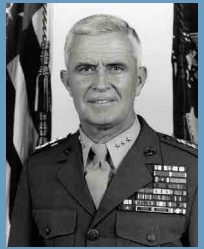
BANGLADESH

Disaster Management Reference Handbook

May 2020



Dedicated in memory of

Lt. Gen. Henry "Hank" C. Stackpole, USMC

May 7, 1935 – May 29, 2020

Joint Task Force Commander, Operation Sea Angel (1991)

Acknowledgements

CFE-DM would like to thank the following people for their knowledge and support in developing this resource:

Lieutenant Colonel (Dr) Md Fakhrul Alam, Bangladesh Army
Dr. Ethan Allen, DKI-APCSS Associate Professor, College of Security Studies
Gabrielle Emery, IFRC Disaster Law Coordinator-Asia Pacific
Henry Glorieux, U.N. Bangladesh Humanitarian Affairs Advisor
Silke Bañuelos-Kuang, OCHA HAO/CMCoord Coordination Unit
Kazi Shahidur Rahman, U.N. Bangladesh Humanitarian Affairs Advisor
Major Allan Tan, Changi RHCC C4 Officer

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ISBN 978-1-955429-02-3



United States Marine Corps Maj. Gen. Henry Stackpole, serving as the commander of Task Force Sea Angel speaks with Marines from III Marine Expeditionary Force and 3rd Marine Division during Operation Sea Angel, April 30, 1991, in Bangladesh. Stackpole retired at the rank of Lieutenant General in 1994.

Dedicated in memory of Lt. Gen. Henry "Hank" C. Stackpole, USMC

May 7, 1935 – May 29, 2020
Joint Task Force Commander, Operation Sea Angel (1991)

The Center for Excellence in Disaster Management and Humanitarian Assistance dedicates this Bangladesh Disaster Management Reference Handbook to honor the legacy of retired United States Marine Corps Lt. Gen. Henry "Hank" C. Stackpole in recognition of his contributions to Bangladesh during Operation Sea Angel.

Stackpole honorably served in the Marine Corps for 37 years, retiring in 1994. Between May 10 and June 13, 1991, he was the commander of Joint Task Force Sea Angel, one of the largest military disaster relief forces ever assembled. In 1991, Cyclone Marian struck the Chittagong district of southeastern Bangladesh. Approximately 139,000 people were killed and an estimated 10 million became homeless or displaced.

Less than two weeks later, the U.S. organized a contingency joint task force commanded by Stackpole, to spearhead humanitarian assistance and disaster relief efforts to the devastated areas. The operation's name Joint Task Force Sea Angel originated from Bangladeshis referring to U.S. military personnel as "angels from the sea."

Stackpole and the 6,700 American service members under his command are credited with saving 200,000 lives and providing medical care to more than two million people, according to Paul A. McCarthy, former logistics officer during Sea Angel.

Lt. Gen. Stackpole's last active duty assignment was as the commander of U.S. Marine Corps Forces, Pacific, and Fleet Marine Force, Pacific, headquartered at Camp H.M. Smith, Hawaii, where he assumed command in July 1992. Following his retirement from the Marine Corps, he served from 1998 to 2005, as president of the Daniel K. Inouye Asia Pacific Center for Security Studies. Stackpole graduated from Princeton University in 1957 with a B.A. in English.

He was the recipient of many distinguished awards and decorations to include the Silver Star Medal, Defense Superior Service Medal with oak leaf cluster, Legion of Merit, the Purple Heart with gold star, the Government of Japan Order of The Rising Sun, and the Vietnamese Cross of Gallantry. He was awarded the Silver Star for conspicuous gallantry and intrepidity in action while serving with Company I, 3rd Battalion, 5th Marines, and 1st Marine Division, during combat operations against the enemy in the Republic of Vietnam.

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Disclaimer

This report has been prepared in good faith based primarily on information gathered from open source material available at the date of publication. Most of the information is considered to be in the public domain. Such sources include PreventionWeb, Reliefweb, United Nations Programs, the World Health Organization, USAID's Office of U.S. Foreign Disaster Assistance (USAID/ OFDA), International Organization for Migration (IOM), the International Federation of Red Cross and Red Crescent Societies (IFRC), the World Bank, and various academic institutions. Information was also gathered from local and government sources in the affected country. We also reach out to subject matter experts and incorporate feedback and additional sources listed in the reference section of this document. Where possible, a link to the original electronic source is provided in the endnote (reference) section at the end of the document. While making every attempt to ensure the information is relevant and accurate, the Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DM) does not guarantee or warrant the accuracy, reliability, completeness or currency of the information in this publication. Any necessary updates will be incorporated in a future version.

Welcome - Note from the Director

Bangladesh has many partners in regard to disaster management including national authorities at central and local levels, academia and the private sector, and UN Agencies. The Humanitarian Community is also working in partnership with many civil-military stakeholders. Several programs assist with the development of relationships and disaster response capabilities in the region.

Humanitarian assistance and disaster response expert working groups are helping to coordinate that assistance. Bangladesh chaired the Regional Consultative Group (RCG) on Humanitarian Civil Military Coordination (CMCoord) with the support of OCHA Regional Office of Asia and the Pacific (ROAP) and the Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DM) in 2018.[1] The RCG acts as a regional forum to bring together humanitarian, civilian and military actors involved in disaster response preparedness planning and disaster response in the region.[2]

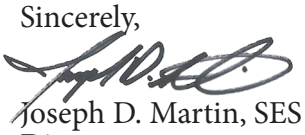
In April 2019, Exercise Coordinated Response (Ex COORES) was co-organized by the Singapore Armed Forces Changi Regional Humanitarian Assistance and Disaster Relief (HADR) Coordination Centre (RHCC), Bangladesh Ministry of Disaster Management and Relief (MoDMR) as well as Armed Forces Division (AFD) and CFE-DM. Ex COORES sharpened the ability of all parties to provide a coordinated disaster response.[3]

CFE-DM also facilitated a Special Operations Forces Subject Matter Expert Exchange in support of the Civil Military Support Element (CMSE), in Dhaka, Bangladesh in August 2019. Participants included members of the Bangladesh Fire Service & Civil Defence, Coast Guard, and Border Guards, who enhanced their knowledge of coordination during natural disasters and roles of humanitarian organizations. Representatives from the UN Resident Coordinator's Office for Bangladesh, UN Office for the Coordination of Humanitarian Affairs and a senior member of the Bangladesh Red Crescent Society (BDRCS) lectured during the exchange's practical exercises and case studies designed to provide a better understanding of international norms.[4]

Additionally, in October 2019, Bangladesh's MoDMR, AFD, and the United States Army Pacific (USARPAC) hosted a Disaster Response Exercise and Exchange (DREE). The DREE brought together 20 countries and several government and non-government organizations to compare best practices for disaster relief, culminating in an exercise simulating a large-scale earthquake response in Dhaka, Bangladesh. The Oregon National Guard and CFE-DM also participated in the event.[5]

Civil-military operations extends reach into the Indo-Pacific region by focusing on disaster relief and humanitarian assistance while building capacity in countries including Bangladesh. Bangladesh has been developing strong civil-military coordination mechanisms as it tackles recurring natural and man-made disasters. Dialogue and information sharing between military, health and humanitarian personnel is essential, especially in our present complex COVID-19 environment. It creates a common situational awareness to guide planning and decision-making, including on the use of available military assets.[6]

Sincerely,



Joseph D. Martin, SES
Director

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

Overview

The Center for Excellence in Disaster Management & Humanitarian Assistance (CFE-DM) is a United States (U.S.) Department of Defense (DoD) organization that was established by U.S. Congress in 1994. The Center is a direct reporting unit to U.S. Indo-Pacific Command and is located on Ford Island, Joint Base Pearl Harbor-Hickam, Hawaii.

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

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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Disaster Management Reference Handbook Series Overview

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

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

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

Executive Summary

Bangladesh has been affected by more than 200 natural disasters over the last three decades. The country's geographical location next to the Bay of Bengal, low-lying terrain, monsoons, and significant rivers render the country very vulnerable to natural hazards. From 1970-2019, storms have been the most frequent disaster to affect Bangladesh at 52%, followed by floods at 31%, with the remaining disasters being epidemics, earthquakes, droughts, and landslides.[7] In addition, Bangladesh is one of the countries in the world most at risk from the negative impacts of climate change including increases in incidence and intensity of extreme weather events and hazards such as soil salinization, rising sea levels and riverbank erosion.[8]

Bangladesh has many sources of vulnerability including earthquakes and flooding. Traffic in Dhaka is among the most congested in the world. An earthquake heavily affecting the capital is among the more challenging disaster scenarios.[9] In addition, the flood damage potential is increasing due to climate change, urbanization, growth of settlements in flood-prone areas and overreliance on flood control works such as levees and reservoirs.[10] Growing urbanization is driven partly by migration and has contributed to straining the use of limited land, environment, and fragile infrastructure. Migration toward urban areas is in turn driven partially by climate change exacerbating flooding of formerly inhabited land around river delta areas. These emerging risks present major challenges to the continued human development, poverty reduction and economic growth of the country, and to the lives, livelihoods, and health of its people.[11]

The poorest, most marginalized and vulnerable communities are hardest hit by disasters as they are repeatedly exposed to natural hazards without the means to recover well. Despite these challenges, Bangladesh has made major gains in improving socioeconomic conditions in recent years with positive economic trends, accelerating growth, and improving the indicators of social progress. The country reached lower middle-income country status in 2015 and at the same time had achieved significant progress in the Millennium Development Goals. Bangladesh has a growing asset base and is more connected to global markets; however, the national economy is at risk from disaster events, climate stresses, and the large amount of gross domestic product (GDP) which is lost each year due to these events. As a result, managing disasters and their impact has been a major area of focus for the country as well as its partners.[12]

Bangladesh has made significant progress in disaster preparedness and mitigation in the last several decades, reducing the death toll during tropical cyclones from hundreds of thousands down to just hundreds of people.[13] For example, in November 2019, Cyclone Bulbul smashed into Bangladesh. Early warning systems and government preparedness programs facilitated the evacuation of approximately 2 million people before the cyclone made landfall, saving numerous lives.[14]

Disaster Management in Bangladesh is guided by a number of national drivers including plans, policies, and orders. The National DM plans (NPDMs) look at the risks and consequences of disasters and community involvement and integration of structural and non-structural measures. The Disaster Management (DM) Policy (2015) places importance on financial resources for DM activities at all levels. The DM Act 2012 endorses the Standing Orders on Disaster (SOD) and provides a legal basis. The Ministry of Disaster Management and Relief (MoDMR) has the responsibility for coordinating national DM efforts and the National Disaster Management Council (NDMC) is the supreme body for providing overall direction, which is translated in the National Plan for Disaster Management (NPDM 2016-2020).[15]

Recently, Bangladesh has been affected by the COVID-19 global pandemic. The first case of COVID-19 in Bangladesh was detected on 8 March 2020. The challenges in Bangladesh are compounded by human densities of megacities and Cox's Bazar, and a weak health system already at risk.[16] Bangladesh's Ministry of Health and Family Welfare (MOHFW) is working with the Armed Forces Division (AFD), UN Bodies, International, National & Local NGOs to deliver coordinated assistance.[17]

UN Bangladesh developed the HCTT Contingency Plan 2020 for Climate-Related Disasters in the COVID-19 Pandemic Context which looks at the risks of cyclone, floods, and landslides in Bangladesh in the context of COVID-19. The HCTT Contingency plan anticipates needs analysis and includes specific pre-agreed upon thresholds which need to be met which would signify that a coordinated response from the humanitarian community would be automatically activated.[18] In addition, a draft Humanitarian Preparedness and Response Plan (HPRP) for Climate-related Disasters in 2020, was developed based on the above referenced HCTT's contingency plan.[19]



BANGLADESH
Country Overview

Disaster Management Reference Handbook | May 2020

Country Overview

Bangladesh ("Land of the Bengals") has a particularly noteworthy history with disasters. Not only has it endured numerous tropical cyclones with significantly improved preparedness, but a most devastating cyclone contributed to the birth of Bangladesh as an independent nation. The 1970 Bhola cyclone is considered the world's deadliest cyclone, at least since the past 150 years that records have been kept. Cyclone Bhola struck East Pakistan, as Bangladesh was known prior to independence, on 12 November 1970 killing more than 300,000 people.[20] Together with those killed in India, there were half a million fatalities.

The cyclone struck less than a month before national elections. The Pakistani government's handling of the rescue and relief operations was severely criticized by both the international media and local political leaders. East Pakistanis (now Bangladeshis) had long felt exploited by the West Pakistan-dominated central government. Discontent between East and West Pakistan goes back to the partition of India. When the British left India in 1947 after 200 years of rule, they divided it into two nations along religious lines – Muslim-majority Pakistan and Hindu-majority India. However, the eastern and western part of Pakistani territory was separated by about 1,000 miles with India between them. Other than religion, East and West Pakistan had little else in common. West Pakistan tried to impose 'Urdu and only Urdu' as the national language, which the Bengali speakers in East Pakistan resisted. West Pakistan also dominated the central government, favoring itself a bit in the distribution of revenues.

Growing frustration with the central government's inadequate relief efforts contributed to a victory for the opposition Awami League in the December 1970 national elections.[21] Following the Awami League winning the vast majority of East Pakistan's seats in the national assembly, West Pakistan commenced talks with the East regarding division of power. The talks did not prove fruitful, and in March 1971 Pakistani President Yahya Khan indefinitely postponed the national assembly session, and imprisoned Awami League leader Sheikh Mujibur "Mujib" Rahman. Massive protests in East Pakistan were followed by a bloody crackdown by the Pakistan Army, leading to the Bangladesh Liberation War. Though atrocities were committed on all sides, the scale of human rights violations by the Pakistan military were staggering. Researchers estimate 300,000-500,000 people were killed, while the Bangladesh government estimates 3 million died. The Pakistan Army sexually assaulted 200,000-400,000 Bangladeshi women and girls in a systematic campaign of genocidal rape.[22] Ten million Bengalis, mostly Hindus, fled to India seeking refuge. Key to gaining international support for Bangladesh's independence was an exposé written by Pakistani journalist Anthony Mascarenhas, who first had to get his family safely out of Pakistan before publishing his article in the United Kingdom's Sunday Times.[23] Indian Prime Minister Indira Gandhi set upon armed intervention, not only due to sympathizing with East Pakistan for their independence struggle, but to also avoid taking in millions of refugees. India's intervention led to Pakistani forces surrendering on 16 December 1971.[24]

Soon after the People's Republic of Bangladesh was established, famine struck in 1973-1974. A state of emergency was declared in 1974 and Sheikh Mujib proclaimed himself president. However, he along with his entire household were murdered in an August 1975 military coup d'état. Only two of his daughters survived as they were out of the country at the time – one of which, Sheikh Hasina, would later become Prime Minister in 1996. General Ziaur "Zia" Rahman, head of the army, assumed the presidency in 1976, following a few years of power struggles. In 1978, Zia won by a landslide victory at the polls, as did his Bangladesh Nationalist Party (BNP) who claimed a majority of parliamentary seats the following year. The next several years saw the lifting of martial law, democracy, and economic growth. However, Zia was assassinated in 1981, and his successor was deposed in another coup in 1982 by General Hossain Mohammed Ershad. General Ershad never held elections as promised. By the 1990s the economy was unraveling, as was his popularity. Zia's widow, Begum Khaleda Zia, became the head of the BNP, and in 1991 became prime minister. The Awami League, headed by Sheikh Hasina, protested against the BNP with hartals or mass strikes until Hasina became prime minister in 1996.[25] Zia and the BNP regained the majority in 2001 with a multiparty alliance.[26]

In December 2002, bomb blasts in Mymensingh killed 17 people. In 2003, two Awami League politicians were killed, leading the

opposition party to instigate a series of hartals and general strikes. In 2007, a state of emergency was declared, numerous politicians were detained on suspicion of corruption, and a military-backed caretaker government took control. Following a landslide victory for the Awami League in December 2008, Hasina returned to power in 2009 ending the caretaker government, and she has remained prime minister.[27]

In 2009, soldiers from Bangladesh Border Guards attempted a coup, killing 74 people. They were unsuccessful and the border guards were reorganized. Hasina has been a vocal advocate on the international stage for mitigation and adaption to climate control.[28] The economy continued to develop, but it was punctuated by Cyclone Sidr and high-profile accidents affecting the garment industry. Cyclone Sidr was notoriously destructive, leading to the deaths of thousands of people, and highlighting that disaster preparedness efforts – including building more shelters – needed to be done. The garment industry was affected by the 2012 Tazreen Factory fire, which killed 117 people,[29] and the 2013 collapse of Rana Plaza that killed more than 1,100 people.[30]

While Bangladesh had previously seen cycles of Rohingya refugees fleeing across the border from Myanmar, the massive exodus sparked in 2017 was on a scale not seen before.[31] More than 700,000 Rohingya have fled to Bangladesh since August 2017, and combined with Rohingya who fled previous bouts of violence in Myanmar, there are now approximately 860,000 Rohingya living in refugee camps in Cox's Bazar.[32] The unresolved political situation in Myanmar prevents their safe return, and raises longer-term concerns about their vulnerability to natural and man-made hazards, and the potential for more instability.

Culture

Bangladesh has a rich culture that has emerged from the intermingling of its different religions and communities. Islam plays a predominant role in influencing many traditions in Bangladesh, in tandem with regional customs. Islam's influence can be readily seen in the commonly used greeting, "May peace be upon you" ("Assalamualaykum").

Elders are treated with great respect, and it is in poor form to smoke, drink, or act foolishly in front of older people. It is considered polite to address someone not simply by their name, but followed by the appropriate honorific, depending upon their gender. Men can be addressed as *Bhaiya* (Elder Brother) and women by *Apa* (Elder Sister), regardless of age.[33]

Well known literature of Bangladesh includes the work of the Bengali poets Rabindranath Tagore (1861-1941) and Kazi Nazrul Islam (1899-1976). Tagore was awarded the Nobel Prize for Literature in 1913 for his book *Gitanjali* (Song Offerings). He often wrote from a multicultural perspective and celebrated the concept of Hindu-Muslim unity. Nazrul Islam is considered the national poet, and during colonial rule used his poetry to encourage critical thinking and nationalist sentiment.[34]

Folk theatre is commonly seen in villages, usually taking place during harvest time or at melas (village fairs). There are a wide variety of folk dances. Classical dance is influenced by Indian models, though is disapproved by strict religious leaders. Folk arts include weaving and needlework.

Ceremonies differ greatly among the main religions. The Muslim majority has religious leaders (pirs), whose status is between that of a bishop and a sage. Hinduism in Bangladesh somewhat resembles the forms and customs of India, although less ornate and formal. Consequently, Hindu ceremonies are not usually conducted inside temples restricted to outsiders. People are generally welcome to watch and even participate.[35]

Photo 1 shows festivities of Pohela Baishakh. It is the first day of the Bengali Calendar, celebrated on 14 April as a national holiday in Bangladesh.[36] It is also celebrated by people of Bengali heritage in the Indian states of West Bengal, Tripura and Assam in mid-April.



Photo 1: Celebration of Pohela Baishakh, Dhaka

Demographics

Bangladesh has an estimated population of 162,650,853 as of 2020. Being slightly smaller than the U.S. state of Iowa,[37] this makes it one of the most densely populated countries in the world. Bangladesh has almost three times the population density of India, and 35 times the population density of the U.S.[38] Figure 1 depicts a population pyramid that details demographics as distributed across age groups.[39]

Ethnic Makeup

The predominant ethnic group is Bengali, which comprises at least 98% of the population in Bangladesh. Other indigenous ethnic groups make up about 1.1% of the population. Estimates vary as to the number of ethnic minority groups. The government recognizes 27 indigenous ethnic groups under the 2010 Cultural Institution for Small Anthropological Groups Act, while other sources estimate about 75 ethnic groups.[40]

Approximately a dozen Adivasi (indigenous tribal) groups live in the Chittagong Hill Tracts. The area had seen conflict from 1973-1997 between the Bangladeshi army and Shanti Bahini rebels. Conflict stemmed from the submergence of 40% of land that Adivasis used for cultivation during the 1960 building of a lake for hydroelectricity, and the subsequent mass in-migration of 400,000 Bengalis, who now comprise half the population in the area. Major Adivasi groups in the Chittagong Hill Tracts include the Chakma (about 240,000 people, and half of Bangladesh's Adivasi population), the Marma, and the Tripuri – collectively known as the Jumma people.[41] Another significant tribe is the Garos (or, as they refer to themselves, A-chik Mandi, literally "hill people"), with 100,000-200,000 living in northern Bangladesh and up to 2 million living across the border in India's Garo Hills.[42]

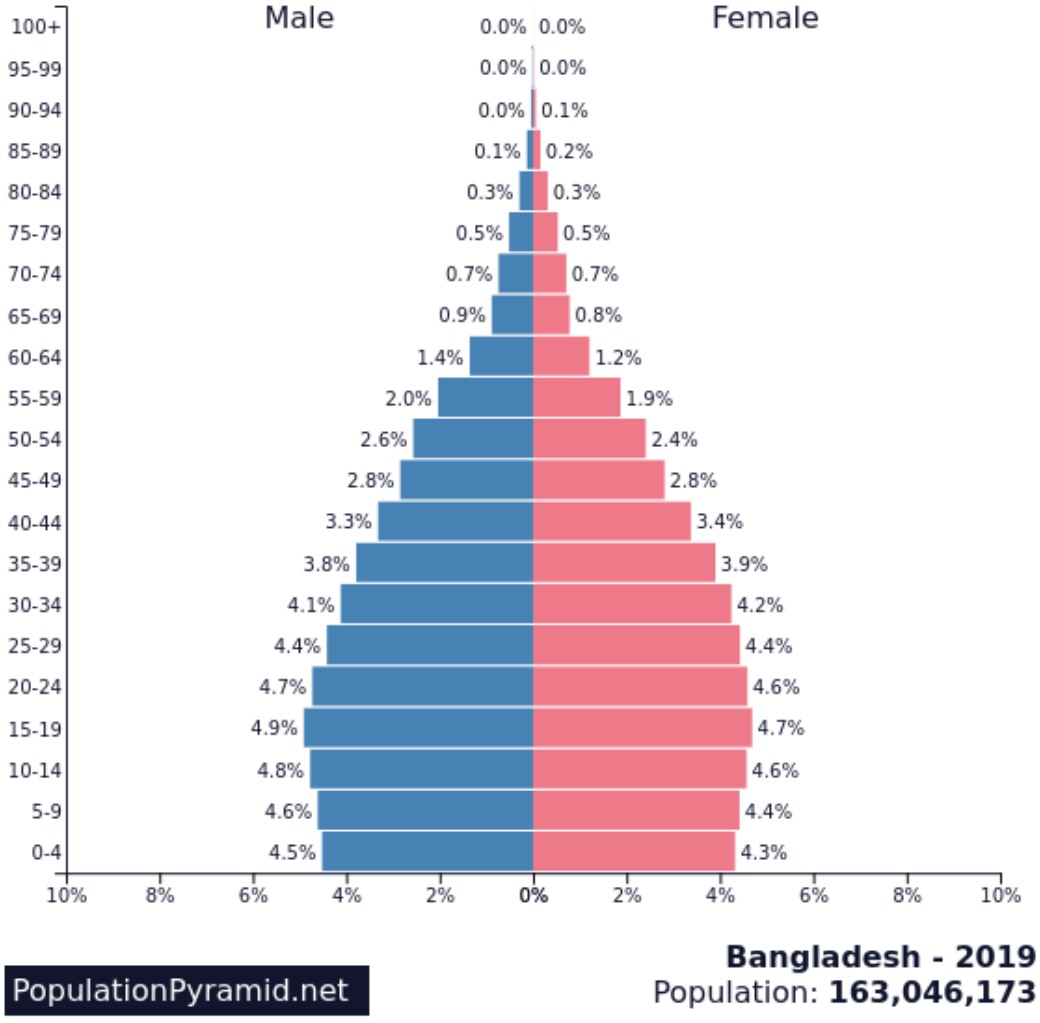


Figure 1: Bangladesh Population Pyramid, 2019

Key Population Centers

The largest population center in Bangladesh is the capital, Dhaka, which has almost 9 million metro residents and is one of the fastest-growing megacities in the world. It is located in the center of the country, near the region of the Ganges and Brahmaputra Rivers, and has become the hub for political, commercial and industrial activities. The second largest city is Chittagong, which has approximately 2.6 million residents and has developed pharmaceutical, steel, and food industries. It is located in Chittagong Division, which has the highest standard of living among Bangladesh's divisions. Chittagong is the country's main commercial and manufacturing center and is also where the country's main port is located. The other cities in Bangladesh have populations of less than 1 million. The top ten most populous cities are listed in Table 1.[43]

1	Dhaka	8,906,039
2	Chittagong	2,592,439
3	Rajshahi	763,952
4	Khulna	664,728
5	Sylhet	526,412
6	Mymensingh	389,918
7	Barisal	339,308
8	Rangpur	307,053
9	Comilla	296,010
10	Narayanganj	286,330

Table 1: Ten Most Populous Cities in Bangladesh

Growing urbanization is driven partly by migration from more rural areas and has contributed to straining the use of limited land, environment, and fragile infrastructure. Migration toward urban areas is in turn driven partially by climate change exacerbating flooding of formerly inhabited land around river delta areas. Traffic in Dhaka is among the most congested in the world. An earthquake heavily affecting the capital is among the more challenging disaster scenarios.

Language

The official language is Bengali or Bangla. It belongs to the Indo-Aryan family of Indo-European languages and is related to Hindi and Assamese. There are two distinct styles of Bengali. Sadhu bhasa, the literary style, contains many Sanskrit-derived words and was used for all printed matter until the 1930s. Calit bhasa, the colloquial style, is widely used in informal discourse, and has now become the basic form used in contemporary literature.[44] Colloquial Bengali includes numerous Urdu words. There is a legacy of Urdu having been imposed as an official language when Bangladesh was East Pakistan prior to 1971, at which time Bengalis strongly resisted attempts to make Urdu the sole official language of Pakistan.[45] Bengali also contains loanwords from Portuguese, English, Arabic, Persian, and Hindi.[46]

Bengali is spoken by over 98% of the Bangladeshi population, per a 2011 estimate.[47] The remainder of the populace are indigenous minority groups who speak their own languages and dialects, some of which are Tibeto-Burman languages.[48] English is also widely spoken or understood in larger towns and cities.

In the region, Bengali is also the official language in the Indian states of West Bengal (on Bangladesh's western border) and Tripura (on Bangladesh's eastern border). Bengali is spoken by approximately 220 million people.[49]

Religion

The main religion of Bangladesh is Islam, as almost 90% of the people are Muslim. Muslims in Bangladesh are predominantly Sunni, although 5% of the population follow Shia and Ahmadiyya Islam. The second largest religious group is Hindu, at 9% of the country's population. The remaining 1-2% are Buddhists, animists, or Christian converts among the Adivasis (indigenous tribal people) in western and northern areas adjoining Myanmar and India.[50]

Islam in the region dates back to the 13th Century, when Arab and Persian merchants and missionaries brought the religion to the Bengal region. Many Hindus and Buddhists were attracted to Islam due to the principle of equality, especially those who were frustrated by the caste system.[51] Constitutionally, Bangladesh is a secular state with no official religion. However, Islamic traditions have a large influence on the culture, overlapping with regional Bengali customs. Islam plays a significant role in everyday life, as can be seen with the celebration of festivals such as Eid-ul-Fitr, Eid-e-Miladunnabi, Muharram and others. While Muslims in Bangladesh are committed to Islam, adherence to certain rituals and tenets may vary depending on a number of factors. In some rural areas, people have begun to incorporate other beliefs into their religion, some

of which may not be recognized by orthodox Islam.[52] The National Mosque of Bangladesh, modeled after the Ka'abah at Mecca, is depicted in Photo 2.[53]



Photo 2: Baitul Mukarram National Mosque in Dhaka Bangladesh

Vulnerable Groups

Refugees

Among the most vulnerable population living in Bangladesh are Rohingya refugees who fled persecution from Myanmar. They are not only refugees, but as neither Myanmar nor Bangladesh recognizes them as citizens, they are also stateless, which exacerbates their lack of legal protections.

Bangladesh hosts what has in recent years become the world's largest refugee camp in Cox's Bazar, where more than 850,000 Rohingya refugees from Myanmar now live. An August 2017 military crackdown on Rohingya communities in Myanmar's Rakhine State included widespread killings and sexual violence backed by the Myanmar Armed Forces. This led more than 740,000 people to flee across the border into Bangladesh in the largest forced migration of Rohingya refugees. Rohingya had also previously fled Myanmar to Bangladesh in previous cycles of violence and displacement,[54] in 1978, 1991, 2012, and 2016.[55] The map (Figure 2) shows an overview of the Rohingya population in refugee camps across the Cox's Bazar area of Bangladesh.[56]

Rohingya women and girls comprise the majority of the refugee population and experience heightened vulnerability, particularly with equitable access to food and sanitation, and gender-based violence including forced early marriage.[57] Rohingya boys and girls in the refugee camps struggle to access education, which makes them more vulnerable to trafficking and other forms of exploitation and abuse. Bangladesh took a significant step in January 2020 by allowing a pilot program for 10,000 Rohingya refugee children to receive formal schooling, which is an improvement over the informal education available only at the primary level in the camps' temporary learning center. However, the pilot program covers less than 3% of the 400,000 school-age Rohingya refugee children in the camps, thus needs and vulnerabilities remain high.[58]

The Rohingya population has long had concerns with the government of Bangladesh's repeated proposals to relocate up to 100,000 refugees to Bhasan Char, an island that emerged in 2006 due to tons of silt flowing into the Bay of Bengal. However, on 26 February 2020, State Minister for Disaster Management and Relief Dr. Enamur Rahman announced "the relocation plan has been postponed."[59] On 23 March, the government further announced it would instead take poor Bangladeshis to the remote island located 3-4 hours out in the ocean, instructing "all district administrations to send people from low income groups to Bhasan Char."[60] Bangladesh spent US$280 million constructing a flood defense embankment and residential shelters on the island, which typically floods every monsoon season.[61] When the island first emerged, Bangladesh authorities considered the possibility of using it to relocate some of the Bangladeshi population to ease overcrowding and land scarcity issues. At the time, climatologists warned it was unfit for human habitation as it was exposed to strong winds and heavy rains, mostly submerging every monsoon season from June to September. The government first ordered the relocation of Rohingya refugees to Bhasan Char in 2015, until pressure from rights groups led to shelving the plan. The plan to move Rohingya to the island was revived in 2017 with approval of the construction funding,[62] until being shelved again in early 2020. While Bangladesh has made a considerable construction investment, concerns remain over people potentially living on Bhasan Char given the remote location and lack of natural resources for self-sufficient sustainment or livelihoods.

Long-term concerns for the Rohingya refugees include if or when they will be able to repatriate to Myanmar, which requires the political situation to improve to an extent that they believe it would be safe to return. In the meantime, the length of time they will stay in Bangladesh is a concern for both refugees and the Bangladesh

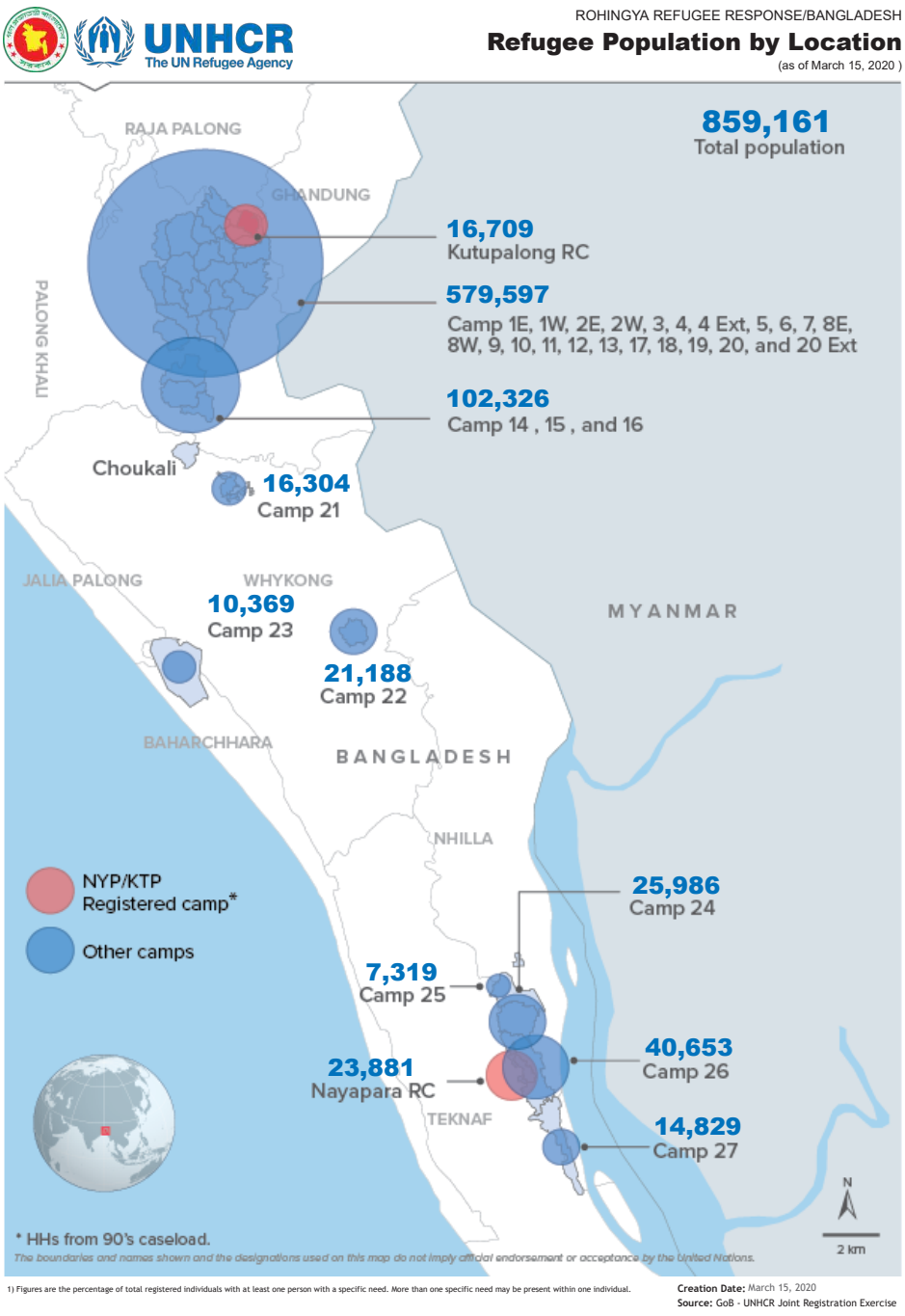


Figure 2: Map of Rohingya Refugee Population in Cox's Bazar, Bangladesh

host community. The refugee camps pose a strain on local resources, particularly for Ukhia and Teknaf sub-districts near the border, which are among Bangladesh's poorest. The influx of refugees led to increased local food prices,[63] and makeshift camps reduced the already limited arable land and exacerbated deforestation.[64]

Bangladesh's other neighbor, India, in December 2019 passed a controversial Citizenship Amendment Act. The new legislation, which sparked widespread protest, only provides citizenship to refugees of certain religious communities from neighboring countries but excludes Muslims. Hundreds of undocumented Muslim migrant workers are being forced from India into Bangladesh,[65] where they often lack official papers as well.[66] Though considerably less numerous, and less well known, than refugees from Myanmar, undocumented migrants and refugees in the Bangladesh-India border area are of increasing concern.[67]

Women

There are areas of success and areas still needing improvement for reducing vulnerabilities of Bangladeshi women. Incredible gains have been made in reducing maternal mortality by 66% since the 1970s,[68] and improving gender parity in education. Bangladesh ranks the highest in the Gender Gap Index in South Asia, achieving 50th among 153 countries in the world. Bangladesh is the only one of the seven South Asian countries included in the report to rank in the top 100 of the index.[69]

However, women's heightened vulnerability becomes apparent when looking at violence and social discrimination. Rates of violence against women remain high. More than two-thirds of women ever married experienced some form of partner violence in their lifetime, and more than half have experienced it in the last 12 months. Additionally, marriage, divorce, custody of children, maintenance and inheritance are subject to religious law, which often discriminates

against women. Women's groups have been a key force in mobilizing to advocate for protections against violence, equality in securing economic opportunities, equal political representation, reproductive rights, family law reforms, and gender mainstreaming in public policies.[70]

Children

Youth are a significant part of Bangladesh's demographics, as the more than 64 million children make up around 40% of the population. Bangladesh achieved stunning success with a rapid rate of decline in mortality of children below the age of five. But challenges remain in further reducing deaths of newborns, decreasing the rate of stunting among children due to malnutrition,[71] and ensuring safe drinking water and access to improved toilets and hand-washing facilities. The lack of facilities take a disproportionate toll on children with diarrheal illnesses.

Many school-age children face difficulties accessing high-quality education in a protected environment. Most schools do not have sanitation facilities needed by adolescent girls and children with disabilities, usually resulting in these children missing more school. Most of the children not attending primary school are from urban slums, remote locations, and disaster-prone areas. For those attending secondary school, drop-out rates are high.[72] Causes of girls in particular dropping out of school include prevalent sexual harassment, lack of educational alternatives, and being married early.[73] Poverty exacerbates many of the factors contributing to children's vulnerability.

Child marriage is prevalent, and a somewhat sensitive issue. Bangladesh has the fourth highest prevalence rate of child marriage in the world. Almost 60% of Bangladeshi girls are married before they reach 18 years of age, and 22% are married before their 15th birthday. In addition to poverty, another exacerbating factor driving child marriage in Bangladesh is natural disasters. Many families live in insecure conditions threatened by frequent flooding, thus view marrying off their young daughters as a short-term survival tactic. However, child marriage is not only detrimental to girls' health and life outcomes, it often contributes to keeping a community in poverty long-term. It is estimated that ending child marriage in Bangladesh could see a 12% rise in earnings and productivity.[74]

Economics

In the last several decades, Bangladesh has significantly reduced poverty, and the economy continues to grow as a result. It reduced poverty from 44.2% in 1991 to 14.8% in 2017, based on the international poverty line of $1.90 a day. At the same time, life expectancy, literacy rates and food production have increased considerably. Rapid economic growth propelled Bangladesh into lower middle-income country status in 2015. Bangladesh is on track to graduate from the UN's Least Developed Countries (LDC) list in 2024. [75] Bangladesh has a gross domestic product (GDP) growth rate of 8%, which is significantly above the average for Asia.[76]

Agriculture remains the main part of the economy, employing almost half of Bangladeshis, with the single most important product being rice. Jute and tea are also main agricultural products, with others including wheat, pulses (such as peas, beans, and lentils), sweet potatoes, oilseeds and various spices, sugarcane, tobacco, fruits (such as bananas, mangoes, and pineapples), goat milk, and goat meat. Fisheries are also an important part of the economy, with aquaculture the source of more than two-fifths of the country's fish yield.[77]

The economy has grown and diversified significantly into other areas as well, including the garment industry and services sector.[78] The garment trade began in the 1970s and is currently a $30 billion industry. The services sector, to include microfinance and computing, comprises 53% of the country's GDP. The growth of IT has brought about a digital transformation and spurred further economic growth. Bangladesh exports nearly $1 billion of technology products every year.[79]

In 2018, Bangladesh exported $5.5 billion worth of products to the United States, primarily apparel and textiles, making the U.S. the single largest market for Bangladeshi goods in the world. U.S. exports to Bangladesh amounted to $2.1 billion, consisting mainly of agricultural products, such as grains, cotton, and machinery. Of the U.S. companies that invest in Bangladesh, the majority are in the oil and gas, banking and insurance, and power generation sectors.[80] In 2018, Foreign Direct Investment increased a historic 68% to US$3.61 billion, according to the UN Conference on Trade and Development.[81] This increase was due partially to investments in power generation and labor intensive industries, but it was also attributed to the US$1.5 billion

acquisition of United Dhaka Tobacco by Japan Tobacco.[82] Photo 3 shows a textile factory in Bangladesh.[83]

While Bangladesh is not new to disasters or major humanitarian crisis, the COVID-19 pandemic will threaten the country's health systems and have long-term effects on its economy. Bangladesh has been slower to react than other countries with its stimulus packages. The Prime Minister initially announced an emergency stimulus package of U.S.$600 million (equivalent to 0.2% of GDP) on 25 March, which on 4 April was enhanced significantly to U.S.$8.5 billion (equivalent to 2.5% of GDP). According to the forecast released by the Economist Intelligence Unit on 26 March, the global economy is expected to contract by -2.2% in 2020. Almost six million workers in Bangladesh's manufacturing sector will be without steady work for an extended period. The oil sector will also be hit hard affecting families in rural Bangladesh.[84]

Government

The government of the People's Republic of Bangladesh follows a parliamentary system. The prime minister is the head of government, in whom executive authority is vested. The president is the head of state and is elected by the parliament every five years. The unicameral parliament, Jatiyo Shangsad (House of the Nation), holds 350 seats. Of those seats, 300 are elected from territorial constituencies, while the remaining 50 seats are reserved for women to be elected by the other members of parliament. Altogether women hold 73 of the 350 seats, or 21% of parliament. Members of parliament, or legislators, serve five-year terms.[85] The overwhelming majority of parliament seats are held by the Awami League, which is also the current prime minister's party. Prime Minister Sheikh Hasina, the current head of government, has held the position since 6 January 2009. The last elections were held on 30 December 2018, with the next elections scheduled for 2023.[86] The ruling Awami League has the majority support. However, its landslide reelection in the December 2018, was marred by allegations of widespread fraud.[87]

As a result of administrative decentralization starting in the 1980s, local government structures consist of eight major divisions, divided into districts or *zila*. Zila are further sub-divided into units called *upazila* and *thana*, under which villages are grouped as the smallest unit of government. Local governments primarily consist of popularly elected executives and council, with divisions headed by commissioners.[88]

Bangladesh's judicial system has roots to the system under the British Raj. Upon independence, the Supreme Court was separated into Appellate and High Court divisions and mandated a separation of the judiciary and executive branches of government. However, the power of the Supreme Court was greatly reduced by the subsequent regime. In 1977 a Supreme Judicial Council was established to draw up a code of conduct for the Supreme Court and High Court judges who may be removed from office by the president upon the council's recommendation.[89]



Photo 3: Bangladesh Textile Factory

Environment

Geography

Bangladesh has a total area of 148,460 square kilometers (sq. km) (57,321 sq. miles), roughly the size of England and Wales combined. It is primarily a flat,

low-lying country with vast rivers. Exceptions to the flat terrain are Sylhet in the northeast with rolling hills, and the Chittagong Hill Tracts in the southeast with forests and small mountain ranges. Alluvial plains characterize much of the land.[90] The two major Himalayan rivers include the Ganges (or padma) and Brahmaputra. They divide the land into seven major regions, upon which the seven governmental divisions are based: Rangur (northwest), Rajshahi (west), Khulna (southwest), Barisal (south-central), Dhaka (central), Sylhet (northeast), and Chittagong (southeast). Almost the entire coastline forms the largest estuarine delta in the world at the Mouths of the Ganges. The wealth of river water leads to the floodplains being very fertile for agricultural production. However, the vast low-lying terrain is highly exposed to the numerous tropical cyclones that form in the Bay of Bengal and accompanying storm surge and flooding.

From the Sundarbans in the west to Chittagong in the east, the coastline is primarily comprised of shifting river courses and silt islands. [91] The Sundarbans mangrove forest is one of the largest forests in the world, and has a wide range of fauna, birds, and animals.[92] The only place in Bangladesh with stone is a quarry in the northwestern corner of Sylhet division. Thus, bricks are commonly hammered into fragments, in order to substitute for stones when making concrete.[93]

Borders

Bangladesh has a total of 4,413 kilometers (km) (2,742 miles) in land borders. The country is surrounded on three sides by India, with which it shares a 4,142-km (2,574-mile) border to the west, north, and east. It also shares a small, 271-km (168-mile) border with Myanmar (Burma) to the southeast.

The country also has a coastline to the south with the Bay of Bengal that runs 580 km (360 miles). Figure 3 shows a map of Bangladesh and surrounding areas.[94]

The Border Guard Bangladesh, under the Ministry of Home Affairs, is a paramilitary force responsible for border security. Their responsibilities include countering trafficking in persons and smuggling of narcotics and other contraband.[95]

Climate

Bangladesh has a tropical climate, with hot, rainy summers and drier winters. The cool period runs October to March, with average lows in January around 26 degrees Celsius (78 degrees Fahrenheit).[96] This is also the driest period, without monsoon rains. The hottest months are April to May, with average highs ranging from 33-36 degrees C (91-96 degrees F). The monsoon season from June to September brings rain that cools the air, though the climate still remains warm.[97] Most rains occur during the monsoon season. and occasional rains occur from October-February. Most places receive more than 152 cm (60 inches) of rain a year, and areas near hills receive 508 cm (200 inches), making it one of the wettest climates in the world.

Bangladesh is vulnerable to being struck by tropical cyclones, which originate over the Bay of Bengal typically from April to May and from September to November. The tropical storms pose a significant risk to lives and property, particularly as they are often accompanied by large storm surges.[98]



Figure 3: Map of Bangladesh and Surrounding Areas



BANGLADESH
Disaster Overview

Disaster Management Reference Handbook | May 2020

Disaster Overview

Bangladesh has made incredible progress in disaster preparedness and mitigation in the last several decades, reducing the death toll during tropical cyclones from hundreds of thousands down to just hundreds of people. However, Bangladesh still faces formidable hazards, especially with increasing climate change.

Climate Change

Adapting to climate change is the critical component of disaster risk reduction for Bangladesh. Even before contemporary climate change, Bangladesh was already one of the most vulnerable places to meteorological hazards, as the Bay of Bengal funnels cyclones straight into the country's coastline. Scientists believe that rising temperatures will lead to more extreme weather globally, including in Bangladesh with stronger and more frequent cyclones generated in the Bay of Bengal. Rising sea levels will also exacerbate a storm's impacts due to increased likelihood of flooding.

Bangladesh has taken great strides to improve disaster preparedness and mitigation by creating an early-warning system and building more than 2,500 concrete storm shelters.[99] The result has been a vast reduction in storm-related deaths. While Cyclone Marian in 1991 resulted in the deaths of more than 140,000 people, Cyclone Aila in 2009 led to some 190 fatalities in Bangladesh, and most due to storm surge when an almost 10-foot wall of water swept through villages in the middle of the afternoon. But despite these successes in disaster preparedness, the problems posed by climate change still remain. "The problem is far too big for any single government," said Tariq A. Karim, Bangladesh's former ambassador to India. "We need a regional and, better yet, a global solution. And if we don't get one soon, the Bangladeshi people will soon become the world's problem, because we will not be able to keep them."[100]

Nearly 700,000 Bangladeshis have been displaced annually by natural disasters in the last decade. By 2050, as many as 13.3 million Bangladeshis could be displaced by the various impacts of climate change. As people migrate away from coastal areas, many are swelling urban slums, particularly in Dhaka, which receives up to 400,000 low-income migrants every year. "Dhaka is filled with people who fled their village because it was swallowed by the sea or the rivers," says Dr. Saleemul Huq, director of the Dhaka-based International Centre for Climate Change and Development and a leading climate scientist. "The coming millions will be impossible to absorb."[101]

Bangladesh still has many sources of vulnerability to tropical cyclones, including poverty, settlement in low-lying coastal areas, overdependence on traditional livelihoods, and needing even more cyclone shelters.[102]

Rising sea levels combine with other kinds of environmental degradation to increase the population's vulnerability. Bangladesh's drinking water is sourced overwhelmingly from groundwater, and the subterranean pumping causes the land to settle. Thus, Bangladesh's cities are sinking, but combined with rising sea levels, the risks of flooding are multiplied. Bangladeshis are already migrating away from low-lying villages in river deltas toward cities, contributing to increased urbanization. However, migrants arriving in Dhaka often end up residing in slums, which also tend to be in low-lying land, thus not substantially reducing their risk to flooding.[103]

Around the world, river deltas are especially vulnerable to rising sea levels. The Ganges Delta is comprised of 230 major rivers and streams, and is home to 160 million people, packed into in a low-lying area that is one-fifth the size of France. Climate change also brings changing patterns of rainfall and drought, which will impact Bangladesh's economy as agriculture remains a major sector.[104]

USAID sponsors mangrove tree planting in villages near the Sundarbans to help reverse deforestation and protect the coastline from storm surges caused by severe weather in the Bay of Bengal. Photo 4 depicts a female farmer gathering mangrove sapling for planting.[105]



Photo 4: Female Farmer Readies Mangrove Sapling for Planting

Hazards

Bangladesh's geographical location next to the Bay of Bengal, low-lying terrain, monsoons, and significant rivers render the country very vulnerable to natural hazards. From 1970-2019, storms have been the most frequent disaster to affect Bangladesh at 52%, followed by flood, at 31% with the remaining disasters being epidemics, earthquakes, droughts, and landslides, [106] as depicted in Figure 4. [107]

Tropical cyclones and storms have been among the most destructive hazards. In 1970, Tropical Cyclone Bhola struck then-East Pakistan (prior to Bangladesh's independence) and India's West Bengal State, causing 300,000[108] to 500,000 fatalities.[109] Floods can include river, coastal, and urban flooding. Another common hazard is extreme heat, while other hazard risks also include wildfire and tsunami.[110] Bangladesh has not recently had a major earthquake, but is at risk for one.[111]

During a normal monsoon, floods can cover about 20% of the country, disrupting life and causing deaths. When monsoon flooding is considered severe, more than 60% of Bangladesh gets inundated.[112] In the last 100 years, floods have killed over 52,000 people, rendered more than 4 million homeless, and altogether affected more than 300 million people.[113]

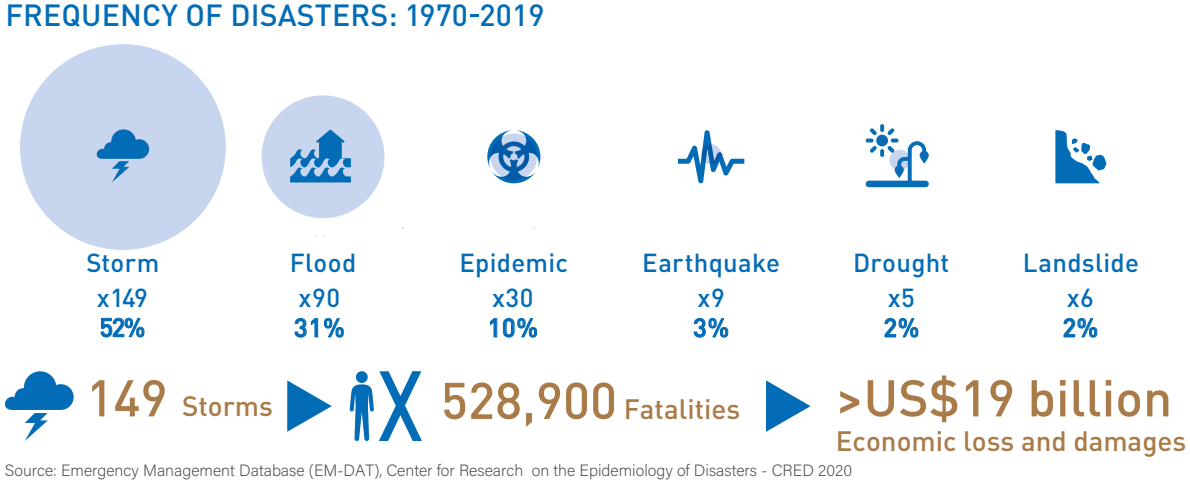
Bangladesh was estimated in a 2018 report to be the world's 8th worst-hit country in terms of the absolute number of people (37 million) affected by natural disasters within the previous ten years.[114] In the 1990s, the Government of Bangladesh began to shift from a reactive approach primarily focused on relief and rehabilitation activities to a proactive approach that encompasses hazard identification, hazard mitigation, community preparedness and integrated response efforts.[115] An exacerbating factor for disaster impacts is that approximately 21.8% of the population lived below the poverty line in 2018.[116] However, Bangladesh has made incredible progress in reducing the poverty rate, as it has decreased significantly from the year 2000 when 48.9% of the population lived below the national poverty line.[117]

History of Natural Disasters

Bangladesh has been affected by more than 200 natural disasters over the last three decades. Listing each disaster would be too numerous but highlighted here are incidents that are larger or have significance for civil-military coordination.[118]

1991 - Cyclone Marian

On 29-30 April 1991, Cyclone Marian struck Bangladesh, resulting in 139,000 people dead and millions left homeless. Millions of livelihoods were also ruined, as one million cattle died, 74,000 acres of crops were destroyed, and another 300,000 acres of cropland was damaged by saltwater flooding. Drinking water, provided by wells, was also widely contaminated. The tropical cyclone brought winds in excess of 235 km/hour (146 miles/hour) and storm surges between 15-20 feet (4.6-6.1 m). The area from Cox's Bazar to Chittagong was especially affected. Some islands were completely inundated, being only a few feet above sea level, including Snadwip, Hatia, Bhola, and Manpura. An inadequate number of shelters was identified as a key contributor to high fatalities. A large international relief



Source: Emergency Management Database (EM-DAT), Center for Research on the Epidemiology of Disasters - CRED 2020

Figure 4: Frequency of Disasters 1970-2019

effort included foreign military assets. A Joint Task Force composed of Bangladesh, U.S., British, Pakistani and Japanese armed forces was activated, with the U.S. military referring to their efforts as Operation Sea Angel.[119]

1997 - Tropical Cyclone

On 19 May 1997, a tropical cyclone with winds up to 200 km/hour (124 miles/hour) struck the eastern coast of Bangladesh, particularly affecting Cox's Bazar. It is estimated that hundreds of people died, though many lives were saved due to early warning and evacuation of people from the highest risk areas into 718 cyclone shelters.[120] The Bangladesh Armed Forces were among the responders, supported by military assets from Oman, Kuwait, India, and Saudi Arabia.[121]

1998 – Severe Monsoon Floods

The country's worst floods occurred in 1998, killing more than 3,500 people and destroying crops and infrastructure worth more than U.S.$2 billion. Two-thirds of Dhaka was flooded, a city of some 10 million people, and three-quarters of Bangladesh was inundated.[122]

2004 - Severe Monsoon Floods

Between July and September, floods inundated two-thirds of the country, killing approximately 1,000 people and causing economic losses of more than U.S.$2 billion.[123] The monsoon floods started around 8 July, following early flooding in the northwest in April that destroyed the annual rice crop. The widest extent of the flood was reached on 24 July, extending over 35,000 square km. Altogether, 36 million people (25% of the population) were affected in 39 out of 64 districts.[124]

2007 - Cyclone Sidr

Cyclone Sidr made landfall in Bangladesh on 15 November 2007, primarily affecting the southwest coast, and reaching winds up to 260 km/h (160 mph). More than 3,400 people died. Particularly destructive were tidal waves and storm surges up to 5-6 meters high, which breached coastal and river embankments, causing extensive flooding and destruction.[125] The Bangladesh Armed Forces were among the primary responders, supported by 49 countries in a massive international relief effort. The U.S. provided military assets in an effort dubbed Operation Sea Angel II.[126]

2016 - Cyclone Roanu

On 21 May 2016, Cyclone Roanu made landfall in Bangladesh, about one week after it struck Sri Lanka as a tropical storm. The cyclone caused the deaths of at least 27 people in Bangladesh, though many more in Sri Lanka. Thanks to early warning systems, half a million people were evacuated to shelters. Cyclone Roanu affected 1.3 million people, bringing winds over 100 km/hour (62 miles/hour), heavy rain, and storm surges peaking at 2.7 meters (8.9 feet).[127] The Bangladesh Armed Forces were among the responders.

June 2017 – Landslides

The June landslides, which started on 13th June with a few episodes, resulted in heavy loss of life (160 persons), injury (187 persons), destruction of houses (6,000 structures), and other key infrastructures despite being localized in impact. It was the worst landslide-related disaster since 2007. It affected approximately 80,000 persons across five districts: Bandarban, Chittagong, Cox's Bazar, Khagrachari and, Rangamati. Among these people, 34, 000 were severely impacted as they lost their houses together with their belongings, basic necessities, livelihoods and food stocks.[128]

August 2017 – Floods

Heavy monsoon rains caused intense flooding across more than one-third of Bangladesh. The Bangladesh Meteorological Department provided heavy rainfall warnings. As per the analysis by the Ministry of Disaster Management and Relief (MoDMR), the floods were the worst in the last four decades. Incessant heavy rainfall brought by the monsoon triggered flooding in five divisions, 31 districts, 176 Upazilas and 1,173 Unions. Findings from the 72-hours Needs Assessment were published on 21 August and they indicated that a total of about 6.9 million people (1.54 million households) were affected by the floods. National authorities confirmed 114 deaths and 197,416 people were temporarily displaced in 703 community shelters. As a result of the extensive floods, 77,272 houses were destroyed, 524,375 were partially damaged. Findings of the 72-hours Needs Assessment also highlighted that in northern Bangladesh, the following were the six worst-affected districts: Gaibhandha, Dinajpur, Kurigram, Jamalpur, Nilphamari, Sirajganj. In these districts, a total of 330,000 people were displaced. Access to the most affected areas in the northwest was a challenge as roads were either

severely damaged or submerged under flood water. Approximately 9,000 km of roads, 500 bridges and culverts were damaged. Nearly 100 km of rail lines were severely damaged by the floods. Around 714 km of embankments were also washed away.[129]

July 2018 – Floods

On 25 July 2018, heavy monsoon rains caused landslides and flooding in the southeast, killing five children near Cox's Bazar and Ramu. Approximately 21,000 Rohingya refugees in the camps were relocated because their shelters were threatened by landslides.[130]

July 2019 – Monsoon Floods

Despite the delayed onset of the monsoon, heavy rainfall occurred during the first half of July 2019 which triggered widespread flooding. Floods damaged and destroyed vital infrastructures including 6,641 kilometers of roads, 1,275 bridges and culverts as well as 1,515 kilometers of embankments. With the support of the Ministry of Disaster Management and Relief (MoDMR), the humanitarian community conducted a Joint Needs Assessment (JNA). Among the 28 districts affected by the floods, the JNA report identified nine most severely affected districts: Jamalpur, Kurigram, Gaibandha, Sylhet, Sirajganj, Tangail, Sunamganj, Bogura, Bandarban. In those districts, 85% of the overall displacement occurred equivalent to 261,499 persons including 57,406 school-age children (29,407 boys and 28,002 girls). Among the displaced population, 239,387 persons were living in makeshift shelters (schools, colleges) or on embankments and some returned as water started to recede in their areas. Associated riverbank erosion permanently displaced more than 8,000 people equivalent to 1,654 households in Kurigram, Bogura and Tangail districts.[131]

May 2020 - Tropical Cyclone Amphan

On 20 May 2020, Tropical Cyclone Amphan reached Bangladesh. As of 22 May, the official death toll in Bangladesh was 17, with the UN estimating 10 million people and 19 districts were affected. GoB's Early Warning system, the successful massive evacuations to cyclone shelters respective of COVID-19 mitigation measures, and the power of the mangrove forest of the Sundarbans contributed to reduce the impact of the cyclone and to reduce the loss of lives as well as the damages to infrastructures. According to MoDMR 330,667 houses were damaged including 55,667 totally destroyed in nine most impacted districts: Khulna, Satkhira, Barguna, Bhola, Patuakhali, Pirojpur, Noakhali, Bagerhat and Jessore. Damage was mostly due to tidal surge causing embankments to collapse or overflow. Bangladesh Armed Forces provided medical assistance, emergency rescue and relief assistance. BDRCS provided food and emergency relief items in affected districts in addition to funding the immediate repair of 200 tube-wells and for the rapid installation of 100 communal latrines. CSOs and NGOs are using their prepositioned items to contribute to the relief efforts.[132]

Country Risks

The 2017 influx of Rohingya into Bangladesh brought the refugee camp population in Cox's Bazar to more than 850,000 and dramatically changed the cyclone risk scenario for the area. Nearly one million vulnerable refugees living in non-permanent shelters raises significant concern about the devastation a tropical cyclone could bring. According to a 2019 study weighing hazard, exposure, and vulnerability, 53% of the Cox's Bazar district has a "very high" or "high" cyclone risk. More than 30% of the Rohingya refugee camps are at a very high or high cyclone risk.[133]

In addition to the various natural hazards that Bangladesh is highly vulnerable to, a complicating factor is the state of the infrastructure. Exacerbated by rapid urbanization and migration to cities, building codes are poorly enforced and streets are narrow. Though Bangladesh does not experience earthquakes as frequently as storms and flooding, the country still faces a high risk of strong earthquakes that may result in high fatalities and widespread damage.[134] Earthquake fatalities would be exacerbated by more buildings collapsing due to poorly enforced building codes.

On 24 April 2013, the 8-story Rana Plaza collapsed in Dhaka's Savar upazila (sub-district), killing at least 1,134 people. The commercial building housed over five garment factories supplying global brands. Factory workers were compelled to work that day, despite concerns over cracks that appeared the day before. The building collapsed due to poor construction and political connections undermining enforcement of building codes. While this was a man-made and not a natural disaster, it reveals how vulnerable the infrastructure would be to any earthquake activity that may affect the capital. [135]

Country Risk Profile

Bangladesh is the country with the second highest risk in the world due to natural hazards.[136] 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 and envisages 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.[137]

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, Bangladesh had an overall risk of 6.0/10, which INFORM categorizes in the "High" risk class. Bangladesh's risk score for the first dimension, Hazard and Exposure, was 7.6/10. However, this first dimension is a combination of components for both natural and human hazards. While the risk from human hazards was only ranked at 6.9/10, the risk score for natural hazards was ranked significantly higher at 8.2/10. This is the second highest natural hazard score in the world (only the Philippines had a higher natural hazards risk at 8.4). The second dimension of Vulnerability was 5.7/10, and the third dimension of Lack of Coping Capacity was 5.1/10.[138]

INFORM also has a new companion index, the Global Crisis Security Index, which is still being developed. Preliminary results ranked the Bangladesh Rohingya Refugee Influx as 3.0 out of 5.0 in crisis severity (the higher the number the more severe the crisis) for April-June 2018. However, INFORM states the ranking "should **not** be used to support decision-making at this stage" as the index has not yet been fully developed, tested and refined.[139]

A risk analysis was conducted by the Humanitarian Coordination Task Team (HCTT) in order to identify the risk of climate-related disasters (Figure 5). Cyclone, floods and landslides (including recent epidemics) were ranked according to their anticipated impact and likelihood. Multiplying these two variables gave a value indicating the gravity (low, medium or high), of a given risk.[140]

Impact	1. Very Unlikely	2. Unlikely	3. Moderately Likely	4. Likely	5. Very Likely
5. Critical			Earthquake	Epidemics	Food Contamination
4. Severe				River/ Monsoon Flooding Waterlogging Cyclone	Industrial Hazards
3. Moderate			Tornado Social Instability Lightning	Landslide Flash Floods Drought Cold wave	Saline Intrusion
2. Minor					
1. Negligible					

Likelihood

Likelihood
1 = Very unlikely (up to 20% chance of the event happening)
2 = Unlikely (20-40%)
3 = Moderately likely (40-60%)
4 = Likely (60-80%)
5 = Very Likely (over 80%)

Impact;
1 = Negligible (minimal impact on overall population)
2 = Minor (minor impact on overall population)
3 = Moderate (moderate impact on overall population)
4 = Severe (severe impact on overall population)
5 = Critical (major impact on overall population)

Figure 5: HCTT Country Risk Profile for Bangladesh



BANGLADESH
Organizational Structure

Disaster Management Reference Handbook | May 2020

Organizational Structure

Lead Government Agencies in Disaster Response

The national disaster management system in Bangladesh involves three main bodies. This includes the National Disaster Management Council (NDMC), headed by the Prime Minister, responsible for strategic decisions for disaster management; the Inter-Ministerial Disaster Management Committee (IMDMC), responsible for coordination across ministries; and the National Disaster Management Advisory Committee, responsible for policy development and advice. The NDMC is the highest-level decision-making body for disaster management in the country. The Ministry of Disaster Management and Relief (MoDMR) has the role of Secretariat to NDMC[141] and is the disaster response coordination mechanism. It has the responsibility for coordinating national disaster management across all agencies.[142]

Figure 6 shows the coordination for disaster management in Bangladesh. The NDMC sits at the top of the organizational chart with several departments, committees, and boards reporting to the NDMC.[143]

Disaster Relief and Emergency Response

The Ministry of Disaster Management and Relief (MoDMR) of the Government of Bangladesh has the responsibility for coordinating national disaster management efforts across all agencies. The National Disaster Management Council (NDMC), headed by the Prime Minister, is the supreme body

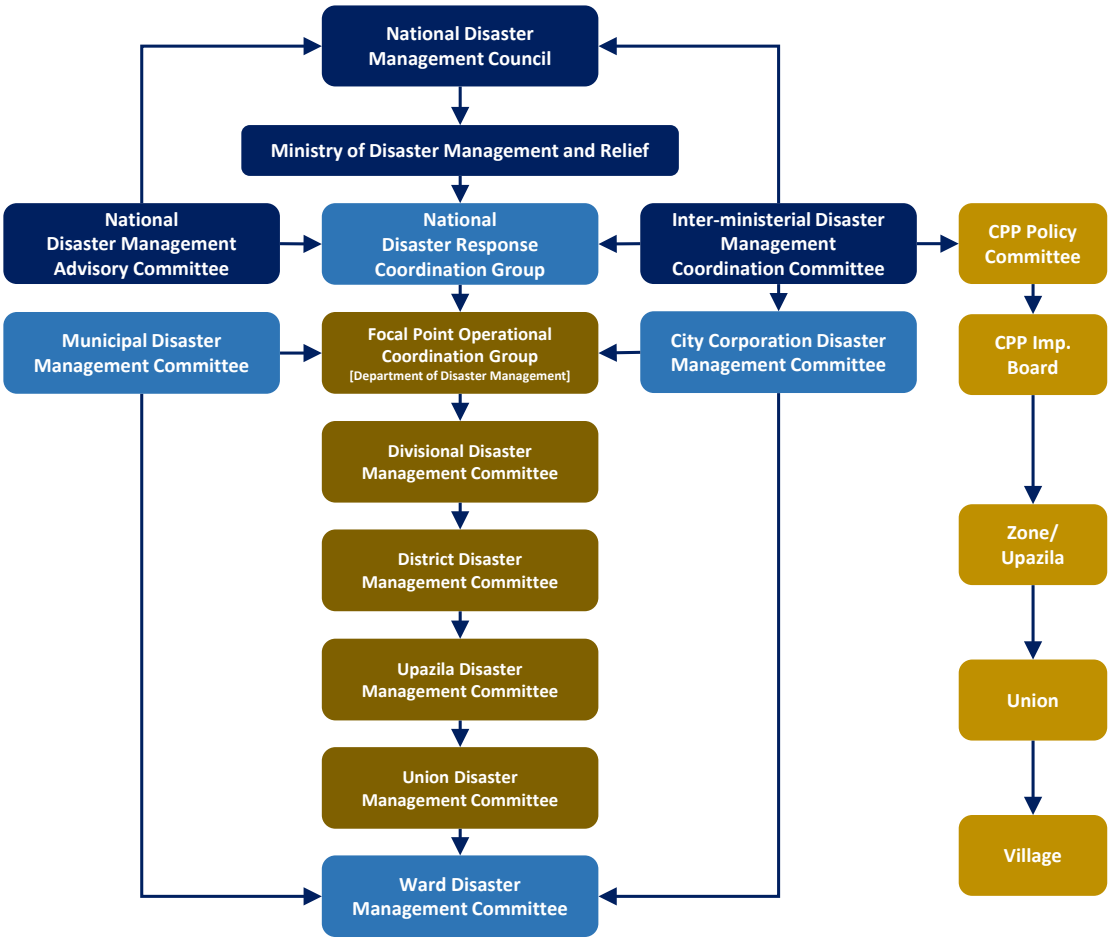


Figure 6: Disaster Management Structure in Bangladesh

for providing overall direction for disaster management (DM) which includes disaster risk reduction, mitigation, preparedness, response and recovery. As DM is a multi-sectoral and multi-functional discipline, functional and hazard-specific planning and execution responsibilities are vested in agencies with primary technical /management focus related to specific sectors, with MoDMR having an overall coordinating and facilitating role as "Secretariat" to NDMC. The Standing Orders on Disaster (SOD) issued by the ministry in 1997, revised in 2010, and revised recently in 2019 is an important milestone towards guiding and monitoring DM activities in Bangladesh.[144]

The National Disaster Management Council (NDMC) and Inter-Ministerial Disaster Management Coordination Committee (IMDMCC) coordinate disaster-related activities at the National level. Coordination at District, Thana and Union levels is done by the respective local level Disaster Management Committees (DMCs). A series of inter-related institutions, at both national and sub-national levels, function to ensure effective planning and coordination of disaster risk reduction and emergency response management.[145]

After the Nepal Earthquake in 2015, the Government of Bangladesh (GoB) established a National Emergency Operation Centre (NEOC) to respond to disasters. In 2015, the NEOC, also termed National Disaster Response Coordination Center (NDRRC), was established at the Secretariat of the MoDMR as a coordination mechanism for disaster response. Emergency operations centers can also be activated at the district levels for the management and coordination of the response through strategic deployment of staff to the field as well as coordination with various clusters and working groups. The Ministry of Foreign Affairs (MoFA) leads the coordination of incoming humanitarian assistance. It coordinates requests for international assistance as directed by the government and NDMC.[146]

International military assistance is based on existing agreements between Bangladesh and Member States or provided multilaterally. Foreign Military Assets (FMA) may either be requested or accepted by the Government of Bangladesh. FMAs should be determined by government agencies and the clusters, in coordination with the Prime Minister's Office, NDMC, the Inter-Ministerial Disaster Management Coordination Committee (IMDMCC) and MoDMR. Once FMAs are accepted, the mission structure is established as either joint and combined operations, or a multinational force (MNF). International military assistance is coordinated bilaterally through the AFD and the Ministry of Defense in consultation with NDMC. If a significant number of FMAs are deployed, a Multi-National Coordination Center (MNCC) may be activated.[147]

Figure 7 depicts the international assistance coordination process.[148]

INTERNATIONAL ASSISTANCE COORDINATION PROCESS

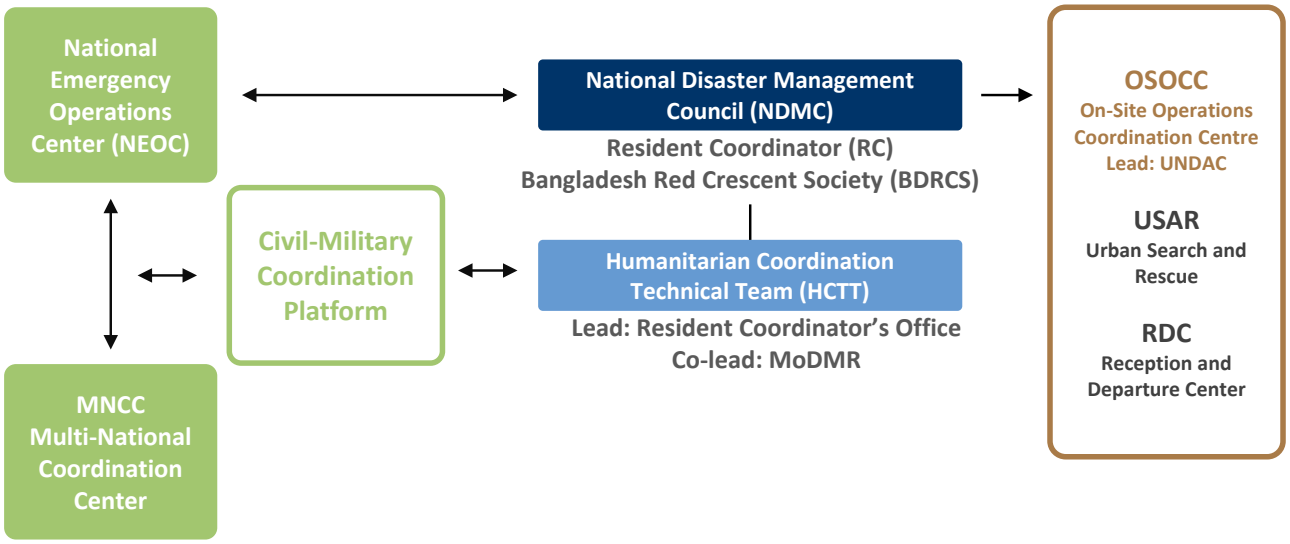


Figure 7: International Assistance Coordination Process

Armed Forces' Role in Disaster Response

The Bangladesh Armed Forces Division (AFD) plays a vital role in disaster management. MoDMR is the government ministry which develops requests for AFD assistance to deliver aid. The main role of AFD is to coordinate the employment of Armed Forces in disaster management and the overall relief operation. The Bangladesh Ministry of Defence, the Army, Navy, and Air Force also have constituted responsibilities in disaster response. During a disaster, Army, Navy and Air Force personnel are deployed to the affected areas. AFD will then establish a monitoring cell to coordinate with all concerned ministries of the government, which includes the Ministry of Foreign Affairs, Ministry of Home Affairs, MoDMR, Ministry of Health, and Ministry of Civil Aviation. AFD coordinates with MoDMR and other ministries, organizations, and agencies involved in disaster management, included in Figure 8.[149] The revised 2019 SoD also endorses a formal civil-military coordination platform for Bangladesh.[150]

In addition to response, AFD takes an active part in the events of disaster risk reduction, its preparedness and management. They also promote civil-military coordination and measures against earthquakes. Since 2010, Bangladesh has organized annual Disaster Response Exercise and Exchange (DREE) events. Each year, there is an earthquake contingency plan prepared for each sector of Dhaka City in line with the national contingency plan and the few major cities outside Dhaka. In addition, AFD along with MoDMR co-hosted Exercise Coordinated Response (Ex COORES 2019) in Singapore.[151]

Humanitarian Coordination Task Team (HCTT)

In 2019, Government of Bangladesh through the approved revised Standing order on Disaster (SoD) recognized the present cluster coordination through the Humanitarian Coordination Task Team (HCTT) as a tool for effective coordination with international community. In 2012, this humanitarian coordination system in Bangladesh was established following a consultative process to review disaster preparedness and response arrangements. The review was jointly led by the MoDMR Secretary and, by the UN Resident Coordinator (RC) under the auspices of the Local Consultative Group Disaster and Emergency Response (LCG DER) itself co-chaired by the UN

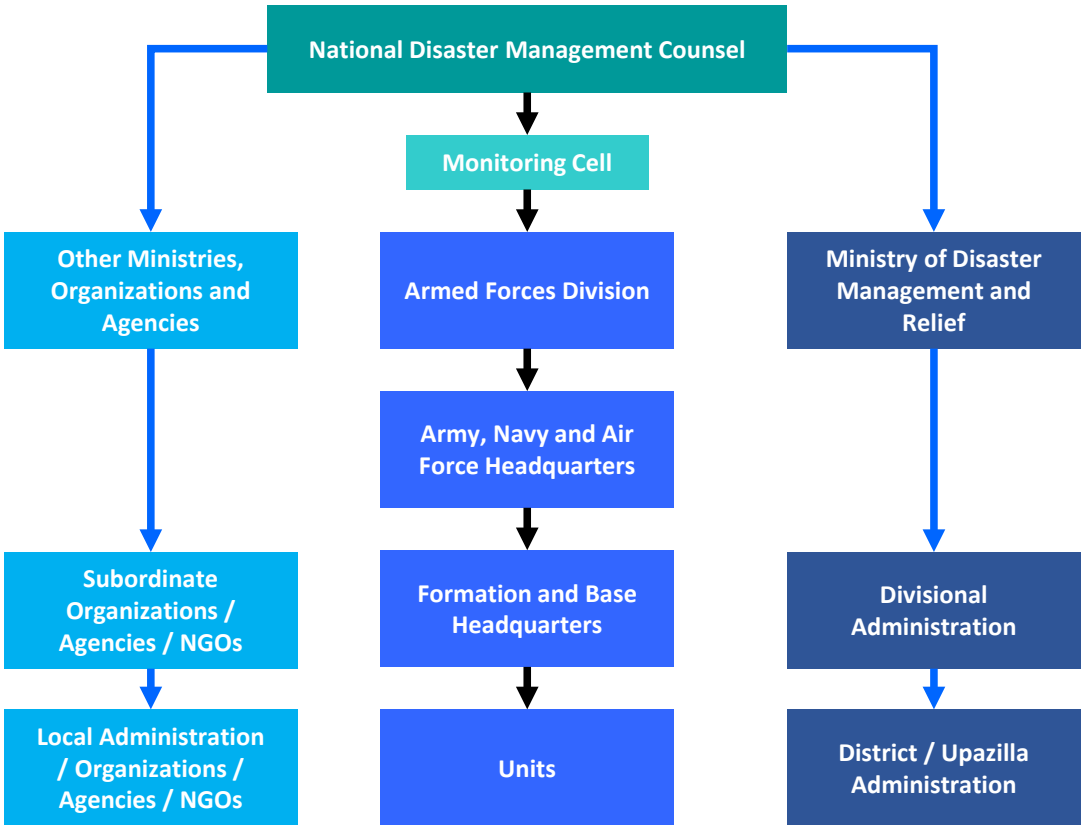


Figure 8: Procedure of Armed Forces Integration During any Disaster

and the MoDMR. This process resulted in the establishment of the HCTT under the LCG-DER and, of nine humanitarian clusters and several working groups.[152]

Since its inception the HCTT has played an important role in coordinating humanitarian action. It has overseen responses to a range of disaster events in Bangladesh. In addition to its coordination function, the HCTT plays a vital role in formalizing and strengthening the relationship between the Government of Bangladesh and national and international humanitarian organizations. Today, the HCTT comprises an additional cluster, the GBV cluster established in 2016, 3 representatives of the national NGO coordination platform led by DDM, 3 representatives of international NGOs representing the INGO emergency sub-committee and two representatives of the donor community. Working groups include CwG, Shongjog (multi-stakeholder platform for communicating with communities), and the Needs Assessment Working Group (NAWG). Discussions are on-going concerning the establishment of the Emergency Telecommunications Cluster (ETC) Cluster. IFRC is the co-lead of the Shelter cluster.[153]

The HCCT has also updated a **2019 Contingency Plan for Earthquake Response in Major Urban Centers.** This Contingency Plan is based on the 2009 Earthquake Risk Assessment of Dhaka, Chittagong and Sylhet by the MoDMR.[154]

UN Bangladesh developed the **HCTT Contingency Plan 2020 for Climate-Related Disasters in the COVID-19 Pandemic Context** which looks at the risks of cyclone, floods, and landslides in Bangladesh in the context of COVID-19. The upcoming cyclone and monsoon seasons during the pandemic will further increase the country's vulnerability. The HCTT Contingency plan anticipates needs analysis and includes specific pre-agreed upon thresholds which need to be met for cyclone, landslides, or floods, which would signify that a coordinated response from the humanitarian community would be automatically activated. However, the introduction of these thresholds does not prevent any organization from undertaking any response. Considering the recurring nature of climate-related disasters, the contingency plan was developed as per OCHA's RAPID approach and the objective of this document is to help the humanitarian community to complement preparedness and response efforts undertaken by Bangladesh's national authorities in relation to climate-related disasters. The Needs Assessment Working Group (NAWG) undertook a composite analysis that considers current COVID-19 impact combined with current and anticipated risks, distress, and disruption, based on empirical data related to climate-related disaster in the country.[155]

The second plan, draft **Humanitarian Preparedness and Response Plan (HPRP) for Climate-related Disasters in 2020**, was developed based on the above referenced HCTT's contingency plan. The draft HPRP has two main objectives: (1) To enhance the humanitarian community's ability to support Government of Bangladesh's (GoB)-led response efforts if/when needed with speed, volume and quality by supporting resources mobilization efforts of all humanitarian partners including joint resource mobilization efforts supportive of national/local stakeholders, and; (2) To provide the required framework for a HCTT coordinated response to a climate-related disaster once concerned components of the HPRP are activated. Considering the impact of COVID-19 in Bangladesh and partners' on-going humanitarian assistance to the consequences of the health emergency, the HPRP is expected to facilitate the coordinated engagement of the humanitarian community in preparation and response to climate-related disasters. The HCTT coordinated response is triggered based on agreed thresholds in the Contingency Plan. The NAWG, Bangladesh Red Crescent Society (BDRCS) and WFP inform both the Ministry of Disaster Management and Relief (MoDMR) and the Office of the UN Resident Coordinator that the thresholds are met. Would any foreign military capabilities be used, coordination will take place with Bangladesh's Armed Forces Division (AFD) which will lead the Multinational Coordination Center (MNCC) as per its 2019 SOP. [156]

Laws, Policies, and Plans on Disaster Management

Disaster Management (DM) in Bangladesh is guided by a number of national and international drivers which, among others, include: a) Standing Orders on Disasters (SOD); b) the Disaster Management Act, 2012; c) the National Plan for Disaster Management 2016-2020; d) the Disaster Management Policy Act 2015; e) the South Asian Association for Regional Cooperation (SAARC)

Framework for Action (SFA) 2006-2015; f) the Sendai Framework for Disaster Risk Reduction (SFDRR) 2016-2030; g) the Asian Regional Plan for Disaster Risk Reduction (ARPDRR); and the Sustainable Development Goals (SDGs).[157] Additional information on Bangladesh's national DM plans are listed below.

Standing Orders on Disaster (2019)

The Standing Orders on Disaster (SOD) are an important part of the disaster regulatory framework in Bangladesh. Essentially the SOD provides a legal basis to perform disaster management activities. [158] The SOD was first issued in 1997, and revised in 1999, 2010, and 2019, and describes the detailed roles and responsibilities of committees, ministries and other organizations in disaster risk reduction and emergency management, and establishes the necessary actions required in implementing Bangladesh's Disaster Management Model. They have been prepared to inform relevant parties their duties and responsibilities regarding disaster management at all levels. Under the SOD all ministries, divisions/departments and agencies shall prepare their own Action Plans with respect to their responsibilities for efficient implementation. The National Disaster Management Council (NDMC) and inter-Ministerial Disaster Management Coordination Committee (IMDMCC) ensure coordination of disaster related activities at the National level. Coordination at District and Upazila (Sub-district) levels will be done by the respective District, Upazila, Union and Ward Disaster Management Committees. The Department of Disaster Management renders all assistance to them by facilitating the process.[159]

The Disaster Management Act No. 34 (2012)

The 2012 Disaster Management Act provides the legal basis for disaster risk reduction and emergency response management in Bangladesh. This Act defines the organizational structure of disaster management at national and local levels and details the responsibilities of all government departments and committees related to the disaster management system.[160]

National Disaster Management Policy (2015)

The National Disaster Management Policy, 2015, defines the national perspective on disaster risk reduction and emergency management, describing the strategic framework, and national principles of disaster management in Bangladesh. It includes the broad national objectives, and strategies in disaster management.[161]

Disaster Management Plans

The Bangladesh National Plan for Disaster Management is a strategic umbrella plan that provides the overall guideline for the relevant sectors and the disaster management committees at all levels to prepare and implement their specific plans.[162]

The ***National Plan for Disaster Management (NPDM 2016-2020)*** was prepared under the leadership of MoDMR and is aligned with national, regional and international frameworks, including the GoB's seventh 5-year plan, Asia Regional Plan for Implementation of the Sendai Framework for Disaster Risk Reduction, and Sendai Framework for Disaster Risk Reduction. The purpose of NPDM 2016-2020 is to guide implementation of the Disaster Management Act 2012, allowing GoB ministries and other agencies to use it to produce their annual work plans. The plan also attaches importance to engagement of the private sector, as well as takes a 'whole-of-Government' approach. The development process of the plan was inclusive, involving consultations with a wide range of stakeholders including GoB agencies, NGOs and civil society organizations (CSOs), facilitated by the United Nations Development Programme (UNDP) and MoDMR from 2015.[163]

NPDM 2016-2020 is a successor of the previous NPDM 2010-2015, which was the first policy document of its kind in Bangladesh. NPDM 2010-2015 reflected a shift from disaster relief and response to a comprehensive risk reduction management, with emphasis on capacity strengthening. NPDM 2010-2015 was drawn from regional and global frameworks including the SAARC Disaster Management Framework and the Hyogo Framework of Action. It recognized the need for addressing emerging risks, and it helped achieve several milestones leading to the Disaster Management Act (2012).[164]

The timeline for the 5-year NPDM 2016-2020 has three program periods: 2016 - preparatory year with existing programs continuing; 2017-2018 - initiation of new actions plus actions continuing from the previous period; and 2019-2020 - more initiatives and an activity peak relating to expected growth in institutional capacity. Main targets are expected to continue to be implemented over the long term until 2030.[165]

Figure 9 shows the disaster management regulatory framework in Bangladesh.[166]

Bangladesh has created a model to guide disaster risk reduction and emergency response management efforts. Figure 10 has key elements including risk reduction and emergency response.[167]

Disaster Management Partners

Disaster management partners in Bangladesh include:

Bangladesh Red Crescent Society (BDRCS), International Organization for Migration (IOM), Bangladesh Rural Advancement Committee (BRAC), Plan International, World Vision, Save the Children, United Nations Children's Fund (UNICEF), Food and Agriculture Organization of the United Nations (FAO), UN Population Fund (UNFPA), UN World Health Organization (WHO), UNDP, Habitat for Humanity, Shelter Box, Catholic Relief Services (CRS), Terre des hommes (TDH), Friendship, Gana Unnayan Kendra (GUK), Mahideb Jubo Somaj Kallayan Somity (MJSKS), SKS Foundation, Solidarités International, Manab Mukti Sangstha (MMS), Assistance for Social Organization and Development (ASOD), National Development Programme (NDP), CARE, Concern Worldwide, Christian Aid, Islamic Relief, Muslim Aid, Aid Comilla, HelpAge, ActionAid, Caritas Bangladesh, United Purpose, Save the Children, Oxfam, Dhaka Ahsania Mission (DAM) and Bolipara Nari Kalyan Somity (BNKS), Asia Development Bank (ADB), and the UN World Food Programme (WFP).[168]

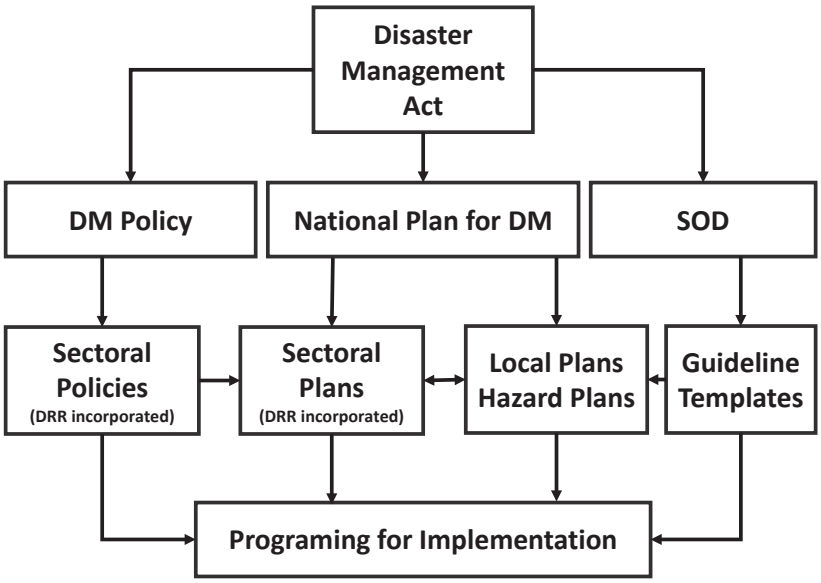


Figure 9: Bangladesh Disaster Management Regulatory Framework

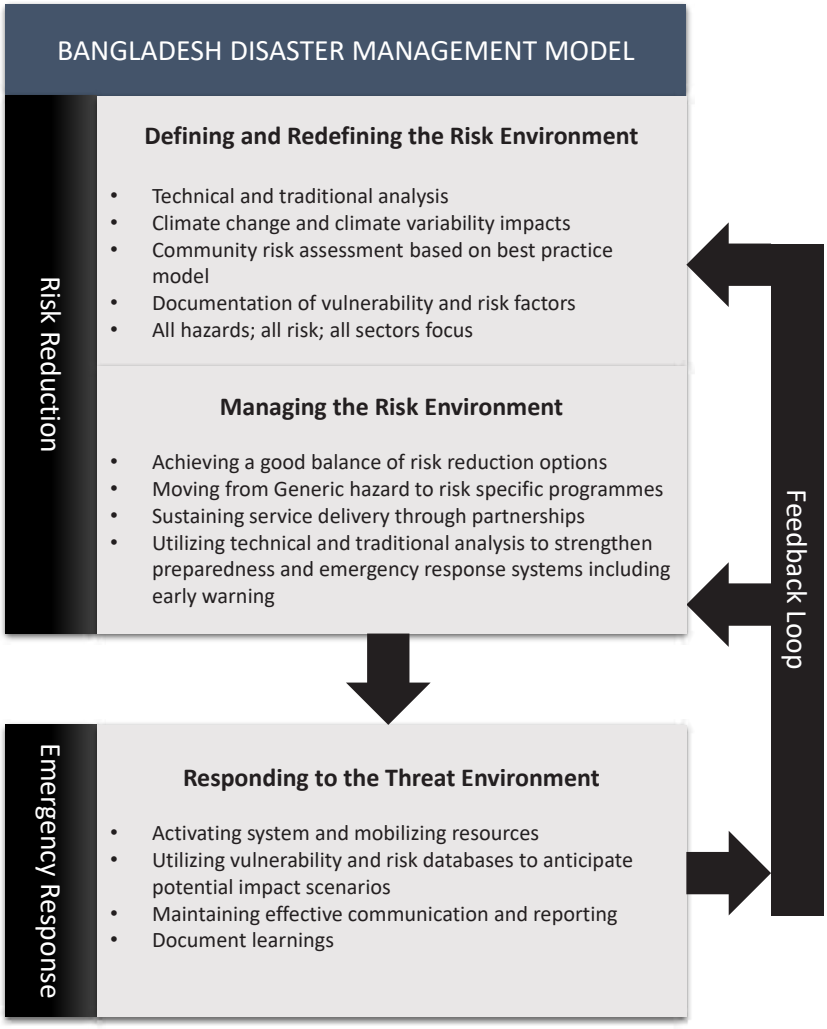


Figure 10: Bangladesh Disaster Management Model

In regard to complex emergencies, in coordination with the GoB, nine United Nations agencies and more than a hundred international and national NGOs and other humanitarian entities are responding to the Rohingya refugee crisis.[169]

The following section will discuss the BDRCS and the United Nations Bangladesh in more detail.

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.[170]

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.[171] It has a country office in Dhaka and a sub delegation office in Cox's Bazar, it works in support of the humanitarian activities of Bangladesh Red Crescent Society.[172]

National Red Cross and Red Crescent Society

The National Red Cross and Red Crescent Societies are the base of the Movement. There are 192 officially recognized Red Cross and Red Crescent Societies, uniting over 128 million individual members and volunteers and 263,000 employees. They provide emergency relief to victims of natural and man-made disasters at both the national and international level. They also work in the fields of community development, social welfare and public health including health education, nursing and blood banks. The National Society in Bangladesh is the Bangladesh Red Crescent Society.[173]

Bangladesh Red Crescent Society (BDRCS)

Bangladesh Red Crescent Society is recognized as auxiliary to the public authorities and mandated to provide for aid to the sick, wounded and people affected by natural disasters, civil disturbances through the 1973 Bangladesh Red Crescent Society Order.[174] It has played a crucial role in the relief, rescue and rehabilitation of hundreds of thousands of victims of floods, cyclones and other natural and man-made disasters in Bangladesh. They work with a wide network of volunteers and associations to work together to improve disaster preparedness, awareness and rehabilitation. In addition, the BDRCS has established safe and sustainable blood systems. They also provide medical services through various hospitals in Chittagong, Sylhet, Dinajpur, Gopalgonj, Holy Family Medical College Hospital in Dhaka, as well as Mother and Child Health (MCH) Centres. The BDRCS has a tracing/restoring family link program that helps to locate family members who have been separated due to conflict and disasters and put them back into contact with their relatives.[175]

BDRCS, with the help of the International Federation of Red Cross and Red Crescent Societies, responded immediately after Tropical Cyclone Mora hit Bangladesh in May 2017. They provided crucial water, sanitation and hygiene promotion, livelihood and shelter support during the recovery phase. The disaster affected more than 3.3 million people and caused massive damage to at least 50,000 homes.[176]

Photo 5 shows a BDRCS representative assisting families affected by monsoon flooding in 2019.[177]

All disaster related activities including response, recovery, prevention, preparedness, development, resilience, and mitigation are carried out through five departments under the Disaster Risk Management (DRM) division. They include the following:[178]

- Disaster Risk Management (DRM)
- Cyclone Preparedness Programme (CPP)
- Community Development (CD)
- Disaster Response (DR)
- Restoring Family Links (RFL)

BDRCS' mandates include:[179]



Photo 5: Bangladesh Red Crescent Society Providing Disaster Relief

1. Aid to the sick and wounded members of the armed forces of Bangladesh.
2. Prevention & alleviation of human sufferings with complete impartiality and without discrimination.
3. Establishment & maintenance of peace among all nations.
4. Provision of relief for the mitigation of sufferings of the disaster affected community (Post Disaster Relief, Recovery and Rehabilitation).
5. Improvement of health and prevention and mitigation of diseases (6 Hospitals/ Blood Programs)
6. Providing trainings in nursing & first aid (2 Nursing Institutions & Training Dept.)
7. Establishing & maintaining maternity & child-welfare institutions (56 MCHs).
8. Organizing youth countrywide as an effective limb of the Society (through the Red Crescent Youth and Volunteers Department and the 68 branches of BDRCS).
9. Providing Ambulance services.
10. Providing garments for hospitals and health institutions.
11. Representing BDRCS at International Forum.
12. Other cognate matters to be approved by the Society.

United Nations in Bangladesh

The relationship between Bangladesh and the United Nations (UN) started during the initial stage of liberation war in 1971. In fact, it began in 1970 when there was landslide victory in Bangladesh (formerly known as East Pakistan) in the parliamentary election under the leadership of Bangabandhu Sheikh Mujibur Rahman. In March 1971, millions of people sought refuge in neighboring India and in April the Government of India requested the UN to provide humanitarian assistance to refugees who crossed the border from East Pakistan. Then the UN Secretary-General Kurt Waldheim initiated a UNHCR led response. The UNHCR took the lead in coordinating humanitarian assistance to 10 million Bengali refugees, in partnership with the Indian government and with the support of UNICEF, WFP, FAO, WHO and the League of Red Cross Societies. It was agreed in the negotiation with the Pakistan Government that the UN would monitor the administration of humanitarian aid to the people of East Pakistan. The mission was called UNEPRO (the United Nations East Pakistan Relief Operation). In December 1971 after Independence, the UN Secretary-General launched the United Nations Relief Operations in Dhaka (UNROD) to continue the relief operation of UNEPRO. This was the inception of the UN-Bangladesh relationship.

The United Nations in Bangladesh, also known as the UN Country Team (UNCT), Bangladesh is made up of 23 UN agencies, funds and programs, as well as the UN Information Centre, convened under the UN Resident

Coordinator. The UN Country Team is the UN's highest-level inter-agency coordination and decision-making body in Bangladesh. The UNCT drives activities at the country-level and allows for all UN entities with activities in-country to work as a team in formulating common positions on strategic issues, ensuring coherence in action and advocacy, in close coordination and cooperation with the Government of Bangladesh and the broader development community.

The UN agencies and offices have made significant changes in many sectors in partnership with the Government of Bangladesh and other stakeholders. The UN System has been engaged to support national development priorities, currently under United Nations Development Assistance Framework (UNFAF). In the upcoming Eighth FYP, the assistance would fall under new generation framework - United Nations Sustainable Development Cooperation Framework (UNSDCF).

In line with the 2030 Agenda for Sustainable Development and UN Development System Reform (UNDS), the UN agencies in Bangladesh have been working together in a new and coherent way to support the government's implementation of the SDGs and to enhance the development impact. The UN in Bangladesh has been supporting the government role as one of development partners in various projects in the field of sustainable development solutions, poverty alleviation, disaster management, peace, good governance, police reform, human rights, environment, climate change, reproductive health, family planning, population, children & mother's development, immunization, maternal and child nutrition, food security, adolescence, youth development, empowerment of women, education, literacy, culture, communication, heritage, labor standards and employment, migration, refugees, drugs and crime, industrial development, capacity development, project services, peacekeeping, volunteerism, counter-terrorism, agricultural development, health care and research, HIV-AIDS, trade, atomic energy, inclusive finance transformation, infrastructure and resilience, human settlement and communication and advocacy services.[180]

Contact information for UN in Bangladesh includes:
Office of the UN Resident Coordinator
IDB Bhaban, Shere-e-Bangla Nagar,
Agargaon, Dhaka-1207
Bangladesh

U.S. Government Agencies in Bangladesh

The U.S. has provided more than seven billion dollars in development assistance to Bangladesh since 1971. In 2018, the U.S. government, through the United States Agency for International Development (USAID), provided over US$290 million dollars to Bangladesh, increasing food security and economic opportunities, improving access to education and healthcare, protecting the environment, and boosting resilience to natural disasters.[181]

Since the start of the Rohingya refugee crisis in 2017, the U.S. has contributed nearly $542 million and is the leading donor of humanitarian assistance. In September 2019, the U.S. pledged an additional $127 million with $89 million going to programs in Bangladesh, assisting both Rohingya refugees and Bangladeshi host communities.[182]

USAID

USAID builds self-reliance by strengthening Bangladesh's ability to plan, finance and implement its own development solutions. USAID programs in the country focus on food security, environmental resilience, democracy and governance, health, education, and humanitarian assistance. The agency strengthens democratic institutions, helps combat gender-based violence and human trafficking, and empowers workers to be self-advocates. With the support of USAID over the last 25 years, Bangladesh has reduced maternal and child mortality by two-thirds and has increased access to health services. USAID also assists vulnerable host communities through primary health services, reading education, and the construction of multi-purpose cyclone shelters.[183]

USAID's Office of Food for Peace (FFP) partners with CARE International, Helen Keller International, and World Vision to implement multi-year development programs to promote agriculture, disaster risk reduction, livelihoods, maternal and child health, and women's empowerment in Bangladesh. FFP contributed $123 million for emergency food assistance to vulnerable communities in Cox's Bazar District in FY2019. FFP partners (WFP and World Vision) provide emergency food assistance to Rohingya refugees and implement community kitchens and disaster risk reduction projects.[184]
USAID's contact information includes:[185]

USAID Contact
Mackenzie Keller
Bangladesh Desk Officer
U.S. Agency for International Development
1300 Pennsylvania Avenue NW
Washington, DC, 20523
Phone +1 (202) 216-3294
Email mkeller@usaid.gov

USAID/OFDA Regional Contact for Asia:
Rachel Miller
Email: ramiller@usaid.gov

U.S. Embassy in Bangladesh

The U.S. Mission to Bangladesh is currently headed by Ambassador Earl R. Miller, who is assisted by the staffs of the Political/Economic/Commercial, Public Affairs, Management and Consular Sections. The U.S. Mission to Bangladesh includes several other agencies of the U.S. Government, including USAID, the Foreign Agriculture Service of the U.S. Department of Agriculture, and the U.S. Defense Attaché Office.[186] U.S. Embassy contact information includes:

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U.S. Embassy Dhaka
Madani Avenue,
Baridhara, Dhaka -1212,
Bangladesh
Tel: +880 (2) 5566-2000

Education and Training

Bangladesh is located in a tectonically active region and some of the major cities including Dhaka, Chittagong and Sylhet are at risk of massive destruction by earthquakes. To address this earthquake hazard, the GoB has created initiatives in which urban community volunteers are trained in search-and-rescue and first aid, masons and construction workers are trained on safe construction, and there is training on school safety and evacuation drills.[187]

In Bangladesh, flooding is a recurrent scenario, especially in the north. The BDRCS staff and volunteers facilitate safe shelter awareness sessions to increase understanding and knowledge of safe shelters. They provide information on how to build a strong house and latrine, and how to be better prepared for future disasters.[188] Photo 6 shows BDRCS staff and volunteers facilitating participatory safe shelter awareness among the villagers in Lalmonirhat after the mega flood in 2017.[189]

Disaster Management Communications

Early Warning Systems

The GoB has been developing and implementing various measures to better equip the country to deal with floods.



Photo 6: Safe Shelter Awareness Training

This includes a flood action plan, flood hydrology study, flood management model study, national water management plan, national water policy, flood early warning study and construction of flood embankments and flood shelters. Bangladesh has a coordinated cyclone forecasting, early warning and evacuation system and the cyclone mortality rate has been reduced greatly from previous years.[190]

The Bangladesh Meteorological Department (BMD), under the Ministry of Defence, is mandated to monitor, analyze and predict all climate and meteorological and earthquake events. The BMD provides warnings and advisories for tropical cyclones, storm surge, severe thunderstorms, tsunami, heavy rainfall, and cold and heat waves. BMD monitors and analyzes seismic waves by using seismometers at four seismic stations (Rangpur, Sylhet, Dhaka, and Chittagong). They broadcast through the radio, television, newspaper, and provide current updates at their website: www.bmd.gov.bd[191]

The international community and NGOs have been partnering with Bangladesh to strengthen end-to-end early warning systems. Currently there is a US$113 million Bangladesh Weather and Climate Services Regional Project (2016-2022) which aims to modernize the country's overall meteorological system, including weather forecasting, early warning systems, and delivery of weather and climate services. This includes investment in and transformation of BMD and the Hydrology Division of the Bangladesh Water Development Board (BWDB) to improve network, hardware, software and human resource capacity. The project aims to build institutional capacity and coordination of agencies to strengthen disaster preparedness and climate resilience in the country.[192]

The World Meteorological Organization (WMO) provides real-time data and information through the Global Telecommunications System (GTS) to BMD and also provides expertise and guidance materials to BMD and the Department of Hydrology. The World Health Organization (WHO) provides help and advice to the governmental and non-governmental health sectors, through its Country Office in Dhaka, Bangladesh. In addition, the International Federation of Red Cross and Crescent Societies, through the Bangladesh Red Crescent Society (BDRCS), administers the Cyclone Preparedness Programme (CPP), in cooperation with the DMB.[193]

The BDRCS has implemented community-based flood early warning systems under its Integrated Flood Resilience Program. This allows people to take proper early action if there is impending flood. The people were also made aware of the flood marker and early warning system through orientation and micro-group sessions. The community disaster management committee and community disaster response team members also received training in 2018-2019 which made them capable of responding before, during, and after any disaster. The capacity of community volunteers and community disaster team members have been boosted by providing them search and rescue and first aid equipment. Flood markers have also been set up in different places of the community with explanatory signboards. During the floods in July 2019, the marker helped community people to measure the level of floodwater and take early actions. [194] The marker has green, yellow, and red marks which indicate different levels of floods as seen in Photo 7.[195]

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 information resources are will assist Joint Task Force leaders and staff during mission planning.[196] The sharing of information is critical because no single responding entity (host government, NGO, international organizations or assisting state government, including foreign military forces) can be the source of all the required information.[197]

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 the emergency has been crucial to timely, efficient and effective disaster response. Recent technology has advanced to aid in both prediction and communication, including when and how to send alerts regarding disasters around the world. These advances have resulted in improved early warning and evacuation measures and opportunities to react and prepare for incoming threats to countries.

There are many resources, stakeholders, and components to consider regarding information sharing before, during and after a natural disaster. This section will discuss country specific, humanitarian, regional, and governmental sources.



Photo 7: Bangladesh Red Crescent Society Flood Early Warning System

Table 2 shows the hazards that affect Bangladesh and identifies the national agency mandated to issue warnings.[198]

Hazard Type	National Agencies Responsible for Monitoring & Sending Out Warnings
Cyclones	Bangladesh Meteorological Department (BMD)
Storm Surge	BMD
Thunderstorm, Lightning	BMD
Tornado	BMD
Hailstorm	BMD
River Flooding	Flood Forecasting and Warning Centre (FFWC), Bangladesh Water Development Board (BWDB), and BMD
Flash Flood	FFWC, BWDB, and BMD
Coastal Flooding (due to storm surge/tsunami	BMD
Drought	BMD, and Department of Agriculture Extension (DAE)
Heat Wave	BMD
Cold Wave	BMD
Dense Fog	BMD
Landslide/Mudslide (due to heavy rain)	BMD
Earthquake	BMD (note: BMD will report to govt and public)
Tsunami	BMD [note: Tsunami watch information bulletins are received from Pacific Tsunami Warning Center (PTWC) and Japan Meteorological Agency (JMA)]
Turbulence/Icing	BMD
Strong Winds	BMD
Air Pollution	BMD
Waterborne Hazards	Department of Environment (DoE)
River Erosion	Department of Public Health Engineering (DPHE)

Table 2: Agencies Responsible for Hazard Monitoring and Warnings

Bangladesh Information Sources:

The Bangladesh Red Crescent Society (BDRCS) has a hotline number to call for reports or questions, at +880 1811 458524. Their website also offers press releases and other information regarding humanitarian assistance and disaster response in the country. You can log onto their website at http://www.bdrcs.org/.[199]

The Bangladesh Meteorological Department (BMD), provides warnings and advisories for tropical cyclones, storm surge, severe thunderstorms, tsunami, heavy rainfall, and cold and heat waves. They broadcast through the radio, tv, newspaper, and you can log onto their website at www.bmd.gov.bd.[200]

The Ministry of Disaster Management and Relief (MoDMR) has an informative website. There is an English tab at the top of the right page. It has a section on disaster management and one for humanitarian assistance as well as daily situation reports and press releases. You can log onto their website at https://www.modmr.gov.bd/.

Think Hazard is a website that provides detailed information on a country. Information is provided on Bangladesh regarding hazards, country assessments, projects, early warning systems, and other resources. You can log onto their website at http://thinkhazard.org/en/report/23-bangladesh.

Humanitarian Information Sources

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 network, with over 13.7 million volunteers helping to reach 150 million people in 192 National Societies. IFRC provides support to and coordination among national societies as needed, working before, during and after disasters and health emergencies to meet the needs and improve the lives of vulnerable people.
Website: https://media.ifrc.org/ifrc

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)/Virtual OSOCC 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://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

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

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.

U.S. Government (USG) Sources

Office of U.S. Foreign Disaster Assistance (OFDA) under USAID

The Office of U.S. Foreign Disaster Assistance (OFDA) under USAID is responsible for leading and coordinating the U.S. Government response to disasters overseas. OFDA responds to an average of 65 disasters in more than 50 countries every year. OFDA 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. OFDA works with the international population to assist countries prepare for, respond to and recover from humanitarian crises.[201]

OFDA products are SitReps and maps which are available via email mailing lists.

For OFDA updates on a disaster response, ask the OFDA representative for USINDOPACOM (whose Area of Responsibility includes Bangladesh) to add you to the email list:

- OFDAindopacom@ofda.gov

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/

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

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 comprehensive program of executive education and workshops.
Website: https://apcss.org/

Pacific Disaster Center

The Pacific Disaster Center (PDC) 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.[202]

The PDC also provides a public version, Disaster Alert, which offers open access to a

world map documenting 18 hazard types.[203] 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.[204]
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.[205]
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.[206]

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 and disaster management country assessments which provide 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 the AHA Center, OCHA and the RHCC. CFE provides DMHA resources and updates at its website, as well as via their Facebook and Twitter accounts.[207]
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

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-covid-analysis-v01

Government Bangladesh Ministry of Health & Family Welfare (MOHFW)
http://103.247.238.81/webportal/pages/controlroom_rohingya.php

The Humanitarian Coordination Task Team (HCTT) Contingency Plan 2020 for Climate-Related Disasters in the COVID-19 Pandemic Context
https://www.humanitarianresponse.info/en/operations/bangladesh/document/hctt-contingency-plan-2020-climate-related-disasters-covid-19

Inter Sector Coordination Group
https://data.humdata.org/dataset/iscg-4w-influx-cox-s-bazar-bangladesh

Bangladesh Red Crescent Society (BDRCS) COVID Updates
http://www.bdrcs.org/news/corona-virus-covid-19-situation-update

U.S. Embassy Health Alert for Bangladesh
https://bd.usembassy.gov/travel-health-alert-u-s-embassy-dhaka-bangladesh/

CFE-DM's COVID-19 FHA Decision Support Tool
CFE-DM's Decision Support Tool (DST) is used to enhance the U.S. Indo-Pacific Command's (USINDOPACOM) planning capabilities for potential Foreign Humanitarian Assistance (FHA) in a COVID-19 environment. It can be found here: https://www.cfe-dmha.org/



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Airports

The Civil Aviation Authority, Bangladesh (CAAB) functions as the regulatory body for all aviation related activities. CAAB is responsible for safe, fast, and efficient flow of air traffic within the Flight Information Region (FIR) bounded by the International geographic boundary of Bangladesh. It is the custodian of all airfields and allied facilities including air navigation facilities. Bangladesh has three international airports, five domestic airports and seven Short Take-off and Landing (STOL) airports, with one new domestic airport under construction.[208] Table 3 shows the list of international and domestic airports with location, runway length, and type.[209]

Airport Name	Location	Type of Airport	Runway Dimensions	Runway Type
Zia International Airport	Dhaka	International	3.200m x 46m	part concrete, part asphalt, or part bitumen-bound macadam
Shah Amanat International Airport	Chittagong	International	2.940m x 45m	bituminous concrete
Osmani International Airport	Sylhet	International	2.940m x 45m	bituminous concrete
Saidpur Airport	Saidpur	Domestic	1828m x 30.5	asphalt
Shah Makhdum Airport	Rajshadi	Domestic	1828m x 30.5	asphalt
Jessore Airport	Jessore	Domestic	2407.9m x 45.7	asphalt
Barisal Airport	Bariasl	Domestic	1827.3m x 30.5	n/a
Cox's Bazar Airport	Cox's Bazar	Domestic	2077.2m x 45.7	asphalt
Khan Jahan Ali Airport	Bagerhat	Domestic	Under construction	n/a
Lalmonirhat Airport	Lalmonirhat	STOL	n/a	n/a
Thakurgaon Airport	Thakurgaon	STOL	n/a	n/a
Ishurdi Airport	Ishurdi	STOL	1432.6m x 24.4	asphalt
Shamshernagar Aiport	Shamshernagar	STOL	1,650 m x n/a	asphalt
Tejjgaon Airport	Tejjgaon	STOL	2.839m x n/a	asphalt
Comilla Airport	Comilla	STOL	1.650m x n/a	n/a
Bogra Airport (operated by Bangladesh Air Force)	Bogra	STOL	n/a	n/a

Table 3: List of Airports in Bangladesh

Seaports

Bangladesh has several seaports, but two main ports include Chittagong and Mongla. The Port of Chittagong is used by ship owners and shipping agents, stevedoring agents (berth operator), handling & lighting contractors and clearing & forwarding agents. Chittagong currently operates 92% of the country's international trade. Information on berthing specifications and fees can be found online through the Logistics Cluster (https://dlca.logcluster.org).[210]

Mongla is the second largest port in Bangladesh. This port has the capacity to handle 6.5 million metric tons of cargo and 50,000 TEUs of container per year. Jute & jute goods, frozen cargo, and other general cargo are exported from Mongla port. Heavy machinery, equipment, fertilizer, food grain, sugar, motor vehicles, and raw materials are imported into this port. Information on berthing specifications and fees can be found online through the Logistics Cluster (https://dlca.logcluster.org).[211]

Roads

The road network is in poor condition in Bangladesh. In Dhaka, streets are extremely congested because vehicles are competing with limited road space. Bangladesh has an estimated 700,000 motorized vehicles and 1.5 million non-motorized vehicles. This includes bicycle rickshaws, three-wheeled mini-taxis, cars, buses, and trucks. In addition, inter-city roads are narrow and poorly maintained. Road accidents and fatal head-on collisions on inter-city roads are common in the country. As a result, injury and death rates from road accidents are among the highest in the world, which is also exacerbated by buses often being overloaded. Road traffic crashes cause at least 4,000 deaths annually. Driving at night is dangerous because streetlights are rare, even in cities, and accidents are most frequent at this time.[212]

Railways

Bangladesh Railway is the state-run transportation agency of Bangladesh. The railway system has a 2835.04 km of rail line with 440 stations, 286 locomotives, 1503 coaches and 10,226 wagons. The railway connects 44 civil districts and it operates 261 passenger trains and 55 goods trains including container trains daily. Bangladesh Railway also operates the largest Inland Container Depot with capacity of 90,000 TEUs. [213]

There have been some challenges to rehabilitating existing railway lines, modernizing signaling systems, acquiring new rolling stocks to improve performance, and linking the network with the Trans Asian Railway. Other challenges include reducing operational bottlenecks by double tracking all major railway corridors, easing traffic congestion by improving commuter train service in Dhaka and Chittagong cities, and introducing more Public Private Partnerships in the railway sub-sector. Bangladesh also faces the barrier of institutional reform and the proper use of land and assets. [214]

Waterways

Bangladesh is a country with many rivers, and inland water transport is a major mode for the transport of goods and people. Most of the districts in Bangladesh have river facilities and river transport is used mostly to transport dense cargo such as fertilizers, bricks, sand, mortar, coal, sand, cement clinkers and food grains. Other products, including diesel, gasoline, and kerosene, are transported on barges to fuel depots located near the ports. It is more cost effective to transport cargo through river ports as compared to road and rail transport. The total length of rivers is estimated to be 24,000 km (14,913 miles). There are 6,000 km (3,728 mi) of navigable waterways during the monsoon season and 3,800 km (2,361 mi) navigable during the dry season.[215]

Schools

The education system in Bangladesh is one of the largest in the world, encompassing approximately 22 million children in kindergarten and primary schools, and accounts for 14.4% of the national budget.[216] The Bangladesh Constitution provides that all children receive free and compulsory education.

Education is overseen by Bangladesh's Ministry of Education. The Ministry of Primary and Mass Education is responsible for implementing policy for primary and state funded schools at the local level. Additionally, Bangladesh's administrative divisions each have their own Boards of Intermediate and Secondary Education (BISE) who are responsible for the development and supervision of Secondary and Higher Secondary School Certificate Exams. There is also a nationwide board for Muslim schools called Madrasahs and a Madrasah Education board who develops and administers graduation examinations in technical and vocational educations.[217]

The education system in Bangladesh has made significant progress in the last decade achieving near universal net primary enrollment. Over 97.9% of primary school age children are enrolled in school and have achieved gender parity in access to education, with girls comprising 50.9% of students enrolled in primary school. However, the country is still working to achieve basic reading fluency for students. A 2018 Save the Children assessment found that 44% of first grade students graduate unable to read their first word and 27% of students in the third grade are unable to read with comprehension.[218] Additionally, enrollment drops as students approach secondary education.[219] However, the adult literacy rate has soared from 35% in 1991 to 73% in 2017.[220]

Children make up 40% of Bangladesh's population and according to UNICEF, 600,000 children are out of school. Partnerships with UNICEF and the Government of Bangladesh aim to complete projects contributing to the enrollment of over 200,000 children.[221] The Bangladesh Rural Advancement Committee (BRAC) has a project called "Boat Schools for Children" which provides purpose-built boats as schools in the Haor basic flood plain to combat the area's fragile transportation and communication networks which hinder access to school. The boats designed as mobile classrooms provide access to children who would otherwise not be able to go to school. 42% of villages in Sylhet have no primary schools and children have to attend schools outside of their settlements. Each boat school is designed to last 20 years and follows a standard education program where students complete five grades of education in four years. In addition to impacting

13,000 school children, the project will train local boat manufacturers, provide construction and equipping of 400 boats, train 500 teachers and create 400 school management committees from the communities, school, government and parents.[222] Bangladeshi children living in poverty in urban slums struggle to remain in school. Many children drop out of school to assist their family's income working as manual laborers. The Schools in Urban Slums project expands BRAC's existing education program by adding 2,000 one-room schools to urban slums or areas adjacent to slums for the estimated 62,000 out-of-school children in and around the cities of Dhaka, Sylhet, Chittagona, Raishahi, Khulna, Barisal, Rangpur, Jessore, Mymensingh, Commilla, Gajipur, and Norsingdi. The project covers the cost of primary school education for all 2,000 schools for four years. Approximately 2,000 teachers were hired and trained to work in the schools and over 10,000 parent committee members were trained to support both teaching and learning outcomes in the local schools.[223]

Another issue compounding Bangladesh's struggle to educate primary and secondary school age children is tied to challenges of those living in refugee status in Cox's Bazar where, according to UNICEF, 97% of Rohingya youth age 15-18 are not in school and 25,000 do not attend any learning programs. To address this, the government of Bangladesh, local partners, and the international community have mobilized to provide children in Cox's Bazar with educational opportunities. They have opened over 3,000 learning centers which operate across 34 camps.[224] Additionally, in 2018, US$ 83 million was allocated of Global Partnership for Education (GPE) funding for emergency education. The grant, managed by UNICEF has established 237 learning centers, trained 474 teachers (including 213 female teachers), and allowed over 15,000 Rohingya children to be enrolled in educational activities. Total contributions toward educational response to the crisis in Cox's Bazar is estimated at US$ 59.5 million for 2019 and mandates support for both Rohingya and Bangladeshi children.[225]

Disaster Risk Reduction in the Education Sector

Building on the importance of school-based disaster preparedness and the impact of school-based interventions to communities, the Bangladesh Red Crescent Society (BDRCS) along with the International Federation of Red Cross and Red Crescent Societies (IFRC) launched the School Based Disaster Risk Reduction (SBDRR) Project in 2017. The project initially trained 810 students directly and 18,000 students indirectly in 10 different schools in the Gazipur region to prepare for, react to, and respond after the effects of an earthquake. However, the impact of this training expands across the community.

SBDRR students were trained in Basic Disaster Risk Management. Students learned how to provide first aid, identify safe spaces and where to locate food, clothing, and medicine to distribute to victims. Students were also trained to identify safer locations in their homes to mitigate an earthquake scenario and then share all of these lessons with family members, friends, and neighbors for a more prepared extended community. Students reported feeling calmer and more prepared as a result of the training. They also felt empowered to respond to assist their communities in the event of an emergency.[226]

Communications

Bangladesh is still working to improve its underdeveloped communications system by expanding is methods and reach of communication throughout its cities.

Telephones

The state owns the country's landline telecommunications system under the Bangladesh Telephone and Telegraph Board (BTTB). Telephone service in urban areas is provided by the BTTB and in the rural areas, the Bangladesh Rural Telecom Authority and Sheba Telecommunications provide telephone service. [227] In 2008, BTTB was rebranded as a public limited company, the Bangladesh Telecommunications Company Limited (BTCL), with shares in the company due to enter the public domain. BTCL operates the largest landline network in the country, while private company Grameenphone is the largest mobile telecoms firm in the country. [228]

Mobile telephone coverage is still limited, and digital telephone systems are still being introduced.

To dial from another country, you need to dial: 00; The international code for Bangladesh is +880.

Internet Access

There are 54 internet service providers operating in Bangladesh. Satellite internet is also

available in some areas to provide wider access than terrestrial means allow. Although, internet usage is underutilized due to the high cost of service, underdeveloped telecommunications, lack of support and low awareness of internet service challenge communication in the country. Extensive efforts are in place to increase the population's access to the internet. Bangladesh's internet country code is: bd.[229]

Mass Media

Bangladesh has three primary methods of transmitting information and current news to the population: television, radio, and newspaper. Bangladesh Television has been available since 1964. 17 Network Stations, primarily produced in Dhaka, transmit to approximately 2 million televisions. Channel 1 runs 24 hours and has grown in popularity as one of the most popular educational and entertainment channels in Bangladesh.[230]

Radio can be an important way to disseminate information, especially to smaller communities in Bangladesh. The medium is effective for illiterate communities to provide important information directed to the needs and interest of the local people. The country's national radio network is Bangladesh Betar or Radio which is a government run station with several regional services operating across the country. Bangladesh Radio transmits to Nepal, Pakistan, India, the Middle East, and Europe in seven languages. Many radio stations broadcast online in Bangladesh. A plan to reach rural areas without telephones or electricity is in the work for Community Radio in Bangladesh.[231]

The following is a list of radio stations that can heard in Bangladesh via shortwave transmission and on the Internet:

BBC – Bengali Service VOA – Bengali Service Radio Metrowave (1170 AM) DW Radio – Bengali Bangla Radio Broadcastings Uradhura Radio Eurobangla Audiocast Radio Probash Bangla Music Radio – SmasHits.com

Below is the list of frequencies for Radio Bangladesh in the different cities, towns and areas:

- **AM RADIO**: 558 Khulna/ 630 Dhaka/ 693 Dhaka /846 Rajshahi /873 Chittagong/ 963 Sylhet /999 Thakurgaon/ 1053 Rangpur/ 1080 Rajshahi/ 1161 Rangamati /1413 Comilla/
- **FM RADIO:** 100.0 Dhaka/ 101.5 Sylhet/ 102.0 Rajshahi/ 102.5 Chittagong/ 103.5 Rangpur /106.5 Khulna/

Post

The Post Office in Bangladesh is run by the government and provides a variety of postal products and services including mailing letters, handling parcels, track and trace, courier delivery, foreign money order, e-Post, financial services, post boxes and more. Post is the least expensive method of communications and service is efficient. Airmail takes between three and four days to go to Europe.[232]

Utilities

Power

The electricity supply in Bangladesh's capital, Dhaka is maintained by two organizations: the government-owned Dhaka Electric Supply Authority and the Dhaka Electric Supply Company. Additionally, the government-owned Rural Electrification Board manages electricity in rural areas where several private and public corporations operate on various levels of power generation, distribution and management.

In Bangladesh, demand for electricity has increased annually by 200 megawatts (MW) since 1996. The country has an installed electricity generating capacity of around 4.68 GW, of which more than 90% is thermal and the rest hydroelectric. The sector is open to private sector participation at all levels. In 2010, the country signed a deal to import electricity from India. However, electricity shortages continue to be common due largely to infrastructural inefficiencies.

Power is a contributing factor to the country's slow GDP growth and thus, the government has recognized the power sector as a priority sector for development. In 1996, the GoB adopted its Private Sector Power Generation Policy to promote private sector participation in electricity generation. In 2004, a revised Private Sector Power Generation Policy provided incentives for foreign investment in the power sector. Recently, the government has focused on further developing power generation projects through the private sector and public–private partnerships.

Bangladesh has small oil reserves and the potential for natural gas exploration. It imports all of its petroleum and crude oil. The government-owned Bangladesh Oil, Gas and Mineral Corporation is the only company involved in the exploitation and marketing of oil. The country's gas reserves have a greater diversity of corporate involvement.[233]

Water and Sanitation

8.5% of the total deaths in Bangladesh is caused by Water Sanitation and Hygiene (WASH) related issues.[234] WASH in school is an integral part of proper education for students in Bangladesh. Unfortunately, the water, sanitation and hygiene situation in the country is poor. Teenage girl students' education and social development is hindered due to low hygiene management during menstruation with only 36% of students understanding menstruation before its onset. Only 35% of schools have hand washing facilities and for every 187 students, there is only 1 toilet on the premises. Only 43% of schools have a separate latrine for girls. Child and infant death due to diarrheal diseases continues to be a great concern in Bangladesh. [235]

The WHO estimates that 97% of the people of Bangladesh have access to water and only 40% percent have proper sanitation. Additionally, 60% of the population has to endure unsafe drinking water putting the health of the nation in danger. The availability of this water greatly fluctuates throughout the year as the warmer season brings massive amounts of water in frequent monsoons and the cooler season brings drought. Additionally, the infrastructure cannot adequately handle the barrage of water in the monsoon season, so the water is not collected and saved for the drier months. Of the water that is available, 80% is used for agriculture.

Further complicating the WASH crisis, potable water/groundwater, which is used by nearly 90% of the population, is also contaminated with arsenic. According to the WHO, the levels of arsenic have affected an estimated 30-35 million people in Bangladesh, contributing to the largest mass poisoning in history. Exposure to arsenic can cause cancer and severely damage many integral systems in the human body. Arsenic has been shown to be the cause of death for 1 out of every 5 people in Bangladesh. As a result, the Bangladeshi government is trying to improve the infrastructure to improve rainwater capture and access to safe drinking water. Contaminated wells have been painted to warn the people away but the paint markers are fading and more than 100,000 safe water points have been created. The Bangladesh Council of Scientific and Industrial Research is investigating new arsenic treatment technologies.[236]

Hope for the Poorest (HP)

Hope for the Poorest (HP) is a non-profit organization that began in 2004 to minimize the suffering of underprivileged communities in Bangladesh. One of the key focus areas of HP is the development of Sanitation Entrepreneurs (SE) which works to produce and distribute low cost sanitation technologies and provide them affordably in urban and rural areas. HP also runs programs such as Primary Health Care, Water Sanitation and Hygiene, Sanitary Napkin Promotion (SNP) and Entrepreneur Development.[237]

Faecal Sludge Management (FSM)

In 2013, leadership in Satkhira, Bangladesh and Practical Action created Faecal Sludge Management (FSM – Satkhira) to address the development initiatives of safety and sanitation in urban areas. Particularly, in Satkhira where there were over 75 people tasked with emptying latrines which entailed, digging a mud hole and discharging sludge into the hole and then dumping the sludge into nearest body of water and off-site dumping without treatment. Practical Action customized mechanized and non-mechanized transported to safely and easily transport waste as well as customized submersible pumps with emptying gear. The waste is then filtered and treated with technology that certifies it free from harmful elements and dries it for compost use. These adjustments not only enhanced the income of the sweepers by shortening service delivery time, but also contributed to the health and safety of the sweepers by limiting their exposure to health hazards.[238]

WaterAid

WaterAid is an international non-governmental organization that assists the world's poorest people gain access to safe water and sanitation. WaterAid in Bangladesh partners with WASH Alliance Bangladesh and many other NGOs to improve WASH situation in educational institutions including provisions to provide:

- Separate toilets for girls with provision for Menstrual Hygiene Management (MHM) facilities
- Provision of toilet for person with disability
- Ensuring availability of water and soap in the toilet
- School Management Committee (SMC) and teachers to ensure cleanliness of school toilets
- Constant monitoring of health, education department and local administration.[239]



BANGLADESH
Health

Disaster Management Reference Handbook | May 2020

Health

Health Overview

Despite limited resources, Bangladesh is consistently striving to attain its health objectives and raise the quality and access to health care for its citizens. In March 2018, the World Bank reported "remarkable progress on health and nutrition related Millennium Development Goals in Bangladesh."[240]

In fact, the country has made significant progress in the health of its citizens in many respects. Since 1990, Bangladesh has decreased the child mortality rate by 78%[241] and increased life expectancy since 1971 by 24 years;[242] The country implemented a successful Expanded Vaccination Program and as a result, has eradicated polio and tetanus and made significant progress toward eradicating malaria and tuberculosis. Figure 11 highlights some of the success in Bangladesh's health care.[243]

Cancer and respiratory disease account for 25% of all deaths in the country. High air pollution levels, among the highest in East Asia, contribute to the prevalence of respiratory disease despite Bangladesh having one of the largest forest covers in the world.[244]

The country recognizes the importance of investing in a strong foundation for universal health coverage (UHC) to reduce inequities in access to health services. Additionally, efforts toward UHC seek to limit reliance on out of pocket payments and achievement of universal health coverage by 2030 which align with its Health Nutrition and Population Strategic Investment Plan 2016-2021.[245] The Health Care Financing Strategy 2012-2032 and the Communication Strategy for Universal Health Care 2014-2016 were implemented with the goal of progressing UHC in Bangladesh. The World Bank commissioned a study in Bangladesh related to UHC examining the human resources for health (HRH) as well as identifying the challenges and proposed policy solutions. Some of these studies provided prioritizing integrated health strategies to improve monitoring and evaluation to address a lapse of monitoring and supervision in HRH and providing commensurate training of service providers to raise the quality of care.[246]

Life expectancy in Bangladesh is 71 for males and 74 for females. The probability of children

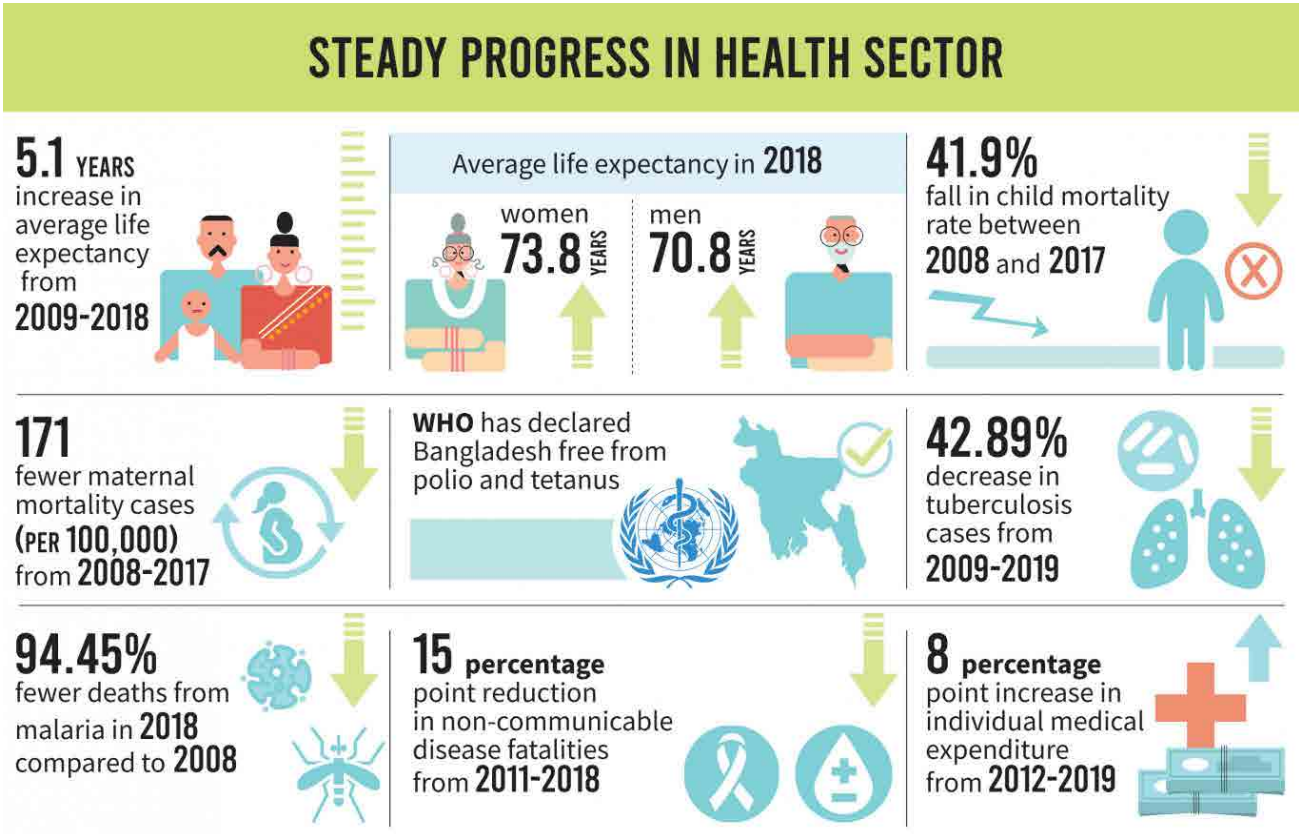

Figure 11: Bangladesh's Strides in Health Care

dying under 5 years old is 30/1000 and the probability of dying between 15 and 60 years of age is 150/1000 for males and 110/1000 for females.[247] The top cause of death in Bangladesh is cancer at 13%, followed by lower respiratory infection and chronic obstructive pulmonary disease, both at 7%.[248]

The Center for Disease Control (CDC) designated Bangladesh a CDC Global Disease Detention Center in 2012 for enhancing global health security for rapid detection and response to infection diseases. The CDC also partnered with the country to provide resources to deal with health emergencies including 28 acute disease outbreak investigations in 2013, setting up 24 national influenza surveillance sites at district and tertiary care hospitals, 16 sites for avian influenza surveillance among poultry workers within live bird markets in Dhaka in 2012, and providing 1,305 public health professionals short course training since 2011.[249]

Health Care System Structure

Bangladesh has a pluralistic health care system consisting of four key factors: government, for profit private sector, not for profit private sector (primarily NGOs), and international development organizations. These systems are highly unregulated.

The Ministry of Health and Family Welfare (MOHFW) heads Public Health in Bangladesh and manage general health and family planning services through district general hospitals, smaller hospitals and clinics at sub district and local community levels. MOHFW works through the following Directorates:

- Health Services
- Family Planning
- Drug Administration
- Nursing and Midwifery
- Health Economics Unit

Private health care encompasses for and not for profit NGOs, and informal providers such as village doctors and other uncertified providers. These services are organized along four levels: community level healthcare (which is provided by domiciliary health providers and community clinics), primary level health care (Rural Health centers, Union Subcenters, Union Family Welfare Centers, and Upazila Health Complexes), secondary level health care (District Hospitals, General Hospitals, Chest Disease Clinics, Tuberculosis Clinics and Leprosy Hospitals), and tertiary level healthcare (provided by Post Graduate Medical Institutes, Specialized Health Care Centers, Medical College hospitals and Infection Disease Hospitals. The private sector also has access to facilities such as private doctor's offices and high-end tertiary level international standard hospitals. [250]

Health financial coverage is very sparse with 9% of households facing catastrophic health payment, 5.6% facing impoverishment, and 7% facing distress financing (borrowing or selling household assets to finance healthcare costs).

Public health care is highly subsidized by the government requiring nominal payments from patients especially for outpatient care. However, quality of care is a concern in Bangladesh resulting in more private and more expensive healthcare expenses. Health expenditure in private health facilities funding primarily from out of pocket payments is 93%.

Health insurance in Bangladesh is practically non-existent and health financing is underfunded. Bangladesh spends the least amount on health in the South Asia region in total, with only 2.64% of gross domestic product (GDP). [251] Comparatively, health expenditure per capita is equivalent to US$32, which is among the lowest in the world.[252]

Health Challenges

Bangladesh struggles with combatting a multitude of health care challenges including actual disease within the population, providing services to that population with limited trained health care providers and financing those endeavors. In order to identify and contain outbreaks before they become epidemics and affect global populations, the country's health organizations collaborate with international partners, such as the CDC and USAID. According to the Health Population and Nutrition Sector Development Program (2011-2016), the main challenges to health services in Bangladesh include:[253]

- Low rate of deliveries by skilled birth attendant.
- High rates of neonatal deaths, malnutrition and micronutrient deficiencies.
- Emerging and re-emerging diseases and impact of climate change.
- Rise in non-communicable diseases (NCD) including cardiovascular diseases, diabetes, cancer and injury

- Diversification of family planning (FP) service and high rate of discontinuation and unmet needs.
- Ineffective urban primary health care service delivery.
- Gender sensitive and equity-based service delivery.
- Inadequacies in human resources.
- MIS functions along with sustained M&E system.
- Quality assurance system, medical auditing, accreditation and weak legal framework.
- Low utilization of public health facilities by the poor.

Although the country has plentiful water sources, both surface and ground water sources are contaminated with toxic trace metals, coliforms and other organic and inorganic pollutants including pesticides, sewage industrial waste, human waste, arsenic, and other pollutants. Health risk resulting from consumption due to water-borne diseases is also a challenge in Bangladesh, particularly among children. Water pollution due to sources such as untreated industrial effluents, improper disposal of domestic waste, and agricultural runoffs result in 8.5% of the total deaths in Bangladesh caused by water sanitation and hygiene related issues.[254] The top 10 causes of death in Bangladesh, as compiled by the CDC, are shown in Figure 12. [255]

TOP 10 CAUSES OF DEATH

1. Cardiovascular diseases
2. Neoplasms
3. Chronic respiratory
4. Diarrheal diseases
5. Diabetes/urological/blood/endocrine disorders
6. Neonatal disorders
7. Unintentional injuries
8. Cirrhosis
9. Transport Injuries
10. Neurological Disorders

Figure 12: Top 10 Causes of Death in Bangladesh

In Bangladesh, the 4th Health, Population, and Nutrition Sector Programme (4th HPNSP) for 2017-2022 aims at a maternal mortality ratio (MMR) target of 121 per 100,000 live births by 2022. The 2016 Bangladesh Maternal Mortality and Health Care Survey (BMMS 2016) assesses the progress in maternal health and established the baseline for HPNSP and Sustainable Development Goals (SDGs). Between BMMS 2001 and BMMS 2010, MMR declined significantly: from 322 to 194 maternal deaths per 100,000 live births. This was remarkable progress, linked to fertility reduction; increased access to maternal health care; increased use of maternal health services in the antenatal, delivery and postpartum periods; and socioeconomic improvements.[256]

While the WHO office in Bangladesh reports that medicine and treatment at public hospitals are mostly free for the poor, there are discrepancies about who is considered poor and no fixed policies to define and guarantee poor status for health benefit.[257]

Another challenge to the health care system in Bangladesh is the high population density, which exacerbates communicable diseases such as Tuberculosis (TB), Hepatitis B, and recently, coronavirus disease 2019 (COVID-19) which requires social distancing to reduce the transmission and controlling infectious disease.

Health Cooperation

The CDC has been working in Bangladesh for 50 years building and maintaining strong collaboration with the International Center for Diarrheal Disease Research, Bangladesh (ICDDR) which is the premier global health research institution in Dhaka to strengthen the capacity of the country to detect emerging infectious diseases. Additionally, the CDC partners with the Institute of Epidemiology Disease Control and Research (IEDCR) within the Bangladesh Ministry of Health and Family Welfare (MOHFW) to strengthen the country's capacity to detect and respond to health threats in Bangladesh.[258]

The Bangladesh Rural Advancement Committee (BRAC) is an NGO service with a Health, Nutrition and Population Programme to help the extreme poor by providing health services particularly for mothers and young children.[259]

Communicable Diseases

Bangladesh faces the threat of communicable diseases including Tuberculosis (TB), HIV/AIDS, Malaria, Hepatitis, and cholera among others. However, the country has made remarkable gains toward eradicating communicable diseases with its Expanded Vaccine Program. In 2018, the WHO recognized Bangladesh as having eradicated polio and tetanus and the country continues to make strides toward eradication of

TB and Malaria. The high prevalence diseases currently impacting populations in Bangladesh are detailed in the following section.[260]

Tuberculosis (TB)

While the tuberculosis (TB) incidence rate remained constant from 2000 - 2016, the new and relapsed TB cases doubled as shown in Figure 13.[261] The WHO Global TB Report in 2016 reported that Bangladesh was one of the world's 30 highest TB-burdened countries, with approximately 73,000 deaths annually due to TB. Additionally, HIV infected people are much more likely to be affected by TB. The high poverty and population migration in Bangladesh contribute to the spread of TB. Additionally, dense and poor living and working conditions in urban areas where one-third of the population lives create high-transmission conditions. The national tuberculosis control program (NTP) was adopted during the 1992-1998 Population and Health Plan, and Bangladesh has a five-year National Strategic Control Plan for TB (2015-2020) to reduce the prevalence of TB and increase the success rate of TB treatments to 90%. The plan also works to ensure treatment of all multi drug-resistant tuberculosis (MDR-TB) cases and aligned all public and private health care providers toward these goals.[262]

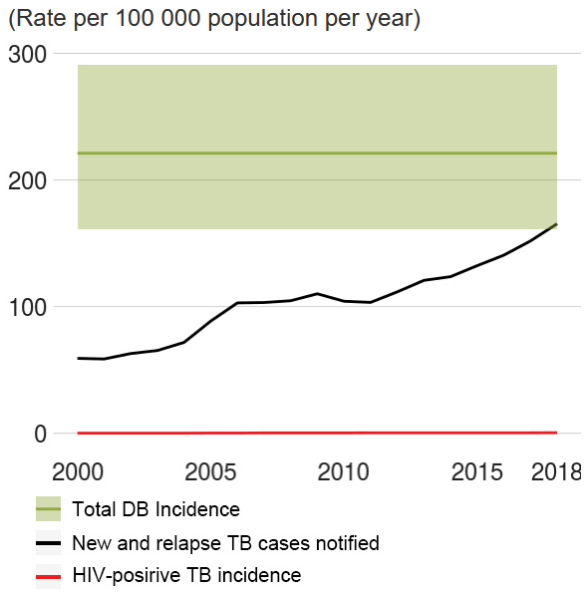

Figure 13: Tuberculosis Profile for Bangladesh 2018

Human Immunodeficiency Virus (HIV)/ Acquired Immunodeficiency Syndrome (AIDS)

In 2017, an estimated 13,000 people were living with HIV, of which 65% were males over 15 years old. There were 1,100 AIDS-related deaths in 2017. Beginning in December 2012, people in Bangladesh living with HIV were provided antiretroviral therapy free of charge through major hospitals. Social stigmas persist with regard to HIV/AIDS in Bangladesh. 5% of men and women living with HIV stated that they had been denied health care in the previous 12 months due to their HIV status. [263]

Malaria

The Asia Pacific Leaders Malaria Alliance (APLMA) reported Bangladesh made significant progress against malaria in 2017 showing a reduction of over 50% in malaria cases and 54% of related deaths since 2010. However, approximately 17 million people are still at risk of contracting the disease. [264]

Hepatitis B

In July 2017, the Dhaka Tribune reported an estimated 10 million people in Bangladesh were carrying the Hepatitis B virus (HBV). [265] However, the WHO published results in July 2019 stating that Bangladesh is the first of four countries in the Southeast Asia region to achieve prevalence of Hepatitis B among children under five years old dropping to less than 1%. Children in WHO's Southeast Asia region were provided three doses of Hepatitis B vaccines in their first year of life, drastically reducing the mother-to-child transmission of the disease.[266]

Cholera

Cholera remains a persistent health problem in Bangladesh, with approximately 109,930 suffering annually (0.7 per 1000 people). Children under 5 years of age were consistently affected year-round with cholera, while people over 5 years of age were affected primarily in summer (May) and the post-monsoon season (October). An estimated 23.1 million people live in high-risk cholera areas and 68.9 million live in areas of moderate cholera risk. The annual economic burden of diarrheal disease is approximately $172 million which is 12% of Bangladesh's total health expenditure.[267]

Diphtheria

Since August 2017, the total number of Rohingya refugees from neighboring Myanmar living in densely populated areas in Cox's Bazar has ballooned to almost 860,000,[268] with poor access to clean water, sanitation and health services. A total of 804 suspected diphtheria cases including 15 deaths were reported from 2

November – 12 December 2017. Of suspected cases, 73% were under 15 years of age and 60% were female. A multi-agency diphtheria task force led by the Ministry of Health Family Welfare of Bangladesh (MOHFW) has been providing critical clinical and public health services to the displaced population. The WHO has provided tetanus-diphtheria (Td) vaccines for children ages 7-15 in addition to other pentavalent vaccines. Additionally, the Serum Institute of India donated 300,000 doses of pentavalent vaccines for response efforts.[269]

Coronavirus Disease (COVID-19)

The Coronavirus disease (COVID-19) emerged from Wuhan, the capital of China's Hubei province in December 2019 and is currently a pandemic for many countries. COVID-19 was declared a global pandemic on 11 March 2020. It is an infectious communicable disease caused by a newly discovered coronavirus. Most people infected with the COVID-19 virus experience mild to moderate respiratory illness and recover without requiring special treatment. Older people, and those with underlying medical problems like cardiovascular disease, diabetes, chronic respiratory disease, and cancer are more likely to develop serious illness.[270] The first case of COVID-19 in Bangladesh was detected on 8 March 2020.[271] As of 22 May, the country had 30,202 confirmed cases of COVID-19, and 432 deaths.[272] In response to the virus, Bangladesh reduced international flights, imposed thermal scanner checking and COVID-19 testing, shut down schools, imposed 14 day quarantine for incoming travelers, imposed movement lockdowns and social distancing orders. The situation in Bangladesh is rapidly evolving, and it is comparable with many other countries, which have seen devastating impact from the virus. [273]

In regard to COVID-19 monitoring, the institute of Epidemiology Disease Control and Research (IEDCR) is responsible for monitoring disease outbreak and expanding the testing facilities. The government declared the entire country of Bangladesh at risk of COVID-19. This declaration was made in line with the 2018 Infectious Diseases Act (Prevention, Control and Elimination). The challenges in Bangladesh are compounded by a weak health system and the risks of a complete saturation of the health system early in the epidemic, leaving patients in severe or critical condition from COVID-19 or other conditions without adequate health care facilities throughout much of the epidemic. Exposure of healthcare workers is also forecasted to be high based on infection prevention control practices, lack of PPEs, and high patient densities in secondary and tertiary care hospitals.[274]

Non-Communicable Diseases

Bangladesh is facing a rise in non-communicable diseases (NCD) including Cardiovascular Diseases (CVD), cancer and diabetes as primary incidences. The WHO reports NCDs in Bangladesh are up 67% from 2011-2018. The results of urbanization, unhealthy lifestyle, processed food, stress, and decreased physical activity contribute to the dramatic increase.[275]

Cardiovascular Disease (CVD)

Epidemiological studies have pointed to a high prevalence of CVD in Bangladesh, and a significant increase in CVD over the past few decades among the Bangladeshi adult population. CVD deaths are a leading cause of death globally, representing 31% of all deaths in the world. Rapid urbanization in Bangladesh due to its fast economic growth has resulted in a rise in chronic disease due to urbanization's association with several risk factors for CVD, such as less physical activity, an unhealthy diet, and increased stress and anxiety. A weighted pool prevalence of overall CVD in urban Bangladesh populations was higher (8%) than that of rural areas (2%).

There was no increased observation between genders. CVD and its risk factors are a major cause of premature death and chronic disability in Bangladesh and 13.4% of disability-adjusted life years lost. An increased public awareness of the high prevalence of CVD and associated risk factors, as well as education on healthier lifestyles and diet are preventative strategies combating this issue.[276]

Cancer

The top cause of death in Bangladesh is Cancer at 13%.[277] Additional breakdown of cancer related deaths by gender is in Figure 14.[278] According to the International Agency for Research on Cancer in 2018, an estimated 150,000 people contract cancer in Bangladesh. Yet, there is only one functioning palliative care center under government management at the Bangabandhu Sheikh Mujib Medical University. Additionally, there are 4 specialized cancer

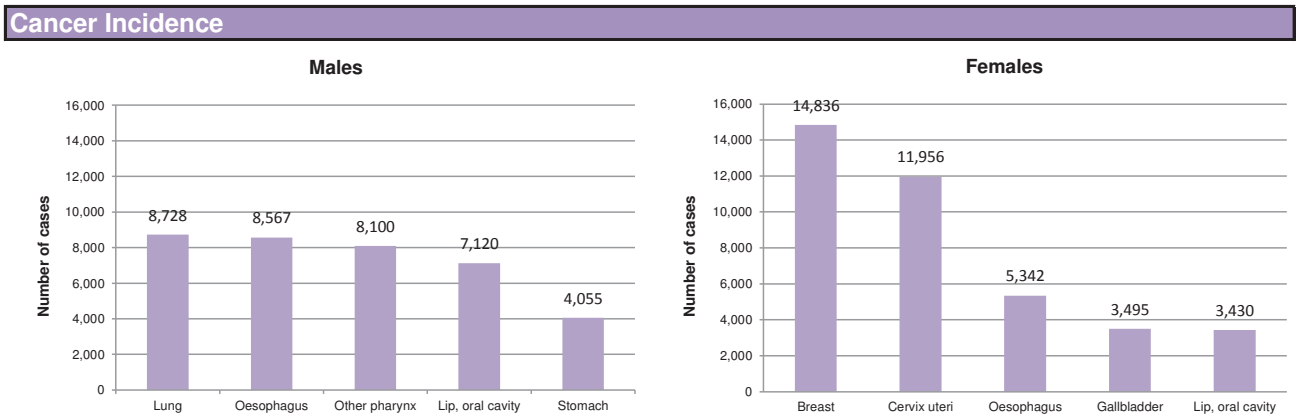

Figure 14: Cancer Incidence in Bangladesh by Gender

hospitals in the country and only one functional radiotherapy facility at Chittagong Medical College Hospital.[279] The two leading causes of cancer related deaths in Bangladesh are lung and oral cancer in males, and are breast cancer and cervical cancer in females.[280]

Diabetes

The Diabetic Association of Bangladesh was founded in 1956 in Dhaka as a non-profit providing research and treatment to the country. There are 64 affiliated associations. The Bangladesh Institute of Research and Rehabilitation in Diabetes Endocrine and Metabolic Disorders (BIRDEM) provides healthcare to diabetes patients in two hospitals. The infrastructure is provided by the government and receives an annual grant. Some services are provided free of charge.

According to the Bangladesh statistical yearbook, the institute has the largest diabetic turnover under a single roof in the world and received approximately 3,739 patients a day in 2014-2015. Another issue facing diabetes patients is access to insulin. Bangladeshi pharmaceutical companies can produce it but not at sufficient enough quantities to meet the demand. Therefore, imported and more expensive insulin and the cost of storage can significantly increase the supply chain. [281]

Training for Health Professionals

Health staffing is a challenge due to the shortage of health care workers as well as diverse geographic locations. Bangladesh has an estimated 3.05 physicians per 10,000 population and only 1.07 nurses per 10,000 population. Additionally, there is a large gap between sanctioned and filled health worker positions, with 36% vacancies for sanctioned health worker positions and only 32% of facilities having 75% or more sanctioned staffer supporting the facilities. However, recent successes in the HRH sector include an increase in the number of graduates and health worker training facilities and an increase in the number of rural health facilities. The MoHFW initiated a program called, the Health, Population and Nutrition Sector Development Program with aims to develop an HRH plan, create a functional HRH Information System, scale up the production of critical health workers, introduce incentive packages to deploy and retain critical health workers to remote and rural areas and to provide training for community-based skilled birth attendance and or nurse-midwife and family welfare visitors and streamlining of recruitment and promotion of nurses.[282]

Among health workers overall, medical doctors and nurses in Bangladesh are particularly concentrated in urban secondary and tertiary hospitals, though 70% of the population lives in rural areas. This situation has created a major challenge for the national health system, particularly for reducing the high maternal mortality rate, with fewer than 20% of births being attended by a skilled birth attendant. To address this issue, the Prime Minister signed the Declaration of Safe Motherhood in 1997. A number of national programs and strategies, such as the Health and Population Sector Programme (1998-2003), the Health Nutrition and Population Sector Programme, and the National Strategy for Maternal Health of 2001, further supported this declaration. The government created two nationwide human resource development plans: (1) to train emergency obstetric care (EmOC) teams to work in district and subdistrict hospitals (medical officers and nurses), and 2) to train 17,000 skilled birth

attendants to work at the community level by 2015. Table 4 depicts the progress in scaling up community-based skilled birth attendants.[283]

The Directorate General of Health Services managed the two complementary initiatives (increasing the number of health care professionals and also training them. However, due to limited government budgets, significant technical and financial training is required from a large number of international partners. Medical officers were initially sent to Nepal for training, while capacity was built in Bangladesh. Then, after developing nationally accepted curricula, medical college hospitals in Bangladesh took over the training of emergency care providers. Later, a shorter, competency-based course was introduced to train emergency care providers in teams; and an orientation program was launched for facility managers, to institutionalize competency-based training. By the end of 2007, the government had reached only 60% of its training target, and funding for the initiative had decreased. In addition, the attrition rate was about 35%.

Major challenges continued in attracting medical officers, particularly women, to work in remote rural areas, where working conditions are poor and there is no clear path for career advancement after training. At the community health worker level, family welfare assistants and female health assistants were trained in a six-month, competency-based course for community-based skilled birth attendants, and then certified and registered by the Bangladesh Nursing Council. Skilled birth attendants are trained by an array of partners through projects that have to be institutionalized into relevant training institutions. At the same time, Nursing Institutes continue to produce direct-entry nurse-midwives, who have limited roles in midwifery services. To strengthen management capacity, a joint plan was developed in 2007 between the Government of Bangladesh and WHO to conduct training courses for program managers at all levels of the health system, as well as provide quarterly monitoring and supervision visits to service providers of maternal and newborn health.[284]

In November 2016, USAID and the U.S. Department of Defense (DoD) partnered with a joint medical mission to train Bangladeshi medical personnel on improved techniques for fistula repair and prevention, positively affecting the quality of life of women in Bangladesh. An estimated 71,000 women require surgery to repair fistulas each year. There were 13 centers and hospitals able to perform only 1,000 repairs a year and leaving approximately half of the women untreated with maternal injuries. To address this gap, USAID and the U.S. Department of Defense partnered with local fistula surgeons to boost the number of surgical repairs. The training was possible through a one-year interagency agreement and involved a 2-week intensive training among a team of Bangladeshi medical students, nurses and surgeons from U.S. Indo-Pacific Command's Regional Health Command-Pacific, surgeons from Tripler Army Medical Center and USAID health officers. DoD also assisted Bangladeshi surgeons during fistula surgeries. In April 2017, a second phase of the mission took place.[285]

Year	No. of functioning districts	No. of new CSBAs	Cumulative No. of CSBAs	Total annual deliveries conducted by CSBAs	% of births by CSBAs	% of births by current SBAs	Total % of births by SBAs
2006	30		2500	210,000	7	13	20
2007	40	1280	3780	317,520	11	15	26
2007	50	1600	5380	451,920	16	18	34
2009	55	1760	7140	599,760	21	21	42
2010	55	1760	8900	747,600	27	23	50
2011	55	1760	10,660	895,440	32	25	57
2012	55	1760	12,420	1,043,280	38	27	64
2013	55	1760	14,180	1,191,120	43	29	72
2014	55	1760	15,940	1,338,960	48	31	79
2015	64	1760	17,700	1,486,800	53	33	86

Table 4: Progress of Skilled Birth Training from 2006-2015



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Women, Peace and Security

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Women, Peace and Security

Women and girls are disproportionally affected by disasters due to a number of circumstances including access to information, exclusion from decision making, a wider care responsibility, and a lack of economic and health care resources. Following the 1991 tropical cyclone in Bangladesh, women accounted for 90%[286] of the 140,000 deaths.[287] A study by the Bangladesh Institute of Social Research Trust (BISRT) found that over 75% of displaced persons as a result of a natural disaster are women and adolescent girls. Thus, in general, women were the most vulnerable in a disaster.[288]

In the past 20 years, progress has been made in the lives of women and girls in Bangladesh due to several initiatives and programs specifically aimed at improving and empowering women. The deliberate promotion of women's leadership in all sectors has been credited with a significant decrease in disaster mortality in Bangladesh. Women have specifically been included in the country's cyclone preparedness program; involved in the design of early warning systems, building cyclone shelters and raising community awareness resulting in a lowered ratio of disaster related female to male deaths by almost two-thirds.[289]

Additionally, maternal mortality rates and fertility rates have declined and there is greater gender parity in school enrollment. Bangladesh acceded to the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) in 1984 and continues to maintain reservations to Articles 2 and 16(1c). The Constitution recognizes equal rights for women and men in the public sphere and there is policy guaranteeing women's rights. The National Women's Development Policy 2011 and its National Action Plan provide a base for the government to promote gender equality, and the 7th 5-year plan integrates gender equality issues across several sectors. Currently, there are 43 ministries where there is institutionalized gender responsive budgeting.

The country is recognized for its progress on several gender indicators including gender parity in primary education, and also ranks highest in the Gender Gap Index in South Asia achieving 47th among 144 countries in the world. The Gender Inequality Index 2013 ranked Bangladesh 146 among 186 countries.[290] However, significant gaps remain. [291]

59% of girls are married before the age of 18 despite efforts to reduce child marriage from government and non-governmental organizations. 31% of women and girls aged 15-19 are malnourished and women still hold few leadership roles. [292] The Representation of the People Order 1972 stipulates that all registered political parties had to increase female representation in their committees to 33% by 2020. However, women's participation still lags behind men in politics as almost all registered political parties are tracking to miss their target of ensuring women represent 33% of committees by the deadlines ending this year (2020).[293]

Women are also discriminated against in family life where marriage, divorce, custody of children, maintenance and inheritance are subject to laws that discriminate against women including religious and 'personal laws.'[294] All types of violence against women listed in the Beijing Platform for Action (PFA) occur in Bangladesh with estimates that nearly 2/3 women have experienced gender based violence (GBV) during their life time. Women are exposed to various kinds of violence including sexual harassment in the workplace, violence inflicted due to unpaid dowry demands, pregnant women's deaths associated with violence, and subjection to trafficking, rapes, and acid-throwing.[295]

To combat these atrocities, Bangladesh launched a four-year action plan on women, peace and security, The National Action Plan (NAP). The NAP expands women's roles in peacekeeping, peacebuilding, disaster management, and preventing violent extremism. Bangladesh is the 83rd member state of the United Nation to adopt a national action plan to address women, peace and security.[296] Additionally, the NAP will make disaster management and recovery systems more gender-responsive, and enhance the protection of women's human rights, before, during, and after conflict and crises.[297]

There is a long list of gender-based violence (GBV) partners in Bangladesh. They provide GBV case management, psychosocial support and recreational activities, GBV information/awareness raising, dignity kit distribution for women and girls, youth/adolescent GBV prevention programs, and safe house/emergency shelter.

The list of partners can be seen in the following Figure 15.[298]

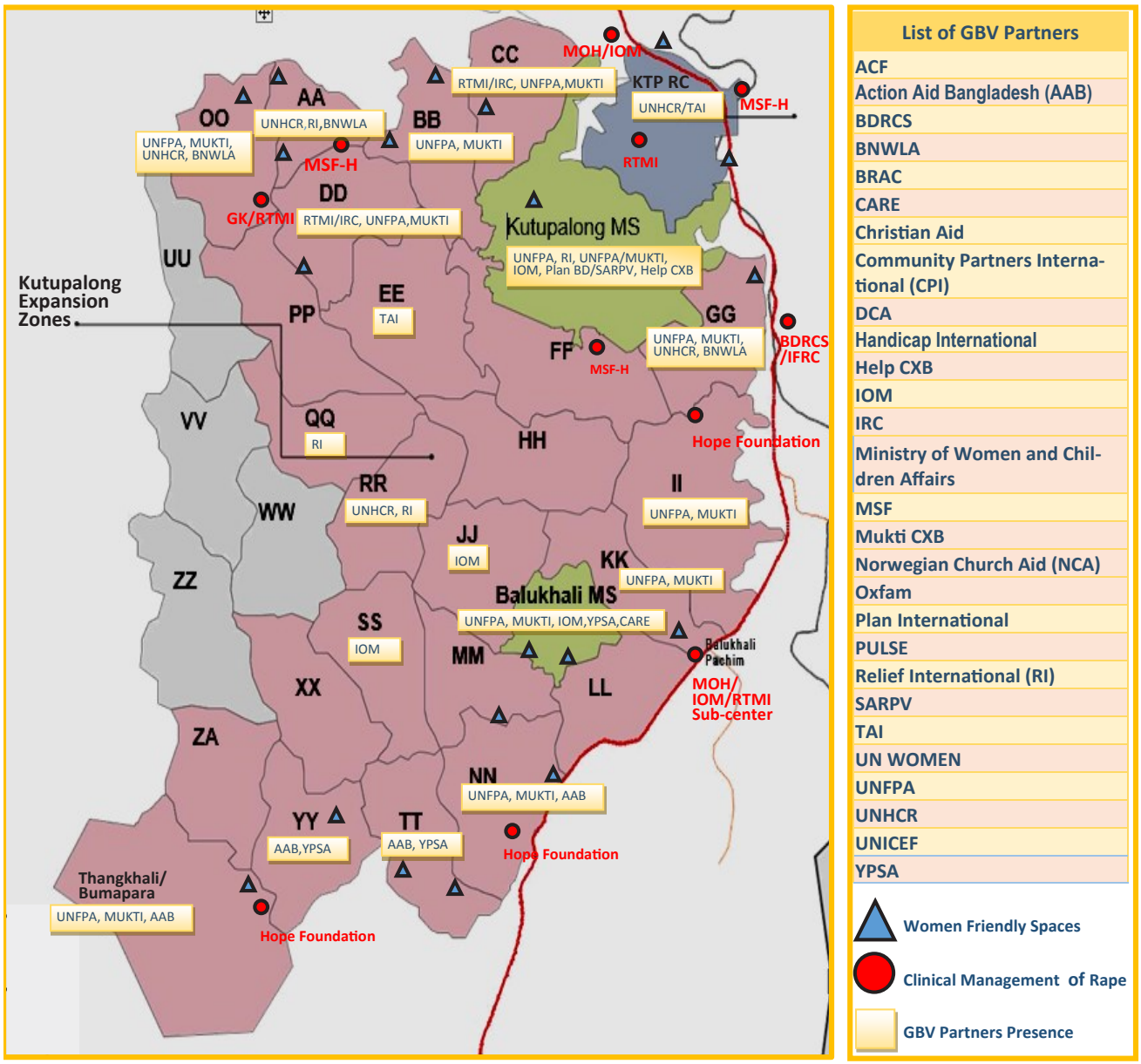

Figure 15: List of Gender-Based Violence Partners in Bangladesh

The Combating Gender Based Violence in Bangladesh Project (CGBV) is another program which focuses on primary prevention, and stopping violence before it occurs by integrating and mutually reinforcing interventions to address the underlying causes and drivers of violence against girls and women and making perpetrators accountable to comply with national and international obligations addressing violence against women and promote the equal status of women in society. The implementation period of the program runs from April 2018-September 2022[299] and aligns with Bangladesh's seventh Five Year Plan and the National Women's Development Policy, aiming to accelerate progress on the Sustainable Development Goals for Agenda 2030.[300]

Fleeing the violence they faced in Myanmar, Rohingya women and girls living in Cox's Bazar, whom the Government of Bangladesh refer to as Forcibly Displaced Myanmar Nationals (FDMN), continue to face multiple layers of challenges. In addition to reported high instances of physical and sexual violence, Rohingya women, 17% of them widowed to violent attacks, and many who became pregnant by rape by Myanmar Army soldiers face daily struggles to survive. In a report

by the UN, in a 6-day period, women were victim to 306 incidents of gender based violence in the Rohingya camps of which 96% required referral to emergency medical services. Additionally, families are forcing young girls to marry as a strategy to prevent rape and young girls who have survived sexual violence are more susceptible to the sex trade because their families view them as damaged goods.[301] Most women and girls stay in their shelters due to social norms, as well as to avoid sexual assault and trafficking that occurs in the camps limiting their access to education. Approximately 85% of sites within Bangladeshi communities hosting Rohingya refugees have no services for survivors of violence.[302]

As a response to the international outcry, the UN and many NGO's responded to provide humanitarian assistance. The Rohingya Women's Empowerment and Advocacy Network is one group working to provide assistance to displaced women, organizing women across the camps in volunteer networks, bolstering livelihood opportunities, and educating the communities on the dangers of domestic violence and early marriage. The Network provides services such as basic education, English lessons for middle and high school girls, and self-defense training.[303]

In regard to the GBV sub-sector's operational response in Cox's Bazar specifically, UNFPA leads. Efforts comprise one (1) government organization (MOWCA/OCC); five UN Agencies (UNFPA, UNICEF, UNHCR, IOM and UNWOMEN), nine (9) International NGOs (ACF, BRAC, Relief International, Plan International, Oxfam, Action Aid, NCA, Handicap International and Community Partners International), three (3) National NGOs (BNWLA, MUKTI, and TAI) as standing members. There are also additional organizations and focal points that participate regularly in the Sub-sector as observers. Of these organizations, 16 have GBV programs that are currently operational.[304]IOM for example, provides services such as water, sanitation and hygiene, protection, and camp management and development. Additionally, IOM initiated a plan to provide an equal distribution of the Cash for Work to women, when historically only men were able to participate in the program. As part of this program, women are able to sell soap and crafts to earn money, empowering them with resources to improve their circumstances.[305]

It is also important to discuss the Novel Coronavirus 2019 (COVID-19) pandemic which at the time of writing this document has had a devastating global impact and is expected to have lasting consequences. Cox's Bazar district is home to over 850,000 Rohingya refugees and extremely vulnerable host communities. The first reported cases of COVID-19 in Cox's Bazar began to develop in the first couple weeks of May; a COVID-19 outbreak in the refugee camps and surrounding communities could disproportionately affect women and girls and other vulnerable populations.[306] The COVID-19 crisis and lockdown measures can also exacerbate pre-existing social and gender norms with negative consequences for women and girls. This may lead to increased policing of women, further reducing their access to services and information, freedom of movement and overall empowerment and subjecting them to various forms of GBV. With COVID-19, critical and timely health care for women and girls, especially those not exhibiting serious symptoms may be delayed.[307]

The Gender in Humanitarian Action (GiHA) Working Group in Bangladesh has undertaken a Rapid Gender Analysis (RGA) to inform national preparedness and response. This RGA contrasts pre-COVID-19 gender information and demographic data against new gender information from a range of quantitative and qualitative sources. It reviews the immediate impact of COVID-19 on pre-existing structural social and economic vulnerabilities of women, girls and diverse gender groups, and the challenges faced by these groups in accessing information and health, education, and WASH, protection and GBV services. The RGA collected and interpreted data and information about the specific roles, responsibilities, access barriers, needs, and opportunities of girls, boys, women, men and gender diverse people. An intersectional analysis then examines how gender intersects with age, ethnicity, class, sexuality, disability and location, to produce different degrees of vulnerabilities. The gendered impact of COVID-19 affects (1)Increased risks and evidence of GBV in the context of the pandemic and its responses; (2) Unemployment, economic and livelihood impacts for the poor women and girls; (3) Unequal access to health, education and WASH services; (4) Unequal distribution of care and domestic work; (5) Women and girls' voices are not being included to inform a gender-targeted response; and (6) Policy response mechanisms do not incorporate gender analytical data or gender-responsive plans. [308]



BANGLADESH
Conclusion

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Conclusion

Bangladesh has a long history of natural disasters. The country is vulnerable to natural hazards due to its geographical location, low-lying terrain, monsoons, and significant rivers. Bangladesh is affected by storms, flooding, earthquakes, droughts, landslides, and epidemics.[309] Earthquakes pose one of the greatest risks to urban lives and assets where building codes and micro zonation maps are not followed in construction of high-rise buildings.[310] Climate change has also demonstrated a significant risk impact on the country with extreme weather events increasing in incidence and intensity.[311] Climate change also poses risks to development, requiring climate change adaptation to be integrated with relevant DM national policies and strategies as well as in the socio-economic development process, natural resources management, and other support efforts.[312]

Growing urbanization, driven partly by migration has contributed to a strained environment in Bangladesh. Migration toward urban areas has also been driven partially by climate change exacerbating flooding of formerly inhabited land around river delta areas. These emerging risks present major challenges to human development, poverty reduction, health, and the economic growth of the country.[313] Disasters in Bangladesh have shown how disaster risk and poverty are closely interlinked. As a result, it is crucial to integrate Disaster Management (DM) measures in development initiatives where people's livelihoods are at risk.[314]

The Ministry of Disaster Management and Relief (MoDMR) is the disaster response coordination lead and has the responsibility for coordinating national disaster management across all agencies in Bangladesh. Bangladesh has a long history of military engagement in disaster response and the role of the Bangladesh Armed Forces Division (AFD) as a primary responder to natural disasters has evolved over several decades. Humanitarian Assistance and Disaster Relief (HADR) is a key focus area for the AFD. The country's participation in exercises has enhanced its civil-military coordination processes.[315]

Disaster Management in Bangladesh is guided by a number of national drivers including plans, policies, and orders including the DM Policy (2015), the DM Act 2012, the 2019 Standing Orders on Disaster (SoD), and the National Plan for Disaster Management (NPDM 2016-2020).[316]

Despite challenges, Bangladesh has improved socioeconomic conditions in recent years with an accelerating economy and improving social progress indicators. However, disaster events and climate stresses take a toll on the country's economy. Managing disasters and their impact has been a major area of focus for the country as well as its partners.[317] The government has gradually shifted their DM approach to a comprehensive risk reduction methodology based on common disaster experiences, lessons learned, and the desire to reduce future impacts. In recent years, Bangladesh has experienced an exponential decrease in the numbers of fatalities per cyclone. This is due to efforts by government and regional partners under the Cyclone Preparedness Plan (CPP).[318] Improved warning and notification systems now help move many more people out of evacuation zones before cyclones make landfall. Additionally, the NGO partners along with the Government of Bangladesh (GoB) have built thousands of cyclone shelters.[319]

In 2019, GoB through the approved revised SoD recognized the present cluster coordination through the Humanitarian Coordination Task Team (HCTT) as a tool for effective coordination with the international community. The HCTT has overseen responses to a range of disaster events[320] and has updated a 2019 Contingency Plan for earthquake response in major urban centers which is based on the 2009 Earthquake Risk Assessment of Dhaka, Chittagong and Sylhet by the MoDMR.[321]

At the time of publishing this document, Bangladesh has been affected by the COVID-19 global pandemic.[322] Bangladesh's Ministry of Health and Family Welfare (MOHFW) is working with AFD, UN Bodies, and International, National & Local NGOs to deliver coordinated assistance.[323] Currently there are plans in Bangladesh that are addressing the compound humanitarian needs and its mitigation measures. The HCTT Contingency Plan 2020 for Climate-Related Disasters in the COVID-19 Pandemic Context looks at the risks of cyclone, floods, and landslides in the context of COVID-19. This plan anticipates needs analysis and includes specific pre-agreed upon thresholds which need to be met which would signify that a coordinated response from the humanitarian community would be automatically activated.[324] In addition, a draft Humanitarian Preparedness and Response Plan (HPRP) for Climate-related Disasters in 2020, was developed based on the above referenced HCTT's contingency plan.[325]



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Appendices

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Appendices

DOD DMHA Engagements in the Past Five Years (FY 2014-2019)

Cooperation Afloat Readiness and Training (CARAT) November 2019

The 25th Anniversary CARAT Season concluded with a closing ceremony held at the School of Maritime Warfare and Tactics (SMWT) in Chattogram, Bangladesh. CARAT, which began in 1995, is the U.S. Navy's oldest and longest continually running regional exercise in South and Southeast Asia. It strengthens partnerships between regional navies and enhances maritime security cooperation throughout the Indo-Pacific.

Sailors from both the U.S. and Bangladesh attended a community outreach event at Ashar Alo School for Children with Special Needs in Chattogram, where they toured the facility, met with students, and saw a concert. The exercise included training in a range of capabilities including diving, engineering, aviation, hydrography, maritime domain awareness and maritime law. Participating U.S. assets included Sailors from Task Force 73, Task Force 72, Destroyer Squadron 7, Mobile Diving Salvage Unit One, and a P-8A Poseidon from Patrol Squadron (VP) 45.

CARAT builds upon other engagements in South Asia, Southeast Asia and the Pacific Islands including Pacific Partnership, the largest annual multilateral humanitarian assistance and disaster relief preparedness mission. These engagements bring like-minded naval forces together routinely based on shared values and maritime security interests.[326]

Pacific Resilience Bangladesh Disaster Response Exercise and Exchange (DREE), October 2019

The U.S. Army Pacific Command (USARPAC) in partnership with the Bangladesh Ministry of Disaster Management and Relief and the Bangladesh Armed Forces hosted the 9th annual Pacific Resilience Disaster Response Exercise and Exchange (DREE) in Dhaka, Bangladesh 27-31 October 2019. This was the largest ever in-country DREE in scope and participation. The aim of the event was to enhance disaster preparedness, improve emergency response capabilities, and coordinate civil-military assistance between the partner nations. The event informs specific training and capabilities with Bangladesh, U.S. partner nations, partners and the Oregon National Guard, a state partner of Bangladesh. The earthquake simulation was a meaningful exchange of information for all parties including Oregon State Partnership Program (SPP) participants because they, like Bangladesh, also sits on an earthquake zone.[327]

Southeast Asia Cooperation and Training (SEACAT), August 2019

The Southeast Asia Cooperation and Training (SEACAT) Exercise took place in Singapore in August 2019. The exercise included 14 ships and 400 personnel from participating nations including Bangladesh, Brunei, Cambodia, Indonesia, Malaysia, the Philippines, Singapore, Sri Lanka, Thailand, the U.S. and Vietnam.

The goal of the SEACAT exercise is to bring together regional partner nations to engage in "real world, real time" training designed to enhance partner nation ability to communicate, coordinate and counter illegal smuggling and piracy. The exercise emphasizes realistic training scenarios wherein exercise participants will practice identifying, tracking and boarding of vessels participating in the exercise. SEACAT promotes shared commitments to maritime partnerships, security and stability in Southeast Asia.

Throughout the exercise, maritime forces from the Indo-Pacific region operated together, executing a variety of realistic scenarios designed to reinforce interoperability in areas such as visit, board, search and seizure (VBSS), maritime domain awareness and maritime asset tracking.

Participants from the U.S. Coast Guard included Maritime Security Response Team West (MSRT) and Pacific Tactical Law Enforcement Team (PACTACLET). The U.S. Coast Guard Maritime Security Response Team (MSRT) also conducted workshops and seminars on visit, board, search and seizure techniques in Manila, Philippines, addressing a wide range of topics including human trafficking, drugs and weapons smuggling and illegal fishing.[328]

Pacific Angel, June 2019

Pacific Angel events are an expression of the United States' commitment to South Asia and the U.S. Indo Pacific Command's support of international disaster and humanitarian relief efforts in the region. During the event, U.S. Military personnel along with service

members from Nepal, Sri Lanka and Thailand conducted several humanitarian assistance events throughout Lalmonirhat, Bangladesh. In coordination with the Bangladesh air force and civil organizations such as the Red Crescent Society and Ministry of Health, U.S. and partner nations collaborated to provide medical care and engineering assistance in addition to subject matter expert exchanges. Medical care provided at clinics included dental, optometry and general medicine services. A primary goal of the Pacific Angel is building partner capacity and relationship building to better operate in future events, particularly in the event of HADR exchanges and response.[329]

Exercise Coordinated Response (Ex COORES), April 2019

From 2 to 4 Apr 2019, Exercise Coordinated Response (Ex COORES) was held at the Multinational Operations and Exercise Centre at Changi Command & Control Centre in Changi Naval Base. The TTX was co-organized by the Singapore Armed Forces Changi Regional Humanitarian Assistance and Disaster Relief (HADR) Coordination Centre (RHCC), Bangladesh Ministry of Disaster Management and Relief as well as Armed Forces Division (AFD) and USINDOPACOM's Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DM). Ex COORES tested the MNCC's response in an exercise scenario where a 7.8 magnitude earthquake struck along the Madhurpur fault line about 60km north-northwest of Dhaka, Bangladesh in Tangail town. During the TTX, participants harnessed the technological capabilities of RHCC's OPERA Computer Information System (CIS). Ex COORES sharpened the ability to provide a coordinated response.[330]

Cooperation Afloat Readiness and Training (CARAT) Exercise, November 2018

CARAT Bangladesh scenarios are tailored with inputs from the U.S. and Bangladesh Navy to meet evolving threats through exchanges such as in explosive ordnance disposal, Marine tactics and dive operations, in addition to being a venue to improve best practices in information sharing and maritime domain awareness. The exercise includes a sea phase which encompasses complex scenarios in the Bay of Bengal such as a tracking exercise aimed at increasing both navies' ability to together track and pursue targets through the coordinated deployment of surface ships and maritime patrol aircrafts, division tactics designed to enhance communication as ships sail together in complex maneuvers, and a screening exercise to increase proficiency of ships to defend from potential threats.

Sailors and Marines across five ships including a guided missile frigate and patrol craft from the Bangladesh Navy, and a maritime patrol aircraft and dry cargo ship USNS PFC Dewayne T. Williams (T-AK-3009) from the U.S. Navy, performed a series of cooperative evolutions ashore and at-sea. Joint evolutions are designed to highlight the ability for both navies to work together in ensuring maritime security, stability and prosperity. This marked the 24th anniversary of the CARAT exercise series with bilateral engagements between 12 ally and partner nations including Bangladesh, Brunei, Indonesia, Malaysia, the Philippines, Singapore, Sri Lanka, Thailand, Timor-Leste and Vietnam.

Pacific Resilience Bangladesh Disaster Response Exercise and Exchange (DREE), October 2017

The U.S. Army Pacific Command (USARPAC) sponsored the 8th annual Pacific Resilience Disaster Response Exercise and Exchange (DREE) which took place in Dhaka, Bangladesh in partnership with the country's Ministry of Disaster Management and Relief and the Bangladesh Armed Forces (MoDMR). The aim of the event was to enhance disaster preparedness, improve emergency response capabilities, and coordinate civil-military assistance between the partner nations. The event hosted over 1,000 participants and approximately 130 different government and non-government organizations from 13 countries. The exercise aimed to evaluate a comprehensive framework for disaster response involving the participating parties. The tabletop exercise was based on an earthquake scenario for the Mymensingh region and included field training and exercises to test the earthquake response operational efforts, coordinate support from international organizations, and test the effectiveness of the strategical support structure in Dhaka.[331]

USACE Multipurpose Cyclone Shelter and School Program, 2014-2017

U.S. Army Corps of Engineers helps build capacity in developing countries including Bangladesh. Cyclone Sidr struck the southwest coast of Bangladesh in November 2007. The storm caused widespread damage to about half of

the country's 64 districts, resulting in thousands of deaths and left the country with a glaring need to prepare for future natural disasters. Nine years later, 88 new structures across Bangladesh are providing local school children a place to learn and surrounding communities with a shelter during emergencies. Managed by the U.S. Army Corps of Engineers (USACE) (Alaska District's Asia Office), final construction operations are wrapping up the three-year (2014-2017) Multipurpose Cyclone Shelter and School Program with the financial assistance from USAID. Each school has about 200 students and has the capacity to accommodate 1,800 people for shelter during an emergency. In 2011, USAID sought the Alaska District's expertise to execute its shelter program based off of its experience with USINDOPACOM.[332]

Disaster Management Analysis, March-April 2016

CFE-DM sponsored and executed a Bangladesh Disaster Management Analysis in coordination with the U.S. Embassy Dhaka and the Government of the People's Republic of Bangladesh. The purpose was to provide the U.S. Pacific Command and supporting commands, the U.S. Government, and the U.S. Embassy detailed information about Bangladesh's disaster management capacity and capabilities. The analysis team consisted of research personnel from CFE-DM, one SME from the Daniel K. Inouye Asia-Pacific Center for Security Studies (DKI-APCSS), one SME from the PDC, and one field grade officer from the Oregon National Guard, with support from individuals representing the DOD, U.S. Embassy Dhaka Country Team, USAID/OFDA, and the United Nations regional organizations. The Government of Bangladesh provided open access to those ministries, departments, and agencies responsible for disaster management at the national and local levels. The two objectives for the analysis were to (1) assist U.S. Government security cooperation actors in planning and conducting activities along the disaster management line of effort and (2) determine a starting point for building partner capacity in disaster management in coordination with regional agencies, international organizations, and nongovernmental organizations. This analysis addressed two disaster scenarios: (1) The Most Likely - the regularly recurring rural annual disasters (cyclones, floods, river bank erosion, seasonal storms, tornados, and droughts) and, (2) the Most Dangerous - a sudden onset, urban-based catastrophic disaster (earthquake, gas explosions, multi-block fires) in Dhaka City where the social, economic, political, and structural impact of a disaster of such magnitude would severely test the capability and capacity of the Government of Bangladesh to respond.[333]

Pacific Resilience Disaster Response Exercise & Exchange (PR DREE), October 2016

The seventh annual Pacific Resilience Disaster Response Exercise and Exchange (PR DREE) was co-hosted by the Bangladesh Armed Forces Division (AFD) and U.S. Army Pacific (USARPAC) in October 2016. More than 250 participants from China, Maldives, Myanmar, Nepal, Sri Lanka, the United Kingdom, the United Nations and the U.S., as well as dozens of governmental and non-governmental and international organizations participated. Personnel worked together either through a phased tabletop exercise (TTX) or a field training exercise (FTX), though U.S. personnel were limited to the TTX. It enhanced the knowledge and practices of the National Disaster Response Coordination Center, and strengthened partnerships and communication between multiple agencies and nations in the event of a catastrophic disaster in Bangladesh. Groups deliberated over medical emergency scenarios, which included search and rescue; identified logistical obstacles; discussed shelter/relief plans and procedures that are currently in place; and increased coordination between international and domestic organizations and agencies.[334]

USACE in Support of USINDOPACOM, Develop a Bangladesh Post-Disaster Plan, 2013- 2016

The U.S. Army Corps of Engineers (USACE), in support of the U.S. Indo-Pacific Command (USPACOM) worked with officials from the Bangladesh Ministry of Disaster Management and Relief and the Department of Disaster Management to develop a debris management plan for Dhaka City. The plan was under development from 2013 and completed in January 2016. During the development of the plan, USACE worked closely with the U.S. Embassy's Office of Defense Cooperation and the U.S. Agency for International Development. The team gathered information on traditional debris practices in Dhaka City, and debris planning from previous earthquakes around the world. The plan incorporates lessons-learned from around the world, including

debris clearance experience from the April 25, 2015 earthquake in Nepal. The team met with Government of Bangladesh stakeholders, the Bangladesh military, international organizations and nongovernment organizations to understand context, challenges, and previous debris planning efforts. The plan was reviewed and edited by the Government of Bangladesh. As the plan moves forward, it will be used to support Bangladesh's existing Standing Order on Disasters and Disaster Management Plan. The debris plan, which was funded by USINDOPACOM, is one of many USACE efforts in the Indo-Asia-Pacific region to build partner capacity.[335]

Lightening Academy Training for Bangladesh Officers, October 2015

Female Bangladesh officers received hands on training at Lightning Academy at Schofield Barracks, Hawaii on October 22, 2015. Five soldiers from Bangladesh visited the academy to learn about training opportunities for their female counterparts. The purpose of the visit was to build confidence in Bangladesh female officer corps, and for them to obtain a better understanding of 25ID training and female Soldiers success and capabilities. Currently there are approximately 1,000 female Soldiers in the Bangladesh Army, and approximately 150 of them are non-medical branches. They also took part in a panel discussion about women in the armed forces with female company grade officers of the 25th Infantry Division. In 2000, Bangladesh, as a non-permanent member of the UN Security Council that year, voted for the landmark resolution on women, peace and security – UN Security Council Resolution 1325. Women's participation has been vague in Bangladesh, but this training was an important step.[336]

PR DREE, August-September 2015

The PR DREE between USARPAC and the AFD took place in Dhaka, Bangladesh in August 2015. The DREE increased familiarity with the Dhaka City earthquake response plans. It also enabled participants to practice logistical and medical emergency scenarios, identify gaps in plans and procedures, increase coordination between emergency management and stakeholders, and use media in response planning. It was also a venue to evaluate Foreign Humanitarian Assistance procedures in Bangladesh. The DREE scenario involved a 7.5-magnitude earthquake striking the central and eastern part of Bangladesh leaving more than 50,000 killed and 100,000 displaced and injured.[337]

ASEAN Regional Forum Disaster Response Workshop, April 2015

Humanitarian assistance and disaster response was the focus as Association of Southeast Asian Nations (ASEAN) Regional Forum (ARF) members met in Kuala Lumpur, Malaysia in April 2015. U.S Indo-Pacific Command (USINDOPACOM) representatives were among the U.S. delegates and those of other ARF member nations including Bangladesh. The workshop discussed how to enhance collaboration and efficiencies in disaster response exercises; how to best make use of available resources and improve the quality of the efforts of all nations by way of a coordinated effort and strategy; and identify existing capacities and gaps.[338]

COPE SOUTH 15, February 2015

COPE SOUTH is a U.S. Pacific Air Forces sponsored, bilateral tactical airlift exercise conducted in Bangladesh, with subject-matter expert exchanges in the fields of operations, maintenance and rigging disciplines. COPE SOUTH participants placed emphasis on developing USAF-BAF relationships and continuing to seek additional engagement opportunities, particularly in areas of humanitarian assistance and disaster relief, aviation safety, airlift and aviation maintenance and logistics. This exercise demonstrates how combined forces can rapidly respond and integrate with each other to execute airlift operations across the Pacific AOR during contingencies and crises.[339]

PR DREE, August 2014

The 2014 PR DREE exercised plans, equipment and personnel between the two countries to increase readiness for earthquake response and recovery in Dhaka City. The DREE focused on logistics, emergency public communication, and media affairs. Logistical topics addressed foreign humanitarian assistance considerations; the reception and dissemination of aid, first responders and injured citizens; prioritization of land, air and sea space; and management of logistical supplies. Civil-military interoperability; alerting and informing the public; joint information management; media partnerships; engineering; medical; Urban Search

& Rescue (USAR) and disaster coordination; were also included in the exercise.[340]

International/Foreign Relations

United States of America

The United States (U.S.) and Bangladesh partner closely on a range of issues across economics, security, governance and development. In June 2019, at an annual partnership dialogue, the two governments reaffirmed their commitment to enduring partnership, highlighting their cooperation on security, development, humanitarian assistance and disaster relief, and counterterrorism toward a shared vision of a free, open, inclusive and secure Indo-Pacific region. The two countries share membership to many of the same international organizations including the United nations, ASEAN Regional Forum, International Monetary Fund, World Bank and the World Trade Organization.[341]

India

In September 2011, Indian Prime Minister Singh visited Bangladesh calling for a settlement of the longstanding boundary disputes over demarcated areas and the exchange of territorial enclaves. This resulted in the signing of a Protocol to the 1974 Land Boundary Agreement between India and Bangladesh, however the settlement has not been implemented.

Myanmar

Bangladesh struggles to provide health, educational, social, and security services to the approximately 900,000 Rohingya refugees Myanmar Muslim minority living in Cox's Bazar having fled from persecution from Rakhine State. Border authorities constructed a 200-km (124-mile) wire fence designated to deter illegal border crossing and tensions from the military along the countries border.[342]

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. Embassy requirements to enter Bangladesh are listed in the Foreign Clearance Guide at www.fcg.pentagon.mil.

Passport/Visa

Passports must be valid for six months beyond your planned stay in Bangladesh, have at least one blank page, and have a Bangladeshi visa. You must possess an onward or return ticket.

We strongly recommend obtaining a visa before traveling. Although U.S. citizens are eligible to apply for a tourist visa on arrival, there is no guarantee you will receive one. U.S. citizens born outside the United States may be subject to increased scrutiny or further requirements at the port of entry. Recently, some U.S. citizens have been denied entry into Bangladesh despite believing they had fulfilled the requirements for a visa on arrival. Visit the Embassy of Bangladesh website for visa information.

Short term travelers can be denied entry if they cannot demonstrate sufficient financial liquidity.

Visas must be in a valid passport. In country, you may obtain a replacement visa at the Department of Immigration and Passports. Replacing a visa, which is required in order to exit the country, may take three to four business days.

There are penalties for overstaying a visa, and it can be very difficult and time-consuming to change immigration status after arrival. Overstay penalties are as follows:

- 1 to 15 days = 200 Bangladeshi taka per day + 160 U.S. dollar (or equivalent in Bangladeshi taka) processing fee
- 16 to 30 days = 500 Bangladeshi taka per day + 160 U.S. dollar (or equivalent in Bangladeshi taka) processing fee
- 31 days or more = Adjudication at immigration office

For additional information regarding entry or exit requirements, travelers may consult:

Embassy of Bangladesh
Madani Avenue,
Baridhara, Dhaka, 1212
Bangladesh
Telephone: +(88) (2) 5566-2000
Emergency After-Hours Telephone: +(88) (2) 5566-2000. When you hear the recorded message, press "0" to connect with the Embassy Duty Officer
Fax: +(88) (2) 5566-2907
Email: DhakaACS@state.gov

The Consular Section's American Citizen Services unit operates Sunday through Thursday

from 8:00 a.m. to 4:30 p.m. by appointment only, except in the event of an emergency. [343]

Safety and Security

The U.S. government assesses that there remains a credible terrorist threat against foreigners in Bangladesh. U.S. citizens in Bangladesh should take precautions, remain vigilant, and be alert to local security developments.

There has been no significant terrorist attack in Bangladesh since March 2017, but the country remains a target of several foreign terrorist organizations. Since 2015, ISIS-affiliated terrorists have conducted over 30 attacks that targeted foreigners, religious minorities, and local police/security services. In March 2017, ISIS claimed responsibility for at least three bombings in multiple locations in Bangladesh, including two suicide attacks that targeted security forces near Dhaka's Hazrat Shahjalal International Airport. The third bombing transpired during a police raid against suspected terrorists, killing seven onlookers and injuring 40. In July 2016, ISIS attacked a Dhaka restaurant frequented by Westerners, killing 20 hostages, including a U.S. citizen. If you observe high-profile police activity, depart the area immediately.

Al-Qa'ida in the Indian Subcontinent (AQIS) retains a presence in Bangladesh; the group last carried out attacks in 2015 and 2016 that killed several secular bloggers, publishers, and human rights activists; a U.S. citizen was among the victims.

The following groups, including several on the U.S. government's list of designated Foreign Terrorist Organizations, are active in Bangladesh:

- Islamic State of Iraq and ash-Sham (ISIS), known locally as Jamaat-ul-Mujahideen Bangladesh (JMB or "Neo-JMB")
- Al-Qaeda in the Indian Subcontinent (AQIS), known locally as Ansar al-Islam
- Lashkar-e-Tayyiba
- Indigenous sectarian groups

Only adult family members, 18 years of age and older, are permitted to accompany U.S. government employees assigned to the U.S. Embassy in Bangladesh. U.S. government personnel in Bangladesh live, work, and travel under strict security guidelines and are prohibited from:

- Traveling on foot (walking, running) and biking outside of designated areas and times;
- Traveling via non-registered rickshaws outside designated areas and times;
- Traveling via motorcycle or compressed natural gas (CNG) autorickshaw on public thoroughfares and sidewalks;
- Visiting public establishments outside of designated areas and times; and
- Attending large gatherings, including events at international hotels, without prior permission.

Tourism: The tourism industry is nascent, unevenly regulated, and safety inspections for equipment and facilities do not commonly occur. Hazardous areas/activities are often not identified with appropriate signage, and staff may not be trained or certified either by the host government or by recognized authorities in the field. In the event of an injury, appropriate medical treatment is typically available only in/near major cities. First responders are generally unable to provide urgent medical treatment. U.S. citizens are encouraged to purchase medical evacuation insurance. See our webpage for more information on insurance providers for overseas coverage. [344]

Emergency Contact Information

Victims of Crime

Report crimes to both the local police and the U.S. Embassy. The local equivalent of "911" emergency line in Bangladesh is "999" from a landline and from a mobile telephone. Here are best practices for calling for help in Bangladesh:[345]

- According to the website of National Helpdesk, the operators have already been trained to respond to different situations. However, when calling 999, one must provide the following information in detail to assist them and to get quick relief.
- Provide a full address: In this case, mention district or name of upazila. If you do not know your address fully, identify any landmark near you.
- Answer all the questions asked: The police or medical authorities may ask questions that you have to answer. This way, they will be able to advise you about your initial steps to solve the problem.
- Stay calm: When addressing your problem, you must be calm at all times for clarity. Becoming emotional will not only prevent the operators from understanding your problems but keep them from giving you a remedy.

- Describe your emergency: Provide this information carefully: Are you in the situation, is someone else you know? How did it happen? Which service do you require -- police or ambulance? Is the condition of the injured very serious? Are they conscious? Are they breathing? Are they bleeding? If you cannot answer such questions clearly, then let another person speak to the operator.
- If there's a crime, describe the offender: If you are a witness to a crime, quickly move to a corner. Call 999 as fast as you can. If you know the criminal, mention that too. Let the operator know whether the criminal has a weapon. Answer these questions: How does he look? What is his religion? What is his approximate age, weight, color of attire? Is he still there?
- Keep your phone on: If you called from a mobile phone, keep it on so that the operator can contact you.

Currency Information

The currency in Bangladesh is the Bangladeshi Taka. The currency code for Takas is BDT, and the currency symbol is Tk. Entry currency restrictions state travelers must declare US$5000 before entry into Bangladesh and you may not exit Bangladesh with more than US dollars than you declared and you cannot leave with more than 5000 Bangladeshi Taka.[346]

Travel Health Information

The CDC provides guidance that all travelers to Bangladesh should be up to date on routine vaccinations. The following are additional recommendations for travel to Bangladesh. The information in Table 5 is taken directly from the CDC website.[347]

Most medical facilities in Bangladesh are inadequate for routine medical care. If you are seeking medical care you will be asked to pay

Measles (for all travelers)	When traveling to Bangladesh, 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 Bangladesh, regardless of where you are eating or staying.
Typhoid (for most travelers)	You can get typhoid through contaminated food or water in Bangladesh. 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.
Cholera (for some travelers)	Vaccination may be considered for adults who are traveling to areas of active cholera transmission. Cholera is presumed to be present in Bangladesh. Cholera is rate in travelers but can be severe. Certain factors may increase the risk of getting cholera or having severe disease. Avoiding unsafe food and water and washing your hands can also help prevent cholera.
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 Bangladesh, and what time of year you are traveling. You should also consider this vaccine if you plan to visit rural areas in Bangladesh 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)	Talk to your doctor about how to prevent malaria while traveling. You may need to take prescription medicine before, during, and after your trip to prevent malaria, especially if you are visiting low-altitude areas.

Table 5: CDC Travel Health Information for Bangladesh

Rabies (for some travelers)	Rabies can be found in dogs, bats, and other mammals in Bangladesh, 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 Bangladesh. 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 Bangladesh (cont.)

cash for all health care services and medicines before receiving care; credit cards are not accepted in most health care facilities and insurance will not be billed. Adequate emergency medical services including ambulance care is not reliably available. Patients who are admitted to public hospitals typically need a family member or friend to assist them with care in the hospital, and food and medical supplies must be purchased for use in the hospital.

The following actions you can take to stay healthy and safe on your trip include:

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.

Prevent Bug Bites

Bugs (like mosquitoes, ticks, and fleas) can spread a number of diseases in Bangladesh. 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

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.

Safety and Security
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.

Sendai Framework

Bangladesh was ending its first iteration of its National Plan for Disaster Management (NPDM) 2010-2015 when the Sendai Framework was instituted in 2015 at the United Nations' 3rd World Conference on Disaster Risk Reduction in Japan. Bangladesh is a signatory to The Sendai Framework for Disaster Risk Reduction (SFDRR) and has built corresponding priorities into its national context. Further, Bangladesh's NPDM successor document, the NPDM 2016-2020 follows the approach of the Framework with global and regional frameworks and a focused hazard-based approach to the integration of disaster management planning and programming focused on risk reduction and resilience in agencies and sectors across the country.[348]

The Sendai Framework is the global blueprint and fifteen-year plan to build the world's resilience to natural disasters.[349] 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.[350]

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.[351] 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.[352] Figure 16 shows the Sendai DRR Framework.[353]

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

Priorities for Action

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

Priority 1
Understanding disaster risk

Priority 2
Strengthening disaster risk governance to manage disaster risk

Priority 3
Investing in disaster risk reduction for resilience

Priority 4
Enhancing disaster preparedness for effective response, and to «Build Back Better» in recovery, rehabilitation and reconstruction

Figure 16: UN Sendai Framework for Disaster Risk Reduction 2015-2030

Hyogo Framework for Action Country Progress Report

The Hyogo Framework for Action (HFA) was adopted as a guideline to reduce vulnerabilities to natural hazards. The HFA assists participating countries to become more resilient and to better manage the hazards that threaten their development. The levels of progress of the 2013-2015 results of the HFA for Bangladesh are represented in Figure 17 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 Bangladesh.[354]

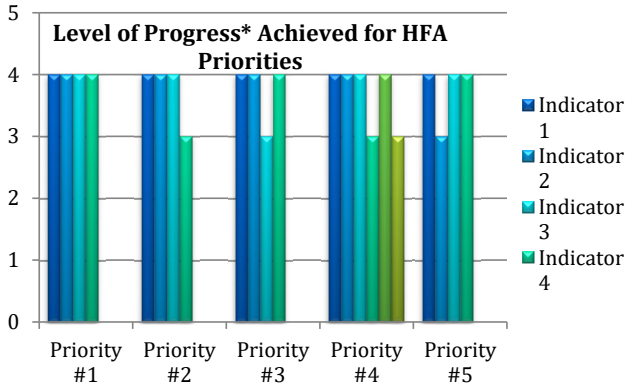

Figure 17: HFA Level of Progress Achieved

Priority for Action #1: Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.		
Core Indicator*	Indicator Description	Level of Progress Achieved
1	National policy and legal framework for disaster risk reduction exists with decentralized responsibilities and capacities at all levels.	4
2	Dedicated and adequate resources are available to implement disaster risk reduction plans and activities at all administrative levels.	4
3	Community Participation and decentralization is ensured through the delegation of authority and resources to local levels.	4
4	A national multi sectoral platform for disaster risk reduction is functioning.	4
Priority #2: Identify, assess and monitor disaster risks and enhance early warning		
Core Indicator*	Indicator Description	Level of Progress Achieved
1	National and local risk assessments based on hazard data and vulnerability information are available and include risk assessments for key sectors.	4
2	Systems are in place to monitor, archive and disseminate data on key hazards and vulnerabilities.	4
3	Early warning systems are in place for all major hazards, with outreach to communities.	4
4	National and local risk assessments take account of regional / trans-boundary risks, with a view to regional cooperation on risk reduction.	3

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

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

Priority #4: Reduce the underlying risk factors		
Core Indicator*	Indicator Description	Level of Progress Achieved
1	Disaster risk reduction is an integral objective of environment related policies and plans, including for land use natural resource management and adaptation to climate change.	4
2	Social development policies and plans are being implemented to reduce the vulnerability of populations most at risk.	4
3	Economic and productive sectorial policies and plans have been implemented to reduce the vulnerability of economic activities.	4
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.	4
6	Procedures are in place to assess the disaster risk impacts of major development projects, especially infrastructure.	3

Priority #5: Strengthen disaster preparedness for effective response at all levels		
Core Indicator*	Indicator Description	Level of Progress Achieved
1	Strong policy, technical and institutional capacities and mechanisms for disaster risk management, with a disaster risk reduction perspective are in place.	4
2	Disaster preparedness plans and contingency plans are in place at all administrative levels, and regular training drills and rehearsals are held to test and develop disaster response programs.	3
3	Financial reserves and contingency mechanisms are in place to support effective response and recovery when required.	4
4	Procedures are in place to exchange relevant information during hazard events and disasters, and to undertake post-event reviews.	4

Table Notes:
*Level of Progress:
1 – Minor progress with few signs of forward action in plans or policy
2 – Some progress, but without systematic policy and/ or institutional commitment
3 – Institutional commitment attained, but achievements are neither comprehensive nor substantial
4 – Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational 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:	Limited national resources, both financial and non-financial, are a key constraint for integrating DRR into the sustainable development process. Considering the exposure to various types of disaster risks and the regularity of their occurrence, especially for urban areas, Bangladesh requires substantial financial resources to protect the lives and livelihoods of the most vulnerable populations through both structural and nonstructural mitigation. At the same time, participation of vulnerable groups in the decision making processes related to DRR planning and programs is essential. Attention needs to be given to structural mitigation of the risks in urban and rural areas to increase human security of the poor people. Other challenges are: - Inadequate coordination and management. - Inadequate participation from all groups and their inclusion. - Requirement for more mitigation and adaption measures to ensure community resilience. - Relief orientated mindset at local government and community levels. - Lack of area-specific information as well as a gap in technical support.
Future Outlook Priorities:	Ensure investment in structural DRR measures in the most vulnerable areas. - Ensure more investment in community-based DRR initiatives to prevent and mitigate disaster risks at the local level. - Increase the capacity of vulnerable communities to ensure better preparedness at community and household levels through sustainable access to financial and natural resources. Strengthen monitoring mechanisms of the DRR implementation. - Strengthen the mechanisms for the participation of vulnerable groups in the formulation, implementation, and monitoring processes of local DM plans, - Increase the involvement of local governments in the formulation of DM policies, plans, and implementations. - Apply an equity and justice-based approach in DRR and CCA. - Strengthen enforcement of policies and planning guidelines related to disaster prevention, mitigation, and vulnerability reduction. - Introduce inclusive DRR policies and planning at the local and national level. - Conduct capacity building of human resources and development of sector specific technical expertise. - Develop local resilience action plans incorporating additional disasters such as salinity, water logging, and human-induced hazards.
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:	Sustaining community efforts on DRR is a key challenge. Communities have been coping with disaster risks for a long time and they have built their own coping strategies. However, the absence of a systematic approach to capturing communities' grassroots DRR best practices poses a significant challenge. Other challenges are: - Limited technical capacity. - Lack of coordinated planning. - Lack of modern search and rescue equipment, logistics, and technology. - Lack of grassroots level human resources for DRR. - Lack of capacity and awareness in the implementation of building code.
Future Outlook Priorities:	Increase systematic approaches to research on DRR effectiveness for sustainable development and document communities' best practices for DRR. This is important for replicating and scaling up these practices across the country and for sharing the most up-to-date information on disaster scenarios and predictions of future disasters related to climate change. - Engagement and partnership with private sector, CSO, and community groups for strengthening community-based DRR approaches. - Effective use of plans and policies. - Technical and equipment support for search and rescue operations. - Build capacity and adaptive institutional research. - More research is needed to replicate and scale up best practices.

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

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:	Bangladesh has already strengthened DRR approaches in the design and implementation of recovery and reconstruction programs in affected communities. However, replication and scaling up of DRR and CCA approaches at the local level still remain a key challenge. More emphasis is needed to raise awareness of DRR and CCA issues among planners and implementers of infrastructural schemes and interventions to ensure the systematic incorporation of DRR. There is also a need for the adequate allocation of financial resources to promote the systematic incorporation of DRR and CCA at all levels. Existing communication and networking systems are still not functioning effectively. Other challenges are: - Replication and scaling up of best practices. - Loss of institutional knowledge due to poor documentation and knowledge management systems. - Resource limitation for strengthening structural DRR work.
Future Outlook Priorities:	All departments will increase the integration of DRR in partnership with development partners to ensure protection against flood, cyclone, tidal surge, and tsunami threats in the most vulnerable areas of Bangladesh. - Communal infrastructures such as government office buildings and educational institutions in the locations vulnerable to disaster should be constructed following universal design specifications that incorporate hazard specific components and the needs of both genders and persons with disabilities. - A community-based disaster resilient habitat program will be developed incorporating DRR and livelihood protection issues for disaster affected areas. - DRR approach is effectively introduced at all levels. - Resources should be made available after effective communion with donor communities. - There should be a focus on mass awareness-raising among the community people. - Coordinating among NGOs and the government line departments should be emphasized.

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

Participation in International Organizations

Bangladesh participates in the following international organizations:[355]

Asian Development Bank (ADB), ASEAN Regional Forum (ARF), Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), C, Conference on Disarmament (CD), Conference on Interaction and Confidence-Building Measures in Asia (CICA observer), Colombo Plan (CP) D-8, Food and Agriculture Organization of the United Nations (FAO), Group of 77 (G-77), International Bank for Reconstruction and Development (IBRD), International Civil Aviation Organization (ICAO), International Chamber of Commerce (ICC national committees), Institute of Catastrophe Risk Management (ICRM), International Development Association (IDA), Inter-American Development Bank (IDB), International Fund for Agricultural Development (IFAD), International Finance Corporation (IFC), International Federation of Red Cross and Red Crescent Societies (IFRC), International Hydrographic Organization (IHO), 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), Telecommunication Standardization Sector of the International Telecommunications Union (ITU-T), Multilateral Investment Guarantee Agency (MIGA), National Association of Manufacturers (NAM), Organisation of Islamic Cooperation (OIC), Organisation for the Prohibition of Chemical Weapons (OPCW), Permanent Court of Arbitration (PCA), South Asian Association for Regional Cooperation (SAARC), United Nations (UN), UN Conference on Trade and Development (UNCTAD), UN Educational, Scientific, and Cultural Organization (UNESCO), United Nations High Commissioner for Refugees (UNHCR), UN Industrial Development Organization (UNIDO), 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).

Country Profile

The information in the Country Profile section is sourced directly from the CIA World Fact book for Bangladesh.[356] Additional numbers on country comparison to the world can be found by going directly to the CIA website.

Background:
The huge delta region formed at the confluence of the Ganges and Brahmaputra River systems - now referred to as Bangladesh - was a loosely incorporated outpost of various empires centered on the Gangetic plain for much of the first millennium A.D. Muslim conversions and settlement in the region began in the 10th century, primarily from Arab and Persian traders and preachers. Europeans established trading posts in the area in the 16th century. Eventually the area known as Bengal, primarily Hindu in the western section and mostly Muslim in the eastern half, became part of British India. Partition in 1947 resulted in an eastern wing of Pakistan in the Muslim-majority area, which became East Pakistan. Calls for greater autonomy and animosity between the eastern and western wings of Pakistan led to a Bengali independence movement. That movement, led by the Awami League (AL) and supported by India, won the independence war for Bangladesh in 1971. The post-independence AL government faced daunting challenges and in 1975 it was overthrown by the military, triggering a series of military coups that resulted in a military-backed government and subsequent creation of the Bangladesh Nationalist Party (BNP) in 1978. That government also ended in a coup in 1981, followed by military-backed rule until democratic elections occurred in 1991. The BNP and AL have alternated in power since 1991, with the exception of a military-backed, emergency caretaker regime that suspended parliamentary elections planned for January 2007 in an effort to reform the political system and root out corruption. That government returned the country to fully democratic rule in December 2008 with the election of the AL and Prime Minister Sheikh HASINA. In January 2014, the incumbent AL won the national election by an overwhelming majority after the BNP boycotted the election, which extended HASINA's term as prime minister. In December 2018, HASINA secured a third consecutive term (fourth overall) with the AL coalition securing 96% of available seats, amid widespread claims of election irregularities. With the help of international development assistance, Bangladesh has reduced the poverty rate from over half of the population to less than a third, achieved Millennium Development Goals for maternal and child health, and made great progress in food security since independence. The economy has grown at an annual average of about 6% for the last two decades and the country reached World Bank lower-middle income status in 2014.

Location: Southern Asia, bordering the Bay of Bengal, between Burma and India

Geographic coordinates:
24 00 N, 90 00 E

Map references: Asia

Area:

total: 148,460 sq km

land: 130,170 sq km

water: 18,290 sq km

country comparison to the world: 95

Area - comparative: Slightly larger than Pennsylvania and New Jersey combined; slightly smaller than Iowa

Print Land boundaries:

total: 4,413 km

border countries (2): Burma 271 km, India 4142 km

Coastline: 580 km

Maritime claims:

territorial sea: 12 nm

exclusive economic zone: 200 nm

contiguous zone: 18 nm

continental shelf: to the outer limits of the continental margin

Climate:
tropical; mild winter (October to March); hot, humid summer (March to June); humid, warm rainy monsoon (June to October)

Terrain: mostly flat alluvial plain; hilly in southeast

Elevation:

mean elevation: 85 m

lowest point: Indian Ocean 0 m

highest point: Keokradong 1,230 m

Natural resources:

natural gas, arable land, timber, coal

Land use:

agricultural land: 70.1% (2016 est.)

arable land: 59% (2016 est.) / permanent crops: 6.5% (2016 est.) / permanent pasture: 4.6% (2016 est.)

forest: 11.1% (2016 est.)

other: 18.8% (2016 est.)

Irrigated land:

53,000 sq km (2012)

Natural hazards: droughts; cyclones; much of the country routinely inundated during the summer monsoon season

Environment - current issues: Many people are landless and forced to live on and cultivate flood-prone land; waterborne diseases prevalent in surface water; water pollution, especially of fishing areas, results from the use of commercial pesticides; ground water contaminated by naturally occurring arsenic; intermittent water shortages because of falling water tables in the northern and central parts of the country; soil degradation and erosion; deforestation; destruction of wetlands; severe overpopulation with noise pollution

Environment - international agreements:
Party to: Biodiversity, Climate Change, Climate Change-Kyoto Protocol, Desertification, Endangered Species, Environmental Modification, Hazardous Wastes, Law of the Sea, Ozone Layer Protection, Ship Pollution, Wetlands

Signed, but not ratified: none of the selected agreements

Geography - note: Most of the country is situated on deltas of large rivers flowing from the Himalayas: the Ganges unites with the Jamuna (main channel of the Brahmaputra) and later joins the Meghna to eventually empty into the Bay of Bengal

Population:

162,650,853 (July 2020 est.)

country comparison to the world: 8

Nationality:

noun: Bangladeshi(s)

adjective: Bangladeshi

Ethnic groups:

Bengali at least 98%, other indigenous ethnic groups 1.1% (2011 est.)

note: Bangladesh's government recognizes 27 indigenous ethnic groups under the 2010 Cultural Institution for Small Anthropological Groups Act; other sources estimate there are about 75 ethnic groups; critics of the 2011 census claim that it underestimates the size of Bangladesh's ethnic population

Languages: Bangla 98.8% (official, also known as Bengali), other 1.2% (2011 est.)

Religions: Muslim 89.1%, Hindu 10%, other 0.9% (includes Buddhist, Christian) (2013 est.)

Age structure:

0-14 years: 26.48% (male 21,918,651/female 21,158,574)

15-24 years: 18.56% (male 15,186,470/female 15,001,950)

25-54 years: 40.72% (male 31,694,267/female 34,535,643)

55-64 years: 7.41% (male 5,941,825/female 6,115,856)

65 years and over: 6.82% (male 5,218,206/female 5,879,411) (2020 est.)

Print Dependency ratios:

total dependency ratio: 47

youth dependency ratio: 39.3

elderly dependency ratio: 7.7

potential support ratio: 13 (2020 est.)

Median age:

total: 27.9 years

male: 27.1 years

female: 28.6 years (2020 est.)

country comparison to the world: 143

Population growth rate:

0.98% (2020 est.)

country comparison to the world: 106

Birth rate:

18.1 births/1,000 population (2020 est.)

country comparison to the world: 88

Death rate:

5.5 deaths/1,000 population (2020 est.)

country comparison to the world: 182

Net migration rate:

-3 migrant(s)/1,000 population (2020 est.)
country comparison to the world: 175

Urbanization:

urban population: 38.2% of total population (2020)

rate of urbanization: 3.17% annual rate of change (2015-20 est.)

Major urban areas - population:

21.006 million DHAKA (capital), 5.020 million Chittagong, 954,000 Khulna, 908,000 Rajshahi, 852,000 Sylhet (2020)

Sex ratio:

at birth: 1.04 male(s)/female

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

15-24 years: 1.01 male(s)/female

25-54 years: 0.92 male(s)/female

55-64 years: 0.97 male(s)/female

65 years and over: 0.89 male(s)/female

total population: 96.7 male(s)/female (2020 est.)
Mother's mean age at first birth: 18.5 years (2014 est.)
note: median age at first birth among women 25-29
Maternal mortality rate:

173 deaths/100,000 live births (2017 est.)

country comparison to the world: 53

Infant mortality rate:

total: 28.3 deaths/1,000 live births

male: 30.6 deaths/1,000 live births

female: 26 deaths/1,000 live births (2020 est.)

country comparison to the world: 60

Life expectancy at birth:

total population: 74.2 years

male: 72 years

female: 76.5 years (2020 est.)

country comparison to the world: 133

Total fertility rate:

2.11 children born/woman (2020 est.)

country comparison to the world: 98

Contraceptive prevalence rate: 62.3% (2014)

Drinking water source:

improved:urban: 86.5% of population

rural: 87% of population

total: 86.9% of population

unimproved:urban: 13.5% of population

rural: 13% of population

total: 13.1% of population (2015 est.)

Current Health Expenditure: 2.4% (2016)

Physicians density: 0.53 physicians/1,000 population (2015)

Hospital bed density: 0.8 beds/1,000 population (2015)

Sanitation facility access:

Improved:urban: 57.7% of population (2015 est.)

rural: 62.1% of population (2015 est.)

total: 60.6% of population (2015 est.)

Unimproved:Urban: 42.3% of population (2015 est.)

rural: 37.9% of population (2015 est.)

total: 39.4% of population (2015 est.)

HIV/AIDS - adult prevalence rate: <.1% (2018 est.)

HIV/AIDS - people living with HIV/AIDS: 14,000 (2018 est.)
country comparison to the world: 91

HIV/AIDS - deaths: <1000 (2018 est.)

Major infectious diseases:

degree of risk: high (2020)

food or waterborne diseases: bacterial and protozoal diarrhea, hepatitis A and E, and typhoid fever vectorborne diseases: dengue fever and malaria are high risks in some locations water contact diseases: leptospirosis

animal contact diseases: rabies

Obesity - adult prevalence rate: 3.6% (2016)

country comparison to the world: 191

Children under the age of 5 years underweight:

32.8% (2014)

country comparison to the world: 7

Education expenditures:

2% of GDP (2018)

country comparison to the world: 169

Literacy: definition: age 15 and over can read and write

total population: 73.9%

male: 76.7%

female: 71.2% (2018)

School life expectancy (primary to tertiary education):

total: 11 years

male: 11 years

female: 12 years (2017)

Unemployment, youth ages 15-24:

total: 12.8%

male: 10.8%

female: 16.8% (2017 est.)

Country comparison to the world: 108

Government :: Bangladesh

Conventional long form: People's Republic of Bangladesh

Conventional short form: Bangladesh
Local long form: Gana Prajatantri Bangladesh
local short form: Bangladesh

former: East Bengal, East Pakistan
etymology: the name - a compound of the Bengali words "Bangla" (Bengal) and "desh" (country) - means "Country of Bengal"

Government type: parliamentary republic

Capital: Dhaka

Geographic coordinates: 23 43 N, 90 24 E
Time difference: UTC+6 (11 hours ahead of Washington, DC, during Standard Time)

etymology: the origins of the name are unclear, but some sources state that the city's site was originally called "dhakka," meaning "watchtower," and that the area served as a watch-station for Bengal rulers

Administrative divisions: 8 divisions; Barisal, Chittagong, Dhaka, Khulna, Mymensingh, Rajshahi, Rangpur, Sylhet

Independence: 16 December 1971 (from Pakistan)

National holiday:
Independence Day, 26 March (1971); Victory Day, 16 December (1971); note - 26 March 1971 is the date of the Awami League's declaration of an independent Bangladesh, and 16 December (Victory Day) memorializes the military victory over Pakistan and the official creation of the state of Bangladesh
Constitution:
History: previous 1935, 1956, 1962 (preindependence); latest enacted 4 November 1972, effective 16 December 1972, suspended March 1982, restored November 1986
Amendments: proposed by the House of the Nation; approval requires at least two-thirds majority vote of the House membership and assent of the president of the republic; amended many times, last in 2018 (2019)

Legal system:

Mixed legal system of mostly English common law and Islamic law

International law organization participation: Has not submitted an ICJ jurisdiction declaration; accepts ICCt jurisdiction

Citizenship:

Citizenship by birth: no

Citizenship by descent only: at least one parent must be a citizen of Bangladesh

Dual citizenship recognized: yes, but limited to select countries

Residency requirement for naturalization: 5 years

Suffrage: 18 years of age; universal

Executive branch:

Chief of state: President Abdul Hamid (since 24 April 2013); note - Abdul HAMID served as acting president following the death of Zillur Rahman in March 2013; Hamid was subsequently indirectly elected by the National Parliament and sworn in 24 April 2013

Head of Government: Prime Minister Sheikh Hasina (since 6 January 2009)

Cabinet: Cabinet selected by the prime minister, appointed by the president
elections/appointments: president indirectly elected by the National Parliament for a 5-year term (eligible for a second term); election last held on 7 February 2018 (next to be held by 2023); the president appoints as prime minister the majority party leader in the National Parliament

Election results: President Abdul Hamid (AL) reelected by the National Parliament unopposed for a second term; Sheikh Hasina reappointed prime minister as leader of the majority AL party following parliamentary elections in 2018

Legislative branch:

Description: unicameral House of the Nation or Jatiya Sangsad (350 seats; 300 members in single-seat territorial constituencies directly elected by simple majority popular vote; 50 members - reserved for women only - indirectly elected by the elected members by proportional representation vote using single transferable vote; all members serve 5-year terms)

Elections: last held on 30 December 2018 (next to be held in 2023)

Election results: percent of vote by party - NA; seats by party as of January 2020 - AL 299, JP 27, BNP 7, other 10, independent 4, vacant 3; composition - men 274, women 73, percent of women 21%

Judicial branch:
Highest courts: Supreme Court of Bangladesh (organized into the Appellate Division with 7 justices and the High Court Division with 99 justices)

Judge selection and term of office: chief justice and justices appointed by the president; justices serve until retirement at age 67
Subordinate courts: civil courts include: Assistant Judge's Court; Joint District Judge's Court; Additional District Judge's Court; District Judge's Court; criminal courts include: Court of Sessions; Court of Metropolitan Sessions; Metropolitan Magistrate Courts; Magistrate Court; special courts/tribunals

Political parties and leaders:

Awami League or AL [Sheikh HASINA]

Bangladesh Nationalist Front or BNF [Abdul Kalam AZADI]

Bangladesh Nationalist Party or BNP [Khaleda ZIA]

Bangladesh Tariqat Federation or BTF [Syed Nozibul Bashar MAIZBHANDARI]

Jamaat-i-Islami Bangladesh or JIB (Makbul AHMAD)

Jatiya Party or JP (Ershad faction) [Hussain Mohammad ERSHAD]

Jatiya Party or JP (Manju faction) [Anwar Hossain MANJU]

Liberal Democratic Party or LDP [Oli AHMED]

National Socialist Party or JSD [KHALEQUZZAMAN]

Workers Party or WP [Rashed Khan MENON]
International organization participation: This entry lists in alphabetical order by abbreviation those international organizations in which the subject country is a member or participates in some other way.

ADB, ARF, BIMSTEC, C, CD, CICA (observer), CP, D-8, FAO, G-77, IAEA, IBRD, ICAO, ICC (national committees), ICRM, IDA, IDB, IFAD, IFC, IFRC, IHO, ILO, IMF, IMO, IMSO, Interpol, IOC, IOM, IPU, ISO, ITSO, ITU, ITUC (NGOs), MIGA, MINURSO, MINUSMA, MONUSCO, NAM, OIC, OPCW, PCA, SAARC, SACEP, UN, UNAMID, UNCTAD, UNESCO, UNHCR, UNIDO, UNIFIL, UNMIL, UNMISS, UNOCI, UNWTO, UPU, WCO, WFTU (NGOs), WHO, WIPO, WMO, WTO

Diplomatic representation in the US:

Ambassador Mohammad ZIAUDDIN (since 18 September 2014)

chancery: 3510 International Drive NW, Washington, DC 20008
telephone: [1] (202) 244-0183
FAX: [1] (202) 244-2771 consulate(s) general: Los Angeles, New York Diplomatic representation from the US:

Chief of Mission: Ambassador Earl Robert MILLER (since 29 November 2018)
telephone: [880] (2) 5566-2000
embassy: Madani Avenue, Baridhara, Dhaka 1212
mailing address: G. P. O. Box 323, Dhaka 1000
FAX: [880] (2) 5566-2915

Flag description: Green field with a large red disk shifted slightly to the hoist side of center; the red disk represents the rising sun and the sacrifice to achieve independence; the green field symbolizes the lush vegetation of Bangladesh
National symbol(s): Bengal tiger, water lily; national colors: green, red

National anthem:

name: "Amar Shonar Bangla" (My Golden Bengal)
lyrics/music: Rabindranath TAGORE

note: adopted 1971; Rabindranath TAGORE, a Nobel laureate, also wrote India's national anthem

Economy - overview
Bangladesh's economy has grown roughly 6% per year since 2005 despite prolonged periods of political instability, poor infrastructure, endemic corruption, insufficient power supplies, and slow implementation of economic reforms. Although more than half of GDP is generated through the services sector, almost half of Bangladeshis are employed in the agriculture sector, with rice as the single-most-important product. Garments, the backbone of Bangladesh's industrial sector, accounted for more than 80% of total exports in FY 2016-17. The industrial sector continues to grow, despite the need for improvements in factory safety conditions. Steady export growth in the garment sector, combined with $13 billion in remittances from overseas Bangladeshis, contributed to Bangladesh's rising foreign exchange reserves in FY 2016-17. Recent improvements to energy infrastructure, including the start of liquefied natural gas imports in 2018, represent a major step forward in resolving a key growth bottleneck.

GDP (purchasing power parity):

$690.3 billion (2017 est.)

$642.7 billion (2016 est.)

$599.5 billion (2015 est.)

note: data are in 2017 dollars

country comparison to the world: 33

GDP (official exchange rate): $261.5 billion (2017 est.)

GDP - real growth rate:

7.4% (2017 est.)

7.2% (2016 est.)

6.8% (2015 est.)

country comparison to the world: 13

GDP - per capita (PPP):

$4,200 (2017 est.)

$4,000 (2016 est.)

$3,800 (2015 est.)

note: data are in 2017 dollars

country comparison to the world: 176

Gross national saving:

30.2% of GDP (2017 est.)

30.6% of GDP (2016 est.)

30.3% of GDP (2015 est.)

country comparison to the world: 30

GDP - composition, by end use:
household consumption: 68.7% (2017 est.)
government consumption: 6% (2017 est.)
investment in fixed capital: 30.5% (2017 est.)
investment in inventories: 1% (2017 est.)
exports of goods and services: 15% (2017 est.)
imports of goods and services: -20.3% (2017 est.)

GDP - composition, by sector of origin:
agriculture: 14.2% (2017 est.)
industry: 29.3% (2017 est.)
services: 56.5% (2017 est.)

Agriculture - products: rice, jute, tea, wheat, sugarcane, potatoes, tobacco, pulses, oilseeds, spices, fruit; beef, milk, poultry

Industries: jute, cotton, garments, paper, leather, fertilizer, iron and steel, cement, petroleum products, tobacco, pharmaceuticals, ceramics, tea, salt, sugar, edible oils, soap and detergent, fabricated metal products, electricity, natural gas

Industrial production growth rate:10.2% (2017 est.)
country comparison to the world: 15

Labor force: 66.64 million (2017 est.)

note: extensive migration of labor to Saudi Arabia, Kuwait, UAE, Oman, Qatar, and Malaysia
country comparison to the world: 7

Labor force - by occupation:
agriculture: 42.7%
industry: 20.5%
services: 36.9% (2016 est.)

Unemployment rate:

4.4% (2017 est.)

4.4% (2016 est.)

note: about 40% of the population is underemployed; many persons counted as employed work only a few hours a week and at low wages

country comparison to the world: 58

Population below poverty line: 24.3% (2016 est.)

Household income or consumption by percentage share:

lowest 10%: 4%

highest 10%: 27% (2010 est.)

Budget:

revenues: 25.1 billion (2017 est.)

expenditures: 33.5 billion (2017 est.)

Taxes and other revenues:

9.6% (of GDP) (2017 est.)

country comparison to the world: 214

Budget surplus (+) or deficit (-):

-3.2% (of GDP) (2017 est.)

country comparison to the world: 137

Public debt:

33.1% of GDP (2017 est.)

33.3% of GDP (2016 est.)

country comparison to the world: 159

Fiscal year:

1 July - 30 June

Inflation rate (consumer prices):

5.6% (2017 est.)

5.7% (2016 est.)

country comparison to the world: 180

Current account balance:

-$5.322 billion (2017 est.)

$1.391 billion (2016 est.)

country comparison to the world: 184

Exports:

$35.3 billion (2017 est.)

$34.14 billion (2016 est.)

country comparison to the world: 57

Exports - partners:

Germany 12.9%, US 12.2%, UK 8.7%, Spain 5.3%, France 5.1%, Italy 4.1% (2017)

Exports - commodities:

garments, knitwear, agricultural products, frozen food (fish and seafood), jute and jute goods, leather

Imports:

$47.56 billion (2017 est.)

$40.28 billion (2016 est.)

country comparison to the world: 56

Imports - commodities:

cotton, machinery and equipment, chemicals, iron and steel, foodstuffs

Imports - partners:

China 21.9%, India 15.3%, Singapore 5.7% (2017)

Reserves of foreign exchange and gold:

$33.42 billion (31 December 2017 est.)

$32.28 billion (31 December 2016 est.)

country comparison to the world: 49

Debt - external:

$50.26 billion (31 December 2017 est.)

$41.85 billion (31 December 2016 est.)

country comparison to the world: 66

Exchange rates:

taka (BDT) per US dollar -

80.69 (2017 est.)

78.468 (2016 est.)

78.468 (2015 est.)

77.947 (2014 est.)

77.614 (2013 est.)

Energy :: Bangladesh

Electricity access:

population without electricity: 60.3 million (2013)

electrification - total population: 75.9% (2016)

electrification - urban areas: 94% (2016)

electrification - rural areas: 68.9% (2016)

Electricity - production:

60.51 billion kWh (2016 est.)

country comparison to the world: 49

Electricity - consumption: 53.65 billion kWh \ (2016 est.)

country comparison to the world: 48

Electricity - exports: 0 kWh (2016 est.)

country comparison to the world: 103

Electricity - imports:

0 kWh (2016 est.)

country comparison to the world: 124

Electricity - installed generating capacity:

11.9 million kW (2016 est.)

country comparison to the world: 56

Electricity - from fossil fuels:

97% of total installed capacity (2016 est.)

country comparison to the world: 32

Electricity - from nuclear fuels:

0% of total installed capacity (2017 est.)

country comparison to the world: 45

Electricity - from hydroelectric plants:

2% of total installed capacity (2017 est.)

country comparison to the world: 136

Electricity - from other renewable sources:

2% of total installed capacity (2017 est.)

country comparison to the world: 134

Crude oil - production:

3,000 bbl/day (2018 est.)

country comparison to the world: 83

Crude oil - exports:

0 bbl/day (2015 est.)

country comparison to the world: 91

Crude oil - imports:

21,860 bbl/day (2015 est.)

country comparison to the world: 63

Crude oil - proved reserves:

28 million bbl (1 January 2018 est.)

country comparison to the world: 81

Refined petroleum products - production:

26,280 bbl/day (2015 est.)

country comparison to the world: 86

Refined petroleum products - consumption:

106,000 bbl/day (2016 est.)

country comparison to the world: 77

Refined petroleum products - exports:

901 bbl/day (2015 est.)

country comparison to the world: 108

Refined petroleum products - imports:

81,570 bbl/day (2015 est.)

country comparison to the world: 63

Natural gas - production:

29.53 billion cu m (2017 est.)

country comparison to the world: 27

Natural gas - consumption:

29.53 billion cu m (2017 est.)

country comparison to the world: 32

Natural gas - exports:

0 cu m (2017 est.)

country comparison to the world: 65

Natural gas - imports:

0 cu m (2017 est.)

country comparison to the world: 89

Natural gas - proved reserves:

185.8 billion cu m (1 January 2018 est.)

country comparison to the world: 44

Carbon dioxide emissions from consumption of energy: 79.97 million Mt (2017 est.)

country comparison to the world: 48

Communications :: Bangladesh

Telephones - fixed lines:

total subscriptions: 1,449,646

subscriptions per 100 inhabitants: 1 less than 1 (2018 est.)

country comparison to the world: 66

Telephones - mobile cellular:
total subscriptions: 161,771,617
subscriptions per 100 inhabitants: 101 (2018 est.)
country comparison to the world: 9
Telephone system: General assessment:
inadequate for a modern country; introducing digital systems; trunk systems include VHF and UHF microwave radio relay links, and some fiber-optic cable in cities; fixed broadband

penetration in Bangladesh remains very low mainly due to the dominance of the mobile platform (2018)

domestic: fixed-line teledensity remains less than 1 per 100 persons; mobile-cellular telephone subscribership has been increasing rapidly and now exceeds 101 telephones per 100 persons; mobile subscriber growth is anticipated over the next five years to 2023; strong local competition (2018)

international: country code - 880; landing points for the SeaMeWe-4 and SeaMeWe-5 fiber-optic submarine cable system that provides links to Europe, the Middle East, and Asia; satellite earth stations - 6; international radiotelephone communications and landline service to neighboring countries (2019)

Broadcast media:
State-owned Bangladesh Television (BTV) broadcasts throughout the country. Some channels, such as BTV World, operate via satellite. The government also owns a medium wave radio channel and some private FM radio broadcast news channels. Of the 41 Bangladesh approved TV stations, 26 are currently being used to broadcast. Of those, 23 operate under private management via cable distribution. Collectively, TV channels can reach more than 50 million people across the country.

Internet country code:.bd

Internet users:

total: 28,499,324

percent of population: 18.2% (July 2016 est.)

country comparison to the world: 26

Broadband - fixed subscriptions:

total: 10,237,003

subscriptions per 100 inhabitants: 6 (2018 est.)

country comparison to the world: 17

Military and Security :: Bangladesh

Military expenditures:

1.37% of GDP (2018)

1.38% of GDP (2017)

1.44% of GDP (2016)

1.46% of GDP (2015)

1.36% of GDP (2014)

country comparison to the world: 86

Military and security forces:

Bangladesh Defense Force: Bangladesh Army, Bangladesh Navy, Bangladesh Air Force; Ministry of Home Affairs: Border Guard Bangladesh (BGB) (2019)

Military service age and obligation:
16-21 years of age for voluntary military service; Bangladeshi nationality and 10th grade education required; officers: 17-21 years of age, Bangladeshi nationality, and 12th grade education required (2018)

Maritime threats:
The International Maritime Bureau reports the territorial waters of Bangladesh remain a risk for armed robbery against ships; in 2018, the number of attacks against commercial vessels increased to 12 over the 11 such incidents in 2017

Transportation :: Bangladesh
National air transport system:
number of registered air carriers: 6 (2015)
inventory of registered aircraft operated by air carriers: 30 (2015)

annual passenger traffic on registered air carriers: 2,906,799 (2015)

annual freight traffic on registered air carriers: 182,692,553 mt-km (2015)

Civil aircraft registration country code prefix: S2 (2016)

Airports:

18 (2013)

country comparison to the world: 138

Airports - with paved runways:

total: 16 (2017)

over 3,047 m: 2 (2017)

2,438 to 3,047 m: 2 (2017)

1,524 to 2,437 m: 6 (2017)

914 to 1,523 m: 1 (2017)

under 914 m: 5 (2017)

Airports - with unpaved runways:

total: 2 (2013)

1,524 to 2,437 m: 1 (2013)

under 914 m: 1 (2013)

Heliports:

3 (2013)

Pipelines: 2950 km gas (2013)

Railways:

total: 2,460 km (2014)

narrow gauge: 1,801 km 1.000-m gauge (2014)

broad gauge: 659 km 1.676-m gauge (2014)

country comparison to the world: 68

Roadways:

total: 369,105 km (2018)

paved: 110,311 km (2018)

unpaved: 258,794 km (2018)

country comparison to the world: 20

Waterways:

8,370 km (includes up to 3,060 km of main cargo routes; network reduced to 5,200 km in the dry season) (2011)

country comparison to the world: 16

Merchant marine:

total: 376

by type: bulk carrier 36, container ship 5, general cargo 97, oil tanker 136, other 102 (2019)
country comparison to the world: 47

Ports and terminals:

major seaport(s): Chittagong
container port(s) (TEUs): Chittagong (2,566,597) (2017)

river port(s): Mongla Port (Sela River)

Terrorist groups - home based:

Harakat ul-Jihad-i-Islami/Bangladesh (HUJI-B):
aim(s): install an Islamic state in Bangladesh
area(s) of operation: headquartered in Bangladesh and mostly active in the southeast; maintains a network of madrassas in Bangladesh; has links with al-Qa'ida and Pakistan-based terror groups advocating similar objectives, including Harakat-ul Jihad Islami (HUJI) and Lashkar e-Tayibba (LeT) (2019)

Islamic State of Iraq and ash-Sham (ISIS) networks in Bangladesh: aim(s): replace the Bangladesh Government with an Islamic state and implement ISIS's strict interpretation of Sharia; ISIS operates in Bangladesh under the name Islamic State in Bangladesh (ISB)
area(s) of operation: operates primarily in Dhaka

note: targets foreigners, foreign aid workers, university professors, students, and secular bloggers for assassination; core ISIS refers to its Bangladesh branch as Bengal (2019)

Terrorist groups - foreign based:

al-Qa'ida (AQ): **aim(s):** overthrow the Bangladesh Government and, ultimately, establish a pan-Islamic caliphate under a strict Salafi Muslim interpretation of sharia
area(s) of operation: operates in collaboration with its al-Qa'ida in the Indian Subcontinent affiliate

note: also known as Ansar al-Islam in Bangladesh (2019)

al-Qa'ida in the Indian Subcontinent (AQIS): **aim(s):** protect Muslims in Bangladesh from perceived injustices and, ultimately, establish an Islamic caliphate in the Indian subcontinent
area(s) of operation: active throughout the country, targeting primarily military and security personnel, but also activists, bloggers, academics, and religious minorities
note: also known as Ansar al-Islam in Bangladesh (2019)

Transnational Issues :: Bangladesh

Disputes - international: Bangladesh referred its maritime boundary claims with Burma and India to the International Tribunal on the Law of the Sea; Indian Prime Minister Singh's September 2011 visit to Bangladesh resulted in the signing of a Protocol to the 1974 Land Boundary Agreement between India and Bangladesh, which had called for the settlement of longstanding boundary disputes over undemarcated areas and the exchange of territorial enclaves, but which had never been implemented; Bangladesh struggles to accommodate 912,000 Rohingya, Burmese Muslim minority from Rakhine State, living as refugees in Cox's Bazar; Burmese border authorities are constructing a 200 km (124 mi) wire fence designed to deter illegal cross-border transit and tensions from the military build-up along border

Refugees and internally displaced persons:

Refugees (country of origin): 914,998 (Burma) (2019) (includes an estimated 744,400 Rohingya refugees who have fled conflict since 25 August 2017)

IDPs: 426,000 (conflict, development, human rights violations, religious persecution, natural disasters) (2018)

Illicit drugs: transit country for illegal drugs produced in neighboring countries

Acronyms and Abbreviations

Acronym	Definition
AADMER	ASEAN Agreement on Disaster Management and Emergency Response
ADB	Asian Development Bank
ADINET	ASEAN Disaster Information Network (AHA Centre)
AFD	Armed Forces Division (Bangladesh)
AL	Awami League (political party)
ARF	ASEAN Regional Forum
AHA Centre	The ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management
ARMOR	Annual ASEAN Monitor Report
APAN	All Partners Access Network (US DoD unclassified system)
APLMA	Asia Pacific Leaders Malaria Alliance
AQIS	Al-Qa'ida in the Indian Subcontinent (known in Bangladesh as Ansar al-Islam)
ASEAN	Association of Southeast Asian Nations
ASOD	Assistance for Social Organization and Development
BBL	Oil Barrel (42 gallons / 159 liters)
BDRCS	Bangladesh Red Crescent Society
BDT	Bangladeshi Taka (currency)
BGB	Border Guard Bangladesh
BIMSTEC	Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation
BIRDEM	Bangladesh Institute of Research and Rehabilitation in Diabetes Endocrine and Metabolic Disorders
BMMS	Bangladesh Maternal Mortality and Health Care Survey
BNF	Bangladesh Nationalist Front (political party)
BNKS	Bolipara Nari Kalyan Somity (NGO)
BNP	Bangladesh Nationalist Party (political party)
BRAC	Bangladesh Rural Advancement Committee (NGO)
BTCL	Bangladesh Telecommunications Company Limited
BTF	Bangladesh Tariqat Federation (political party)
BTTB	Bangladesh Telephone and Telegraph Board
BTV	Bangladesh Television (state-owned)
C	Celsius
CARAT	Cooperation Afloat Readiness and Training (Exercise)
CDC	Centers for Disease Control and Prevention (U.S.)
CFE-DM	Center for Excellence in Disaster Management and Humanitarian Assistance
CGBV	Combating Gender Based Violence in Bangladesh Project
CMCoord	Humanitarian Civil Military Coordination
CNG	Compressed natural gas

Acronym	Definition
COVID-19	Coronavirus disease 2019
CRS	Catholic Relief Services
CSO	Civil society organizations
Cu M	Cubic meters
CVD	Cardiovascular Disease
DAM	Dhaka Ahsania Mission (NGO)
DDM	Department of Disaster Management
DKI-APCSS	Daniel K. Inouye Asia-Pacific Center for Security Studies
DMHA	Disaster Management and Humanitarian Assistance
DMRS	Disaster Monitoring and Response System (AHA Centre)
DREE	Disaster Response Exercise and Exchange
DRR	Disaster Risk Reduction
DoD	Department of Defense
EAS	East Asia Summit
EITI	Extractive Industries Transparency Initiative
EHO	Ethnic Health Organizations
EmOC	Emergency obstetric care
EMOPS	Emergency Operations System (PDC, version of DisasterAWARE)
EPHS	Essential Package of Health Services
Ex COORES	Exercise Coordinated Response
ETC	Emergency Telecommunications Cluster
F	Fahrenheit
FAO	Food and Agriculture Organization of the United Nations
FMA	Foreign Military Assets
FDMN	Forcibly Displaced Myanmar Nationals (GoB term)
FP	Family planning
FSM	Faecal Sludge Management
FTX	Field training exercise
G-77	Group of 77
GDACS	Global Disaster Alert and Coordination System
GDP	Gross Domestic Product
GPE	Global Partnership for Education
GoB	Government of Bangladesh
GRI	Global Risk Index
GUK	Gana Unnayan Kendra
GBV	gender-based violence
HADR	Humanitarian Assistance and Disaster Relief
HBV	Hepatitis B virus

Acronym	Definition
HCCT	Humanitarian Coordination Task Team
HDX	Humanitarian Data Exchange
HFA	Hyogo Framework for Action (predecessor to Sendai Framework)
HP	Hope for the Poorest (NGO)
HPNSP	Health, Population, and Nutrition Sector Programme
HRH	Human Resources for Health
HUJI-B	Harakat ul-Jihad-i-Islami/Bangladesh
IBRD	International Bank for Reconstruction and Development
ICAO	International Civil Aviation Organization
icddr,b	International Center for Diarrheal Disease Research, Bangladesh
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
IDP	Internally displaced person
IEDCR	Institute of Epidemiology Disease Control and Research
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
IFRC	International Federation of Red Cross and Red Crescent Societies
IHO	International Hydrographic Organization
IMDMCC	Inter-Ministerial Disaster Management Coordination Committee
IMWG	Information Management Working Group
INFORM	Index for Risk Management
ILO	International Labour Organization (UN)
IMF	International Monetary Fund
INTERPOL	International Criminal Police Organisation
IOC	International Olympic Committee
IOM	International Organization for Migration (UN)
IPU	Inter-Parliamentary Union
IS	Information sharing
ISIS	Islamic State of Iraq and ash-Sham
ISO	International Organization for Standardization
ITU	International Telecommunications Union
ITU-T	ITU Telecommunication Standardization Sector
JIB	Jamaat-i-Islami Bangladesh (political party)
JMB	Jamaat-ul-Mujahideen Bangladesh (JMB or "Neo-JMB" – Bangladesh term for ISIS)
JP	Jatiya Party (political party)

Acronym	Definition
JSD	National Socialist Party (political party)
km	kilometer
kWh	Kilowatt-hour
LDC	Least Developed Countries
LDP	Liberal Democratic Party (political party)
LeT	Lashkar e-Tayibba
M	Meters
MCIP	Multinational Communications Interoperability Program (US DoD)
MDR-TB	Multidrug-resistant tuberculosis
MHM	Menstrual Hygiene Management
Mi	Miles
MJSKS	Mahideb Jubo Somaj Kallayan Somity
MMR	Maternal mortality ratio
MMR	Measles, mumps, and rubella
MMS	Manab Mukti Sangstha (NGO)
MNCC	Multi-National Coordination Center
MNF	Multinational force
MOHFW	Ministry of Health and Family Welfare (Bangladesh)
MPH	Miles per hour
MSRT	Maritime Security Response Team (US Coast Guard)
MW	Megawatts
NAM	National Association of Manufacturers
NAP	National Action Plan
NAWG	Needs Assessment Working Group
NCD	Non-communicable diseases
NDP	National Development Programme (NGO)
NGO	Non-governmental organization
NPDM	National Plan for Disaster Management
NTP	National tuberculosis control program
OCHA	UN Office for the Coordination of Humanitarian Affairs
OFDA	Office of U.S. Foreign Disaster Assistance (under USAID)
OLE	Oil of lemon eucalyptus
OPCW	Organisation for the Prohibition of Chemical Weapons
PACTACLET	Pacific Tactical Law Enforcement Team (US Coast Guard)
PDC	Pacific Disaster Center
PFA	Beijing Platform for Action (Fourth World Conference on Women in 1995)
PMD	para-Menthane-3,8-diol
PR-DREE	Pacific Resilience Disaster Response Exercise & Exchange

Acronym	Definition
RCG	Regional Consultative Group
RHCC	Changi Regional HADR Coordination Centre (Singapore)
RIMPAC	Rim of the Pacific Exercise
ROAP	Regional Office for Asia and the Pacific (OCHA)
SAARC	South Asian Association for Regional Cooperation
SBDRR	School Based Disaster Risk Reduction Project
SDG	Sustainable Development Goals
SE	Sanitation Entrepreneurs
SEACAT	Southeast Asia Cooperation and Training
SFDRR	Sendai Framework for Disaster Risk Reduction
SitRep	Situation Report
SMC	School Management Committee
SNP	Sanitary Napkin Promotion
SOD	Standing Orders on Disasters
TB	Tuberculosis
Td	Tetanus and diphtheria
TDH	Terre des hommes (NGO)
TEU	Twenty-foot equivalent unit (approximate unit of cargo capacity)
TTX	Tabletop exercise
UHC	Universal Health Coverage
UISS	Unclassified Information Sharing Service
UN	United Nations
UNCT	UN Country Team
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNDRR	UN Office for Disaster Risk Reduction (formerly UNISDR)
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFAF	United Nations Development Assistance Framework
UNFPA	UN Population Fund
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
UNSDCF	United Nations Sustainable Development Cooperation Framework
UNWTO	World Tourism Organization
UPU	Universal Postal Union
USG	United States Government
USACE	U.S. Army Corps of Engineers
USAID	U.S. Agency for International Development
USAR	Urban Search and Rescue

Acronym	Definition
USARPAC	U.S. Army Pacific
USINDOPACOM	U.S. Indo-Pacific Command (Department of Defense)
USPACOM	U.S. Pacific Command (Predecessor to USINDOPACOM until 2018)
VBSS	Visit, board, search and seizure
Virtual OSOCC	Virtual On-Site Operations Coordination Centre (part of GDACS)
WASH	Water, Sanitation, and Hygiene
WCO	World Customs Organization
WFP	World Food Programme (UN)
WHO	World Health Organization (UN)
WMO	World Meteorological Organization
WP	Workers Party (political party)
WTO	World Trade Organization
YF	Yellow Fever

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