

Chapter 20: Nepal, Bhutan, and the Maldives

Summary

Nepal, Bhutan and the Maldives are three of the smallest countries in South Asia by population, but between them they hold both the highest point on Earth and the lowest-lying country on Earth. This chapter tours each one: Nepal's Kathmandu Valley, Lumbini, Mount Everest, the Sherpa people, the Gurkhas and the republic Nepal became in 2008; Bhutan's language, its fortress-monasteries and its idea of Gross National Happiness; and the Maldives' coral atolls, its capital Malé, its language Dhivehi and the danger that rising seas pose to it. Along the way you'll compare how altitude and sea level shape farming, faith, work and the future in all three.

Concepts Covered

1. Nepal
2. Kathmandu Valley
3. Mount Everest
4. Sherpa People
5. Gurkhas
6. Lumbini
7. Nepal's Republic (2008)

8. Bhutan
9. Dzongkha
10. Dzong
11. Gross National Happiness
12. Maldives
13. Atolls
14. Malé
15. Dhivehi
16. Sea-Level Rise

Prerequisites

- **Chapter 1: What Is South Asia?** (the Himalaya, the monsoon, the Indian Ocean)
- **Chapter 4: Colonialism, Independence, and Partition** (what "never colonized, with caveats" means)
- **Chapter 5: Faiths of South Asia** (Hinduism, Buddhism and Islam)
- **Chapter 6: Languages and Scripts** (language families and scripts)

From the roof of the world to the edge of the sea



Hi, it's Mora! You may know Everest from movies and the Maldives from travel ads, but real families live in both places, and some of them live in Minnesota now. This chapter helps you see these countries the way their own people do, and it also shows why a rise in the ocean you can't feel at home could decide the future of a whole nation.

20.1 "Wait, That's the Same Region?"

It's the third meeting of the South Asian Student Association at Prairie Ridge High School. Nima Sherpa, whose family comes from Solukhumbu in eastern Nepal, has brought her phone to the front of Ms. Okafor's classroom. On the projector is an old photo: her grandfather, younger than her dad is now, standing on a rocky trail with snow peaks behind him. "That's near Everest Base Camp," Nima says. "He worked on climbing expeditions before he moved to Kathmandu."

Ben Lindqvist leans forward. "Okay, the Everest guy is your grandpa? That's amazing." Zara Hossain is already scrolling the club's list of the eight South Asian countries. "And look," she says. "The Maldives is on the same list. That's the country that's basically at sea level."

Ben does the math out loud. "So the highest mountain on the planet and the lowest country on the planet are in the same region? How does that even work?" Nima laughs. "Also, my grandpa wasn't a porter because he's a Sherpa. Sherpa is who we are, not a job." The room goes quiet for a second. How do three small countries, one on top of the world and one barely above the waves, fit into one region, and what does living at those heights mean for the people there? That's what this chapter is about.

20.2 Three Small Countries, One Huge Staircase

Picture a staircase that starts underwater in the Indian Ocean and climbs north. The first steps are coral islands that barely poke above the waves. Then come wide, hot river plains. Then green hills and valleys with cities in them. Then cold, steep mountain kingdoms. And at the very top, snow and rock higher than airplanes fly when they take off.

Nepal, Bhutan and the Maldives sit on different steps of that staircase. That one fact, how high or low a place sits, shapes almost everything else about life there: what grows, how people travel, how they earn a living, and what dangers they face.

	Nepal	Bhutan	Maldives
Capital	Kathmandu	Thimphu	Malé
Population (2025, World Bank)	29,618,118 (about 30 million)	796,682 (about 800,000)	529,676 (about 530,000)
Land	Plains, hills and the high Himalaya	Steep Himalayan valleys	Low coral islands in the Indian Ocean
Highest point	Mount Everest, 8,848.86 m	Gangkhar Puensum, 7,570 m	About 2.4 m (natural ground)
Main language	Nepali	Dzongkha	Dhivehi
Largest faith	Hinduism (about 81%, 2021 census), with a large Buddhist minority	Vajrayana Buddhism, with a Hindu minority	Islam (Sunni)
Government today	Federal parliamentary	Constitutional monarchy (since 2008)	Presidential republic (since 1968)

Nepal	Bhutan	Maldives
republic (since 2008)		

Notice something about that last row. Two of these three countries changed their whole system of government in the same year, 2008. You'll see why in the sections ahead.

There's another thing they share. None of them was ruled directly as a British colony the way India, Pakistan, Bangladesh and Sri Lanka were, but each dealt with British power in its own way. Nepal lost territory under the 1816 Treaty of Sugauli. Bhutan agreed in the 1910 Treaty of Punakha to let Britain guide its foreign relations. The Maldives was a British protectorate, recorded in an 1887 agreement: Britain handled its defense and foreign affairs while the sultan ran things at home. You met these caveats in [Chapter 4](#).

20.3 Nepal: Plains, Hills and the Himalaya

Nepal is a landlocked country of about 30 million people (2025, World Bank) on the southern slope of the Himalaya, between India to the south, east and west and China's Tibet region to the north. Its capital is Kathmandu. In Nepali, the country's official language, its name is नेपाल (*nay-PAAL*).

Nepal is a fairly narrow country from south to north, yet inside that short distance the land climbs from about 59 m above sea level to the top of the world. Geographers divide it into three belts that run east to west like stripes:

- **The Terai** is the strip of flat, hot plain along the southern edge, the northern rim of the great plain you met in Chapter 1. It is low, mostly below about 300 m above sea level. Rice, wheat and sugarcane grow

here, and many of Nepal's people live here. The Terai covers about 17% of the country.

- **The Hills** (Pahad) cover about 68% of the country. These are green ridges and valleys, many with terraced fields cut into the slopes like giant steps. Kathmandu is here.
- **The Himal** is the high mountain belt along the northern border, about 15% of the country, with snowfields, glaciers and the world's highest peaks.

Nepal is home to many ethnic groups and languages. Most Nepalis are Hindu: in the 2021 census, about 81% said they were Hindu, about 8% Buddhist and about 5% Muslim, with smaller groups following Kirat, an Indigenous faith, or Christianity. Many families mix Hindu and Buddhist practice, so the lines between faiths are often softer than a census table suggests. Nepal's flag is the only national flag in the world that isn't a rectangle: it's two stacked triangles, a shape called a double pennon.

The biggest festival of the year for many Nepali Hindu families is **Dashain** (दशैं, *duh-SHAIN*), a 15-day celebration in autumn that honors the goddess Durga's victory over the demon Mahishasura. Families gather, elders place a red *tika* mark on younger relatives' foreheads and give blessings, and many people travel home for it. A few weeks later comes **Tihar** (तिहार, *ti-HAAR*), Nepal's festival of lights, related to Diwali, which includes a day for honoring dogs with flower garlands. You can read more about festival calendars in [Chapter 7](#).

The Kathmandu Valley

The **Kathmandu Valley** is a bowl-shaped valley in the hills of central Nepal, about 1,400 m above sea level, that holds the cities of Kathmandu, Patan (Lalitpur) and Bhaktapur and has been the country's political and cultural center for centuries. Before the 1700s, the word "Nepal" meant only this valley. It was the home of the Newar people, whose kings, artists and builders

created the temples, palaces and courtyards that still fill its old city centers. The Newars are famous for their wood carving, metalwork and multi-roofed pagoda temples.

In 1979 UNESCO listed the Kathmandu Valley as a World Heritage Site made of seven monument zones:

Monument zone	What it is
Kathmandu Durbar Square	The old royal palace square of Kathmandu
Patan Durbar Square	The palace square of Patan, packed with temples
Bhaktapur Durbar Square	The palace square of Bhaktapur
Swayambhunath	A Buddhist stupa on a hill west of Kathmandu
Boudhanath	One of the largest Buddhist stupas in the world, a center of Tibetan Buddhist life
Pashupatinath	A major Hindu temple of the god Shiva, on the Bagmati River
Changu Narayan	A Hindu temple of Vishnu, one of the oldest in the valley

That list shows Nepal's mix of faiths in one valley: Hindu temples and Buddhist stupas a short bus ride apart.

Lumbini

Lumbini is a pilgrimage site in the Terai of southern Nepal that Buddhist tradition honors as the birthplace of Siddhartha Gautama, the Buddha. According to Buddhist texts, Queen Maya Devi gave birth to him in a garden there. Today the Sacred Garden includes the Maya Devi Temple, a sacred pond and the ruins of old monasteries and stupas.

The strongest physical evidence at Lumbini is a stone pillar put up by the Mauryan emperor Ashoka in the 3rd century BCE. It carries an inscription in Brahmi script recording the emperor's visit and naming the place as the Buddha's birthplace. The pillar was rediscovered in 1896. UNESCO made Lumbini a World Heritage Site in 1997, and Buddhist pilgrims from Sri Lanka, Thailand, Japan, Tibet and around the world visit it. You met the Buddha's story and Ashoka in [Chapter 2](#) and [Chapter 5](#).

One person, many homes



The Buddha was born in what is now Nepal, became enlightened at Bodh Gaya in what is now India, and his teachings spread to Sri Lanka, Bhutan and far beyond. When a famous figure "belongs" to many modern countries, which one gets to tell the story? I think the honest answer is: all of them, a little differently.

Mount Everest

Mount Everest is the highest mountain on Earth, 8,848.86 m (29,031.7 ft) above sea level according to a joint measurement by China and Nepal in 2020. Its summit sits on the border between Nepal and China. In Nepali it is called सगरमाथा, Sagarmatha (*suh-gur-MAA-thaa*), a name often translated as "head in the sky" (dictionaries differ on whether its first part means "sky" or "sea"; *matha* means "forehead"). In Tibetan it is called Chomolungma. The

English name honors George Everest, a British Surveyor General of India in the 1800s; Britain's Royal Geographical Society adopted it in 1865.

On 29 May 1953, Tenzing Norgay, a Sherpa mountaineer, and Edmund Hillary, a beekeeper and climber from New Zealand, became the first people confirmed to reach the summit. Tenzing was also the *sirdar*, the leader of the Sherpa team, on that British expedition. Since then, thousands of people have reached the top, and climbing has become a major source of jobs and income for the region.

The mountain sits inside Sagarmatha National Park, created in 1976 in the Solukhumbu District, Nima's family's home district. UNESCO listed it as a natural World Heritage Site in 1979. The park protects glaciers, high valleys and rare animals such as the snow leopard, and it is also home to Sherpa villages and Buddhist monasteries.

Everest brings pride and income, but also crowds, trash and deaths among climbers and climbing workers. Its glaciers are shrinking too. The IPCC, the UN's climate science panel, reported in 2021 that human influence is very likely the main driver of glacier retreat worldwide since the 1990s, and that mountain glaciers will keep melting for decades or centuries.

The Sherpa People

The **Sherpa People** are an ethnic group of the high Himalaya, most of whom live in eastern Nepal, especially Solukhumbu and the Everest region, with communities in India's Sikkim and Darjeeling areas and in Tibet. Their name comes from the Tibetan words *shar*, "east," and *pa*, "people," so "Sherpa" means something like "people from the east." According to Sherpa oral history, their ancestors migrated over the mountains from eastern Tibet several centuries ago.

Sherpas speak the Sherpa language, which is related to Tibetan, and most are Tibetan Buddhists. Buddhist monasteries are the center of community life in the Everest region. Living at high altitude for generations, Sherpas became known worldwide for their skill and strength as mountain guides.

That fame has created a common mix-up. Many foreigners use "sherpa" with a small s to mean any mountain guide or porter, whatever their background. In business and politics, "sherpa" even means an assistant who prepares the way for a leader. But for Nima's family, Sherpa is an identity, like Swedish is for Ben's great-grandparents. Plenty of Sherpas have never worked on a mountain, and plenty of climbing workers on Everest come from other Nepali ethnic groups.

The Gurkhas

The **Gurkhas** are soldiers from Nepal (and Nepali-speaking communities in India) who have served in the British Army since 1815 and today also serve in the Indian Army and other forces. Their name comes from Gorkha (गोर्खा, *GOR-khaa*), the hill kingdom whose king, Prithvi Narayan Shah, united the many small states of Nepal in the 1700s.

Between 1814 and 1816, Nepal fought a war against the British East India Company. Nepal lost and, under the 1816 Treaty of Sugauli, gave up land in the west and south. But the British were so impressed by Nepal's soldiers that they began recruiting them even before the war ended. Gurkhas fought for Britain in both World Wars and in many other conflicts. They are known for their curved knife, the *khukuri*, and for their reputation for courage.

For many hill families, especially Gurung and Magar families, serving as a Gurkha has been a respected path to steady income and travel, and it helped create Nepali communities in Britain and elsewhere. It also raised questions of fairness: Gurkhas long received smaller pensions than other British soldiers until public campaigns won equal pensions for those who

joined after 1997 (announced in 2007) and the right for retired Gurkhas to settle in Britain (2009).

Nepal's Republic (2008)

For about 240 years, from 1768, Nepal was a kingdom ruled by the Shah dynasty, and by the late 1900s it was known as the world's only officially Hindu kingdom.

The late 1900s and early 2000s brought big changes. Protests in 1990 forced the king to accept multiparty democracy. From 1996 to 2006 a civil war between government forces and Maoist rebels killed more than 17,000 people. After mass protests in 2006 and a peace deal, Nepal held elections for a Constituent Assembly, a special body chosen to write a new constitution, on 10 April 2008.

Nepal's Republic (2008) refers to the moment Nepal ended its monarchy and became a republic: at its very first meeting, on 28 May 2008, the Constituent Assembly voted to declare Nepal a federal democratic republic. The last king, Gyanendra, left the royal palace in Kathmandu in June 2008, and it became a museum. Nepal also became officially secular, with no state religion. Writing the constitution took years, and it finally came into effect on 20 September 2015. It made Nepal a federal republic divided into seven provinces, each with its own government.

Nepal's politics have kept changing. In September 2025, large youth-led protests, often called the "Gen Z" protests, broke out against corruption, after the government banned many social media platforms. The protests turned deadly, and Prime Minister K. P. Sharma Oli resigned on 9 September 2025. Sushila Karki, a former chief justice, became interim prime minister. In an early election on 5 March 2026, the Rastriya Swatantra Party won 182 of the 275 seats in the House of Representatives, and Balendra (Balen) Shah, a

former mayor of Kathmandu, was sworn in as prime minister on 27 March 2026. (Leaders change; check the news for the latest.)

Nepal's economy depends heavily on farming, tourism and money sent home by Nepalis working abroad. In 2025 these remittances equaled about 32% of Nepal's GDP (World Bank), one of the highest shares anywhere. You'll see more in [Chapter 21](#).

20.4 Bhutan: The Thunder Dragon Kingdom

Bhutan is a small, mountainous kingdom of about 800,000 people (2025, World Bank) in the eastern Himalaya, between India and China's Tibet region. Its capital is Thimphu. Bhutanese call their country Druk Yul, often translated "Land of the Thunder Dragon," and the thunder dragon appears on the national flag. The name comes from the Drukpa lineage, the school of Buddhism that has been central to the country's history.

Bhutan's land is almost all steep. Rivers cut deep valleys running north to south, from snowy peaks over 7,000 m down to humid foothills near India. Its highest mountain, Gangkhar Puensum (7,570 m), is the highest mountain in the world that no one has ever climbed. Bhutan banned climbing peaks over 6,000 m in 1994 out of respect for local spiritual beliefs about the mountains, and has banned mountaineering altogether since 2003.

Thimphu sits in a valley between about 2,250 and 2,650 m above sea level, making it one of the highest capital cities in the world. It became the official capital in 1961, replacing the older capital, Punakha.

Most Bhutanese follow Vajrayana Buddhism, the same broad tradition as Tibet, and monks, prayer flags and painted temples are part of everyday life. A large minority, mostly in the south, is Hindu, many of them Nepali-speaking people called Lhotshampa ("southern borderlanders"). Bhutan's Constitution

says at least 60% of the country must stay under forest cover "for all time," one of the strongest environmental rules in any constitution.

A kingdom that chose democracy

Bhutan's first hereditary king, Ugyen Wangchuck, was enthroned in 1907 at Punakha, and his family, the Wangchuck dynasty, still reigns. In 1910 Bhutan signed the Treaty of Punakha, agreeing to let Britain guide its foreign relations. In 1949 it signed a Treaty of Friendship with independent India. The two countries promised not to interfere in each other's internal affairs, and Bhutan agreed to be guided by India's advice on foreign relations, a clause the two countries replaced when they revised the treaty in 2007.

The fourth king, Jigme Singye Wangchuck, who ruled from 1972 to 2006, did something unusual: he pushed his own country toward democracy, even though many Bhutanese were happy with the monarchy. He stepped down in 2006 in favor of his son, Jigme Khesar Namgyel Wangchuck, the fifth king. In 2008 Bhutan held its first elections for the National Assembly (on 24 March 2008) and adopted a written constitution. Bhutan became a constitutional monarchy: the king is head of state, and an elected prime minister and parliament run the government.

Dzongkha

Dzongkha (ཇོང་ཁ, *DZONG-kaa*) is the national language of Bhutan. It belongs to the Tibetic group of languages and is written in the Tibetan script. Its name means "the language of the fortress," from *dzong*, "fortress," and *kha*, "language," because it was the language spoken by officials in the dzongs of western Bhutan.

Dzongkha is far from the only language in Bhutan, which has about two dozen. Many people in the east speak Tshangla, and many in the south speak Nepali. English has no official status but is widely used in schools,

government and media, so many young Bhutanese grow up speaking several languages. That might sound familiar if you're Zara, who understands Bangla at home but answers in English.

Dzong

A **dzong** (ཇོང, *DZONG*) is a large fortress-monastery found mainly in Bhutan (and historically in Tibet) that is both the religious center and the government office for a district. Picture high white walls that slope inward, with few windows near the bottom, a red-brown stripe near the top, and golden roofs over temples inside the courtyards. Inside, the building is split roughly in half: one side holds monks and temples, and the other holds government offices.

The split is on purpose. In Bhutanese tradition, religious authority and civil government work side by side, and the dzong puts both under one roof. One of the most famous, Punakha Dzong, was built in 1637 to 1638 where two rivers, the Pho Chhu and Mo Chhu (the "male" and "female" rivers), meet. Many dzongs host a *tshechu*, a festival of *cham* dances, many of them masked, performed by monks and lay dancers, which draws families from across the district. Bhutan's districts are still called *dzongkhag*, "dzong areas," and there are 20 of them.

Gross National Happiness

Gross National Happiness (GNH) is Bhutan's idea that a country should measure its progress by the well-being of its people and environment, not only by how much money its economy makes. The fourth king, Jigme Singye Wangchuck, is credited with the phrase in the 1970s, when he said GNH mattered more than gross domestic product (GDP), the usual measure of a country's economy.

Bhutan built the idea into its 2008 Constitution, which says the state shall try to promote the conditions that let people pursue Gross National Happiness. In practice GNH rests on four "pillars": fair and sustainable development, protecting the environment, preserving culture and good government. Bhutan's Centre for Bhutan Studies (now the Centre for Bhutan and GNH Studies) developed a GNH Index, working with researchers at Oxford University, which surveys thousands of people on nine areas of life: psychological well-being, health, education, time use, cultural diversity, good government, community life, ecology and living standards.

In the 2022 GNH Index, released in May 2023, Bhutan scored 0.781 on a scale from 0 to 1, up from 0.756 in 2015. The survey sorted people into four groups: 9.5% "deeply happy," 38.6% "extensively happy," 45.5% "narrowly happy" and 6.4% "unhappy." So about 48% were deeply or extensively happy, and some areas, such as cultural participation, got worse after 2015.

Happiness is a goal, not a fact



Don't read "Gross National Happiness" as "everyone in Bhutan is happy." It's a policy goal and a way of measuring. Bhutan's own survey found many people only narrowly happy, and some areas of life getting worse.

Whose Story?

Bhutan's story is often told abroad as a peaceful Himalayan kingdom that put happiness first, and many Bhutanese are proud of GNH and of their peaceful move to democracy. But Nepali-speaking Lhotshampa families from southern Bhutan often tell a different story about the late 1980s and 1990s, when citizenship and dress rules tightened and more than 100,000 people left or were forced out. Bhutan's government at the time said many of them were illegal immigrants, while refugees and human rights groups described expulsions and loss of citizenship. About 108,000 refugees lived in seven camps in eastern Nepal, and starting in 2007 more than 100,000 were resettled abroad, about 85,000 of them in the United States by 2015. Some of their children may sit in your classes today, and their families may tell this history very differently from a travel brochure.

20.5 The Maldives: A Nation of Atolls

Maldives (officially the Republic of Maldives, usually called "the Maldives") is an island country of about 530,000 people (2025, World Bank) in the Indian Ocean, southwest of India and Sri Lanka, made up of roughly 1,190 small coral islands. It is the smallest South Asian country by population and land area: all its land together is only about 298 square km. But that land is scattered across about 90,000 square km of ocean, so it's one of the most spread-out countries in the world.

Atolls

The islands are grouped into 26 **atolls**. An **atoll** is a ring of coral reef and small low islands surrounding a shallow lagoon. The word itself is South Asian: English borrowed "atoll" from the Dhivehi word *އަތޮލު*, *atholhu* (A-tho-lu).

It traveled through French in the 1600s, and Charles Darwin made it the scientific term in the 1840s.

How does an atoll form? Darwin's explanation, still the basic model today, goes like this:

1. A volcano rises from the sea floor and forms an island.
2. Coral grows in a fringing reef around the island's shore, in warm, shallow, sunny water.
3. Over a very long time the volcano stops erupting and slowly sinks, while the coral keeps growing upward toward the light.
4. Eventually the volcano disappears below the surface. What's left is the ring of reef, with sand islands piled on it by waves, around a lagoon where the island used to be.

That's why the Maldives is so flat. Its islands aren't mountaintops; they're coral and sand piled up by the sea. The average ground level is only about 1.5 m above sea level, and the highest natural point is only about 2.4 m (some sources give a higher figure for one spot). That makes the Maldives the lowest-lying country in the world. Mount Everest is about 3,700 times taller than the Maldives' highest natural ground.

Malé

Malé (*MAA-lay*, often written Male in English) is the capital and largest city of the Maldives, built on a tiny island in North Malé Atoll. In the 2022 census about 212,000 people lived in the city of Malé, roughly two in every five people in the country. The main island covers only about 2 square km, yet in the 2014 census it held about 110,000 people, making it one of the most densely packed places on Earth. The rest of the city's people live on nearby islands that belong to the city, such as Hulhumalé. Buildings cover nearly every bit of

the main island, and the city has grown onto neighboring islands, including the airport island and Hulhumalé.

Hulhumalé is an artificial island. Starting in 1997, engineers pumped sand from the sea floor to build new land, a process called land reclamation. It now houses tens of thousands of people, and it was built partly as a response to the threat of rising seas.

Dhivehi

Dhivehi (ދިވެހި, *dhi-VAY-hee*) is the language of the Maldives. Its name means roughly "islanders' language." Dhivehi is an Indo-Aryan language, part of the same big family as Hindi, Bangla and Nepali, and its closest relative is Sinhala, spoken in Sri Lanka ([Chapter 19](#)). Together the two form an "island" branch of the family.

Dhivehi is written in a script called Thaana, which is written from right to left, like Arabic. Thaana is unusual: some of its first letters were adapted from numerals, both Arabic numerals and older local ones, and its vowel marks come from Arabic. It's a good example of how trade and faith across the Indian Ocean mixed South Asian and Arab influences.

Faith, history and life on the islands

Buddhism was the main faith in the Maldives for centuries. Arab and Persian traders crossing the Indian Ocean brought Islam, and by tradition the last Buddhist king converted in 1153. The monarchy lasted more than 800 years in all. In 1887 an agreement recorded the Maldives as a British protectorate, and it gained full independence on 26 July 1965, a date Maldivians celebrate as Independence Day. The sultanate ended and a republic was declared on 11 November 1968. Today the Maldives' constitution makes Islam the state religion and says a non-Muslim may not become a citizen; nearly all

Maldivians are Sunni Muslims, and Eid al-Fitr and Eid al-Adha are major national holidays.

Life follows the sea. For centuries Maldivians were known as skilled sailors and fishers, and tuna, especially skipjack tuna, is still the most important catch. Fishing remains the second-largest part of the economy; tourism, which began in the early 1970s, is now the largest. Many resorts take up a whole island each, while most Maldivians live on separate "local islands" with their own mosques, schools, football fields and harbors. That gap means many visitors see only resorts and never meet the 500,000 or so people who live there.

Sea-Level Rise

Sea-Level Rise is the gradual increase in the average height of the ocean, caused mainly by warming seawater expanding and by melting glaciers and ice sheets adding water. It is happening now and speeding up.

The IPCC, the UN's climate science panel, reported these findings in its 2021 assessment:

- Global average sea level rose about 0.20 m between 1901 and 2018.
- The rate has sped up, reaching about 3.7 mm per year between 2006 and 2018.
- By 2100, compared with the years 1995 to 2014, global sea level will likely rise about 0.28 to 0.55 m if the world cuts greenhouse gas emissions very deeply, and about 0.63 to 1.01 m if emissions stay very high.
- Much higher rises, approaching 2 m by 2100, can't be ruled out under very high emissions, although scientists have low confidence in that outcome.

Why does a rise of half a meter or a meter matter so much to the Maldives? Think back to that average ground level of about 1.5 m. A higher ocean

doesn't just cover a strip of beach. It lets storm waves and high tides wash farther inland, pushes salt water into the thin layer of fresh groundwater under each island, and erodes shorelines. The IPCC also projects that extreme high-water events that used to happen about once a century will happen at least once a year at more than half of tide-measuring sites by 2100. For a country whose highest ground is lower than a basketball hoop, that is a question about whether whole islands remain livable.

The Maldives has worked hard to get the world to notice. On 17 October 2009, President Mohamed Nasheed and his ministers held the world's first underwater cabinet meeting, in scuba gear, to draw attention to the threat. The country has also built new land, such as Hulhumalé, with rising seas in mind.

Same planet, different worries



Here's a neat way to remember this chapter: warming is one cause with two faces in South Asia. Up high in Nepal and Bhutan, it melts glaciers; down low in the Maldives, that meltwater and warmer oceans help raise the sea.

20.6 Mountains to Atolls: Comparing the Three

Now put the three countries side by side and ask the question from the hook: how does altitude, or the lack of it, shape life?

Question	Nepal	Bhutan	Maldives
Where do most people live?	Terai plains and hill valleys	River valleys in the mountains	A few crowded islands, especially Malé
How do people travel?	Roads, footpaths and small airstrips; mountain roads can close in the monsoon	Winding mountain roads; one main international airport at Paro	Boats and seaplanes between islands
What does the land give?	Rice and wheat on the plains, terraced farms in the hills, rivers for hydropower	Forests, hydropower, mountain farming	Fish (especially tuna), coconuts, coral reefs that draw tourists
Biggest climate worry	Glacier melt, floods and landslides	Glacier melt, floods and landslides	Sea-level rise, storm waves, saltwater in groundwater
Big money-maker	Remittances, tourism, farming	Hydropower, tourism	Tourism, fishing
How faith shapes the landscape	Hindu temples and Buddhist stupas side by side	Dzongs, monasteries and prayer flags	Mosques on every inhabited island

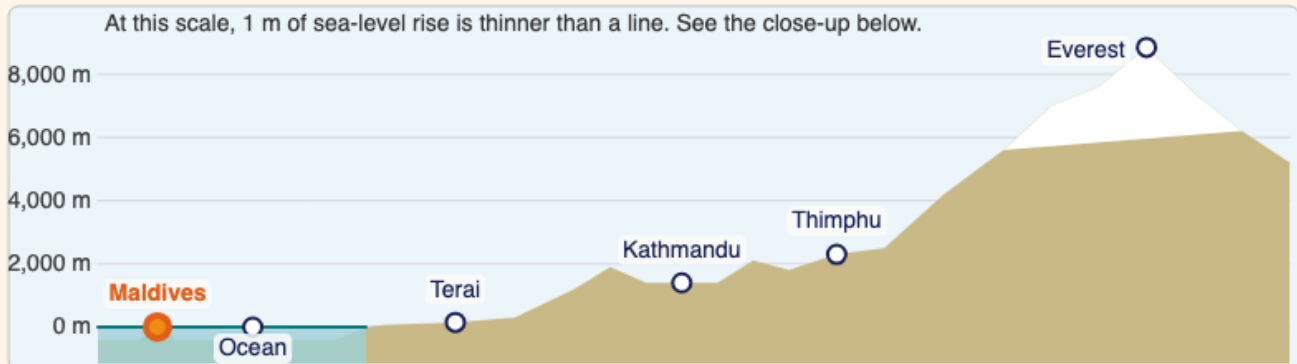
Some patterns stand out. In the mountain countries, steep land makes farming and travel hard, but fast rivers are good for hydropower and the peaks draw visitors. The atoll country has almost no farmland, but its ocean is full of fish and reefs. In all three, many young people leave home to study or work, and climate change threatens land that families have lived with for generations.

Back at the club meeting, Ben sketches a line on the whiteboard that starts flat at the bottom left and shoots up on the right. Zara adds a wavy blue line along the bottom. "If the ocean goes up a little, Kathmandu won't notice," she says. "Down here, it matters a lot." Ben nods. "One region, two totally different problems."

Diagram: Mountains to Atolls

Mountains to Atolls

Tap a place to read about it. Raise the sea and compare the two panels.



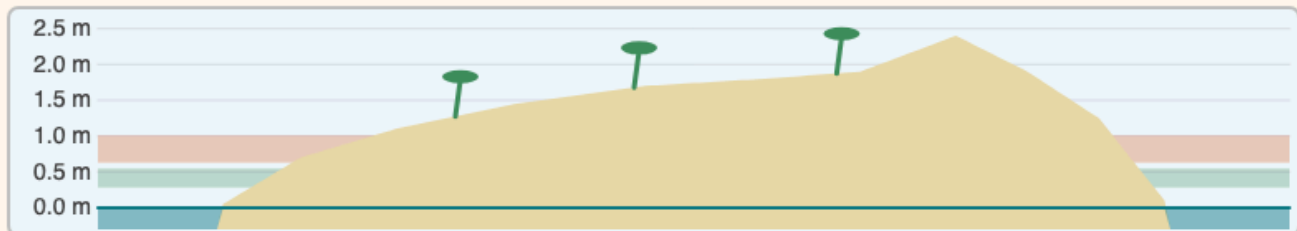
Maldives atoll • Maldives

Elevation: about 1.5 m on average; highest natural point about 2.4 m

Low coral islands in 26 atolls. Fishing, tourism and life on the water. Biggest worry: sea-level rise.

Close-up: a sample atoll island (schematic)

Green band: IPCC likely rise by 2100 with very low emissions (0.28-0.55 m). Orange band: with very high emissions (0.63-1.01 m).



Sea +0.00 m: about 0% of this sample island's width is below the new sea level.

Schematic map, not to scale. Not an official depiction of borders.

Sea-level rise: 0.00 m

☒ Show IPCC 2100 ranges

[Back to Mountains to Atolls Lesson Plan](#)

Interactive simulation: <https://aaryavvatts-lab.github.io/south-asian-culture-textbook/sims/ch20-mountains-to-atolls/main.html>

[Open the Mountains to Atolls fullscreen](#)

MicroSim specification: Mountains to Atolls

sim-id: ch20-mountains-to-atolls

Library: p5.js

Status: Implemented

Bloom Level: Analyze

Bloom Verb: compare

Learning Objective: The learner will compare how altitude and sea level shape life in Nepal, Bhutan and the Maldives by reading a schematic elevation profile and testing how much of a low atoll island a given sea-level rise would cover.

Canvas: responsive width; 700 px drawing area plus 90 px control area.

Controls: "Sea-level rise" slider (0 to 2.0 m, step 0.05 m); place menu (Maldives atoll, Indian Ocean, Terai plains, Kathmandu, Thimphu, Mount Everest); "Show IPCC 2100 ranges" checkbox; click or tap a place marker on the profile.

Behavior: A schematic staircase profile runs from a Maldives atoll (highest natural point about 2.4 m) through the Terai, Kathmandu and Thimphu to Everest (8,848.86 m). The sea line there barely moves. A lower close-up floods a schematic sample atoll island (average about 1.5 m) as the slider rises and reports the share below the new sea level, with the IPCC AR6 likely 2100 ranges shaded. The caption "Schematic map, not to scale. Not an official depiction of borders." appears in the drawing area.

Start with the slider at zero and click each marker, from the atoll to Everest, reading each elevation. Then drag the slider to 1 m. Can you even see the sea move on the top panel? Now check the close-up: how much of the sample island is under the new sea level?

Turn on the IPCC ranges and compare the "very low emissions" band with the "very high emissions" band. Notice how much of the sample island stays dry

in each case. The island shape is schematic, built from the Maldives' average height and highest point, so the exact percentage is not a forecast for any real island, but the pattern is real: a rise you can't even see from Kathmandu can decide the future of a low island.

Ask Your Elders

Your interview for this chapter

Talk with a parent, grandparent, aunt, uncle, family friend or community elder about mountains, islands and the landscapes of home. If your family is Nepali, Bhutanese or Maldivian, ask about the land and festivals they grew up with; if not, ask what they know or remember about mountain or island life anywhere. If you don't have a South Asian elder to ask, interview a club advisor, a local temple, mosque, gurdwara or cultural center volunteer, or a classmate's family (with permission). Ten minutes is enough.

Before you start: Bring a photo of mountains or an island (from a family album or from this chapter) to get the conversation going, and ask if it's okay to take notes.

Questions to ask

1. What did the land around your childhood home look like: mountains, hills, plains, rivers or sea?
2. How did people get around: walking trails, roads, buses, boats? How long did it take to reach the nearest big town?
3. Which festival did your family look forward to most, and what did it look, smell and sound like? (For example Dashain or Tihar in Nepal, a tshechu in Bhutan, or Eid in the Maldives.)

4. Did anyone in your family or village work far from home, in another city or country, and send money back? How did that change things?
5. How has the weather, the snow, the rivers or the sea changed since you were young, or since you moved?
6. What do you hope I'll know or feel about that landscape, even if I've never been there?

Listen for: details that connect to the Kathmandu Valley, Mount Everest or the Sherpa People; descriptions of a Dzong, a monastery or a mosque at the center of community life; and any memories of glaciers, floods or Sea-Level Rise.

Save it: Write down one quote or story in their words, with their permission. If they agree, you can share it with the [Roots & Rivers Story Archive](#).

? Your turn: compare two answers



Compare your elder's description of the landscape they grew up in with the comparison table in Section 20.6. Did they live on a "high" step or a "low" step of the staircase? If a friend interviewed someone from a very different landscape, list two ways altitude or water changed daily life in their two stories.

"Every family does it a little differently, and there is no wrong answer here."

Common Misconceptions

Myth: "Sherpa" means a porter or mountain guide.

Reality: The Sherpa people are an ethnic group of the Himalaya, mostly in eastern Nepal, with their own language, Buddhist traditions and history. Many

Sherpas have worked as climbing guides, but many have not, and many climbing workers on Everest come from other ethnic groups.

Myth: Gross National Happiness means everyone in Bhutan is happy.

Reality: GNH is a policy goal and a way of measuring well-being. In Bhutan's own 2022 GNH Index, 6.4% of people were classed as unhappy and 45.5% as only "narrowly happy," and the survey found some areas of life, such as cultural participation, getting worse.

Myth: The Maldives is basically just a resort.

Reality: The Maldives is a country of about 530,000 people (2025, World Bank) with its own language (Dhivehi), script (Thaana), Islamic faith, history of sultans and a capital city, Malé, that is one of the most crowded cities on Earth. Most Maldivians live on local islands, not resorts.

Myth: Nepal was a British colony, like India.

Reality: Nepal was never formally colonized. It lost land to the East India Company in the 1816 Treaty of Sugauli and had close ties with Britain, but it kept its own kings and government. Bhutan was also never colonized, though it let Britain guide its foreign relations after 1910.

Check Yourself

? 1. What is the difference between the Kathmandu Valley and the country of Nepal? ✓

The Kathmandu Valley is a valley in central Nepal, about 1,400 m high, holding Kathmandu, Patan and Bhaktapur. Before the 1700s the word "Nepal" meant just this valley; today Nepal is the whole country, from the Terai plains to the Himalaya.

? 2. What happened in Nepal on 28 May 2008? ✓

At its first meeting, Nepal's newly elected Constituent Assembly voted to end the monarchy and declare Nepal a federal democratic republic.

? 3. What does the name Dzongkha mean, and how does it connect to dzongs? ✓

Dzongkha means "language of the fortress." A dzong is a fortress-monastery that serves as both a religious center and a district government office, and Dzongkha was the language spoken by officials there.

? 4. How does an atoll form, according to Darwin's model? ✓

Coral grows around a volcanic island. The volcano slowly sinks while the coral keeps growing upward, until only a ring of reef and low sand islands remains around a lagoon.

? 5. Why does a sea-level rise of about 1 m matter much more to the Maldives than to Nepal? ✓

The Maldives' average ground level is only about 1.5 m and its highest natural point about 2.4 m, so a 1 m rise would bring floods, storm waves and salt water to much of the land. Nepal's lowest land is about 59 m above sea level, so the ocean's rise doesn't reach it directly.

Exercises

Remember

1. Name the capitals of Nepal, Bhutan and the Maldives, and the main language of each.

 Answer

Nepal: Kathmandu, Nepali. Bhutan: Thimphu, Dzongkha. Maldives: Malé, Dhivehi.

2. Who were the first two people confirmed to reach the summit of Mount Everest, and when?

 Answer

Tenzing Norgay, a Sherpa mountaineer, and Edmund Hillary of New Zealand, on 29 May 1953.

Understand

1. Explain why "Sherpa" and "porter" are not the same thing.

 Answer

Sherpa is the name of an ethnic group from the Himalaya with its own language and Buddhist traditions. Porter is a job. Some Sherpas work as porters or guides, but many don't, and many porters belong to other ethnic groups.

2. Explain in your own words what Gross National Happiness is and how Bhutan measures it.

Answer

GNH is Bhutan's idea that progress should be measured by people's well-being and the environment, not just the economy. Bhutan measures it with a GNH Index survey that looks at nine areas of life, such as health, education, time use, community and living standards.

Apply

1. Use the Mountains to Atolls sim. Set the slider to the low end of the IPCC "very high emissions" range (0.63 m) and then the high end (1.01 m). Record how much of the sample island is below the new sea level each time, and write two sentences about what the difference means. *Hint: remember the island is schematic, so focus on the pattern.*
2. A cousin says she's going to "Nepal's Terai" for a wedding. Using this chapter, describe what landscape, elevation and crops she will probably see there. *Hint: look at the three belts in Section 20.3.*

Analyze

1. Compare how Nepal and Bhutan each moved from monarchy toward democracy around 2008. What was similar, and what was different? *Hint: think about who pushed for the change and what happened to the king.*
2. Using the comparison table in Section 20.6, analyze why remittances matter so much to Nepal's economy while hydropower and tourism matter so much to Bhutan's. *Hint: think about land, jobs and rivers.*

Evaluate

1. Some people say Gross National Happiness is a model the whole world should copy. Others say it hides problems. Using evidence from the chapter (including the Whose Story? box), evaluate both views and state your own position. *Hint: a strong answer uses the 2022 survey numbers.*
2. The Maldives held an underwater cabinet meeting in 2009 to draw attention to sea-level rise. Evaluate how effective a dramatic event like that might be compared with other actions, such as building Hulhumalé. *Hint: consider who each action is aimed at.*

Create

1. Design a one-page "staircase" poster for your club that shows Nepal, Bhutan and the Maldives on a single elevation line, with one fact about faith, one about language and one about climate for each country. Use a schematic drawing with no official borders. *Hint: label elevations in meters with their sources.*
2. Write a short diary entry (150 to 200 words) from a fictional teenager in Malé or Kathmandu during a major festival (Eid in Malé, or Dashain or Tihar in Kathmandu). Include at least two concept words from this chapter. *Hint: use your senses: sounds, smells, colors, weather.*

Key Takeaways

- Nepal, Bhutan and the Maldives sit at the two extremes of South Asia's "staircase": Nepal holds Mount Everest (8,848.86 m), while the Maldives' highest natural ground is only about 2.4 m.
- Nepal runs from the Terai plains through the hills of the Kathmandu Valley to the Himalaya, and holds Lumbini, honored as the Buddha's birthplace.

- The Sherpa are an ethnic group, not a job title; the Gurkhas, soldiers from Nepal's hills, have served Britain since 1815.
- Nepal ended its monarchy and became a republic on 28 May 2008; after youth-led protests in 2025 and an early election in March 2026, Balendra Shah became prime minister.
- Bhutan became a constitutional monarchy with its first elections in 2008. Its national language is Dzongkha, its fortress-monasteries are called dzongs, and its constitution makes Gross National Happiness a goal of the state.
- The Maldives is a nation of about 1,190 low coral islands in 26 atolls, with Dhivehi as its language and Malé as its crowded capital; "atoll" is a Dhivehi word.
- Climate change touches all three: glaciers are retreating in the mountains, and the IPCC projects a likely global sea-level rise of about 0.28 to 1.01 m by 2100, a serious threat to the Maldives.

From the summit to the sea!



You've now toured all eight countries of South Asia, from the highest peak to the lowest islands. Next, in Chapter 21, we follow South Asians as they move around the world, to the Caribbean, East Africa, Britain, the Gulf and right here to Minnesota.

Quiz: Nepal, Bhutan, and the Maldives

Test your understanding of Chapter 20. Choose the best answer, then click **Show Answer** to check.

Question 1

On what date did Nepal's Constituent Assembly vote to end the monarchy and declare a republic?

- A. 15 August 1947
- B. 28 May 2008
- C. 20 September 2015
- D. 5 March 2026

? Show Answer



The correct answer is **B**. At its first meeting on 28 May 2008, the newly elected Constituent Assembly declared Nepal a federal democratic republic. The date 20 September 2015 is when Nepal's new constitution came into effect, years after the monarchy had already ended.

Concept Tested: Nepal's Republic (2008) **Bloom's Level:** Remember

Question 2

What does the Dzongkha word that gives Dzongkha its name, *dzong*, refer to?

- A. A Buddhist prayer wheel
- B. A mountain pass
- C. A masked dance festival
- D. A fortress-monastery that also serves as a government office

 Show Answer



The correct answer is **D**. A dzong is a fortress-monastery in which roughly half the building holds monks and temples and half holds government offices. Dzongkha means "language of the fortress." A masked dance festival held at a dzong is a tshechu, not a dzong itself.

Concept Tested: Dzong **Bloom's Level:** Remember

Question 3

The English word "atoll" was borrowed from which language?

- A. Dhivehi
- B. Arabic
- C. Sinhala
- D. Portuguese

 Show Answer

The correct answer is **A**. "Atoll" comes from the Dhivehi word *atholhu*, the language of the Maldives. It reached English through French in the 1600s. Sinhala is Dhivehi's closest relative, which makes it a tempting choice, but the word itself is Maldivian.

Concept Tested: Atolls **Bloom's Level:** Remember

Question 4

Why is it inaccurate to use "Sherpa" to mean any mountain porter?

- A. Because Sherpas are only found in Bhutan, not Nepal
- B. Because Sherpas are not allowed to work on Everest expeditions
- C. Because Sherpa is an ethnic group with its own language and traditions, and many climbing workers come from other groups
- D. Because the word Sherpa means "porter" only in Tibetan, not in Nepali

 Show Answer

The correct answer is **C**. The Sherpa people are an ethnic group of the Himalaya, mostly in eastern Nepal. Their name means "people from the east." Many Sherpas have worked as guides, but many have not, and many climbing workers belong to other groups. The name does not mean "porter" in any language.

Concept Tested: Sherpa People **Bloom's Level:** Understand

Question 5

Which statement best describes Gross National Happiness?

- A. A finding that every person in Bhutan is happy
- B. A goal and measuring system that looks at well-being and the environment, not just the economy
- C. Bhutan's name for its national currency
- D. A ranking that shows Bhutan is the happiest country on Earth

 **Show Answer**



The correct answer is **B**. GNH is Bhutan's policy goal and index for measuring well-being across nine areas of life. It does not claim everyone is happy: in the 2022 GNH Index, 6.4% of people were classed as unhappy and 45.5% as only narrowly happy.

Concept Tested: Gross National Happiness **Bloom's Level:** Understand

Question 6

Why is the Maldives so flat?

- A. Its islands are coral reef and sand piled up by waves around lagoons, not the tops of mountains
- B. Glaciers scraped the islands flat during the last ice age
- C. Engineers leveled all the islands to build resorts
- D. The islands are the remains of a flat river delta

 Show Answer

The correct answer is **A**. Maldivian islands sit on atolls: rings of coral reef that grew upward as old volcanoes sank, with sand islands built on top by waves. That is why average ground is only about 1.5 m. Some land, such as Hulhumalé, was reclaimed by engineers, but that is not why the whole country is flat.

Concept Tested: Atolls **Bloom's Level:** Understand

Question 7

Ben says, "Nepal must have been a British colony, since India was." Which response is most accurate?

- A. He's right; Nepal was ruled directly by Britain until 1947.
- B. He's right; Nepal became independent in 1965.
- C. He's wrong; Nepal was part of the Mughal Empire until 2008.
- D. He's wrong; Nepal kept its own rulers, though it lost land to the East India Company under the 1816 Treaty of Sugauli.

 Show Answer

The correct answer is **D**. Nepal was never formally colonized, though the 1816 Treaty of Sugauli cost it territory and tied it closely to Britain. The British also began recruiting Gurkhas then. The year 1965 is the Maldives' independence date, not Nepal's.

Concept Tested: Nepal **Bloom's Level:** Apply

Question 8

A Maldivian island's ground is about 1.5 m above sea level. Using the IPCC's 2021 likely range for very high emissions, roughly how high could global sea level rise by 2100?

- A. About 0.02 to 0.05 m
- B. About 5 to 10 m
- C. About 0.63 to 1.01 m
- D. About 8.8 m

? Show Answer



The correct answer is **C**. The IPCC's likely range under very high emissions is about 0.63 to 1.01 m by 2100, relative to the years 1995 to 2014. On an island averaging about 1.5 m, that would bring much more flooding from tides and storm waves. The 5 to 10 m figure describes sea levels about 125,000 years ago, not 2100.

Concept Tested: Sea-Level Rise **Bloom's Level:** Apply

Question 9

Compare Nepal's and Bhutan's moves away from absolute monarchy in 2008. Which statement is accurate?

- A. Nepal abolished its monarchy and became a republic, while Bhutan kept its king as head of state in a new constitutional monarchy.
- B. Both countries abolished their monarchies and became republics.
- C. Bhutan abolished its monarchy, while Nepal kept its king.
- D. Neither country held elections in 2008.

 Show Answer

The correct answer is **A**. Nepal's Constituent Assembly ended the monarchy on 28 May 2008. Bhutan held its first National Assembly elections on 24 March 2008 and adopted a constitution, but its king remains head of state. Both countries changed systems in 2008, which is why choice B is a tempting mistake.

Concept Tested: Bhutan **Bloom's Level:** Analyze

Question 10

In the Mountains to Atolls sim, a 1 m sea-level rise moves the sea line on the mountain panel by less than one pixel but floods a large part of the sample island. What does this show?

- A. Sea-level rise only matters in Nepal.
- B. The sim has a mistake in its scale.
- C. Mount Everest is getting shorter as the sea rises.
- D. The same rise that is tiny compared with mountain heights is large compared with the height of atoll islands.

 Show Answer

The correct answer is **D**. On a scale built for Everest (8,848.86 m), 1 m is too small to see, but the Maldives' highest natural ground is only about 2.4 m, so 1 m is a big share of it. The scale is correct. The two panels use very different vertical scales on purpose.

Concept Tested: Maldives **Bloom's Level:** Analyze