionally, the mainstream newspaper and growing number of television stations and news outlets provide the population with a range of access to information. Digital news outlets with the increase of internet access in the country has also been on the rise due to the ability and availability to purchase less expensive smartphones from China and India.[242]

Post

The Government of Nepal Ministry of Communication and Information Technology runs the Postal Services Department in the Country. The General Post Office is a central office located in Dillibazar, next to Karagar in Kathmandu and is responsible for handling all inbound mail from foreign postal administration to Nepal, handling all outbound mail from Nepal to foreign postal administration, and providing all types of postal services to post offices in Kathmandu district.[243]

Utilities

Power

The country of Nepal has no significant sources of fossil fuel and therefore relies heavily on traditional energy resources with biomass contributing to 88%. Petroleum products are used 9%, electricity is used 2% and renewable energy at 1%. Biomass fuel by way of fuel wood is the main source due to Nepal's large forests. The estimated annual yield of fuel wood is 25.8 million tonnes or an average of 2.8 tonnes per hectare of forest. Due to the high dependence on fuel wood in the country, forest resources are under threat to meet the requirements of human and livestock populations. Therefore, people are relying on crop residue and animal waste due to scarcity of forests, but this practice is degrading the fertility of the agricultural land and is unsustainable.[244]

Nepal has a high percentage of the population with access to electricity with total population at over 90%. The urban areas have access at over 94% and over 85% have access in rural areas.[245] The Nepalese use the lowest commercial energy of all South Asians using approximately 500 Kilowatt-hour (kWh) per capita per year.

Hydropower is a potential source of untapped resource in the country though the documented potential for hydropower of Nepal's river system is approximately 83,000 megawatts. Currently, the country is using less than 1% if the potential energy source. However, that is set to change in the coming years as in 2018, Nepal formalized an agreement with India to build a 900 MW hydroelectric power plant worth $1.04 billion, the single largest foreign investment project in Nepal's history.[246] A second hydroelectric project for an electro mechanical 40 MW Rahughat Hydroelectic Project was ordered in February 2020, also another collaboration with India, specifically, the Nepal Electric Authority and India's Raghuganga Hydropower Limited which is majority funded by the EXIM Bank of India.[247]

Additionally, there are no proven reserves for petroleum available for commercial exploitation in Nepal and no significant amount of alternative fossil fuel, natural gas, etc. have been discovered in the country.[248]

Water and Sanitation

The Government of Nepal has prioritized improvements to the country's access to sanitation and hygiene by enabling a policy environment, inclusive planning, decentralizing service delivery and social movement around transforming sanitation over the past 25 years. As a result, the country has made significant progress in expanding access to water and sanitation by increasing the number of households with access to improved water sources by over half (46% in 1990 to 95% in 2016) and increasing the number of those using improved sanitation facilities by 10% (only 6% in 1990 and 62% in 2016). Still, 3.5 million people do not have access to basic water services and 10.8 million have no access to improved

sanitation. Further, 25% of government schools lack improved water and sanitation facilities and 39% do not have separate toilets for girls and boys and menstrual hygiene management facilities.[249]

In 2017 and 2018, the Ministry of Water and Sanitation (MoWS) partnered with humanitarian groups in implementing a comprehensive program on cholera and waterborne diseases in the Kathmandu Valley. This program was in response to lessons learned following the 2015 earthquakes and cholera outbreaks. In 2019, over 1 million people benefited from WASH cluster reconstruction activities who responded to various earthquake affected districts. Additionally, more than 180,000 people in 2018 and over 30,000 people in 2017 also benefited.

Technical and financial support were provided to flood response and recovery workers engaged in repair and reconstruction of damaged WASH services including hygiene promotion for over 141,000 vulnerable people in 5 severely affected districts. Water supply schemes providing access to safe water also benefitted over 100,000.[250]

To continue the important work of improving WASH services in the country, UNICEF partnered with the Government of Nepal's Ministry of Water Supply in the implementation of the WASH Sector Development Plan 2016-2030. WASH Nepal has the following aims:[251]

- Improve access to safe water including unreached populations;
- scale up sanitation social movement and the total sanitation concept;
- engage the private sector to promote improved hygiene practices/create markets;
- advocate for gender and disability-friendly sanitation facilities;
- raise awareness on hygiene behaviors;
- improve water quality with regulatory body, implement safety plans, enhance water treatment awareness;
- support government to revise policies and create a new WASH act;
- and mainstream DRR and CCA into existing WASH policies.

HEALTH

Due to concerted efforts of past sixty years, significant achievements have been made in the health sector. Nepal has made improvements in life-expectancy at birth; reduced the maternal mortality rate; and reduced the under-five mortality rate in the last two decades. 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.

Nepal faces the burden of communicable and noncommunicable diseases. Health awareness in the general public has been increased. Considerable development in education, communication, agriculture, and food supply has contributed to the development of health. Collaboration and partnership with international organizations, donor communities, and countries have been developed.

Health Care System Structure

The overall purpose of the Department of Health Services (DoHS) is to deliver preventive, promotive and curative health services throughout Nepal. The DoHS is one of three departments under Ministry of Health & Population (MoHP). The DoHS tasks include: [252]

- To provide the GoN necessary technical advice in formulating health related policies, develop and expand health institutions established in line with these policies;
- To determine requirement of manpower for health institutions and develop such manpower by preparing short and long term plans;
- To ensure supply of drugs, equipment, instruments and other material at regional level by properly managing these resources;
- To mobilize assistance in the implementation of approved programs by preparing, asking for preparation of objective programs

related to various aspects of public health (family health, family planning, child health, infectious disease control, eradication of malnutrition, control of AIDS and STDs);
- To manage the immediate solution of problems arising from natural disasters and epidemics;
- To establish relationships with foreign countries and international institutions with the objective of enhancing effectiveness and developing health services and assist the Ministry of Health in receiving foreign aid by clearly identifying the area of cooperation;
- To create a conducive atmosphere to encourage the private sector, non-governmental organizations and foreign institutions to participate in health services, maintain relation and coordination, control quality of health services by regular supervision and inspection;
- To systematically maintain data, statements and information regarding health services, update and publish them as required;
- To fix designated positions of employees; and
- To clear audit irregularities of central level offices, projects, and regional level offices.

Health Strategies and Surveillance

The Nepalese health system has had three health sector strategies and implementation plans developed to guide the health sector since 2004. The first two strategies were guided by the Millennium Development Goals (MDGs), and the recent Nepal Health Sector Strategy (NHSS) 2015–2020 and is based on Nepal's commitment to the Sustainable Development Goals (SDGs).[253]

The GoN and MoHP with support of World Health Organization (WHO), formulated Multi-Sectoral Action Plan (MSAP) for the prevention and control of NCDs (2014-2020) in Nepal. Similarly, the SDG target is to reduce noncommunicable diseases (NCDs) by one-

third. The new National Health policy 2019 has emphasized prevention and control of NCDs in Nepal through multi-sectoral collaboration.[254]

Disease surveillance is carried out through the Early Warning and Reporting System (EWARS), a hospital-based sentinel surveillance system that complements the HMIS by the early reporting of selected vector-borne, water and food borne diseases with outbreak potential. The main objective of the EWARS is to strengthen the flow of information on vector borne and other outbreak prone infectious diseases from the districts; and to facilitate prompt rapid outbreak responses by rapid response teams at central, regional and district levels to support DHOs, DPHOs, PHCCs and health posts with case investigation and disease control. The system also helps in program planning, evaluation, and the formulation of research hypotheses, and to disseminate data and information on infectious diseases.[255]

Communicable Diseases

Nepal is burdened with the following communicable diseases:

Coronavirus disease (COVID-19)

The COVID-19 pandemic is rapidly spreading across the globe with high mortality, severely straining health systems. While the GoN has been able to control the spread of COVID-19 through strict intervention packages including travel restrictions and social distancing measures that were introduced early in the epidemic, Nepal may suffer significantly due to the impact of COVID-19.[256] The Department of Health Services (DoHS) monitors possible epidemics and disease outbreaks on a regular basis for early response and prevention through an Early Warning and Reporting System and Integrated Disease Surveillance System.[257] As of October 2, 2020, approximately 82,450 cases of COVID-19 have been confirmed so far in Nepal. Figure 17 shows the Health Sector Response to COVID-19 as of 28 September.[258]

Figure 18 shows the distribution among COVID-19 cumulative cases across all districts in Nepal. [259]

The GoN has developed the Health Sector Emergency Response Plan and different institutions within the Government are working together in regard to preparedness and response plans to prevent further spread of COVID-19. Government-led clusters have been activated, and international partners in-country are working closely with Government counterparts to provide support where required. The Humanitarian Country Team (HCT) prepared a Nepal COVID-19 Preparedness and Response Plan (CPRP) which reflects the MoHP Health Sector Emergency Response Plan. The HCT and the clusters are working in collaboration with and support to the Government. The CPRP includes a significant health component, but also highlights needs related to coordination planning and monitoring, protection, risk communication and community engagement, food security, water, sanitation, and hygiene (WASH), nutrition, education, shelter/ Camp Coordination and Camp Management Cluster (CCCM), early recovery, and logistics. The HCT is working with the GoN towards having a joint COVID-19 Nepal Preparedness and Response Plan. [260]

The GoN response is led by a High-level Committee on COVID-19, headed by the Deputy Prime Minister and the Minister for Defense. Also established is a COVID Crisis Management Centre (CCMC)– led by the same ministers, along with a Steering Committee, led by the Secretary of the Ministry of Health and Population, and various Clusters have been stood- up at Federal and Provincial Level, though not all clusters are currently active in all provinces. Under the joint leadership of the UN Resident Coordinator's Office and WHO, the HCT responds accordingly along with preparedness and contingency for a scaled-up response should it be required. The UN has activated the Provincial Focal Point Agency System to support coordination between the international community and the GoN at the provincial level.[261]

Health Sector Response to COVID-19

Monday | 28 September 2020 (12 Ashwin 2077)

RT-PCR Test	RT-PCR Test / Million	Total Positive Cases	Confirmed cases in isolation	Recovered	Recovery Rate	Deaths	People in Quarantine
998407	34214	74745	19624	54640	73.1%	481	6310

COVID-19 Summary (Last 24 hours)

Total RT-PCR Test done	10080
Recovered	742
Deaths	4
Confirmed Cases	1351
	Female:436; Male: 915

Trend of RT-PCR and COVID-19 cases
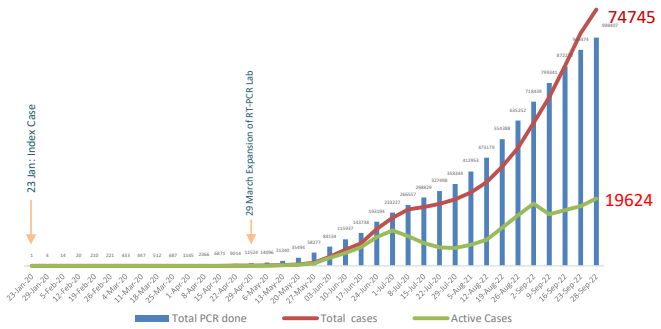
COVID-19 Recovered, Active and Death cases

25.2%
19624 **Active Cases**

0.7%
481 **Deaths**

73.1%
54640 Recovered
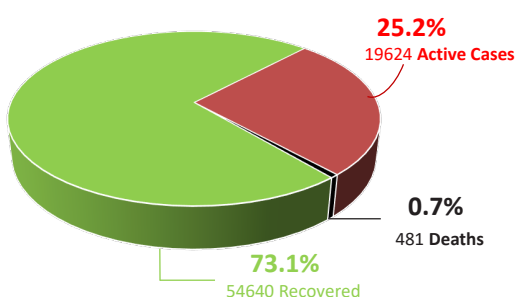
Gender wise distribution of COVID-19 Cases

Female 27% 20230

Male 73% 54515
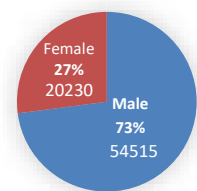
Figure 17: COVID-19 Cases in Nepal (September 28, 2020)

Province	Districts with more than 500 active cases	Districts with no active cases
1	Morang	
2	Dhanusha, Mahottari, Parsa, Bara, Rautahat, Sarlahi	
Bagmati	Kathmandu, Lalitpur	
Gandaki		Mustang
5		
Karnali		Humla
Sudurpaschim		
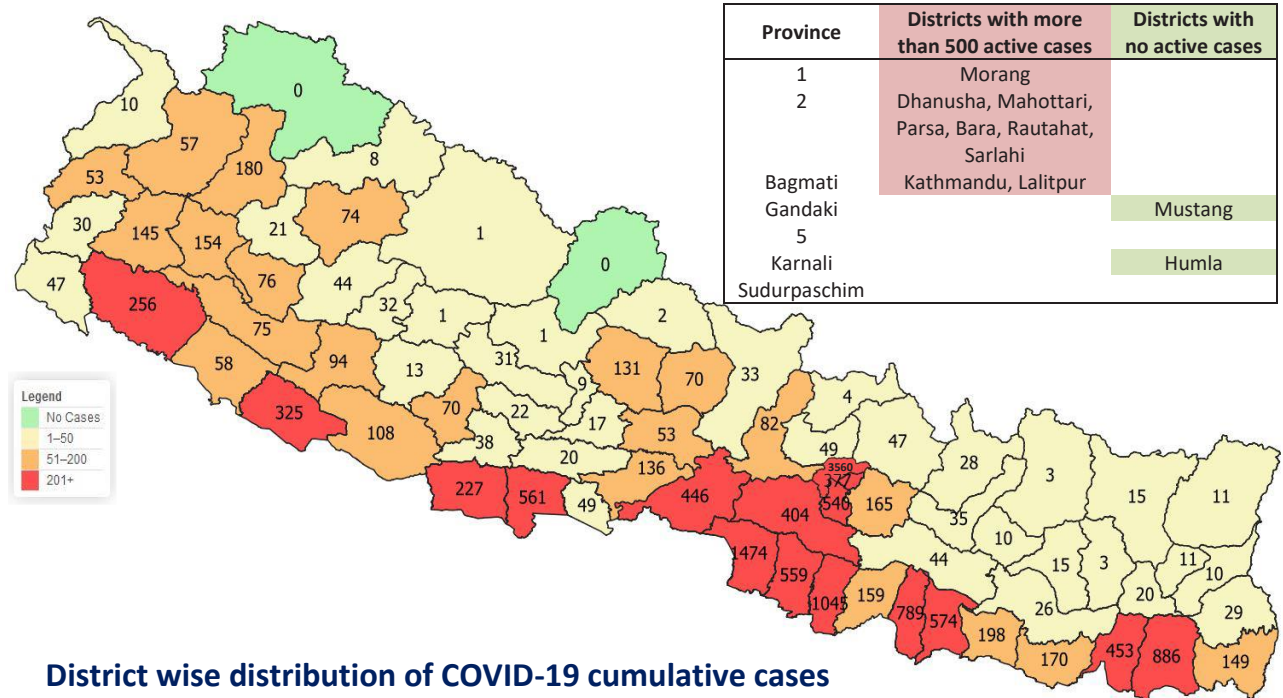
District wise distribution of COVID-19 cumulative cases

Figure 18: COVID-19 Distribution in Nepal

Malaria

Malaria poses a greater threat in areas with an abundance of vector mosquitoes, amongst mobile and vulnerable populations, in relatively inaccessible areas, and during times of certain temperatures. Nepal's malaria control program began in 1954, mainly in the Tarai belt of central Nepal with support from the U.S. The Government of Nepal has set a vision of Malaria-free Nepal in 2025. The current National Malaria Strategic Plan (NMSP) 2014- 2025 has been developed. Total positive cases of malaria slightly increased from 1128 in FY 2073/74 (2016/2017) to 1187 in 2074/75 (2017/2018) where 557 cases are indigenous cases and 630 are imported cases.[262]

Tuberculosis

Tuberculosis (TB) is a public health problem which affects thousands of people each year and is the sixth leading cause of death in Nepal. The World Health Organization (WHO) estimates that 44,000 people develop active TB every year, of whom 20,500 have infectious pulmonary disease and can spread the disease to others. In 2073/74 2074/75 (2017/2018), the National Tuberculosis Programme (NTP) registered 32,474 TB cases.[263]

Kala-azar

While it remains a major health concern, the number of Kala-azar cases has decreased significantly in recent years. However, in 2074/75 (2017/2018), there was a slight increase in reported cases (239 Kala-azar cases) compared to the previous year (231). The GoN has designated 18 districts as Kala-azar endemic districts; however, other districts besides these have reported new cases of Kala-azar in recent years. Kala-azar is a vector-borne disease caused by a parasite and transmitted by a sand-fly. The disease is characterized by fever for more than two weeks with splenomegaly, anemia, and progressive weight loss and sometimes darkening of the skin. In endemic areas, children and young adults are the principal victims. The disease is fatal if not treated in time. [264]

Lymphatic filariasis

Lymphatic filariasis is a public health problem in Nepal. The Epidemiology and Disease Control Division (EDCD) formulated a National Plan of Action for the Elimination of Lymphatic Filariasis in Nepal (2003–2020) by establishing a National Task Force and mass drug administration. As of 2074/75 (2017/2018), Mass drug administration (MDA) has been phased out in 37 districts, post- MDA surveillance initiated in 37 districts. [265]

Dengue

Dengue is a mosquito-borne disease that occurs in Nepal as dengue fever, dengue hemorrhagic fever (DHF) and dengue shock syndrome (DSS). Sporadic cases and outbreaks occurred in 2006 and 2010. The number of reported dengue cases has decreased significantly since 2010. A total of 2111 dengue cases were reported from 28 districts in 2074/75 (2017/2018). The majority of cases were reported from Rupandehi (32%), Jhapa (25%), Mahottari (20%) and Sarlahi (6%).[266]

HIV/AIDS

Epidemic transmission of HIV has halted in Nepal. New infections are lowering in numbers. A new National HIV Strategic Plan 2016-2021 has recently been launched to achieve ambitious global goals of 90-90-90. By 2020, 90% of all people living with HIV will know their HIV status by 2020, 90% of all people with diagnosed HIV infection will receive sustained antiretroviral therapy, and by 2020, 90% of all people receiving antiretroviral therapy will have viral suppression. [267]

Leprosy

During FY 2074/75 (2017/2018), a total number of 3249 new leprosy cases were detected and put under Multi Drug Therapy (MDT). 2882 cases were under treatment and receiving MDT at the end of the fiscal year. [268]

Noncommunicable Diseases

Noncommunicable Diseases (NCDs) are a serious threat in Nepal. The latest Noncommunicable Diseases (NCDs) Risk Factors STEPS Survey in Nepal 2019 shows that the Nepali people participate in unhealthy behavior (risk factors) such as tobacco and alcohol use; unhealthy diets; lack of physical activity; and have metabolic risk factors like raised blood glucose, raised blood pressure, raised blood cholesterol, and overweight/obesity.

These risk factors can lead to cardiovascular diseases, diabetes, cancer, and chronic respiratory diseases. [269] NCDs accounted for 66% of all deaths in Nepal in 2016.

Figure 19 shows that cardiovascular disease accounted for 30% of deaths, following with cancers (9%), chronic respiratory diseases (10%), and diabetes (4%).[270]

Training for Health Professionals

In Nepal, the National Health Training Centre (NHTC) caters to the training needs of MoH departments, divisions, and centers by delivering pre-service, basic, upgrading, competency based, orientation and refresher training courses that train health service providers. NHTC's network includes five regional health training centers, and one sub Centre. Its training activities are in line with the 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. 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. [271]

PROPORTIONAL MORTALITY*

▶ **30%**
Cardiovascular diseases

▶ **9%**
Cancers

▶ **10%**
Chronic respiratory diseases

▶ **4%**
Diabetes

▶ **13%**
Other NCDs

▶ **25%**
Communicable, maternal, perinatal and nutritional conditions

▶ **9%**
Injuries

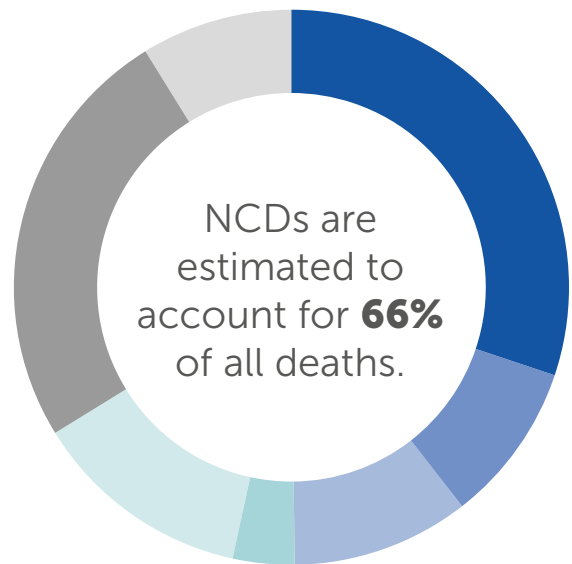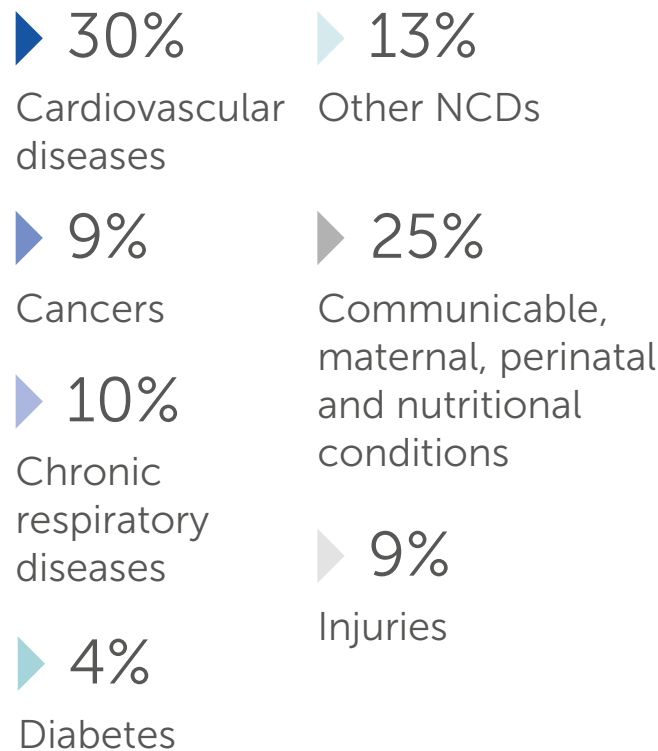NCDs are estimated to account for **66%** of all deaths.

Figure 19: Disease Rates in Nepal

WOMEN, PEACE, AND SECURITY

Nepal is signatory to 23 human rights treaties and international human rights instruments, with legal frameworks in Nepal largely supporting Gender Equality and Social Inclusion (GESI), including the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), the Beijing Platform for Action (BPfA), Convention on the Rights of the Child, the Convention on the Rights of Persons with Disabilities, the Sustainable Development Goals (SDGs), and UN Security Council Resolutions 1325 and 1820.[272]

Nepal is in a post-conflict period of transformation, recovery, and reconstruction, following the decade-long armed conflict that took place from 1996 and ended with the signing of a peace agreement in 2006. Women were not included in the 2006 peace agreement; however, Nepal transitioned to secular democratic governance and received a push from women's groups for equal participation and protection in the constitution.[273]

Nepali women were deeply affected by the 1996-2006 civil war and have had an important role in building lasting peace in the country.[274] The role that many Nepali women had in the Maoist uprising is still affecting many women today. Many joined explicitly because of the calls for a more equitable society and role within it; however, several child soldiers were women and now struggle to find their place in society and reintegration is challenging. Many people still remember the conflict in which Maoists killed people and left others disabled, and as a result, communities have yet to be advised on how to deal with returnees. In addition, many families believe that while their daughters were on the battlefield, they were with other men outside marriage and this could bring shame or dishonor on their family.[275]

Cultural norms that run strong in Nepal often prevent women from having an active and productive role in society. The country has a patriarchal social structure that may restrict progress in major development sectors for women.[276] In order for the country to be considered a more democratic society, it must provide women and girls equal access to resources and decision-making opportunities.[277]

Women are most at risk of physical, sexual and emotional violence, and one in four women in Nepal are victims.[278] One-third of married women have experienced violence from their spouse in Nepal.[279] Gender inequality remains high, as indicated by the Gender Inequality Index (GII) of 0.476 in 2019 (Ranked 115 out of 162 countries). This ranking of countries according to their gender gaps is an attempt to better capture gender disparities. The GII is interpreted as a percentage and indicates the percentage of potential human development lost due to gender inequality. For Nepal this is a high disparity or large gender gap.[280] Many women face multiple forms of discrimination in addition to gender, which could be based on class, caste, geography, language, religion, and sexual orientation. Women's mobility, especially during the formative adolescent and youth years, is restricted.[281]

Women with disabilities, who are elderly, and who are transgendered face compounding challenges. Elderly women in Nepal seem to have faced disproportional levels of discrimination. According to the government's Nepal Living Standards Survey, women are nearly 30% more likely to be illiterate than their male counterparts. According to a local NGO, Ageing Nepal, 95% of elderly women are unable to read. Illiteracy poses a major problem for elderly women, especially after the 2015 earthquakes. In order to access the three installments of governmental post-earthquake support it requires a bank account, which requires extensive paperwork. In addition, many elderly widows lost everything after the

earthquakes and have post-earthquake physical and mental health issues.[282] Many women with disabilities struggle with mobility which can prevent them from moving to safety when a flood hits their villages. Transgender people experience prejudice, including from their own families, and this can be exacerbated in risky and vulnerable situations such as in the context of a disaster. The needs, capacities, and opinions of sexual and gender minorities are often ignored.[283]

Nepal ranks very high in terms of women's labor force participation, but not in other aspects of economic equality. More men than women occupy managerial positions and are considered 'professionals' within their sector and wage inequality between sexes for equal work remains high.[284] Although more than 14,000 women were elected during the local, federal and provincial elections, women still struggle to exercise their rights to political participation and leadership. This is largely due to social norms and harmful practices that directly limit women's voice and agency, women's limited access to information, resource constraints and inadequate support systems.[285]

Ensuring accountability for and monitoring of the National Action Plans (NAP) on the United Nations Security Council Resolution (UNSCR) 1325 on Women, Peace, and Security (WPS) is a challenge in many countries, including in Nepal. [286] Nepal was the first country in Asia to develop a National Action Plan on Women, Peace, and Security in 2011.[287] The plan also includes a background section highlighting the history of conflict, other policies and NAPs that support women's empowerment, and particular concerns of women in Nepal as they relate to the WPS agenda. At the 23 April 2019 high-level WPS Commitments event, Nepal committed to creating a new NAP in advance of October 2020.[288]

Immediately after the 2015 earthquakes, the Inter-Cluster Coordination Gender Working Group (ICCGWG) was set up to discuss issues relating to gender as a group, and it provided guidance, advocacy and advice for other cluster groups through an assigned gender focal point. A Gender Equality and Social Inclusion Profile identifying marginalized groups and a standardized gender checklist was created and shared with humanitarian responders and other clusters. Gender updates were provided back to the ICCGWG and collated for further discussion. It is important to mention that only 19.17% of land is owned by women in Nepal which puts them at risk of being excluded from housing reconstruction programs that are based on the owner-driven reconstruction approach.[289]

Crisis and conflict have profound and disproportionate impacts on women and girls, amplifying pre-existing inequalities.[290] The impacts and implications of COVID-19 are different for men, women, people with diverse gender identities and sexual orientations and those from marginalized and vulnerable groups.[291] COVID-19 response enactment of national emergency powers, introduction of military checkpoints and lockdowns, closed borders, and restrictions on citizens' movement and speech, all mirror a governance context similar to that of a conflict setting. Women and girls often experience a lack of food and housing security, loss of livelihoods, a heightened vulnerability to gender-based violence, and an increased burden of unpaid care work.

The challenges brought by COVID-19 threaten to repeat and exacerbate these vulnerabilities. For example, less than 50% of pregnancies are taking place in health facilities, compared with 70% before the COVID-19 lockdowns began. Visits to the doctor by pregnant women have also dropped 50%. Risk, transportation shortages, and health facility closures have affected the maternal health of women and their babies in Nepal.[292]

In contexts including Nepal, women's leadership is essential to support peacebuilding and recovery. Women play an essential role in peace and security activities, including in accelerating economic revitalization in the aftermath of conflict and in contributing to peace.[293]

CONCLUSION

Nepal is one of the most disaster-prone countries in South Asia with unpredicted earthquakes, frequent flooding, landslides and multiple hazards and disasters affecting the country every year.[294] The geography, geological position, and the impact of climate change are the primary causes of disasters in Nepal. Urbanization, environmental degradation, variations in nature and type of disaster have only further intensified the disaster risk in Nepal.[295] Nepal has been ranked at twentieth position among the countries in the world in terms of people affected by floods every year. Overall, floods and landslides make up almost 75% of disasters in Nepal, further creating a strong need for disaster management.[296]

In 2017, Nepal experienced a period of sustained, heavy rainfall resulting in flooding across 35 of Nepal's 77 districts, affecting approximately 1.7 million people. Over 80% of land in the southern Terai region was inundated by flood waters and several districts recorded the heaviest rainfall in 60 years.[297] Immediately following the floods, the Government of Nepal activated the humanitarian Cluster System as well as mobilized 27,000 of their own security personnel and civil servants to support relief efforts and provided more than US$11.3 million to affected areas. Humanitarian assistance was provided from the UN System, IFRC, Nepal Red Cross Society, non-governmental groups and development partners.[298]

Two powerful earthquakes hit Nepal in 2015, killing almost 9,000 people, injuring 22,000 others, and displacing hundreds of thousands more.[299] The major earthquakes in 2015 devastated Nepal, causing an estimated US$7 billion or its equivalent NPR$ 706 billion in damages and losses. The Nepal government and partners began short-term and long-term reconstruction efforts based on the Post Disaster Needs Assessment (PDNA) led by the National Planning Commission (NPC) with assistance of national experts and institutions, assisting countries and development partners

and humanitarian assistance was mobilized from all parts of the world.[300] In the aftermath of the Gorkha Earthquake (2015) and the Monsoon floods (2017) in Nepal, the public and private sector collaborated and partnered in the reconstruction of disaster-affected areas in the country.[301]

Nepal has made significant achievements in terms of legal framework, policy instruments, and institutional arrangements for disaster risk management. The Constitution 2072 (2015) provisions regarding shared responsibility of all tiers of government have provided legal backup for institutionalizing DRM at national and sub national levels.[302] Nepal's disaster governance is guided by its Constitution, the Disaster Risk Reduction and Management (DRRM) Act 2074 (2017),[303] and Local Government Operation Act, 2074 (2017)[304] The Government of Nepal has endorsed a National DRRM Policy 2075 (2018) and Disaster Risk Reduction National Strategic Action Plan 2018-2030, which provides a comprehensive planning framework for disaster risk reduction and management in Nepal, encompassing different priority areas and guiding government actors and stakeholders to achieve targets by adopting appropriate processes.[305] The DRRM Act 2074 (2017) was amended in March 2019 -DRRM Act 2075 (2019). It establishes a National Disaster Risk Reduction Management Authority (NDRRMA) under the Ministry of Home Affairs (MoHA) and sets out the nature of disaster risk management (DRM) in a federal context. MoHA is leading the ongoing efforts to operationalize the NDRRMA Act.[306] In addition, the National Disaster Response Framework, 2070 (2014), and first amendment, 2075 (2019) has been formulated to ensure the role of governmental bodies and the private sector in order to effectively carry out disaster response activities.[307] The DRR policies and practices are fostered through DRM initiatives at global, national and sub national levels.[308]

APPENDICES

DoD DMHA Engagements in the Past Five Years (FY 2015-2020)

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

Nepal Pacific Resilience 2019 Disaster Response Exercise & Exchange (DREE), May 2019

Held in Pokhara, Nepal, from 19-26 May 2019, the Pacific Resilience 2019 DREE was the fifth iteration of the Humanitarian Assistance/Disaster Relief engagement between the United States Army Pacific (USARPAC) and the Nepali Army. The event was composed of a tabletop exercise (TTX), field training exercise (FTX), subject matter expert exchanges, multilateral demonstrations, technical training, and a cultural day. Previous exercises occurred in 2011, 2013, 2016, and 2018 and focused on earthquake response. A 2015 exercise was canceled as a result of the April 2015 earthquake in Nepal.[309]

Nepal Pacific Resilience Disaster Response Exercise and Exchange (DREE), September 2018.

During the four-day exercise from 25-28 September 2018, participants worked through a disaster scenario in reaction to a mega earthquake that was developed to examine Nepal's legal and regulatory framework, policies, procedures, organizational setup, tactics and response techniques. The DREE consisted of subject matter expert exchanges, tabletop evaluations, and functional exercises focused on mass casualty simulations, search and rescue operations, camp management, engineer planning, communication planning and disaster response.[310]

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. 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.[311]

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 20-23 September 2016. Participants in the DREE were able to increase interoperability and multinational collaboration efforts for disaster response and humanitarian aid operations. The bilateral 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.[312]

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 worked together to ensure capabilities helps deliver aid.[313]

USAID Disaster Assistance and Response Team (DART), April 2015

The USAID 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 25 April 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.[314]

International/Foreign Relations

While Nepal has several bilateral engagements with various countries, this section will focus on Nepal's bilateral relations with China, India, and the U.S. Nepal has taken a number of initiatives on the foreign policy front since the formation of the present government in February 2018. Nepal has priority relations with India and China due to the proximity as neighbors.

Regional cooperation frameworks, such as the South Asian Association for Regional Cooperation (SAARC), the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), the Shanghai Cooperation Organization (SCO), and Asia Cooperation Dialogue (ACD) provided opportunities to foster partnership and collaboration between Nepal, China, and India.[315]

China

Nepal's relations with China have grown through advancement of cooperation in multiple areas in the exchange of high-level visits, bilateral meetings, and consultations. The Protocol to Transit Transport Agreement was signed with China which opened up Nepal's access to the three inland ports and four seaports of China. President Bidya Devi Bhandari paid a State visit to China and held delegation level talks with Chinese President Xi Jinping in April 2019. The visit contributed to further strengthen Nepal-China friendship and cooperation. Meetings of various bilateral mechanisms between Nepal and China were held. They included the meetings of Bilateral Consultation Mechanism, Railways cooperation, Border security Cooperation, Nepal-China's Tibet Trade Facilitation Committee, and the first meeting of the newly established Mechanism for the Implementation of Nepal-China Cooperation Programs and Projects. [316]

India

The first ever cross-border Motihari-Amlekhgunj Petroleum Pipeline Project between Nepal and India was inaugurated in 2019. The Janakpur-Jaynagar cross border railway project was completed and its further extension up to Bardibas is underway. In addition, there are several other projects between the countries. Prime Minister K P Sharma Oli paid an official visit to India on the occasion of the swearing-in-ceremony of Prime Minister Narendra Modi and held bilateral talks which contributed to deepen the age-old friendly ties in May 2019. India continues to be Nepal's largest trading partner, the second largest investor, the largest source of tourists, and a major development partner.[317]

United States

Nepal-U.S. relations continue to grow in the areas of trade, investment, and development cooperation. Following the 2015 earthquakes in Nepal, the U.S. committed to aiding in Nepal's recovery and reconstruction.[318] Foreign Secretary Bairagi had a meeting with the Acting Deputy

Administrator of USAID David Moore on 19 December 2018. The Foreign Secretary thanked the U.S. Government for the socioeconomic development of the country as well as for its support to the peace process.[319] Nepal's comprehensive peace accord formally ended the country's decade-long Maoist insurgency in 2006. In July 2013, the Government of Nepal announced the successful completion of the reconciliation and integration process of ex-Maoist combatants into the Nepal Army.[320] During the 2018 meeting, Foreign Secretary Bairagi requested the USAID to focus their support through Nepal's national budgetary system.[321]

Figure 20 shows Nepal's development assistance, foreign direct investment, foreign trade, and other economic diplomacy.[322]

Participation in International Organizations

Nepal participates in the following international organizations: [323]

Asian Development Bank (ADB), Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), Conference on Disarmament (CD), Colombo Plan (CP) D-8, Food and Agriculture Organization of the United Nations (FAO), Group of 77 (G-77), IAEA, International Bank for Reconstruction and Development (IBRD), International Civil Aviation Organization (ICAO), International Chamber of Commerce (ICC)), Institute of Catastrophe Risk Management (ICRM), International Development Association (IDA), International Fund for Agricultural Development (IFAD), International Finance Corporation (IFC), International Federation of Red Cross and Red Crescent Societies (IFRC), International Labour Organization (ILO), International Monetary Fund (IMF), International Criminal Police Organisation (INTERPOL), International Maritime Organization (IMO), International Olympic Committee (IOC), International Organization for Migration (IOM), Inter-Parliamentary Union (IPU), International Organization for Standardization (ISO), International Telecommunications Satellite Organization (ITSO), International Telecommunications Union (ITU), Multilateral Investment Guarantee Agency (MIGA), the U.N. Mission for the Referendum in Western

Economic Diplomacy

Top five import partner countries: India, China, UAE, France, and Indonesia
Top five export partner countries: India, USA, Germany, Turkey, and UK

Top five Foreign Investors: China, India, USA, Japan, and UAE

Nepal's Foreign Trade

Foreign Direct Investment US$116 million (MOF Economics Bulletin)

Economic Diplomacy

Tourism

Offical Development Assistance US$1578.48 million

Top five bilateral development partners:
India: US$175.70m.
China: US$150.37m.
UK: US$110.50m.
USAID: US$77.54m.

Top five multilateral development partners:
WB Group: US$528.31m.
ADB: US$292.48m.
UN: US$64.07m.
EU: US$26.17m.
IFAD: US$15.20m.

Overseas Employment

Total Tourist arrival: 1,238,589 (MOF Economics Bulletin)

Top five tourist source Countries: India, China USA, Sri Lanka, and UK

Issuance of Final Work permit and renewal: 243,868 (persons), (Department of Foreign Employment)

Top five destination for overseas employment: Saudi Arabia, Qatar, Malaysia, UAE, and Kuwait
Total remittance: US$7.85 billion
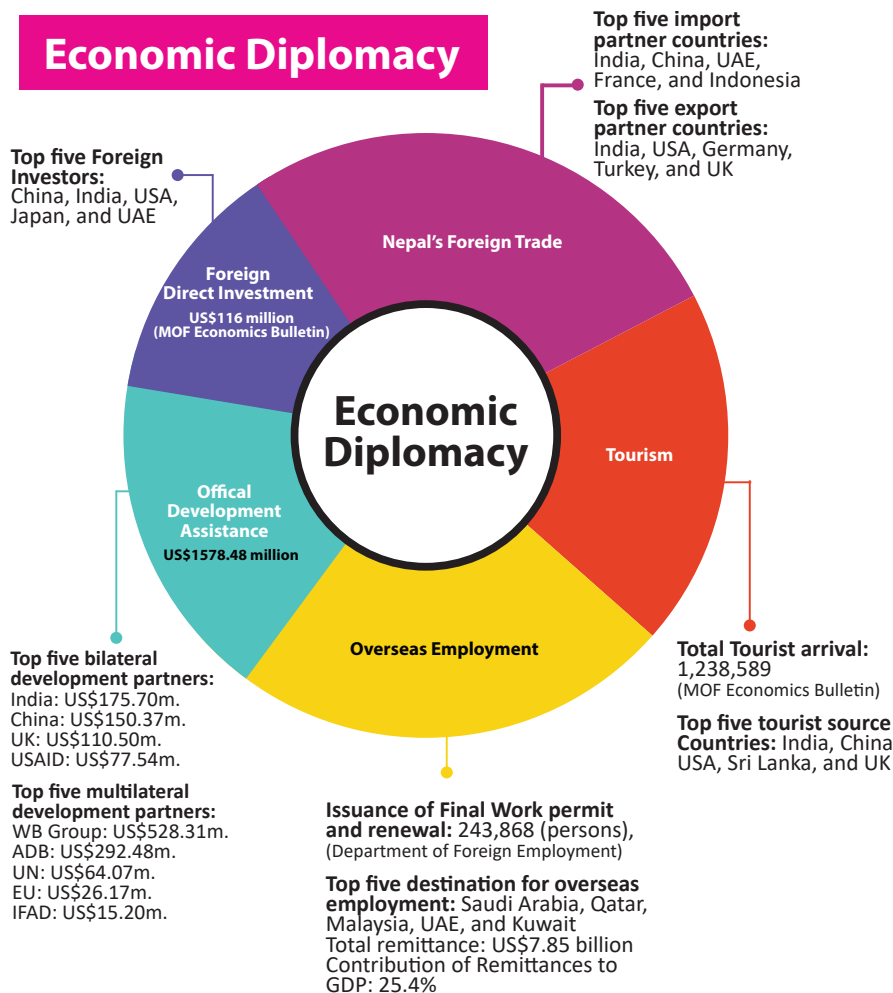Contribution of Remittances to GDP: 25.4%

Figure 20: Nepal's Economic Diplomacy

Sahara (MINURSO), the U.N. Multidimensional Integrated Stabilization Mission in Mali (MINUSMA), U.N. Stabilization Mission in Haiti (MINUSTAH), the U.N. Organization Stabilization Mission in the Democratic Republic of the Congo (MONUSCO), National Association of Manufacturers (NAM), Organisation for the Prohibition of Chemical Weapons (OPCW), South Asian Association for Regional Cooperation (SAARC), United Nations (UN), the African Union-United Nations Hybrid Operation in Darfur (UNAMID), the United Nations Disengagement Observer Force (UNDOF), UN Educational, Scientific, and Cultural Organization (UNESCO), UN Industrial Development Organization (UNIDO), the U.N Interim Force in Lebanon (UNIFIL), the U.N. Mission in Liberia (UNMIL), the U.N. Mission in the Republic of South Sudan (UNMISS), the U.N. Operation in Côte d'Ivoire UNOCI, World Tourism Organization (UNWTO), Universal Postal Union (UPU), World Customs Organization(WCO), The World Federation of Trade Unions (WFTU NGOs), World Health Organization (WHO), World Intellectual Property Organization (WIPO), World Meteorological Organization (WMO), World Trade Organization (WTO).

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. DoD personnel must review the Foreign Clearance Guide (FCG) for travel to Nepal (www.fcg.pentagon.mil). All official travel and active duty personal travel must be submitted through an APACS request. Contact information for the Defense Attaché Office can be found in the FCG if you have additional questions.

Passport/Visa

At the present time, the United States Embassy in Kathmandu is closed for routine visa services.

The Embassy is only able to process emergency cases and a limited number of visa cases that do not require an interview. If you have an urgent matter and need to travel immediately, please contact support-nepal@ustraveldocs.com to request an emergency appointment.[324]

You must have a passport valid for at least six months beyond the date of your intended arrival in Nepal and a minimum of one blank visa page other than the endorsements page (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. [325]

Safety and Security

On August 18, 2020, the Government of Nepal announced a renewal of the Kathmandu lockdown implemented as a public health measure to help slow the spread of COVID-19. There are broad exceptions to the lockdown (to include the movement of individuals seeking food, medicine, and other items important to life safety). The government announced August 10, 2020, that the suspension of international and domestic flight service would be extended to August 31, 2020.[326] You should also exercise increased caution in Nepal due to the potential for isolated political violence. Political demonstrations intended to be peaceful can sometimes escalate into violence and may be met with force by Nepali authorities.[327]

During periods of political tension there are occasionally small-scale improvised explosive device (IED) incidents in various parts of Nepal. While reported incidents have not been directed toward Westerners or Western interests, they have caused injury and damage to nearby individuals and property. There are also extortion attempts and threats of violence by a local group against private businesses and aid organizations, including local and international schools within the Kathmandu Valley.[328]

Emergency Contact Information

If you are a U.S. citizen with an emergency, please contact the U.S. Embassy Kathmandu +(977)(1) 423-4000 or 400-7269. Emergency after-hours telephone: +(977)(1) 400-7266, 400-7269. [329]
Address: U.S. Embassy Kathmandu
Maharajgunj, Kathmandu, Nepal
Website: https://np.usembassy.gov/
Email: consktm@state.gov

In the event of an emergency, dial 100 to contact the police in Nepal. It is equivalent to 911 in the U.S.

The State Department's Office of Overseas Citizens Services also stands ready to assist. From the United States and Canada dial +1-888-407-4747 and from overseas dial +1-202-501-4444. (The "+" sign indicates your international dialing prefix, which is 011 in the United States and 00 in most other countries. For example, if dialed from the United States, the normal business hours number is 011-977-1-423-4000.)

Currency Information

When crossing by land into Nepal, U.S. citizens should carry U.S dollar bills to pay their Nepali visa fee. U.S. citizens travelling from India to Nepal from the Belahia, Bhairahawa check point should be aware that Nepali visa fees must be paid in cash in U.S. dollars. Credit cards or other currencies will not be accepted. All U.S. bills must be new (no older than 2003) and in good condition (no tears, excessive wear, creases, visible repairs, etc.).[330]

The Nepalese rupee is the official currency of Nepal.[331]

Travel Health Information

The CDC provides guidance that all travelers to Nepal should be up to date on routine vaccinations. The following are additional recommendations for travel to Nepal.

Eat and Drink Safely

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

Eat

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

Don't Eat

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

Drink

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

Don't Drink

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

Take Medicine

Talk with your doctor about taking prescription or over-the-counter drugs with you on your trip in case you get sick. Malaria is a risk in some parts of Nepal. If you are going to a risk area, fill your malaria prescription before you leave, and take enough with you for the entire length of your trip. Follow your doctor's instructions for taking the pills; some need to be started before you leave.

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.

To prevent bug bites:
- Cover exposed skin by wearing long-sleeved shirts, long pants, and hats.
- Use an appropriate insect repellent (see below).
- 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.
- Use a bed net if the area where you are sleeping is exposed to the outdoors.

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.
- DEET
- Picaridin (also known as KBR 3023, Bayrepel, and Icaridin)
- Oil of lemon eucalyptus (OLE) or para-Menthane-3,8-diol (PMD)
- IR3535
- 2-undecanone

If you are bitten by bugs:
- Avoid scratching bug bites and apply hydrocortisone cream or calamine lotion to reduce the itching.
- Check your entire body for ticks after outdoor activity. Be sure to remove ticks properly.

Note that conditions can change rapidly in a country at any time. To receive updated Travel Advisories and Alerts for the countries you choose, sign up at step.state.gov.

The information in Table 5 is taken directly from the CDC website under the Travelers Health Section (https://wwwnc.cdc.gov).[332]

Health Alerts for Nepal: At the time of writing this handbook, there is a dengue outbreak alert for Nepal. There is also a COVID-19 risk alert for Nepal.[333]

Measles (for all travelers)	When traveling to Nepal, travelers should ensure update to date measles-mumps-rubella (MMR) vaccine before travel as follows: • Infants (6 through 11 months old): 1 dose of measles-mumps-rubella (MMR) vaccine before travel. This dose does not count as the first dose in the routine childhood vaccination series. • People 12 months old or older, with no evidence of immunity or no written documentation of any doses: 2 doses of MMR vaccine before travel. The 2 doses must be given 28 days apart. • People 12 months old or older who have written documentation of 1 dose and no other evidence of immunity: 1 additional dose before travel, at least 28 days after the previous dose
Routine vaccines (for all travelers)	Make sure you are up-to-date on routine vaccines before every trip. These vaccines include the MMR vaccine, diphtheria-tetanus-pertussis vaccine, varicella (chickenpox) vaccine, polio vaccine, and your yearly flu shot.
Hepatitis A (for most travelers)	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 (for most travelers)	You can get typhoid through contaminated food or water in Nepal. The CDC recommends this vaccine for most travelers, especially if you are staying with friends or relatives, visiting smaller cities or rural areas, or if you are an adventurous eater.
Hepatitis B (for some travelers)	You can get hepatitis B through sexual contact, contaminated needles, and blood products, so the CDC recommends this vaccine if you might have sex with a new partner, get a tattoo or piercing, or have any medical procedures.
Japanese Encephalitis (for some travelers)	You may need this vaccine if your trip will last more than a month, depending on where you are going in 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 (for some travelers)	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. Avoid visiting low-altitude areas. Areas of Nepal with risk of malaria: <2,000 m (6,562 ft). None in Kathmandu and on typical Himalayan treks.
Rabies (for some travelers)	Rabies can be found in dogs, bats, and other mammals in Nepal, so the CDC recommends this vaccine for the following groups: • Travelers involved in outdoor and other activities (such as camping, hiking, biking, adventure travel, and caving) that put them at risk for animal bites. • People who will be working with or around animals (such as veterinarians, wildlife professionals, and researchers). • People who are taking long trips or moving to Nepal. • Children, because they tend to play with animals, might not report bites, and are more likely to have animal bites on their head and neck.
Yellow Fever (for some travelers)	Required if traveling from a country with risk of YF virus transmission and ≥1 year of age, including transit >12 hours in an airport located in a country with risk of YF virus transmission. Note: Yellow fever vaccine availability in the U.S. is currently limited. If you need to be vaccinated before your trip, you may need to travel some distance and schedule your appointment well in advance. Find the clinic nearest you.

Table 5: CDC Travel Health Information for Nepal

Sendai Framework

Nepal's Secretary at MOHA and the head of the Nepali Delegation attended the Global Platform for Disaster Risk Reduction in May 2019 in Geneva, Switzerland. Nepal aligned its national targets on DRR with those of Sendai Framework for Disaster Risk Reduction (SFDRR), the SDGs, the Paris Agreement on Climate Change and the outcomes of the World Humanitarian Summit. Nepal has formed a National Platform for DRR that includes I/NGO's, academia, media and stakeholders working in the field of DRR in Nepal, following the guidelines set by UNDRR. The GoN has created the Disaster Risk Reduction and Management Act 2017, the Local Government Operation Act 2017, National DRR Policy 2018, National DRR Strategic Action Plan 2018-2030, revised the National Disaster Response Framework, and formed a national DRR Management Authority, the DRRMA in 2019.[334]

The Sendai Framework is the global blueprint and fifteen-year plan to build the world's resilience to natural disasters.[335] The information in this section is sourced directly from the Sendai Framework. The Sendai Framework for Disaster Risk Reduction 2015-2030 outlines seven clear targets and four priorities for action to prevent new and reduce existing disaster risks:

The Seven Global Targets include:
- Substantially reduce global disaster mortality by 2030, aiming to lower average per 100,000 global mortality rates in the decade 2020-2030 compared to the period 2005-2015.
- Substantially reduce the number of affected people globally by 2030, aiming to lower average global figure per 100,000 in the decade 2020 -2030 compared to the period 2005-2015.
- Reduce direct disaster economic loss in relation to global gross domestic product (GDP) by 2030.
- Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030.
- Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020.
- Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of this Framework by 2030.
- Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to the people by 2030.[336]

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

The Sendai Framework aims to achieve the substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries over the next 15 years. It was adopted at the Third United Nations World Conference on Disaster Risk Reduction in Sendai, Japan in 2015.[337]

The Sendai Framework is the successor instrument to the Hyogo Framework for Action (HFA) 2005-2015: Building the Resilience of Nations and Communities to Disasters.[338] Figure 21 shows the Sendai DRR Framework.[339]

Chart of the Sendai Framework for Disaster Risk Reduction
2015-2030

Scope and purpose

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

Expected outcome

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

Goal

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

Targets

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

Figure 21: UN Sendai Framework for Disaster Risk Reduction 2015-2030

HFA Country Progress Report

The Hyogo Framework for Action (HFA) was adopted as a guideline to reduce vulnerabilities to natural hazards. The HFA assists participating countries to become more resilient and to better manage the hazards that threaten their development. The levels of progress of the 2013-2015 results of the HFA for Nepal are represented in Figure 22 and Table 6. Table 7 provides an overview of the overall challenges and the future outlook statement from the HFA report. The 2013-2015 is the most recent HFA report available for Country Nepal. The information in this section is sourced directly from the HFA Country Progress Report.[340]
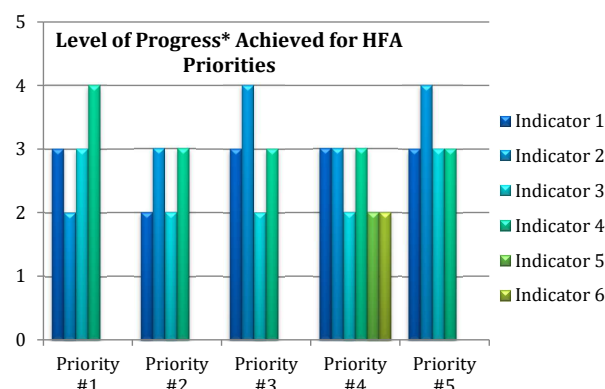

Figure 22: HFA Level of Progress Achieved

Priority for Action #1: Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.		
Core Indicator*	**Indicator Description**	**Level of progress Achieved***
1	National policy and legal framework for disaster risk reduction exists with decentralized responsibilities and capacities at all levels.	2
2	Dedicated and adequate resources are available to implement disaster risk reduction plans and activities at all administrative levels.	3
3	Community participation and decentralization is ensured through the delegation of authority and resources to local levels.	2
4	A national multi sectoral platform for disaster risk reduction is functioning.	3
Priority for Action #2: Identify, assess and monitor disaster risks and enhance early warning.		
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
Priority for Action #3: Use knowledge, innovation and education to build a culture of safety and resilience at all levels		
1	Relevant information on disasters is available and accessible at all levels, to all stakeholders (through networks, development of information sharing systems, etc.).	2
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.	2
4	Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.	3

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

Priority for Action #4: Reduce the underlying risk factors.		
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.	3
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 for Action #5: Strengthen disaster preparedness for effective response at all levels.		
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.	2
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 6: National Progress Report on the Implementation of the HFA (cont.)

Future Outlook Area 1: The more effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction.	
Challenges:	DRM/CRM has been well accounted in development policies and plans till now, though substantial achievements are yet to be observed in terms of periodic and national plans. However, what is reflected and underscored in the plans is not substantiated in the annual programs and budgets. One of the reasons for this is the 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. Beside these, 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 step 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 plausible and sufficient building codes, climate change adaptation policies, local resilience, and capacity building, and incorporating timely revision and monitoring are important for a country like Nepal.
Future Outlook Statement:	With addition of limited facilities, semi urban areas are declared as urban area in the form of municipalities that has amplified the urban risks. The multi-hazard and risk assessment of newly declared municipalities are to be incorporated in the risk assessment programmes. The Climate change adversity and disaster vulnerabilities have been in geometric progression in Nepal putting several millions of people under risk and threatening the livelihoods. Significant and visible plans and policies, primarily affordable from the local resources are to be developed for improving livelihoods and reducing vulnerabilities. An integrated response to sustainable and resilient development model is inevitable if Nepal looks upon improvement of livelihoods and enhance resilience from local to national level. There is growing trend to compartmentalize disaster risk reduction, climate change, environmental risk and health hazards as separate domain. This approach will not only address the partial problem but also will be detrimental to long term sustainability of development effort. Moreover, the intervention for the integrated approach need to have direct linkage with livelihoods of people to ensure community ownership of any development effort.

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

Future Outlook Area 2: The development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level, that can systematically contribute to building resilience to hazards.	
Challenges:	The 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. The new DM Act will be instrumental to gear up the effort towards changing this mindset. The new policy and act will also ensure sufficient institutional and budgetary provision and mechanism to spend on mitigation, preparedness and recovery. Beside these, following are the major challenges: • Promulgation of 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 Statement:	The current legislative and policy focus on emergency response and relief hinders efforts to strengthen integrated disaster risk management. There is urgent need to develop policies and tools which demonstrate the role of integrated disaster risk management and sustainable development in reducing vulnerability and protecting investments made in development. After the enactment of proposed DM Act, existing committee-based approach would be replaced by institution-based approach from the national level to local level. There is need to build capacity of the local government to ensure risk assessment and mitigation in each development planning in the community level. The academic institution would be strengthened and DRM/CRM curricula would be incorporated comprehensively from school to university levels.
Future Outlook Area 3: The systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programs in the reconstruction of affected communities.	
Challenges:	Emergency response has been the main focus on disaster risk management in the previous years. This focus was sporadic and did not effectively address the risks that face Nepal as the SOPs have not been developed. 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 Statement:	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 development of PDNA tools and strengthened network of NEOC and all R/D/MEOCs would be instrumental in response, relief and recovery.

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

Country Profile

The information in the Country Profile section is sourced directly from the CIA World Fact book for Nepal. Additional numbers on country comparison to the world can be found by going directly to the CIA website (https:/www.cia.gov). It discusses topics including geography, people and society, government, economy, energy, communications, military and security, transportation, terrorism, and transnational issue.[341]

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 Nepali 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. During the ensuing 10-year civil war between Maoist and government forces, the monarchy dissolved the cabinet and parliament and re-assumed absolute power in 2002, after the crown prince massacred the royal family in 2001. 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 2012 deadline set by the Supreme Court, then-Prime Minister Baburam BHATTARAI dissolved the CA. Months of negotiations ensued until 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 2013, in which the Nepali Congress (NC) won the largest share of seats in the CA and in 2014 formed a coalition government with the second-place Communist Party of Nepal-Unified Marxist-Leninist (UML) with NC President Sushil KOIRALA serving as prime minister. Nepal's new constitution came into effect in 2015, at which point the CA became the Parliament. Khagda Prasad Sharma OLI served as the first post-constitution prime minister from 2015 to 2016. OLI resigned ahead of a no-confidence motion against him, and Parliament elected Communist Party of Nepal-Maoist (CPN-M) leader Pushpa Kamal DAHAL (aka "Prachanda") prime minister. The constitution provided for a transitional period during which three sets of elections – local, provincial, and national – needed to take place. The first local elections in 20 years occurred in three phases between May and September 2017, and state and federal elections proceeded in two phases in November and December 2017. The parties headed by OLI and DAHAL ran in coalition and swept the parliamentary elections, and OLI, who led the larger of the two parties, was sworn in as prime minister in February 2018. In May 2018, OLI and DAHAL announced the merger of their parties - the UML and CPN-M - to establish the Nepal Communist Party (NCP), which is now the ruling party in Parliament.

Geography:

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: 96
Area - comparative: slightly larger than New York state

Land boundaries:
total: 3,159 km
border countries (2): China 1389 km, India 1770 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
lowest point: Kanchan Kalan 70 m
highest point: Mount Everest (highest peak in Asia and highest point on earth above sea level) 8,848 m

Natural resources:
quartz, water, timber, hydropower, scenic beauty, small deposits of lignite, copper, cobalt, iron ore

Land use:
agricultural land: 28.8% (2011 est.)
arable land: 15.1% (2011 est.) / permanent crops: 1.2% (2011 est.) / permanent pasture: 12.5% (2011 est.)
forest: 25.4% (2011 est.)
other: 45.8% (2011 est.)

Irrigated land:
13,320 sq km (2012)

Population distribution:
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

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); forest degradation; soil erosion; contaminated water (with human and animal wastes, agricultural runoff, and industrial effluents); unmanaged solid-waste; 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

People and Society :

Population:
30,327,877 (July 2020 est.)
country comparison to the world: 46

Nationality:
noun: Nepali (singular and plural)
adjective: Nepali

Ethnic groups:
Chhettri 16.6%, Brahman-Hill 12.2%, Magar

7.1%, Tharu 6.6%, Tamang 5.8%, Newar 5%, Kami 4.8%, Muslim 4.4%, Yadav 4%, Rai 2.3%, Gurung 2%, Damai/Dholii 1.8%, Thakuri 1.6%, Limbu 1.5%, Sarki 1.4%, Teli 1.4%, Chamar/Harijan/Ram 1.3%, Koiri/Kushwaha 1.2%, other 19% (2011 est.)
note: 125 caste/ethnic groups were reported in the 2011 national census

Languages:
Nepali (official) 44.6%, Maithali 11.7%, Bhojpuri 6%, Tharu 5.8%, Tamang 5.1%, Newar 3.2%, Bajjika 3%, Magar 3%, Doteli 3%, Urdu 2.6%, Avadhi 1.9%, Limbu 1.3%, Gurung 1.2%, Baitadeli 1%, other 6.4%, unspecified 0.2% (2011 est.)
note: 123 languages reported as mother tongue in 2011 national census; many in government and business also speak English

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

Age structure:
0-14 years: 28.36% (male 4,526,786/female 4,073,642)
15-24 years: 20.93% (male 3,276,431/female 3,070,843)
25-54 years: 38.38% (male 5,251,553/female 6,387,365)
55-64 years: 6.64% (male 954,836/female 1,059,360)
65 years and over: 5.69% (male 852,969/female 874,092) (2020 est.)

Dependency ratios:
total dependency ratio: 53
youth dependency ratio: 44.1
elderly dependency ratio: 8.9
potential support ratio: 11.2 (2020 est.)

Median age:
total: 25.3 years
male: 23.9 years
female: 26.9 years (2020 est.)
country comparison to the world: 161

Population growth rate:
0.98% (2020 est.)
country comparison to the world: 107

Birth rate:
18.1 births/1,000 population (2020 est.)
country comparison to the world: 89

Death rate:
5.7 deaths/1,000 population (2020 est.)
country comparison to the world: 177
Net migration rate:
-3.1 migrant(s)/1,000 population (2020 est.)
country comparison to the world: 178

Population distribution:
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: 20.6% of total population (2020)
rate of urbanization: 3.15% annual rate of change (2015-20 est.)

Major urban areas - population:
1.424 million KATHMANDU (capital) (2020)

Sex ratio:
at birth: 1.06 male(s)/female
0-14 years: 1.11 male(s)/female
15-24 years: 1.07 male(s)/female
25-54 years: 0.82 male(s)/female
55-64 years: 0.9 male(s)/female
65 years and over: 0.98 male(s)/female
total population: 0.96 male(s)/female (2020 est.)

Mother's mean age at first birth:
20.8 years (2016 est.)
note: median age at first birth among women 25-29

Maternal mortality rate:
186 deaths/100,000 live births (2017 est.)
country comparison to the world: 49

Infant mortality rate:
total: 25.1 deaths/1,000 live births
male: 26.3 deaths/1,000 live births
female: 23.8 deaths/1,000 live births (2020 est.)
country comparison to the world: 68

Life expectancy at birth:
total population: 71.8 years
male: 71.1 years
female: 72.6 years (2020 est.)
country comparison to the world: 160

Total fertility rate:
1.96 children born/woman (2020 est.)
country comparison to the world: 117

Contraceptive prevalence rate:
52.6% (2016/17)

Drinking water source:
improved:
urban: 91.7% of population
rural: 91.4% of population
total: 91.5% of population
unimproved:
urban: 8.3% of population
rural: 8.6% of population
total: 8.5% of population (2017 est.)

Current Health Expenditure:
5.6% (2017)

Physicians density:
0.91 physicians/1,000 population (2017)

Hospital bed density:
0.3 beds/1,000 population (2012)

Sanitation facility access:
improved:
urban: 56% of population (2015 est.)
rural: 43.5% of population (2015 est.)
total: 45.8% of population (2015 est.)
unimproved:
urban: 44% of population (2015 est.)
rural: 56.5% of population (2015 est.)
total: 54.2% of population (2015 est.)

HIV/AIDS - adult prevalence rate:
0.1% (2018 est.)
country comparison to the world: 128

HIV/AIDS - people living with HIV/AIDS:
30,000 (2018 est.)
country comparison to the world: 73

HIV/AIDS - deaths:
900 (2018 est.)
country comparison to the world: 62

Major infectious diseases:
degree of risk: high (2020)
food or waterborne diseases: bacterial diarrhea, hepatitis A and E, and typhoid fever
vectorborne diseases: Japanese encephalitis, malaria, and dengue fever

Obesity - adult prevalence rate:
4.1% (2016)
country comparison to the world: 187

Children under the age of 5 years underweight:
27.2% (2016)
country comparison to the world: 15

Education expenditures:
5.2% of GDP (2018)
country comparison to the world: 56

Literacy:
definition: age 15 and over can read and write
total population: 67.9%
male: 78.6%
female: 59.7% (2018)

School life expectancy (primary to tertiary education):
total: 12 years
male: 12 years
female: 13 years (2017)

Unemployment, youth ages 15-24:
total: 21.4%
male: 19.7%
female: 23.9% (2017 est.)
country comparison to the world: 59

Government :

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:
name: Kathmandu

geographic coordinates: 27 43 N, 85 19 E
time difference: UTC+5.75 (10.75 hours ahead of Washington, DC, during Standard Time)
etymology: name derives from the Kasthamandap temple that stood in Durbar Square; in Sanskrit, "kastha" means "wood" and "mandapa" means "pavilion"; the three-story structure was made entirely of wood, without iron nails or supports, and dated to the late 16th century; it collapsed during a 2015 earthquake

Administrative divisions:
7 provinces; Gandaki Pradesh, Karnali Pradesh, Province No. One, Province No. Two, Province No. Three, Province No. Five, Sudurpashchim Pradesh

Independence:
1768 (unified by Prithvi Narayan SHAH)

National holiday:
Constitution Day, 20 September (2015); note - marks the promulgation of Nepal's constitution in 2015 and replaces the previous 28 May Republic Day as the official national day in Nepal; the Gregorian day fluctuates based on Nepal's Hindu calendar

Constitution:
history: several previous; latest approved by the Second Constituent Assembly 16 September 2015, signed by the president and effective 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; last amended 2016

Legal system:
English common law and Hindu legal concepts; note - new criminal and civil codes came into effect on 17 August 2018

International law organization participation:
has not submitted an International Court of Justice (ICJ) jurisdiction declaration; non-party state to the International Criminal Court (ICCt)

Citizenship:
citizenship by birth: yes
citizenship by descent only: yes
dual citizenship recognized: no
residency requirement for naturalization: 15 years
Suffrage:
18 years of age; universal

Executive branch:
chief of state: President Bidhya Devi Bhandari (since October 2015)
head of government: Prime Minister Khadga Prasad (KP) Sharma Oli (since 15 February 2018); deputy prime ministers Ishwar Pokhrel, Upendra Yadav (since 1 June 2018) (an)
cabinet: Council of Ministers appointed by the prime minister; cabinet dominated by the Nepal

Communist Party
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); election last held 13 March 2018 (next to be held in 2023); prime minister indirectly elected by the Federal Parliament

election results: Bidhya Devi Bhandari reelected president; electoral vote - Bidhya Devi Bhandari (CPN-UML) 39,275, Kumari Laxmi Rai (NC) 11,730

head of state: President Bidhya Devi Bhandari (since 29 October 2015); Vice President Nanda Bahadar PUN (since 31 October 2015)

Legislative branch:
description: bicameral Federal Parliament consists of:
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)
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:
first election for the National Assembly held on 7 February 2018 (next to be held in 2024)
first election for House of Representatives held on 26 November and 7 December 2017 (next to be held in 2022)
election results:
National Assembly - percent of vote by party - NA; seats by party - NCP 42, NC 13, FSFN 2, RJPN 2; composition - men 37, women 22,

percent of women 37.3%
House of Representatives - percent of vote by party - NA; seats by party - NCP 174, NC 63, RJPN 17, FSFN 16, other 4, independent 1; composition - men 185, women 90, percent of women 32.7%; note - total Federal Parliament percent of women 33.5%

Judicial branch:
highest courts: Supreme Court (consists of the chief justice and up to 20 judges)
judge selection and term of office: Supreme Court chief justice appointed by the president upon the recommendation of the Constitutional Council, a 5-member, high-level advisory body headed by the prime minister; other judges appointed by the president upon the recommendation of the Judicial Council, a 5-member advisory body headed by the chief justice; the chief justice serves a 6-year term; judges serve until age 65
subordinate courts: High Court; district courts

Political parties and leaders:
the Election Commission of Nepal granted ballot access under the proportional system to 88 political parties for the November-December 2017 House of Representatives election to the Federal Parliament; of these, the following 8 parties won seats:
Federal Socialist Forum, Nepal or FSFN [Upendra Yadav]
Naya Shakti Party, Nepal [Baburam Bhattarai]
Nepal Communist Party or NCP [Khadga Prasad Oli, Pushpa Kamal Dahal]
Nepali Congress or NC [Sher Bahadur Deuba]
Nepal Mazdoor Kisan Party [Narayan Man Bijukchhe]
Rastriya Janamorcha [Chitra Bahadur K.C.]
Rastriya Janata Party or RJPN [Mahanta Thakur]
Rastriya Prajatantra party or RPP [Kamal Thapa]

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 US:
Ambassador Arjun Kumar Karki (since 18 May 2015)
chancery: 2730 34th Place NW, Washington, DC 20007
telephone: [1] (202) 667-4550
FAX: [1] (202) 667-5534
consulate(s) general: Chicago (IL), New York

Diplomatic representation from the US:
chief of mission: Ambassador Randy Berry (since 25 October 2018)
telephone: [977] (1) 423-4000
embassy: Maharajgunj, Kathmandu, Nepal
mailing address: US Embassy, Maharajgunj Chakrapath, Kathmandu, Nepal 44600
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. 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 :

Economy - overview:
Nepal is among the 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% of GDP. Agriculture is the mainstay of the economy, providing a livelihood for almost two-thirds of the population but accounting for less than a 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 has signed trade and investment agreements with India, China, and other countries, but political uncertainty and a difficult business climate have hampered foreign investment. The United States and Nepal signed a $500 million Millennium Challenge Corporation Compact in September 2017 which will expand Nepal's electricity infrastructure and help maintain transportation infrastructure.

Massive earthquakes struck Nepal in early 2015, which damaged or destroyed infrastructure and homes and set back economic development.

Although political gridlock and lack of capacity have hindered post-earthquake recovery, government-led reconstruction efforts have progressively picked up speed, although many hard hit areas still have seen little assistance. Additional challenges to Nepal's growth include its landlocked geographic location, inconsistent electricity supply, and underdeveloped transportation infrastructure.

GDP (purchasing power parity):
$79.19 billion (2017 est.)
$73.39 billion (2016 est.)
$72.96 billion (2015 est.)
note: data are in 2017 dollars
country comparison to the world: 95

GDP (official exchange rate):
$24.88 billion (2017 est.)
GDP - real growth rate:
7.9% (2017 est.)
0.6% (2016 est.)
3.3% (2015 est.)
country comparison to the world: 9

GDP - per capita (PPP):
$2,700 (2017 est.)
$2,500 (2016 est.)
$2,500 (2015 est.)
note: data are in 2017 dollars
country comparison to the world: 195

Gross national saving:
45.4% of GDP (2017 est.)
40.2% of GDP (2016 est.)
44% of GDP (2015 est.)
country comparison to the world: 7

GDP - composition, by end use:
household consumption: 78% (2017 est.)
government consumption: 11.7% (2017 est.)
investment in fixed capital: 33.8% (2017 est.)
investment in inventories: 8.7% (2017 est.)
exports of goods and services: 9.8% (2017 est.)
imports of goods and services: -42% (2017 est.)
GDP - composition, by sector of origin:
agriculture: 27% (2017 est.)

industry: 13.5% (2017 est.)
services: 59.5% (2017 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:
12.4% (2017 est.)
country comparison to the world: 7

Labor force:
16.81 million (2017 est.)
note: severe lack of skilled labor
country comparison to the world: 37

Labor force - by occupation:
agriculture: 69%
industry: 12%
services: 19% (2015 est.)

Unemployment rate:
3% (2017 est.)
3.2% (2016 est.)
country comparison to the world: 36

Population below poverty line:
25.2% (2011 est.)
Household income or consumption by percentage share:
lowest 10%: 3.2%
highest 10%: 29.5% (2011)

Budget:
revenues: 5.925 billion (2017 est.)
expenditures: 5.945 billion (2017 est.)

Taxes and other revenues:
23.8% (of GDP) (2017 est.)
country comparison to the world: 122
Budget surplus (+) or deficit (-):
-0.1% (of GDP) (2017 est.)
country comparison to the world: 48

Public debt:
26.4% of GDP (2017 est.)
27.9% of GDP (2016 est.)
country comparison to the world: 171

Fiscal year:
16 July - 15 July

Inflation rate (consumer prices):
4.5% (2017 est.)
9.9% (2016 est.)
country comparison to the world: 168
Current account balance:
-$93 million (2017 est.)
$1.339 billion (2016 est.)
country comparison to the world: 84

Exports:
$818.7 million (2017 est.)
$761.6 million (2016 est.)
country comparison to the world: 168

Exports - partners:
India 53.1%, US 11.8%, Turkey 7.2% (2017)

Exports - commodities:
clothing, pulses, carpets, textiles, juice, jute goods

Imports:
$10 billion (2017 est.)
$8.764 billion (2016 est.)
country comparison to the world: 101

Imports - commodities:
petroleum products, machinery and equipment,
gold, electrical goods, medicine

Imports - partners:
India 70.2%, China 7.5% (2017)
Reserves of foreign exchange and gold:
$9.091 billion (31 December 2017 est.)
$8.506 billion (31 December 2016 est.)
country comparison to the world: 76

Debt - external:
$5.849 billion (31 December 2017 est.)
$4.321 billion (31 December 2016 est.)
country comparison to the world: 129

Exchange rates:
Nepalese rupees (NPR) per US dollar -
104 (2017 est.)
107.38 (2016 est.)
107.38 (2015 est.)
102.41 (2014 est.)
99.53 (2013 est.)

Energy :

Electricity access:
population without electricity: 3 million (2017)
electrification - total population: 90.7% (2016)
electrification - urban areas: 94.5% (2016)
electrification - rural areas: 85.2% (2016)

Electricity - production:
4.244 billion kWh (2016 est.)
country comparison to the world: 125

Electricity - consumption:
4.983 billion kWh (2016 est.)
country comparison to the world: 124

Electricity - exports:
2.69 million kWh (FY 2017 est.)
country comparison to the world: 94

Electricity - imports:
2.175 billion kWh (2016 est.)
country comparison to the world: 57
Electricity - installed generating capacity:
943,100 kW (2016 est.)
country comparison to the world: 130

Electricity - from fossil fuels:
5% of total installed capacity (2016 est.)
country comparison to the world: 203

Electricity - from nuclear fuels:
0% of total installed capacity (2017 est.)
country comparison to the world: 152
Electricity - from hydroelectric plants:
92% of total installed capacity (2017 est.)
country comparison to the world: 10
Electricity - from other renewable sources:
3% of total installed capacity (2017 est.)
country comparison to the world: 128

Crude oil - production: Oil Barrel (42 gallons / 159 liters)
0 bbl/day (2018 est.)
country comparison to the world: 181

Crude oil - exports:
0 bbl/day (2015 est.)
country comparison to the world: 173

Crude oil - imports:
0 bbl/day (2015 est.)
country comparison to the world: 174

Crude oil - proved reserves:
0 bbl (1 January 2018 est.)
country comparison to the world: 176

Refined petroleum products - production:
0 bbl/day (2015 est.)
country comparison to the world: 185

Refined petroleum products - consumption:
27,000 bbl/day (2016 est.)
country comparison to the world: 126

Refined petroleum products - exports:
0 bbl/day (2015 est.)
country comparison to the world: 187

Refined petroleum products - imports:
26,120 bbl/day (2015 est.)
country comparison to the world: 106

Natural gas - production: cubic meters (cu m)
0 cu m (2017 est.)
country comparison to the world: 177

Natural gas - consumption:
0 cu m (2017 est.)
country comparison to the world: 181

Natural gas - exports:
0 cu m (2017 est.)
country comparison to the world: 159

Natural gas - imports:
0 cu m (2017 est.)
country comparison to the world: 164

Natural gas - proved reserves:
0 cu m (1 January 2014 est.)
country comparison to the world: 175

Carbon dioxide emissions from consumption of energy:
8.396 million Mt (2017 est.)
country comparison to the world: 115

Communications :

Telephones - fixed lines:
total subscriptions: 799,368
subscriptions per 100 inhabitants: 3 (2018 est.)
country comparison to the world: 82

Telephones - mobile cellular:
total subscriptions: 39,178,451
subscriptions per 100 inhabitants: 132 (2018 est.)
country comparison to the world: 38

Telecommunication systems:
general assessment: mountainous topography hinders development of telecom infrastructure; mobile service has been extended to all 75 districts covering 90% of Nepal's land area; fixed broadband is low due to limited number of fixed lines and preeminence of the mobile platform, with overall penetration 2.8%; 3G and 4G subscribers, early stages for mobile broadband market; first launch of a Nepalese satellite (2020)
domestic: 3G coverage is available in 20 major cities (2019); disparity between high coverage in cities and coverage available in underdeveloped rural regions; fixed-line 3 per 100 persons and mobile-cellular 132 per 100 persons; fair radiotelephone communication service; 20% of the market share is fixed (wired) broadband, 2% is fixed (wireless) broadband, and 78% is mobile broadband (2019)
international: country code - 977; Nepal, China and Tibet connected across borders with underground and all-dielectric self-supporting (ADSS) fiber-optic cables; radiotelephone communications; microwave and fiber landlines to India; satellite earth station - 1 Intelsat (Indian Ocean) (2019)

the COVID-19 outbreak is negatively impacting telecommunications production and supply chains globally; consumer spending on telecom devices and services has also slowed due to the pandemic's effect on economies worldwide; overall progress towards improvements in all facets of the telecom industry - mobile, fixed-line, broadband, submarine cable and satellite - has moderated

Broadcast media:
state operates 3 TV stations, as well as national and regional radio stations; 117 television channels are licensed, among those 71 are cable television channels, three are distributed through Direct-To-Home (DTH) system, and four are digital terrestrial; 736 FM radio stations are licensed and at least 314 of those radio stations are community radio stations (2019)

Internet country code:
.np

Internet users:
total: 5,716,419
percent of population: 19.7% (July 2016 est.)
country comparison to the world: 69

Broadband - fixed subscriptions:
total: 791,961
subscriptions per 100 inhabitants: 3 (2018 est.)
country comparison to the world: 75

Military and Security :

Military expenditures:
1.6% of GDP (2019)
1.6% of GDP (2018)
1.7% of GDP (2017)
1.7% of GDP (2016)
1.6% of GDP (2015)
country comparison to the world: 75

Military and security forces:
Nepal Army (includes Air Wing); Nepal Armed Police Force (under the Ministry of Home Affairs; paramilitary force responsible for

border and internal security, including counter-insurgency, and assisting the Army in the event of an external invasion) (2019)

Military service age and obligation:
18 years of age for voluntary military service (including women); no conscription (2019)

Military and security service personnel strengths:
the Nepal Army has approximately 95,000 active troops (including a small air wing of about 500 personnel); approximately 15,000 Nepal Armed Police (2019 est.)

Military equipment inventories and acquisitions:
the Army's inventory includes a mix of older equipment largely of British, Chinese, Indian, Russian, and South African origin; since 2010, China, Italy, and Russia are the top suppliers of military hardware to Nepal (2019 est.)

Military deployments:
720 Central African Republic (MINUSCA); 880 Democratic Republic of the Congo (MONUSCO); 350 Golan Heights (UNDOF); 860 Lebanon (UNIFIL); 230 Liberia (UNSMIL); 140 Mali (MINUSMA); 1,700 South Sudan (UNMISS) (April 2020)

Transportation :

National air transport system:
number of registered air carriers: 4 (2015)
inventory of registered aircraft operated by air carriers: 15 (2015)
annual passenger traffic on registered air carriers: 510,341 (2015)
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: 92

Airports - with paved runways:
total: 11 (2017)
over 3,047 m: 1 (2017)
1,524 to 2,437 m: 3 (2017)
914 to 1,523 m: 6 (2017)
under 914 m: 1 (2017)

Airports - with unpaved runways:
total: 36 (2013)
1,524 to 2,437 m: 1 (2013)
914 to 1,523 m: 6 (2013)
under 914 m: 29 (2013)

Railways:
total: 59 km (2018)
narrow gauge: 59 km 0.762-m gauge (2018)
country comparison to the world: 131

Roadways:
total: 27,990 km (2016)
paved: 11,890 km (2016)
unpaved: 16,100 km (2016)
country comparison to the world: 98

Terrorism :

Terrorist groups - foreign based:
Indian Mujahedeen (IM): aim(s): enhance
networks in Nepal to carry out attacks against
Indians in Nepal and India
area(s) of operation: maintains active hubs of
small, loosely connected networks (2018)

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), 6,626 (Bhutan) (2018)
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

ACAPS	Assessment Capacities Project
ADB	Asian Development Bank
APF	Armed Police Force
AIN	Association of I/NGOs
APAN	All Partners Access Network (US DoD unclassified system)
BHA	Bureau for Humanitarian Assistance
BIMSTEC	Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation
BPfA	Beijing Platform for Action
CBDRM	Community Based Disaster Risk Management
CCA	Climate Change Action
CCCM	Camp Coordination and Camp Management Cluster
CCMC	COVID Crisis Management Centre
CDC	Centers for Disease Control and Prevention (U.S.)
CDO	Chief District Officers
CDRC	Central Disaster Relief Committee
CEDAW	Convention on the Elimination of All Forms of Discrimination Against Women
CFE-DM	Center for Excellence in Disaster Management and Humanitarian Assistance
CMCoord	Humanitarian Civil Military Coordination
CNDRC	Central Natural Disaster Relief Committee
COVID-19	Coronavirus disease 2019
CPA	Comprehensive Peace Agreement
CPRP	COVID-19 Preparedness and Response Plan
CRED	Center for Research on the Epidemiology of Disasters
DAO	District Administration Office
DART	USAID Disaster Assistance Response Team
DEOCs	District Emergency Operation Centers
DDMC	District Disaster Management Committee
DDRC	District Disaster Relief Committee
DKI-APCSS	Daniel K. Inouye Asia-Pacific Center for Security Studies
DHA	Department of Hydrology and Meteorology
DHF	dengue fever, dengue hemorrhagic fever
DHM	Department of Hydrology and Meteorology
DMHA	Disaster Management and Humanitarian Assistance
DoD	Department of Defense
DoHS	The Department of Health Services
DREE	Disaster Response Exercise and Exchange
DREF	Disaster Relief Emergency Fund
DRM	disaster risk management

DRR	Disaster Risk Reduction
DRRM	Disaster Risk Reduction and Management
DRRMA	Disaster Risk Reduction and Management Act
DSS	dengue shock syndrome
EDCD	Epidemiology and Disease Control Division
EMOPS	Emergency Operations System (PDC, version of DisasterAWARE)
ERUs	Emergency Response Units
EWARS	Expansion, Sensitization and Strengthening of Sentinel sites
EWS	Early Warning Systems
F	Fahrenheit
FAO	Food and Agriculture Organization of the United Nations
FMT	Foreign Medical Teams
FTEs	Field Training Events
FTX	Field training exercise
G-77	Group of 77
GDACS	Global Disaster Alert and Coordination System
GDP	Gross Domestic Product
GESI	Gender Equality and Social Inclusion
GII	Gender Inequality Index
GLOF	glacial lake outburst flood
GoN	Government of Nepal
GRI	Global Risk Index
HCT	Humanitarian Country Team
HDX	Humanitarian Data Exchange
HEOC	Health Emergency Operation Center
HFA	Hyogo Framework for Action (predecessor to Sendai Framework)
HQ	Headquarters
HuMOCC	Humanitarian-Military Coordination Center
IASC	Inter-Agency Standing Committee
IBRD	International Bank for Reconstruction and Development
ICAO	International Civil Aviation Organization
ICCGWG	Inter-Cluster Coordination Gender Working Group
ICCt	International Criminal Court
ICJ	International Court of Justice (UN)
ICRC	International Committee of the Red Cross
ICRM	Institute of Catastrophe Risk Management
IDA	International Development Association
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
IFRC	International Federation of Red Cross and Red Crescent Societies

IHP	International Humanitarian Partnership
INFORM	Index for Risk Management
ILO	International Labour Organization (UN)
IMF	International Monetary Fund
INTERPOL	International Criminal Police Organisation
IMO	International Maritime Organization
IOC	International Olympic Committee
IOM	International Organization for Migration (UN)
IPU	Inter-Parliamentary Union
IS	Information sharing
ISO	International Organization for Standardization
ITSO	International Telecommunications Satellite Organization
ITU	International Telecommunications Union
JCC	Joint Coordinating Committee
JHAST	Joint Humanitarian Assessment Support Team
km	kilometer
kWh	Kilowatt-hour
MCIP	Multinational Communications Interoperability Program (US DoD)
MDA	Mass drug administration
MDGs	Millennium Development Goals
MEP	Ministry of Economics and Planning
MIGA	Multilateral Investment Guarantee Agency
MMR	Measles, mumps, and rubella
MNMCC	Multi-National Military Coordination Center
MoFAGA	Ministry of Federal Affairs and General Administration
MoFALD	Ministry of Agriculture and Livestock Development
MoHA	Ministry of Home Affairs
MoHP	Ministry of Health and Population
MoI	Ministry of Industry
MoSTE	Ministry of Science, Technology and Environment
MoU	Memorandum of Understanding
MoUD	Ministry of Urban Development
MoWS	Ministry of Water and Sanitation
MSAP	Multi-Sectoral Action Plan
MW	Megawatts
NACRIMAC	Nepalese Army Crisis Management Center
NAM	National Association of Manufacturers
NAP	National Action Plan
NA	Nepal Army
NCD	Non-communicable diseases

NCP	Nepali Congress Party
NDRF	National Disaster Response Framework
NDRRMA	National Disaster Risk Reduction Management Authority (also referred to as NDMA)
NEOC	National Emergency Operation Center
NGO	Non-governmental organization
NHSS	Nepal Health Sector Strategy
NHTC	National Health Training Centre
NMSP	National Malaria Strategic Plan
NP	Nepal Police
NPC	National Planning Commission
NRCS	Nepal Red Cross Society
NSC	National Seismological Centre
NTP	National tuberculosis control program
OCHA	UN Office for the Coordination of Humanitarian Affairs
OFDA	Office of U.S. Foreign Disaster Assistance (under USAID) now BHA
OLE	Oil of lemon eucalyptus
OPCW	Organisation for the Prohibition of Chemical Weapons
OSOCC	On-Site Operations Coordination Center
PDC	Pacific Disaster Center Global
PDNA	Post Disaster Needs Assessment
PMD	para-Menthane-3,8-diol
PMO	Prime Minister's Office
RCO	Resident Coordinator's Office
RHCC	Changi Regional HADR Coordination Centre (Singapore)
ROAP	Regional Office for Asia and the Pacific (OCHA)
SAARC	South Asian Association for Regional Cooperation
SAR	Search and Rescue
SDG	Sustainable Development Goals
SFDRR	Sendai Framework for Disaster Risk Reduction
SitRep	Situation Report
SOP-FEWS	Standard Operating Procedure for Flood Early Warning System
SSDP	School Sector Development Plan
TB	Tuberculosis
TIA	Tribhuvan International Airport
TTX	Tabletop exercise
TWG	Training Working Group
UISS	Unclassified Information Sharing Service
UN	United Nations
UN-CMCoord	UN Humanitarian Civil-Military Coordination
UNCTAD	United Nations Conference on Trade and Development

UNDAC	United Nations Disaster Assessment and Coordination
UNDP	United Nations Development Programme
UNDRR	UN Office for Disaster Risk Reduction (formerly UNISDR)
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
UN INSARAG	United Nations International Search and Rescue Advisory Group
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs
UNSCR	United Nations Security Council Resolution
UNWTO	World Tourism Organization
UPU	Universal Postal Union
U.S.	United States
USG	United States Government
USAID	U.S. Agency for International Development
USAID BHA	USAID Bureau for Humanitarian Assistance
USAR	Urban Search and Rescue
USARPAC	U.S. Army Pacific
USINDOPACOM	U.S. Indo-Pacific Command (Department of Defense)
USPACOM	U.S. Pacific Command (Predecessor to USINDOPACOM until 2018)
VDCs	Village Development Committees
Virtual OSOCC	Virtual On-Site Operations Coordination Centre (part of GDACS)
WASH	Water, Sanitation, and Hygiene
WCO	World Customs Organization
WHO	World Health Organization (UN)
WMO	World Meteorological Organization
WPS	Women, Peace, and Security
WTO	World Trade Organization
YF	Yellow Fever

Endnotes

1   Government of Nepal Ministry of Home Affairs. Nepal Disaster Report June 2019. http://drrportal.gov.np/uploads/document/1594.pdf

2   Save the Children. Nepal: Much Awaited Disaster Risk Reduction and Management Act Is Endorsed. October 18 2017. https://nepal.savethechildren.net/news/much-awaited-disaster-risk-reduction-and-management-act-endorsed

3   The Asia Foundation. Independent Impacts and Recovery Monitoring Phase 4: April 2017. https://asiafoundation.org/wp-content/uploads/2017/10/Aid-and-Recovery-in-Post-Earthquake-Nepal-Synthesis-Report-Phase-4-1.pdf

4   Government of Nepal Ministry of Energy, Water Resources and Irrigation. Department of Hydrology and Meteorology Flood Forecasting Division. Standard operating procedure (SOP) for flood early warning system in Nepal. June 2018. http://hydrology.gov.np/#/publications?_k=2x0fi4

5   Government of Nepal. Ministry of Health and Population. Health Emergency and Disaster Management Unit (HEDMU). Health Emergency Operation Center (HEOC). Disaster Management. Website last update 2018. https://heoc.mohp.gov.np/service/disaster-management/

6   Statement by Mr. Prem Kumar Rai, Secretary at the Ministry of Home Affairs and Head of the Nepali Delegation to the Global Platform for Disaster Risk Reduction (GP 2019) 13-17 May 2019 Geneva, Switzerland. https://www.preventionweb.net/files/globalplatform/Official%20Statement%20for%20GP%202019%20.pdf

7   Government of Nepal National Planning Commission. Nepal Earthquake 2015: Post Disaster Needs Assessment: Vol. A. Key Findings. 2015. https://www.worldbank.org/content/dam/Worldbank/document/SAR/nepal/PDNA%20Volume%20A%20Final.pdf

8   Government of Nepal Ministry of Home Affairs. Nepal Disaster Report June 2019. http://drrportal.gov.np/uploads/document/1594.pdf

9   Government of Nepal Ministry of Home Affairs. National Disaster Response Framework, first amendment, 2075 (2019) (Draft Version). Document provided via email from Prem Awasthi, National Field Coordinator for UN Resident Coordinator's Office on September 7, 2020. Document also provided by Kristin Pettersen, Lead Humanitarian Advisory to the Military from USAID BHA on September 9, 2020.

10   Government of Nepal Ministry of Home Affairs. Nepal Disaster Report June 2019. http://drrportal.gov.np/uploads/document/1594.pdf

11   Oxford Policy Management. Disaster risk reduction and management in Nepal: Delineation of roles and Responsibilities. May 2020. https://www.opml.co.uk/files/Publications/a1594-strengthening-the-disaster-risk-response-in-nepal/delineation-of-responsibility-for-disaster-management-full-report-english.pdf?noredirect=1

12   Government of Nepal Ministry of Home Affairs. National Disaster Response Framework, first amendment, 2075 (2019) (Draft Version). February 2019. Document provided via email from Prem Awasthi, National Field Coordinator for UN Resident Coordinator's Office on September 7, 2020. Document also provided by Kristin Pettersen, Lead Humanitarian Advisory to the Military from USAID BHA on September 9, 2020.

13   Humanitarian Country Team Contingency Plan. Nepal: Monsoon Flooding. May 2019. https://reliefweb.int/sites/reliefweb.int/files/resources/hct_monsoon_season_emergency_response_preparedness_2019_june_final.pdf

14   Government of Nepal Ministry of Home Affairs. Nepal Disaster Report June 2019. http://drrportal.gov.np/uploads/document/1594.pdf

15   Britannica. Nepal History. https://www.britannica.com/place/Nepal/History

16   Photo 1: https://www.flickr.com/photos/rapidtravelchai/6163461026/in/photolist-aoDmeq-aoDm9w-aoABeR-aoABaT

17   Government of Nepal MOFA. History of Nepal. https://mofa.gov.np/about-nepal/history-of-nepal/

18   Government of Nepal MOFA. History of Nepal. https://mofa.gov.np/about-nepal/history-of-nepal/

19   Britannica. Nepal History. https://www.britannica.com/place/Nepal/History

20   Government of Nepal MOFA. History of Nepal. https://mofa.gov.np/about-nepal/history-of-nepal/

21   Government of Nepal MOFA. History of Nepal. https://mofa.gov.np/about-nepal/history-of-nepal/

22   BBC. Nepal Profile – Timeline. https://www.bbc.com/news/world-south-asia-12499391

23   Government of Nepal MOFA. History of Nepal. https://mofa.gov.np/about-nepal/history-of-nepal/

24   BBC. Nepal Profile – Timeline. https://www.bbc.com/news/world-south-asia-12499391

25   Government of Nepal MOFA. History of Nepal. https://mofa.gov.np/about-nepal/history-of-nepal/

26   Government of Nepal MOFA. History of Nepal. https://mofa.gov.np/about-nepal/history-of-nepal/

27   Government of Nepal MOFA. Culture and Society of Nepal. https://mofa.gov.np/about-nepal/culture-society/

28   Nepal Tourism Board. Culture. https://www.welcomenepal.com/plan-your-trip/culture.html

29   Britannica. Nepal. Cultural Life. https://www.britannica.com/place/Nepal/Administration-and-social-conditions#ref23652

30   Government of Nepal. MOFA. Culture and Society of Nepal. https://mofa.gov.np/about-nepal/culture-society/

31   MOFA Nepal. Profile. https://mofa.gov.np/about-nepal/nepal-profile/

32   Nepal Tourism Board. Culture. https://www.welcomenepal.com/plan-your-trip/culture.html

33   Reuters. Thousands of Animals Sacrificed in Nepal Hindu Ritual Amid Outcry. 4 December 2019. https://www.reuters.com/article/us-nepal-religion/thousands-of-animals-sacrificed-in-nepal-hindu-ritual-amid-outcry-idUSKBN1Y81R6

34   The New York Times. Nepal's Animal Sacrifice Festival Slays On. But Activists Are Having an Effect. https://www.nytimes.com/2019/12/06/world/asia/nepal-animal-sacrifice-gadhimai.html

35   Nepal Tourism Board. Culture. https://www.welcomenepal.com/plan-your-trip/culture.html

36   Nepal Tourism Board. Traditional Crafts. https://www.welcomenepal.com/things-to-do/traditional-crafts.html

37   Nepal Tourism Board. Wildlife. https://www.welcomenepal.com/plan-your-trip/wildlife.html

38   Nepal Sambat. https://www.nepalsambat.com/nepal-sambat/

39   Nepali Calendar. https://nepalicalendar.rat32.com/index.php?dowhat=nepali-calendar-horoscope-game-download-unicode-new-year-mobile-calendar&view=86b122d4358357d834a87ce618a55de0#date-conversion

40   Britannica. Demographic trends. https://www.britannica.com/place/Nepal/The-people#ref341254

41   Nepal Tourism Board. People. https://www.welcomenepal.com/plan-your-trip/people.html

42   MOFA Nepal. Profile. https://mofa.gov.np/about-nepal/nepal-profile/

43   Figure 2 – Nepal Census Ethnic Composition. Britannica. https://www.britannica.com/place/Nepal/The-people

44   MOFA Nepal. Profile. https://mofa.gov.np/about-nepal/nepal-profile/

45   Nepali Times. Nepali workers stuck in no-man's land Migrants in the Gulf are caught between cruel employers and a heartless homeland. September 19, 2020. https://www.nepalitimes.com/here-now/nepali-workers-stuck-in-no-mans-land/

46   Britannica. People. https://www.britannica.com/place/Nepal/The-people

47   Government of Nepal. Ministry of Education. School Sector Development Plan. http://www.moe.gov.np/assets/uploads/files/SSDP_Book_English_Final_July_5,_2017.pdf

48   Population Pyramid Nepal 2019. https://www.populationpyramid.net/nepal/2019/

49   Government of Nepal. Ministry of Education. School Sector Development Plan. http://www.moe.gov.np/assets/uploads/files/SSDP_Book_English_Final_July_5,_2017.pdf

50   MOFA Nepal. Profile. https://mofa.gov.np/about-nepal/nepal-profile/

51   Encyclopedia Britannica. Nepal. September 18, 2020. Leo E Rose, Richard Riseley Proud and others. https://www.britannica.com/place/Nepal/The-people#ref341252

52   Human Rights Watch. The Need for Durable Solutions for Bhutanese Refugees in Nepal and India. 16 May 2007. https://www.hrw.org/report/2007/05/16/last-hope/need-durable-solutions-bhutanese-refugees-nepal-and-india

53   UNHCR. Nepal: Start of resettlement process for Bhutanese refugees. https://www.unhcr.org/en-us/news/briefing/2007/11/473055824/nepal-start-resettlement-process-bhutanese-refugees.html

54   UNHCR. Nepal. https://reporting.unhcr.org/node/10316

55   The New Humanitarian. Tibetan refugees in Nepal crying out for documentation. 4 June 2013. https://www.thenewhumanitarian.org/fr/node/253571

56   Kathmandu Post. The case for achieving gender parity. 10 March 2020. https://kathmandupost.com/columns/2020/03/10/the-case-for-achieving-gender-parity

57   UNDP. Inequalities in Human Development in the 21st Century Nepal. http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/NPL.pdf

58   UN Women Nepal. 25 Years After the Beijing Platform for Action in Nepal. https://asiapacific.unwomen.org/en/news-and-events/stories/2019/12/25-years-after-the-beijing-platform-for-action-in-nepal

59   UN Women Nepal. https://asiapacific.unwomen.org/en/countries/nepal/about-un-women-nepal

60   UN Women Nepal. 25 Years After the Beijing Platform for Action in Nepal. https://asiapacific.unwomen.org/en/news-and-events/stories/2019/12/25-years-after-the-beijing-platform-for-action-in-nepal

61   World Bank. Nepal Earthquake 2015 Post Disaster Needs Assessment. https://www.worldbank.org/content/dam/Worldbank/document/SAR/nepal/PDNA%20Volume%20A%20Final.pdf

62   Male to Female Deaths Due to 2015 Nepal Earthquake. https://www.researchgate.net/figure/Number-of-male-and-female-deaths-as-a-result-of-the-earthquake_fig2_280112172

63   Strategic Framework for Resilient Livelihoods in Earthquake-Affected Areas of Nepal. Golam Rasul, Bikash Sharma, Bhartendu Mishra, Nilhari Neupane, Tashi Dorji, Manbar S. Khadka, Surendra Raj Joshi. June 2015. https://www.researchgate.net/publication/280112172_Strategic_Framework_for_Resilient_Livelihoods_in_Earthquake-_Affected_Areas_of_Nepal

64   Researchgate. Women and Children in the 2015 Earthquake in Nepal. Alice Fothergill and Emma Squier. January 2018. https://www.researchgate.net/publication/320909926_Women_and_Children_in_the_2015_Earthquake_in_Nepal

65   Foreign Policy. In Nepal, Tradition is Killing Women. 6 January 2019. https://foreignpolicy.com/2019/01/06/in-nepal-tradition-is-killing-women-chhaupadi-womens-rights-menstruation/

66   UNICEF. Nepal. https://www.unicef.org/nepal/children-nepal

67   Figure 3: Challenges of Children in Nepal. https://www.savethechildren.org/us/what-we-do/where-we-work/asia/nepal

68 World Vision. In the Shadow of a Broken Shrine: Child labor in Nepal. 11 June 2017. https://www.worldvision.org/blog/shadow-broken-shrine-child-labor-nepal

69 The Kathmandu Post. Nepal reaffirms commitment to eliminating forced labour, human trafficking and child labour. 21 November 2019. https://kathmandupost.com/national/2019/11/21/nepal-reaffirms-commitment-to-eliminating-forced-labour-human-trafficking-and-child-labour

70 https://www.amnesty.org/en/latest/news/2020/05/nepal-authorities-must-deliver-justice-for-dalit-killings/

71 https://idsn.org/key-issues/dalit-women/dalit-women-in-nepal-2/

72 https://journeys.dartmouth.edu/NepalQuake-CaseStudies/caste-based-inequality/

73 https://idsn.org/countries/nepal/

74 https://globalvoices.org/2020/05/31/dalit-youth-and-five-of-his-friends-stoned-to-death-in-nepal-because-of-his-love-for-an-upper-caste-girl/

75 https://kathmandupost.com/national/2020/05/28/amnesty-international-calls-for-impartial-investigation-into-recent-killing-of-dalits

76 https://idsn.org/countries/nepal/

77 https://adwan.org.np/

78 https://journeys.dartmouth.edu/NepalQuake-CaseStudies/caste-based-inequality/#significance

79 https://minorityrights.org/2020/07/21/covid19-dalits-nepal/

80 Nepal Ministry of Finance.

81 UN Department of Economic and Social Affairs. https://www.un.org/development/desa/dpad/least-developed-country-category-nepal.html

82 UN Committee for Development Policy. 2018. https://undocs.org/en/E/2018/33

83 UN Women. Nepal. https://asiapacific.unwomen.org/en/countries/nepal

84 Government of Nepal. Ministry of Education. School Sector Development Plan. http://www.moe.gov.np/assets/uploads/files/SSDP_Book_English_Final_July_5,_2017.pdf

85 Britannica. The Economy. https://www.britannica.com/place/Nepal/The-economy

86 Government of Nepal. Ministry of Education. School Sector Development Plan. http://www.moe.gov.np/assets/uploads/files/SSDP_Book_English_Final_July_5,_2017.pdf

87 World Bank. Nepal. 12 April 2020. https://www.worldbank.org/en/country/nepal/overview

88 World Bank. Nepal Earthquake 2015 Post Disaster Needs Assessment. https://www.worldbank.org/content/dam/Worldbank/document/SAR/nepal/PDNA%20Volume%20A%20Final.pdf

89 World Bank. Nepal. 12 April 2020. https://www.worldbank.org/en/country/nepal/overview

90 Britannica. Government. https://www.britannica.com/place/Nepal/Administration-and-social-conditions#ref23649

91 Government of Nepal. Ministry of Education. School Sector Development Plan. http://www.moe.gov.np/assets/uploads/files/SSDP_Book_English_Final_July_5,_2017.pdf

92 Britannica. Government. https://www.britannica.com/place/Nepal/Administration-and-social-conditions#ref23649

93 Photo 1. Bhandari re-elected Nepal's President. 16 March 2018. https://www.weeklyvoice.com/bhandari-re-elected-nepals-president/

94 Weekly Voice. Bhandari re-elected Nepal's President. 16 March 2018. https://www.weeklyvoice.com/bhandari-re-elected-nepals-president/

95 Government of Nepal. http://nepal.gov.np:8080/NationalPortal/home

96 Jane's Sentinel Security Assessment for Nepal. 2020.

97 Nepal Tourism Board. Everest. https://www.welcomenepal.com/places-to-see/everest.html

98 Nepal Tourism Board. Geography. https://www.welcomenepal.com/plan-your-trip/geography.html

99 MOFA Nepal. Profile. https://mofa.gov.np/about-nepal/nepal-profile/

100 MOFA Nepal. Profile. https://mofa.gov.np/about-nepal/nepal-profile/

101 Nepal Tourism Board. Geography. https://www.welcomenepal.com/plan-your-trip/geography.html

102 Nepal Tourism Board. Geography. https://www.welcomenepal.com/plan-your-trip/geography.html

103 Nepal With Border Neighbors. Britannica https://www.britannica.com/place/Nepal

104 Average Temperatures and Rainfall in Summer/Winter. https://www.welcomenepal.com/plan-your-trip/climate.html

105 Average Temperatures and Rainfall in Summer/Winter. https://www.welcomenepal.com/plan-your-trip/climate.html

106 Humanitarian Country Team Contingency Plan. Nepal: Earthquake. February 2016. http://www.flagship2.nrrc.org.np/sites/default/files/knowledge/EPR%20Plan%20Nepal%20-%20Earthquake%20-%20Feb%202016.pdf

107 IOM. Press Release: DRRM consultation with parliamentary committee on law justice and HR. March 26, 2019. https://nepal.iom.int/news/press-release-drrm-consultation-parliamentary-committee-law-justice-and-hr

108 Government of Nepal Ministry of Energy, Water Resources and Irrigation. Department of Hydrology and Meteorology Flood Forecasting Division. Standard operating procedure (SOP) for flood early warning system in Nepal. June 2018. http://hydrology.gov.np/#/publications?_k=2x0fi4

109 IOM. Press Release: DRRM consultation with parliamentary committee on law justice and HR. March 26, 2019. https://nepal.iom.int/news/press-release-drrm-consultation-parliamentary-committee-law-justice-and-hr

110   ResearchGate. The Geographical Journal of Nepal. Vol. 12: 1-24, 2019. Central Department of Geography, Tribhuvan University, Kathmandu, Nepal. Mainstreaming climate change adaptation into sectoral policies in Nepal: A review. January 2019. DOI: http://dx.doi.org/10.3126/gjn.v12i1.23412 https://www.researchgate.net/publication/340249475_Mainstreaming_climate_change_adaptation_into_sectoral_policies_in_Nepal_A_review

111   ResearchGate. The Geographical Journal of Nepal. Vol. 12: 1-24, 2019. Central Department of Geography, Tribhuvan University, Kathmandu, Nepal. Mainstreaming climate change adaptation into sectoral policies in Nepal: A review. January 2019. DOI: http://dx.doi.org/10.3126/gjn.v12i1.23412 https://www.researchgate.net/publication/340249475_Mainstreaming_climate_change_adaptation_into_sectoral_policies_in_Nepal_A_review

112   Government of Nepal. Ministry of Health and Population. Health Emergency and Disaster Management Unit (HEDMU). Health Emergency Operation Center (HEOC). Risk Profile of Nepal. Website last updated 2018. https://heoc.mohp.gov.np/service/risk-profile-of-nepal/

113   Government of Nepal Ministry of Energy, Water Resources and Irrigation. Department of Hydrology and Meteorology Flood Forecasting Division. Standard operating procedure (SOP) for flood early warning system in Nepal. June 2018. http://hydrology.gov.np/#/publications?_k=2x0fi4

114   Government of Nepal National Planning Commission. Nepal Flood 2017 Post Flood Recovery Needs Assessment. https://reliefweb.int/sites/reliefweb.int/files/resources/PFRNA%20Report.pdf

115   Government of Nepal. Ministry of Health and Population. Health Emergency and Disaster Management Unit (HEDMU). Health Emergency Operation Center (HEOC). Risk Profile of Nepal. Website last updated 2018. https://heoc.mohp.gov.np/service/risk-profile-of-nepal/

116   Government of Nepal. Ministry of Health and Population. Health Emergency and Disaster Management Unit (HEDMU). Health Emergency Operation Center (HEOC). Risk Profile of Nepal. Website last updated 2018. https://heoc.mohp.gov.np/service/risk-profile-of-nepal/

117   Government of Nepal. Ministry of Health and Population. Health Emergency and Disaster Management Unit (HEDMU). Health Emergency Operation Center (HEOC). Risk Profile of Nepal. Website last updated 2018. https://heoc.mohp.gov.np/service/risk-profile-of-nepal/

118   Government of Nepal. Ministry of Health and Population. Health Emergency and Disaster Management Unit (HEDMU). Health Emergency Operation Center (HEOC). Risk Profile of Nepal. Website last updated 2018. https://heoc.mohp.gov.np/service/risk-profile-of-nepal/

119   Government of Nepal. Ministry of Health and Population. Health Emergency and Disaster Management Unit (HEDMU). Health Emergency Operation Center (HEOC). Risk Profile of Nepal. Website last updated 2018. https://heoc.mohp.gov.np/service/risk-profile-of-nepal/

120   Government of Nepal. Ministry of Health and Population. Health Emergency and Disaster Management Unit (HEDMU). Health Emergency Operation Center (HEOC). Risk Profile of Nepal. Website last updated 2018. https://heoc.mohp.gov.np/service/risk-profile-of-nepal/

121   Government of Nepal Ministry of Home Affairs. Nepal Disaster Report June 2019. http://drrportal.gov.np/uploads/document/1594.pdf

122   NDRRMA Facebook Page. Photo credit: Anil Pokhrel. 13 August 2020. https://www.facebook.com/NDRRMA/

123   NDRRMA Facebook Page. Photo credit: Anil Pokhrel. 13 August 2020. https://www.facebook.com/NDRRMA/

124   ReliefWeb. Nepal - Landslide update (MFD, Nepal Disaster Risk Reduction Portal) (ECHO Daily Flash of 17 August 2020). August 17, 2020. https://reliefweb.int/report/nepal/nepal-landslide-update-mfd-nepal-disaster-risk-reduction-portal-echo-daily-flash-17

125   OCHA. Humanitarian Response. Nepal: Monsoon Update (28 July 2019). https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/npl_flood_snapshot_29july2019.pdf

126   Government of Nepal Ministry of Home Affairs. Nepal Disaster Report June 2019. http://drrportal.gov.np/uploads/document/1594.pdf

127   Government of Nepal Ministry of Home Affairs. Nepal Disaster Report June 2019. http://drrportal.gov.np/uploads/document/1594.pdf

128   Government of Nepal National Planning Commission. Nepal Flood 2017 Post Flood Recovery Needs Assessment. https://reliefweb.int/sites/reliefweb.int/files/resources/PFRNA%20Report.pdf

129   ReliefWeb. Nepal: Flooding Response Plan (August 2017-February 2018). August 2017. https://reliefweb.int/sites/reliefweb.int/files/resources/Nepal%20Response%20Plan%20250817.pdf

130   ReliefWeb. Nepal: Flooding Response Plan (August 2017-February 2018). August 2017. https://reliefweb.int/sites/reliefweb.int/files/resources/Nepal%20Response%20Plan%20250817.pdf

131   Relief Web. Nepal: Floods and Landslides-Jul 2016. http://reliefweb.int/disaster/fl-2016-000068-npl

132   Relief Web. Nepal: Earthquake-Apr 2015. http://reliefweb.int/disaster/eq-2015-000048-npl

133   Government of Nepal National Planning Commission. Nepal Earthquake 2015: Post Disaster Needs Assessment: Vol. A. Key Findings. 2015. https://www.worldbank.org/content/dam/Worldbank/document/SAR/nepal/PDNA%20Volume%20A%20Final.pdf

134   Government of Nepal National Planning Commission. Nepal Earthquake 2015: Post Disaster Needs Assessment: Vol. A. Key Findings. 2015. https://www.worldbank.org/content/dam/Worldbank/document/SAR/nepal/PDNA%20Volume%20A%20Final.pdf

135   Relief Web. Nepal: Floods and Landslides-Aug 2014. http://reliefweb.int/disaster/ls-2014-000103-npl

136   Relief Web. India/Nepal: Floods and Landslides-Jun 2013. http://reliefweb.int/disaster/fl-2013-000070-ind

137   Relief Web. Nepal: Floods and Landslides-Jul 2012. http://reliefweb.int/disaster/fl-2012-000132-npl

138   Relief Web. Nepal: Flash Floods -May 2012. https://reliefweb.int/disaster/fl-2012-000071-npl

139   Relief Web. Nepal: Himalayan Earthquake-Sep. 2011. http://reliefweb.int/disaster/eq-2011-000136-ind

140   Relief Web. IFRC DREF final report. Nepal: Extreme Cold. https://reliefweb.int/sites/reliefweb.int/files/resources/Situation_Report_252.pdf

141   Government of Nepal. Ministry of Health and Population. Health Emergency and Disaster Management Unit (HEDMU). Health Emergency Operation Center (HEOC). Risk Profile of Nepal. Website last updated 2018. https://heoc.mohp.gov.np/service/risk-profile-of-nepal/

142   European Commission. Disaster Risk Management Knowledge Centre (DRMKC). INFORM Global Risk Index. Methodology. https://drmkc.jrc.ec.europa.eu/inform-index/InDepth/Methodology

143   European Commission. Disaster Risk Management Knowledge Centre (DRMKC). INFORM GRI Country Risk Profile. Nepal. Version 2020. https://drmkc.jrc.ec.europa.eu/inform-index

144   Government of Nepal Ministry of Home Affairs. Nepal Disaster Report June 2019. http://drrportal.gov.np/uploads/document/1594.pdf

145   Government of Nepal Ministry of Home Affairs. National Disaster Response Framework, first amendment, 2075 (2019) (Draft Version). Document provided via email from Prem Awasthi, National Field Coordinator for UN Resident Coordinator's Office on September 7, 2020. Document also provided by Kristin Pettersen, Lead Humanitarian Advisory to the Military from USAID BHA on September 9, 2020.

146   Humanitarian Country Team Contingency Plan. Nepal: Monsoon Flooding. May 2019. https://reliefweb.int/sites/reliefweb.int/files/resources/hct_monsoon_season_emergency_response_preparedness_2019_june_final.pdf

147   Oxford Policy Management. Disaster risk reduction and management in Nepal: Delineation of roles and Responsibilities. May 2020. https://www.opml.co.uk/files/Publications/a1594-strengthening-the-disaster-risk-response-in-nepal/delineation-of-responsibility-for-disaster-management-full-report-english.pdf?noredirect=1

148   Humanitarian Country Team Contingency Plan. Nepal: Monsoon Flooding. May 2019. https://reliefweb.int/sites/reliefweb.int/files/resources/hct_monsoon_season_emergency_response_preparedness_2019_june_final.pdf

149   Humanitarian Country Team Contingency Plan. Nepal: Earthquake. February 2016. http://www.flagship2.nrrc.org.np/sites/default/files/knowledge/EPR%20Plan%20Nepal%20-%20Earthquake%20-%20Feb%202016.pdf

150   Policy and Institutions Facility (PIF) Report. Learning from Nepal NRA to inform the National Disaster Risk Reduction and

Management Authority. Bhandari and Hodder. March 2019. https://www.dpnet.org.np/uploads/files/NRA%20Lessons%20-%20FINAL%20Report%202019-09-29%2010-39-08.pdf

151   Oxford Policy Management. Disaster risk reduction and management in Nepal: Delineation of roles and Responsibilities. May 2020. https://www.opml.co.uk/files/Publications/a1594-strengthening-the-disaster-risk-response-in-nepal/delineation-of-responsibility-for-disaster-management-full-report-english.pdf?noredirect=1

152   Government of Nepal Ministry of Home Affairs. National Disaster Response Framework, first amendment, 2075 (2019) (Draft Version). February 2019. Document provided via email from Prem Awasthi, National Field Coordinator for UN Resident Coordinator's Office on September 7, 2020. Document also provided by Kristin Pettersen, Lead Humanitarian Advisory to the Military from USAID BHA on September 9, 2020.

153   Government of Nepal Ministry of Home Affairs. National Disaster Response Framework, first amendment, 2075 (2019) (Draft Version). February 2019. Document provided via email from Prem Awasthi, National Field Coordinator for UN Resident Coordinator's Office on September 7, 2020. Document also provided by Kristin Pettersen, Lead Humanitarian Advisory to the Military from USAID BHA on September 9, 2020.

154   Government of Nepal Ministry of Home Affairs. National Disaster Response Framework, first amendment, 2075 (2019) (Draft Version). February 2019. Document provided via email from Prem Awasthi, National Field Coordinator for UN Resident Coordinator's Office on September 7, 2020. Document also provided by Kristin Pettersen, Lead Humanitarian Advisory to the Military from USAID BHA on September 9, 2020.

155   United Nations Nepal Information Platform. Contingency Plan 2016: Nepal Earthquake. http://un.org.np/attachments/contingency-plan-2016-nepal-earthquake

156   Government of Nepal Ministry of Home Affairs. National Disaster Response Framework, first amendment, 2075 (2019) (Draft Version). February 2019. Document provided via email from Prem Awasthi, National Field Coordinator for UN Resident Coordinator's Office on September 7, 2020. Document also provided by Kristin Pettersen, Lead Humanitarian Advisory to the Military from USAID BHA on September 9, 2020.

157   The Nepalese Army. Part 2. Operation 'SANKATMOCHAN'. https://www.nepalarmy.mil.np/upload/publications/special/english_part2.pdf

158   The Nepalese Army. Part 2. Operation 'SANKATMOCHAN'. https://www.nepalarmy.mil.np/upload/publications/special/english_part2.pdf

159   Government of Nepal National Planning Commission. Nepal Earthquake 2015: Post Disaster Needs Assessment: Vol. A. Key Findings. 2015. https://www.worldbank.org/content/dam/Worldbank/document/SAR/nepal/PDNA%20Volume%20A%20Final.pdf

160   Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DM). Operation Sahayogi Haat. United States Pacific Command Operation Sahayogi Haat Joint After Action Report (JAAR) January 2016.

161   Government of Nepal National Planning Commission. Nepal Earthquake 2015: Post Disaster Needs Assessment: Vol. A. Key Findings. 2015. https://www.worldbank.org/content/dam/Worldbank/document/SAR/nepal/PDNA%20Volume%20A%20Final.pdf

162   Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DM). Operation Sahayogi Haat. United States Pacific Command Operation Sahayogi Haat Joint After Action Report (JAAR) January 2016.

163   Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DM). Operation Sahayogi Haat. United States Pacific Command Operation Sahayogi Haat Joint After Action Report (JAAR) January 2016.

164   Joint UNEP/OCHA Environment Unit. Environment and Humanitarian action Country Study Nepal. January 2016. https://www.eecentre.org/Modules/EECResources/UploadFile/Attachment/Nepal_EHA_Study-_20160120.pdf

165   Joint UNEP/OCHA Environment Unit. Environment and Humanitarian action Country Study Nepal. January 2016. https://www.eecentre.org/Modules/EECResources/UploadFile/Attachment/Nepal_EHA_Study-_20160120.pdf

166   Humanitarian Technology: Science, Systems and Global Impact, 7-9 June 2016. Analyzing the National Disaster Response Framework and Inter-Organizational Network of the 2015 Nepal/Gorkha Earthquake. Mizan Bustanul Fuady Bisria and Shohei Beniyab. https://www.sciencedirect.com/science/article/pii/S1877705816322019

167   Government of Nepal National Planning Commission. Nepal Earthquake 2015: Post Disaster Needs Assessment: Vol. A. Key Findings. 2015. https://www.worldbank.org/content/dam/Worldbank/document/SAR/nepal/PDNA%20Volume%20A%20Final.pdf

168   Government of Nepal National Planning Commission. Nepal Earthquake 2015: Post Disaster Needs Assessment: Vol. A. Key Findings. 2015. https://www.worldbank.org/content/dam/Worldbank/document/SAR/nepal/PDNA%20Volume%20A%20Final.pdf

169   Humanitarian Technology: Science, Systems and Global Impact, 7-9 June 2016. Analyzing the National Disaster Response Framework and Inter-Organizational Network of the 2015 Nepal/Gorkha Earthquake. Mizan Bustanul Fuady Bisria and Shohei Beniyab. https://www.sciencedirect.com/science/article/pii/S1877705816322019

170   Government of Nepal National Planning Commission. Nepal Earthquake 2015: Post Disaster Needs Assessment: Vol. A. Key Findings. 2015. https://www.worldbank.org/content/dam/Worldbank/document/SAR/nepal/PDNA%20Volume%20A%20Final.pdf

171   Oxford Policy Management. Disaster risk reduction and management in Nepal: Delineation of roles and Responsibilities. May 2020. https://www.opml.co.uk/files/Publications/a1594-strengthening-the-disaster-risk-response-in-nepal/delineation-of-responsibility-for-disaster-management-full-report-english.pdf?noredirect=1

172   The Government of Nepal Ministry of Home Affairs. National Policy for Disaster Risk Reduction. 2018. https://app.adpc.net/sites/default/files/public/publications/attachments/DRR%20Policy%20%28Nepal%29.pdf

173   Oxford Policy Management. Disaster risk reduction and management in Nepal: Delineation of roles and Responsibilities. May 2020. https://www.opml.co.uk/files/Publications/a1594-strengthening-the-disaster-risk-response-in-nepal/delineation-of-responsibility-for-disaster-management-full-report-english.pdf?noredirect=1

174   Government of Nepal Ministry of Home Affairs. National Disaster Response Framework, first amendment, 2075 (2019) (Draft Version). February 2019. Document provided via email from Prem Awasthi, National Field Coordinator for UN Resident Coordinator's Office on September 7, 2020. Document also provided by Kristin Pettersen, Lead Humanitarian Advisory to the Military from USAID BHA on September 9, 2020.

175   Government of Nepal Ministry of Home Affairs. National Disaster Response Framework, first amendment, 2075 (2019) (Draft Version). February 2019. Document provided via email from Prem Awasthi, National Field Coordinator for UN Resident Coordinator's Office on September 7, 2020. Document also provided by Kristin Pettersen, Lead Humanitarian Advisory to the Military from USAID BHA on September 9, 2020.

176   The Government of Nepal Ministry of Home Affairs. National Policy for Disaster Risk Reduction. 2018. https://app.adpc.net/sites/default/files/public/publications/attachments/DRR%20Policy%20%28Nepal%29.pdf

177   Asian Preparedness Partnership (APP). Nepal Disaster Risk Reduction National Strategic Plan of Action (2018-2030). https://app.adpc.net/index.php/publications/nepal-disaster-risk-reduction-national-strategic-plan-action-2018-2030-english

178   The Government of Nepal Ministry of Home Affairs. Disaster Risk Reduction National Strategic Plan of Action 2018-2030. July 2018. https://app.adpc.net/sites/default/files/public/publications/attachments/DRR%20National%20Plan%20of%20Action%20%28Nepal%29.pdf

179   Oxford Policy Management. Disaster risk reduction and management in Nepal: Delineation of roles and Responsibilities. May 2020. https://www.opml.co.uk/files/Publications/a1594-strengthening-the-disaster-risk-response-in-nepal/delineation-of-responsibility-for-disaster-management-full-report-english.pdf?noredirect=1

180   Oxford Policy Management. Disaster risk reduction and management in Nepal: Delineation of roles and Responsibilities. May 2020. https://www.opml.co.uk/files/Publications/a1594-strengthening-the-disaster-risk-response-in-nepal/delineation-of-responsibility-for-disaster-management-full-report-english.pdf?noredirect=1

181   Humanitarian Country Team Contingency Plan. Nepal: Monsoon Flooding. May 2019. https://reliefweb.int/sites/reliefweb.int/files/resources/hct_monsoon_season_emergency_response_preparedness_2019_june_final.pdf

182   Government of Nepal Ministry of Home Affairs. National Disaster Response Framework, first amendment, 2075 (2019) (Draft Version). February 2019. Document provided via email from Prem Awasthi, National Field Coordinator for UN Resident Coordinator's Office on September 7, 2020. Document also provided by Kristin Pettersen, Lead Humanitarian Advisory to the Military from USAID BHA on September 9, 2020.

183 Humanitarian Country Team Contingency Plan. Nepal: Earthquake. February 2016. http://www.flagship2. nrrc.org.np/sites/default/files/knowledge/EPR%20 Plan%20Nepal%20-%20Earthquake%20-%20Feb%202016. pdf

184 ALNAPSTUDY. Exploring Coordination in Humanitarian Clusters. Clarke and Campbell. 2015. file:///C:/Users/acile/Downloads/exploring-coordination-in-humanitarian-clusters.pdf

185 Government of Nepal National Planning Commission. Nepal Earthquake 2015: Post Disaster Needs Assessment: Vol. A. Key Findings. 2015. https://www. worldbank.org/content/dam/Worldbank/document/SAR/ nepal/PDNA%20Volume%20A%20Final.pdf

186 Humanitarian Country Team Contingency Plan. Nepal: Monsoon Flooding. May 2019. https://reliefweb. int/sites/reliefweb.int/files/resources/hct_monsoon_ season_emergency_response_preparedness_2019_june_ final.pdf

187 United Nations Nepal Information Platform. Contingency Plan 2016: Nepal Earthquake. http://un.org. np/attachments/contingency-plan-2016-nepal-earthquake

188 United Nations Nepal. COVID-19: Preparedness and Response Plan (CPRP). Government of Nepal's Health Sector Emergency Response Plan. COVID-19 Pandemic. May 2020. http://un.org.np/sites/default/ files/26-05-20%20Covid-19%20CPRP.pdf

189 About the Movement. Page last updated 2019. Accessed March 15, 2020. http://www.bdrcs.org/about-movement

190 IFRC. Who we are. http://www.ifrc.org/en/who-we-are/

191 Email communication with Gabrielle Emery, IFRC Disaster Law Coordinator-Asia Pacific, 14 September. Feedback provided from Krishna Kumar, IFRC.

192 Email communication with Gabrielle Emery, IFRC Disaster Law Coordinator-Asia Pacific, 14 September. Feedback provided from Krishna Kumar, IFRC.

193 ReliefWeb. Nepal: Earthquake Emergency Appeal Final Report (MDRNP008). Oct 16, 2019.

194 ReliefWeb. Nepal: Earthquake Emergency Appeal Final Report (MDRNP008). Oct 16, 2019.

195 USAID. The Real Heroes Behind USAID's Nepal Earthquake Response. Bill Berger. April 25, 2016. https:// blog.usaid.gov/2016/04/the-real-heroes-behind-usaids-nepal-earthquake-response/

196 USAID. Building Back Together: Nepal, One Year Later. Peter Mainak. April 25, 2016. https://blog.usaid. gov/2016/04/building-back-together-nepal-one-year-later/

197 USAID. Building Back Together: Nepal, One Year Later. Peter Mainak. April 25, 2016. https://blog.usaid. gov/2016/04/building-back-together-nepal-one-year-later/

198 USAID. Building Back Together: Nepal, One Year Later. Peter Mainak. April 25, 2016. https://blog.usaid. gov/2016/04/building-back-together-nepal-one-year-later/

199 Government of Nepal Ministry of Home Affairs. Nepal Disaster Report June 2019. http://drrportal.gov.np/ uploads/document/1594.pdf

200 Government of Nepal Ministry of Energy, Water Resources and Irrigation. Department of Hydrology and Meteorology Flood Forecasting Division. Standard operating procedure (SOP) for flood early warning system in Nepal. June 2018. http://hydrology.gov.np/#/ publications?_k=2x0fi4

201 Government of Nepal Ministry of Energy, Water Resources and Irrigation. Department of Hydrology and Meteorology Flood Forecasting Division. Standard operating procedure (SOP) for flood early warning system in Nepal. June 2018. http://hydrology.gov.np/#/ publications?_k=2x0fi4

202 Government of Nepal Ministry of Energy, Water Resources and Irrigation. Department of Hydrology and Meteorology Flood Forecasting Division. Standard operating procedure (SOP) for flood early warning system in Nepal. June 2018. http://hydrology.gov.np/#/ publications?_k=2x0fi4

203 Government of Nepal Ministry of Energy, Water Resources and Irrigation. Department of Hydrology and Meteorology Flood Forecasting Division. Standard operating procedure (SOP) for flood early warning system in Nepal. June 2018. http://hydrology.gov.np/#/ publications?_k=2x0fi4

204 Government of Nepal Ministry of Energy, Water Resources and Irrigation. Department of Hydrology and Meteorology Flood Forecasting Division. Standard operating procedure (SOP) for flood early warning system in Nepal. June 2018. http://hydrology.gov.np/#/ publications?_k=2x0fi4

205 Center for Excellence in Disaster Management & Humanitarian Assistance. Humanitarian Assistance Response Training (HART) Module: HA/DR Information. September 2018.

206 Joint Publication 3-29. Foreign Humanitarian Assistance. January 3, 2014. http://www.jcs.mil/ Portals/36/Documents/Doctrine/pubs/jp3_29.pdf

207 Email communication from Julia Hartelius, Interim Disaster Law Coordinator, International Federation of Red Cross and Red Crescent Societies. Asia Pacific Regional Office. April 15, 2019.

208 Email communication from Julia Hartelius, Interim Disaster Law Coordinator, International Federation of Red Cross and Red Crescent Societies. Asia Pacific Regional Office. April 15, 2019.

209 USAID. https://www.usaid.gov/who-we-are/

organization/bureaus/bureau-democracy-conflict-andhumanitarian-assistance/office-us

210 Pacific Disaster Center. About DisasterAWARE. https://www.pdc.org/apps/disasteraware/about-disasteraware/

211 Pacific Disaster Center. Disaster Alert. https:// disasteralert.pdc.org/disasteralert/

DisasterAWARE Quick Start User Guide, 2019, Version 6.5. https://disasteraware.pdc.org/help/Quick-Start-Guide-DisasterAWARE-screen.pdf

212   USAID. https://www.usaid.gov/sites/default/files/documents/1861/FS_EarlyWarningCapacityDevelopment_PDC_Eng.pdf

213   APAN. About Us. https://www.apan.org/

214   Britannica. Transportation. https://www.britannica.com/place/Nepal/The-economy#ref23647

215   Government of Nepal. Transportation Sector. http://nepal.gov.np:8080/NationalPortal/view-page?id=63

216   Logistics Cluster. Nepal International Airport. https://dlca.logcluster.org/display/public/DLCA/2.2.1+Nepal+International+Airport+-+Tribhuvan

217   Figure 4: Airport Network in Nepal. https://dlca.logcluster.org/display/public/DLCA/2.2+Nepal+Aviation?preview=/852202/27558187/NPL_LCA_AirportNetwork_A4L_20190830.png

218   Jane's Sentinel Security Assessment for Nepal 2020.

219   Jane's Sentinel Security Assessment for Nepal 2020.

220   Logistics Cluster. Nepal Logistics Infrastructure. https://dlca.logcluster.org/display/public/DLCA/2+Nepal+Logistics+Infrastructure

221   Log Cluster. Nepal Road Network. https://dlca.logcluster.org/display/public/DLCA/2.3+Nepal+Road+Network

222   Government of Nepal. DRR National Plan of Action 2018-2030.

223   Britannica. Transportation. https://www.britannica.com/place/Nepal/The-economy#ref23647

224   Britannica. Transportation. https://www.britannica.com/place/Nepal/The-economy#ref23647

225   Jane's Sentinel Security Assessment for Nepal 2020.

226   Jane's Sentinel Security Assessment for Nepal 2020.

227   USAID. Nepal Education. https://www.usaid.gov/nepal/education

228   Government of Nepal. Ministry of Education. School Sector Development Plan. http://www.moe.gov.np/assets/uploads/files/SSDP_Book_English_Final_July_5,_2017.pdf

229   Britannica. Health and Education. https://www.britannica.com/place/Nepal/Administration-and-social-conditions#ref23651

230   Government of Nepal School Sector Development Plan 2016-2023. http://www.moe.gov.np/assets/uploads/files/SSDP_Book_English_Final_July_5,_2017.pdf

231   Government of Nepal School Sector Development Plan 2016-2023. http://www.moe.gov.np/assets/uploads/files/SSDP_Book_English_Final_July_5,_2017.pdf

232   Nepal Earthquake Post Disaster Needs Assessment. https://www.worldbank.org/content/dam/Worldbank/document/SAR/nepal/PDNA%20Volume%20A%20Final.pdf

233   USAID. Nepal Education. https://www.usaid.gov/nepal/education

234   Government of Nepal School Sector Development Plan 2016-2023. http://www.moe.gov.np/assets/uploads/files/SSDP_Book_English_Final_July_5,_2017.pdf

235   Government of Nepal School Sector Development Plan 2016-2023. http://www.moe.gov.np/assets/uploads/files/SSDP_Book_English_Final_July_5,_2017.pdf

236   World Bank. Government of Nepal Post Disaster Needs Assessment. 2015. https://www.worldbank.org/content/dam/Worldbank/document/SAR/nepal/PDNA%20Volume%20A%20Final.pdf

237   Jane's Sentinel Security Assessment for Nepal 2020.

238   Nepal Telecommunications Authority. MIS Report. July 2019. https://nta.gov.np/wp-content/uploads/MIS-2076-Baisakh.pdf

239   Nepali Telecom. Internet users in Nepal increases rapidly, penetration reaches 63%. https://www.nepalitelecom.com/2018/01/internet-in-nepal-users-rapid-increase.html

240   OnlineKabar. Number of Internet Users Increases by 4.4 million in one year. 22 July 2019. https://english.onlinekhabar.com/number-of-internet-users-increases-by-4-4-million-in-one-year.html

241   Telecomkhabar. Total Internet Subscribers in Nepal in 2019. https://www.telecomkhabar.com/2019/07/internet-subscribers-in-nepal-in-2019/

242   Media Landscapes. Nepal. https://medialandscapes.org/country/nepal

243   Government of Nepal. Postal Services Department. http://www.gpo.gov.np/Home/About

244   Government of Nepal. Energy Sector. https://nepal.gov.np:8443/NationalPortal/view-page?id=92

245   CIA Factbook Nepal. Energy. https://www.cia.gov/library/publications/the-world-factbook/geos/np.html

246   Reuters. India and Nepal PMs launch construction of 900 MW power plant. 10 May 2018. https://www.reuters.com/article/us-nepal-india/india-and-nepal-pms-launch-construction-of-900-mw-power-plant-idUSKBN1IC0P4

247   The Economic Times. BHEL bags second hydroelectric project order in Nepal. 3 February 2020. https://energy.economictimes.indiatimes.com/news/renewable/india-proposes-to-construct-400-mw-hydropower-project-in-nepal/67973726

248   Government of Nepal. Energy Sector. https://nepal.gov.np:8443/NationalPortal/view-page?id=92

249   UNICEF. WASH https://www.unicef.org/nepal/water-and-sanitation-wash

250   Government of Nepal. Nepal Disaster Report 2019. http://drrportal.gov.np/uploads/document/1594.pdf

251   UNICEF. NEPAL WASH. https://www.unicef.org/nepal/water-and-sanitation-wash

252   Government of Nepal Ministry of Health and Population Department of Health Services. http://dohs.gov.np/about-us/department-of-health-services/

253   Ministry of Health and Population. Nepal Health Research Council. Nepal Burden of Disease 2017. A Country Report based on the Global Burden of Disease 2017 Study. April 2019. http://nhrc.gov.np/wp-content/uploads/2019/04/NBoD-2017_NHRC-MoHP.pdf

254   Nepal Health Research Council. Burden of Non-communicable Diseases in Nepal: An Urgent Need for Actions. http://nhrc.gov.np/wp-content/uploads/2019/07/NCDs-policy-brief.pdf

255   Ministry of Health and Population. Government of Nepal Department of Health Services 2073/74 (2016/17) Annual Report. http://dohs.gov.np/publications/

256   Modelling of COVID-19 Strategies in Nepal. White, Letchford, Pokharel, Lata, and Zaman. May 2020. https://reliefweb.int/sites/reliefweb.int/files/resources/Nepal_COVID-19_modelling_-_final_published.pdf

257   Oxford Policy Management. Disaster risk reduction and management in Nepal: Delineation of roles and Responsibilities. May 2020. https://www.opml.co.uk/files/Publications/a1594-strengthening-the-disaster-risk-response-in-nepal/delineation-of-responsibility-for-disaster-management-full-report-english.pdf?noredirect=1

258   Government of Nepal. Ministry of Health and Population. Health Emergency and Disaster Management Unit (HEDMU). Health Emergency Operation Center (HEOC). Coronavirus disease (COVID-19) outbreak updates & resource materials. Situation Report. https://heoc.mohp.gov.np/update-on-novel-corona-virus-covid-19/

259   Government of Nepal. Ministry of Health and Population. Health Emergency and Disaster Management Unit (HEDMU). Health Emergency Operation Center (HEOC). Coronavirus disease (COVID-19) outbreak updates & resource materials. Situation Report. https://heoc.mohp.gov.np/update-on-novel-corona-virus-covid-19/

260   United Nations Nepal. COVID-19: Preparedness and Response Plan (CPRP). Government of Nepal's Health Sector Emergency Response Plan. COVID-19 Pandemic. May 2020. http://un.org.np/sites/default/files/26-05-20%20Covid-19%20CPRP.pdf

261   United Nations Nepal. COVID-19: Preparedness and Response Plan (CPRP). Government of Nepal's Health Sector Emergency Response Plan. COVID-19 Pandemic. May 2020. http://un.org.np/sites/default/files/26-05-20%20Covid-19%20CPRP.pdf

262   Ministry of Health and Population. Government of Nepal Department of Health Services 2074/75 (2017/18) Annual Report. https://dohs.gov.np/wp-content/uploads/2019/07/DoHS-Annual-Report-FY-2074-75-date-22-Ashad-2076-for-web-1.pdf

263   Ministry of Health and Population. Government of Nepal Department of Health Services 2074/75 (2017/18) Annual Report. https://dohs.gov.np/wp-content/uploads/2019/07/DoHS-Annual-Report-FY-2074-75-date-22-Ashad-2076-for-web-1.pdf

264   Ministry of Health and Population. Government of Nepal Department of Health Services 2074/75 (2017/18) Annual Report. https://dohs.gov.np/wp-content/uploads/2019/07/DoHS-Annual-Report-FY-2074-75-date-22-Ashad-2076-for-web-1.pdf

265   Ministry of Health and Population. Government of Nepal Department of Health Services 2074/75 (2017/18) Annual Report. https://dohs.gov.np/wp-content/uploads/2019/07/DoHS-Annual-Report-FY-2074-75-date-22-Ashad-2076-for-web-1.pdf

266   Ministry of Health and Population. Government of Nepal Department of Health Services 2074/75 (2017/18) Annual Report. https://dohs.gov.np/wp-content/uploads/2019/07/DoHS-Annual-Report-FY-2074-75-date-22-Ashad-2076-for-web-1.pdf

267   Ministry of Health and Population. Government of Nepal Department of Health Services 2074/75 (2017/18) Annual Report. https://dohs.gov.np/wp-content/uploads/2019/07/DoHS-Annual-Report-FY-2074-75-date-22-Ashad-2076-for-web-1.pdf

268   Ministry of Health and Population. Government of Nepal Department of Health Services 2074/75 (2017/18) Annual Report. https://dohs.gov.np/wp-content/uploads/2019/07/DoHS-Annual-Report-FY-2074-75-date-22-Ashad-2076-for-web-1.pdf

269   World Health Organization. Noncommunicable Disease Risk Factors: STEOPS Survey Nepal 2019. https://www.who.int/docs/default-source/nepal-documents/ncds/ncd-steps-survey-2019-compressed.pdf?sfvrsn=807bc4c6_2

270   World Health Organization. Noncommunicable Diseases Country Profiles 2018. file:///C:/Users/acile/Downloads/9789241514620-eng.pdf

271   Ministry of Health and Population. Government of Nepal Department of Health Services 2073/74 (2016/17) Annual Report. http://dohs.gov.np/publications/

272   UN Women and Gender in Humanitarian Action Task Team (GiHA TT). Nepal Gender Equality and Social Inclusion (GESI) Profile for COVID-19 Responses and Preparedness. May 8 2020. http://un.org.np/sites/default/files/Nepal%20GESI%20Profile_8%20May%202020.pdf

273   PeaceWomen. National Action Plan: Nepal. http://www.peacewomen.org/nap-nepal

274   NGO Working Group on Women, Peace, and Security. Nepal. https://www.womenpeacesecurity.org/region/nepal/

275   The New Humanitarian. Reintegration challenges for Maoist female ex-combatants. https://www.thenewhumanitarian.org/report/88806/nepal-reintegration-challenges-maoist-female-ex-combatants

276   USAID. Factsheet: Gender Equality, Female Empowerment, and Social Inclusion.https://www.usaid.gov/sites/default/files/documents/1861/FINAL_GESI_Factsheet.pdf

277   USAID. Factsheet: Gender Equality, Female Empowerment, and Social Inclusion.https://www.usaid.gov/sites/default/files/documents/1861/FINAL_GESI_Factsheet.pdf

278   NGO Working Group on Women, Peace, and Security. Nepal. https://www.womenpeacesecurity.org/region/nepal/

279   NGO Working Group on Women, Peace, and Security. Nepal. https://www.womenpeacesecurity.org/region/nepal/

280   UNDP. Human Development Reports. 2019. http://www.hdr.undp.org/en/countries/profiles/NPL

281   UN WOMEN. Asia and the Pacific. About UN Women Nepal. https://asiapacific.unwomen.org/en/countries/nepal/about-un-women-nepal

282   The New Humanitarian. Post-quake Nepal: No country for old women. March 1, 2017. https://www. thenewhumanitarian.org/feature/2017/03/01/post-quake-nepal-no-country-old-women

283   Practical Action. Missing Voices: Experiences of marginalized gender groups in disaster in Nepal and Peru. Working Paper. June 2019. https://reliefweb.int/sites/reliefweb.int/files/resources/Missing%20Voices.pdf

284   UN WOMEN. Asia and the Pacific. About UN Women Nepal. https://asiapacific.unwomen.org/en/countries/nepal/about-un-women-nepal

285   UN WOMEN. Asia and the Pacific. About UN Women Nepal. https://asiapacific.unwomen.org/en/countries/nepal/about-un-women-nepal

286   UN WOMEN and UNICEF. Gender and Age Inequality of Disaster Risk. December 2019. https://reliefweb.int/sites/reliefweb.int/files/resources/Gender%20and%20age%20inequality%20of%20disaster%20risk.pdf

287   UN Women and Gender in Humanitarian Action Task Team (GiHA TT). Nepal Gender Equality and Social Inclusion (GESI) Profile for COVID-19 Responses and Preparedness. May 8 2020. http://un.org.np/sites/default/files/Nepal%20GESI%20Profile_8%20May%202020.pdf

288   UN WOMEN and UNICEF. Gender and Age Inequality of Disaster Risk. December 2019. https://reliefweb.int/sites/reliefweb.int/files/resources/Gender%20and%20age%20inequality%20of%20disaster%20risk.pdf

289   UN WOMEN and UNICEF. Gender and Age Inequality of Disaster Risk. December 2019. https://reliefweb.int/sites/reliefweb.int/files/resources/Gender%20and%20age%20inequality%20of%20disaster%20risk.pdf

290   UN WOMEN. Action Brief. Women, Peace, and Security and COVID-19 in Asia and the Pacific. 2020. https://asiapacific.unwomen.org/en/digital-library/publications/2020/03/women-peace-and-security-and-covid-19-in-asia-pacific#view

291   UN Women and Gender in Humanitarian Action Task Team (GiHA TT). Nepal Gender Equality and Social Inclusion (GESI) Profile for COVID-19 Responses and Preparedness. May 8 2020. http://un.org.np/sites/default/files/Nepal%20GESI%20Profile_8%20May%202020.pdf

292   The New Humanitarian. As home births rise in Nepal, so do fears for maternal health. July 6, 2020. https://www.thenewhumanitarian.org/news/2020/07/06/Nepal-coronavirus-maternal-health-pregnancy

293   UN WOMEN. Action Brief. Women, Peace, and Security and COVID-19 in Asia and the Pacific. 2020. https://asiapacific.unwomen.org/en/digital-library/publications/2020/03/women-peace-and-security-and-covid-19-in-asia-pacific#view

294   Save the Children. Nepal: Much Awaited Disaster Risk Reduction and Management Act Is Endorsed. October 18 2017. https://nepal.savethechildren.net/news/much-awaited-disaster-risk-reduction-and-management-act-endorsed

295   Government of Nepal Ministry of Home Affairs. Nepal Disaster Report June 2019. http://drrportal.gov.np/uploads/document/1594.pdf

296   Government of Nepal Ministry of Energy, Water Resources and Irrigation. Department of Hydrology and Meteorology Flood Forecasting Division. Standard operating procedure (SOP) for flood early warning system in Nepal. June 2018. http://hydrology.gov.np/#/publications?_k=2x0fi4

297   Government of Nepal National Planning Commission. Nepal Flood 2017 Post Flood Recovery Needs Assessment. https://reliefweb.int/sites/reliefweb.int/files/resources/PFRNA%20Report.pdf

298   ReliefWeb. Nepal: Flooding Response Plan (August 2017-February 2018). August 2017. https://reliefweb.int/sites/reliefweb.int/files/resources/Nepal%20Response%20Plan%20250817.pdf

299   The Asia Foundation. Independent Impacts and Recovery Monitoring Phase 4: April 2017. https://asiafoundation.org/wp-content/uploads/2017/10/Aid-and-Recovery-in-Post-Earthquake-Nepal-Synthesis-Report-Phase-4-1.pdf

300   Government of Nepal National Planning Commission. Nepal Earthquake 2015: Post Disaster Needs Assessment: Vol. A. Key Findings. 2015. https://www.worldbank.org/content/dam/Worldbank/document/SAR/nepal/PDNA%20Volume%20A%20Final.pdf

301   Statement by Mr. Prem Kumar Rai, Secretary at the Ministry of Home Affairs and Head of the Nepali Delegation to the Global Platform for Disaster Risk Reduction (GP 2019) 13-17 May 2019 Geneva, Switzerland. https://www.preventionweb.net/files/globalplatform/Official%20Statement%20for%20GP%202019%20.pdf

302   Government of Nepal Ministry of Home Affairs. Nepal Disaster Report June 2019. http://drrportal.gov.np/uploads/document/1594.pdf

303   Government of Nepal Ministry of Home Affairs. Nepal Disaster Report June 2019. http://drrportal.gov.np/uploads/document/1594.pdf

304   Government of Nepal Ministry of Home Affairs. National Disaster Response Framework, first amendment, 2075 (2019) (Draft Version). February 2019. Document provided via email from Prem Awasthi, National Field Coordinator for UN Resident Coordinator's Office on September 7, 2020. Document also provided by Kristin Pettersen, Lead Humanitarian Advisory to the Military from USAID BHA on September 9, 2020.

305   Oxford Policy Management. Disaster risk reduction and management in Nepal: Delineation of roles and Responsibilities. May 2020. https://www.opml.co.uk/files/Publications/a1594-strengthening-the-disaster-risk-response-in-nepal/delineation-of-responsibility-for-disaster-management-full-report-english.pdf?noredirect=1

306   Humanitarian Country Team Contingency Plan. Nepal: Monsoon Flooding. May 2019. https://reliefweb.int/sites/reliefweb.int/files/resources/hct_monsoon_season_emergency_response_preparedness_2019_june_final.pdf

307   Government of Nepal Ministry of Home Affairs. National Disaster Response Framework, first amendment, 2075 (2019) (Draft Version). February 2019. Document provided via email from Prem Awasthi, National Field Coordinator for UN Resident Coordinator's Office on September 7, 2020. Document also provided by Kristin Pettersen, Lead Humanitarian Advisory to the Military from USAID BHA on September 9, 2020.

308   Government of Nepal Ministry of Home Affairs. Nepal Disaster Report June 2019. http://drrportal.gov.np/uploads/document/1594.pdf

309   DVIDS. USARPAC, Nepali Army Disaster Response Exercise And Exchange 2019. https://www.dvidshub.net/news/323199/usarpac-nepali-army-disaster-response-exercise-and-exchange-2019

310   U.S. Army. Multinational disaster response exercise wraps up in Nepal. September 28, 2018. Sgt. 1st Class Corey Ray. https://www.army.mil/article/211802/multinational_disaster_response_exercise_wraps_up_in_nepal

311   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. https://www.pacom.mil/Media/News/News-Article-View/Article/1140219/women-peace-security-and-the-future-of-un-peacekeeping/

312   U.S. Pacific Command (PACOM). Nepalese Army Disaster Response Exercise Closes. September 30, 2016. Staff Sgt. Christopher Brown. https://www.pacom.mil/Media/News/News-Article-View/Article/960801/nepalese-army-disaster-response-exercise-closes/

313   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. https://www.pacom.mil/Media/News/News-Article-View/Article/823118/us-air-force-nepal-exchange-disaster-relief-best-practices/

314   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. https://www.pacom.mil/Media/News/Article/586832/nepal-us-relief-and-recovery-targeting-most-affected-populations/

315   Government of Nepal Ministry of Foreign Affairs. Report on Nepal's Foreign Affairs (2018-2019). https://mofa.gov.np/wp-content/uploads/2019/12/Annual-Report-Final-Draft-29-Dec-2019-FINAL.pdf

316   Government of Nepal Ministry of Foreign Affairs. Report on Nepal's Foreign Affairs (2018-2019). https://mofa.gov.np/wp-content/uploads/2019/12/Annual-Report-Final-Draft-29-Dec-2019-FINAL.pdf

317   Government of Nepal Ministry of Foreign Affairs. Report on Nepal's Foreign Affairs (2018-2019). https://mofa.gov.np/wp-content/uploads/2019/12/Annual-Report-Final-Draft-29-Dec-2019-FINAL.pdf

318   USAID Nepal. https://www.usaid.gov/nepal

319   Government of Nepal Ministry of Foreign Affairs. Report on Nepal's Foreign Affairs (2018-2019). https://mofa.gov.np/wp-content/uploads/2019/12/Annual-Report-Final-Draft-29-Dec-2019-FINAL.pdf

320   U.S. Embassy in Nepal. U.S.-Nepal Relations. https://np.usembassy.gov/our-relationship/policy-history/

321   Government of Nepal Ministry of Foreign Affairs. Report on Nepal's Foreign Affairs (2018-2019). https://mofa.gov.np/wp-content/uploads/2019/12/Annual-Report-Final-Draft-29-Dec-2019-FINAL.pdf

322   Government of Nepal Ministry of Foreign Affairs. Report on Nepal's Foreign Affairs (2018-2019). https://mofa.gov.np/wp-content/uploads/2019/12/Annual-Report-Final-Draft-29-Dec-2019-FINAL.pdf

323   Central Intelligence Agency. The World Factbook. South Asia: Nepal. Page last updated August 4, 2020. https://www.cia.gov/library/publications/the-world-factbook/geos/np.html

324   U.S. Embassy in Nepal. Visas. https://np.usembassy.gov/visas/

325   U.S. Embassy in Nepal. Visas. https://np.usembassy.gov/visas/

326   U.S. Embassy in Nepal. Health Alert. August 19, 2020. https://np.usembassy.gov/health-alert-u-s-embassy-kathmandu-nepal-20/

327   Travel.State.Gov. U.S. Department of State-Bureau of Consular Affairs. https://travel.state.gov/content/travel/en/international-travel/International-Travel-Country-Information-Pages/Nepal.html

328   Travel.State.Gov. U.S. Department of State-Bureau of Consular Affairs. Country Information: Nepal.

329   U.S. Embassy in Nepal. Emergency Contact-All Locations. Page accessed August 25, 2020. https://np https://travel.state.gov/content/travel/en/international-travel/International-Travel-Country-Information-Pages/Nepal.html.usembassy.gov/u-s-citizen-services/emergency-contact/

330   Travel.State.Gov. U.S. Department of State-Bureau of Consular Affairs. https://travel.state.gov/content/travel/en/international-travel/International-Travel-Country-Information-Pages/Nepal.html

331   OANDA. Currency Tools. Nepalese Rupee. https://www1.oanda.com/currency/iso-currency-codes/NPR

332   Centers for Disease Control and Prevention. Nepal Traveler View. https://wwwnc.cdc.gov/travel/destinations/traveler/none/nepal

333   Centers for Disease Control and Prevention. Nepal Traveler View. https://wwwnc.cdc.gov/travel/destinations/traveler/none/nepal

334   Statement by Mr. Prem Kumar Rai, Secretary at the Ministry of Home Affairs and Head of the Nepali Delegation to the Global Platform for Disaster Risk Reduction (GP 2019) 13-17 May 2019 Geneva, Switzerland. https://www.preventionweb.net/files/globalplatform/Official%20Statement%20for%20GP%202019%20.pdf

335   PreventionWeb.net. Chart of the Sendai Framework for Disaster Risk Reduction 2015-2030. http://www.preventionweb.net/files/44983_sendaiframeworkchart.pdf

336   UNISDR. Sendai Framework for Disaster Risk Reduction. https://www.unisdr.org/we/coordinate/sendai-framework

337   PreventionWeb.net. Chart of the Sendai Framework for Disaster Risk Reduction 2015-2030. http://www.preventionweb.net/files/44983_sendaiframeworkchart.pdf

338   UNISDR. Sendai Framework for Disaster Risk Reduction. https://www.unisdr.org/we/coordinate/sendai-framework

339   PreventionWeb.net. Chart of the Sendai Framework for Disaster Risk Reduction 2015-2030. http://www.preventionweb.net/files/44983_sendaiframeworkchart.pdf

340   PreventionWeb. Nepal National progress report on the implementation of the Hyogo Framework for Action (2013-2015). April 2015. https://www.preventionweb.net/files/41755_NPL_NationalHFAprogress_2013-15.pdf

341   Central Intelligence Agency. The World Factbook. South Asia: Nepal. Page last updated August 4, 2020. https://www.cia.gov/library/publications/the-world-factbook/geos/np.html

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