



# The People's Pandemic

How the Himalayan Kingdom of Bhutan staged  
a world-class response to COVID-19



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Cover: The shape of Bhutan, formed by a collage of photographs taken during the COVID-19 pandemic.





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# The People's Pandemic



## CHAPTER 1

# Pandemic of a Century

**O**n December 31, 2019, Dechen Wangmo, minister of health for the Himalayan Kingdom of Bhutan, posted on social media a charming portrait of herself and her eight-year-old son, Tenzin, attired in matching silk brocade. “Wishing you and your family beautiful moments, treasured memories and all the blessings. Have a blissful year ahead.” It had been a productive twelve months for her ministry, one in which Wangmo had overseen an ambitious public health agenda that included improving health outcomes for women and children and scaling up a specialty hospital in the capital. But before the year-end celebrations, she phoned a trusted colleague, Dr. Sonam Wangchuk, head of the Royal Centre for Disease Control.

Earlier that day, China had informed the World Health Organization about a cluster of pneumonia cases in Wuhan, a city in the central province of Hubei. Twenty-seven people were afflicted, seven seriously. The infection appeared to be viral, the notice said, but was not obviously passed from person to person. The cause was unknown. Among public health cognoscenti who monitor such cryptic announcements, some wondered if the illnesses could be caused by a pathogen similar to the one behind the 2002–2003 outbreak of Severe Acute Respiratory Syndrome, or SARS, a coronavirus infection that leapt out of China, raced across 29 countries, and killed 774 people before being contained nine months later. The New Year’s Eve notice was disquieting, but it was too early to set off alarms.

Wangmo, however, did not dismiss this news. Both she and the RCDC’s Wangchuk were data-driven pragmatists who brought a deep sense of personal responsibility to their jobs. “We must keep an eye on it,” she told him. She could not have foreseen what lay ahead.

THIS IS THE STORY of a nation’s singular response to one of the great global health crises in modern times—one that by May 1, 2022 would kill some 6.2 million people and infect 514 million, a level of viral devastation that continues to astonish. The COVID-19 pandemic, caused by the novel coronavirus SARS-CoV-2, has sown grief and anger and despair, upended lives and economies, and illuminated institutional failures and individual frailties. In the midst of this catastrophe, as governments around the world faltered, Bhutan charted a unique course that in many ways served as a model—one based on what the plainspoken health minister distilled as “science, solidarity, and leadership from the heart.”

This response was led by an informed and engaged monarch and was carried out by political leaders who also happened to be health professionals. It was supported across Bhutanese society. And it was guided by spiritual principles that would never appear in a public health textbook—and that, in practice, far exceeded standard guidelines.

When the pandemic struck, Bhutan was about to graduate from the United Nations’ Least Developed

Country category. In terms of scientific expertise and health infrastructure, Bhutan likewise enjoyed relatively meager means. Yet the nation managed to parlay the little it had into a formidably efficient campaign against the lethal infection. It was more than a year into the pandemic—in early January 2021—when Bhutan saw its first death (one of only 21, as of May 2022); not until June 2021 did a single health care worker—a pharmacy technician—become infected. From the start, Bhutan's leaders were closely observing pandemic turmoil in other nations and drawing lessons from the resulting confusion and mistakes. Bhutan's action plan was not flawless—no public health crisis response is, especially given the startling dynamics of SARS-CoV-2. Yet the country's undisputed successes exemplify the essentials of pandemic preparedness that all nations—big or small, rich or poor—can learn from.

ON JANUARY 24, 2020, as the outbreak was growing exponentially in China, *The Lancet* published an article based on early clinical reports. It estimated the proportion of people infected with the new and frightening pathogen who would die: about 3 percent (a figure that would, over the course of the pandemic, be revised many times). In the face of this assessment, Bhutan's king, Jigme Khesar Namgyel Wangchuck, asked Dechen Wangmo and two colleagues to model potential cases and mortality for Bhutan. “We stayed up all night, getting the data, analyzing it, and doing projections on hospitalization, critical care, and mortality,” Wangmo said. “After two days, we presented our findings to His Majesty.” Their projection: 41,758 cases, 1,437 hospitalizations, 365 requiring critical care, and 20-30 deaths. Given Bhutan's efficient but relatively bare-bones health system, the numbers seemed inconceivable.

“His Majesty looked at the graph and took a very deep sigh,” Wangmo recalled. “He said, ‘I cannot have this in my country. You have to do everything possible to avert such a disaster. I can't lose a single Bhutanese to this disease. It will break the nation.’”

Wangchuck, the Fifth Druk Gyalpo, or Dragon King, of Bhutan was 40 years old when the pandemic began its relentless spread. Oxford-educated, erudite and serious by nature, and deeply loved by Bhutanese (a worship that may seem alien to those living in Western democracies), he articulated from the start the goals and themes that would direct the country's response. By any public health yardstick these goals were unattainable. Yet they were very nearly achieved—and they inspired the Bhutanese people to toil and sacrifice in ways they could not have imagined. While in many nations ad hoc decision-making and political discord led to public health chaos, Wangchuck's shrewd leadership reinforced the trust people had long invested in him.

Over the next weeks, as the rest of the world was struggling in the early throes of the pandemic, the King set out a remarkable set of precepts: *Strive to prevent any deaths from COVID-19. Prioritize lives over livelihoods. Envision and plan for the worst-case scenario. Overprepare, don't underprepare. Don't worry about the costs. Honor Bhutan's identity of Nation as Family.* These instructions would inform every subsequent policy discussion and decision, every official messaging campaign, every undertaking. In early 2022, as the highly contagious Omicron variant exploded in Bhutan, triggering a seemingly endless series of lockdowns and mass testing, the King's guiding principles would be sorely tested, but they prevailed.

Where did these remarkable precepts come from?

Zero mortality springs directly from Buddhism, Bhutan's official religion, practiced by more than 75 percent of the population. “We consider a human life very precious because we believe in rebirth and the idea that attaining a human life is very difficult,” explained Dr. Mimi Lhamu, a pediatrician at Jigme Dorji Wangchuck National Referral Hospital, in Thimphu, the capital, and chairperson of the National Immunization Technical Advisory Group (NITAG). “We also believe that when you have a human life, you have the potential for

improving your future rebirth and making your destiny.”

“His Majesty was straight and clear that we should save lives, that every Bhutanese life is precious,” said Dr. Tshokey (he has only one name), a clinical microbiologist at the national referral hospital and a key member of the health ministry’s Technical Advisory Group (TAG). “He specifically said that if any Bhutanese succumb to the virus, ‘I will have failed as a king. I will not be able to show my face to my people.’” For Tshokey, the very first COVID-19 death in Bhutan—a 34-year-old man with underlying health problems who passed away a full year into the pandemic, on January 7, 2021—felt like a personal failure. “Having to change the official figure from zero to one—it was so painful.”

In the early days of the crisis, when many nations were trying to strike a balance between protecting public health and protecting their economies, Bhutan entertained no such tradeoffs. “The phrase ‘life over livelihood’ was being pronounced everywhere in the world—it was a rather commonly used phrase. But we meant every letter and every word. We really could not bother about livelihoods—that is, the economy of the country—because we went all out saving lives,” said Prime Minister Dr. Lotay Tshering. “We saw in different news media that millions of lives were lost. Streets were filled with patients. Graveyards filled with dead bodies. Cremation grounds piled with dead bones. Near and dear ones could not meet. Those horrific stories made us realize that we must go all out to save every life.”

The King’s “lives over livelihoods” edict also derives in part from the country’s guiding Gross National Happiness policy, which prioritizes well-being and happiness over conventional socioeconomic indicators of progress. According to Dr. Sithar Dorjee, TAG chairperson and director of the Khesar Gyalpo University of Medical Sciences of Bhutan, “His Majesty especially commanded, ‘Don’t underdo it—overdo it to protect lives. I won’t mind spending all of our reserve funds. The economy will come back, we can earn money later on. But if we lose a loved one, then we are losing a precious human life.’”

These Buddhist ideals infuse the legacy of Bhutan’s monarchs, explained Sonam Kinga, a scholar, author, and former chairperson of the National Council of Bhutan, one of the two houses of Parliament. “This is a modern Buddhist kingship in terms of ideals, a contractual monarchy in terms of origin, and very progressive in terms of governance and performance,” he said. “It is primarily driven by compassion and care. This is not just semantics, this is not just a cliché—it is what Bhutan has been, in fact.”

The King’s pandemic pronouncements illustrated Bhutan’s densely woven social fabric. Anyone who has observed casual interactions, whether on a busy street in Thimphu or a chance encounter on a desolate mountain road, knows that Bhutanese forge social connections, even with strangers, reflexively; as a result, they become tied to other citizens, through family, friends, school, jobs, volunteer work, or happenstance. Bhutan is a two-degrees-of-separation society. In his 2009 National Day address, the King said: “Our country is called a Gross National Happiness country because in happiness, we celebrate together and when we grieve, we grieve together as if we were all members of one family. If there are works to be done, we share equal responsibility in carrying out the work and when we face a problem, together we solve the problem.” Or as Dechen Wangmo put it, “Because we are so small, no single death can be hidden. It will break the morale of the country. Three people die, and the whole nation will be mourning.”

“Nation as Family” is no mere sentiment. When the pandemic struck, some 15,000 Bhutanese resided in 68 countries around the world. In the first two years of the crisis, hundreds of them fell sick. The King included them in every aspect of the government’s response. Initially, the Ministry of Foreign Affairs arranged the return journeys of nearly 8,000 Bhutanese abroad, most of whom stayed in the country through 2020, during the infection’s fierce first wave. When Bhutanese citizens began getting sick in the spring of 2020 in New York City,

an epicenter of infection where hospitals were imploding and ambulance sirens blared day and night, the King issued a directive to rent an apartment as an isolation facility for Bhutanese. The foreign ministry called on Bhutanese health workers in New York to form a dedicated medical team outfitted with top-quality personal protective equipment. This order was replicated in Bhutanese communities around the globe. As of May 2022, no Bhutanese abroad has died of COVID-19.

The Royal Commands also sprang from Bhutan's history. Unlike neighboring Tibet, Sikkim, and Ladakh, Bhutan has never been colonized or absorbed by a larger, more powerful nation, and its monarchs have endeavored to ensure that it remains independent and autonomous. This applied in early 2020 as well. "As the rest of the country, including the government, was preparing for the pandemic from a health point of view, His Majesty saw it in a totally different dimension—from a larger national security perspective," said Sonam Kinga. "We are small, landlocked, surrounded by India and China. The pandemic drove home the fact, which we already knew, that we are very vulnerable. Let me reiterate: We are paranoid about our survival. The threat from the coronavirus was another dimension of the challenges that we have always faced for our security and prosperity. The fact that Bhutan survives today is not a miracle but a result of sacrifices and hard work, despite all the odds stacked against us. It is the Bhutanese DNA."

The King's guidance further took into account the missteps of other nations. "Bhutan's strength is that it has always learnt from the mistakes of its neighbors or the events of world and regional history and avoided repeating them by taking necessary precautions," noted an April 2020 editorial in *The Bhutanese* newspaper. "Our Kings have best exemplified this in contrast to risk averse and pen pushing bureaucrats or leaders around the world." Mimi Lhamu put it more succinctly: "If we had taken the stand, like the U.S. and other countries had taken, that the virus would go away, then I'm 100 percent sure our health system would have collapsed."

AS THE SCIENCE AROUND SARS-CoV-2 shifted in the early months of the pandemic, the King kept abreast of every development. In TAG meetings, "He would throw us questions: 'What is the update on vaccines? Are antivirals in the pipeline? How are other countries doing? Any public health approaches that we can learn from them?'" said Dr. Tshokey. "He talks like a scientist. I know I better be careful when I speak." Added Will Parks, UNICEF's representative in Bhutan, "His Majesty joked, 'We're all pretending to be epidemiologists.' But, in fact, he rapidly became very, very good at epidemiology."

The prime minister filled in this portrait. "When the pandemic hit us in the beginning months, myself being a health professional, I tried educating my King on COVID-19, the virus, what is an infection, how do we control it, surveillance, the use of masks, the qualities of various masks, immune system protection, and vaccines. But then, to my surprise, he started educating me. He read a lot. He sent me questions that I didn't have the answers to. He sent me papers and articles that I had not read. Soon, His Majesty was talking about different kinds of vaccines and viral variants. His Majesty was explaining how a pandemic would slowly go on to endemicity. All that really struck me: his capacity to read, learn, and retain."

The King wasn't satisfied with merely getting updates from the field. During the first year and a half of the pandemic, he spent nearly 80 percent of his time away from the palace—to oversee preparations, gather detailed feedback on the ground, point out weak spots in pandemic defenses, motivate frontliners, and inspire townsfolk and villagers—then quarantining on his return to Thimphu. He traveled by car, on foot, and on horseback, often returning to remote corners of the southern border with India, a coronavirus hotspot, where infection was always poised to slip through.

"Wearing a baseball cap and knee-length traditional Gho robe, carrying a backpack, Bhutan's King has walked

through jungles infested with leeches and snakes, trekked mountains and quarantined several times in a hotel in the capital,” gushed a June 2021 article in India’s *Economic Times*. “In recent weeks, the king walked for five days on a trail passing through elevations up to 4,343 m (14,250 ft) to thank primary health workers in remote areas.”

On the King’s official website, one photo in particular captured the hearts of Bhutanese. Taken on May 14, 2021, it portrayed the monarch eating a modest packed lunch at a security outpost. He is sitting alone on a wooden bench, looking down, subdued and introspective. Beside him stands a makeshift guard tower—fashioned of tree trunks and wooden boards, roofed with corrugated metal. Thick forest surrounds the grassy clearing. Small and off-center in the frame, the King looks both heroic and weary to the bone. It was one of many southern tours, this time as the vicious Delta variant of the coronavirus was flaring in India. Weeks earlier, he had said goodbye to the Queen, his five-year-old boy, and his newborn son. A month later, in June, he was photographed climbing misty crags in the northeast on a 67-kilometer route. With every passing month and every new series of photos, the monarch’s face visibly aged. “When we see him in the news or in any pictures,” said Deki Pem, deputy dean of the Faculty of Nursing and Public Health at Khesar Gyalpo University, “no Bhutanese will say that they don’t feel emotional, that they don’t cry.”

CARRYING OUT THE KING’S PANDEMIC COMMANDS was a close-knit cadre of health professionals in the cabinet. In Bhutan’s 2018 national elections, the victorious Druk Nyamrup Tshogpa (DNT) had run on a progressive platform that in part emphasized the importance of health, spelled out in a manifesto centered on social equity and “narrowing the gap.” The 11-member cabinet included Prime Minister Lotay Tshering, a urologist and surgeon; Minister of Foreign Affairs Tandi Dorji, a pediatrician; Minister of Health Dechen Wangmo (whom we have already met), a global health consultant; and Minister of Finance Namgay Tshering, a former public health program manager. The cabinet’s pandemic triumvirate—Lotay Tshering, Tandi Dorji, and Dechen Wangmo—had been longtime friends and colleagues before assuming their posts. Lotay Tshering and Tandi Dorji were medical school classmates and college hostel roommates in Bangladesh in the 1990s. Years before democracy was introduced in the kingdom (with the first National Assembly elections in 2008), a future in politics was inconceivable to medical professionals. “Never in my wildest dreams,” the foreign minister said with a laugh.

In 2007, the call had come to form political parties. When few Bhutanese citizens stepped forward, the King addressed the JDW National Referral Hospital’s doctors and nurses. “He said, ‘If people like yourselves, the most educated people, don’t join politics, then who will? We need good people,’” recalled Tandi Dorji. “I thought, now is an opportunity for me to make a difference, to be the change that I want to see.” He ran in the 2008 elections, lost, and co-founded the DNT party in 2013, persuading Tshering to join him.

Lotay Tshering was born in a remote southern section of the Thimphu district. Both of his parents were illiterate. Between eighth and ninth grade, he decided to become a monk, having concluded it was the path to a righteous life. “My understanding in those days was that we had to wear the red robe. It was my mother who stopped me, because we had five brothers and one sister, and of the five brothers, two were already monks. My mother thought the house was full of monks. I then thought the next-closest vocation for helping people was the medical profession.”

Leaving his hospital job in 2013, he entered the political arena. (Bhutan law requires civil servants to be apolitical and resign their posts before joining political parties.) After his party lost in the national elections, Tshering was tapped by the King to head the monarch’s Kidu Medical Unit, where he served from 2014 to 2018. As the country’s only urosurgeon, he provided care in every district—including the most secluded villages, where specialty medical treatment was nonexistent—and in so doing touched the lives of nearly every Bhutanese family.

“I traveled to every part of the country—east-west, north-south, big hospital-small hospital. I went around doing endoscopies, performing surgeries, visiting health clinics, leading health awareness programs,” he said. The experience was eye-opening, giving him insights into social disparities in health—the very reason he entered politics in 2013. “I realized that we could not be happy when people didn’t have access to a good health care system. I realized that with a killer disease inside them, people had to walk for days or hitchhike a ride to get to the nearest hospital. Those recollections subconsciously pushed me to politics. Rightly or wrongly, I believed that as a surgeon in a hospital, I could only treat one patient at a time. But if I got a grip on policymaking, I could improve the whole health care system. To sit on this hot seat, to be the head of the government, was never in my plan—it came by default.”

By the 2018 elections, Tshering had earned a reputation as a tireless and compassionate physician. As prime minister, he continued to perform surgeries and do medical rounds on Saturdays, even during the pandemic. As he had told the news agency Agence France-Presse in 2019, “Some people play golf, some do archery, and I like to operate.” During the COVID-19 crisis, he led the nation with calm resolution, out-of-the-box thinking, and a kind of austere humility. When the first lockdown took place in August and September 2020, he slept every night on a narrow window seat in his office. A photo in *The Bhutanese* showed his makeshift bed’s rumpled blankets and an ironing board standing nearby.

Dechen Wangmo had carved out a career as an international public health consultant, working in the United States, India, Nepal, Myanmar, Sri Lanka, and other nations, focusing on health systems, governance, policy, and strategic planning. Born and raised in Thimphu, Wangmo had gone to the U.S. after 12th grade to become a doctor: “But after spending five years in a pre-med course, then interning for various hospitals in Boston, I realized medicine was not my cup of tea.” A stint working in Belize with HIV/AIDS patients—at that time a group deeply stigmatized in Bhutan—pointed her toward her real calling. “I loved this idea of doing advocacy, teaching, building public health systems, primary health care.” Intent on pursuing a master’s degree in public health and, as she said, “testing my destiny,” she applied to only one school: Yale University. MPH in hand, she went on to become founding chairperson of Lhaksam, Bhutan’s HIV-positive network, and to found the Bhutan Cancer Society, a civil society organization. “Early on, when we were discussing politics, the prime minister used to tell me, ‘You’re doing all these things for other countries in the region. Here, you have an opportunity to do something for Bhutan. So please join politics,’” Wangmo said. When Tandi Dorji invited her to run on the DNT ticket in 2018, she mulled the offer for a day and said yes. “I didn’t even know the basics of politics,” she told the website Women for Politics, in 2021. “It was the cause that I was passionate about.”

The pandemic exposed Wangmo’s natural leadership abilities. She was clear, direct, hands-on, frequently out in the field, and steeped in the science. “I want to put on the record that during this pandemic, if it were not for the leadership of the current Lyonpo [the honorific title for “Minister”], I think we would have failed as a ministry,” said the RCDC’s Sonam Wangchuk. “She is quite strategic, analytical. With any decision, she would always say, ‘Get me the data.’ This is how a health ministry should work.”

In public and in private, Wangmo is not afraid to show emotion: “I have a very soft corner for vulnerable populations and causes that are forgotten.” Her colleagues agree. According to program officer Yeshey Pelden, the media focal person at the health ministry, when it was time to write pandemic press releases, “The emotional touches were supplied by Lyonpo Dechen. She said that it’s not just about informing the nation but connecting with the people emotionally.” During a rare interlude of pandemic calm in the fall of 2020, Wangmo took it upon herself to bake more than 400 cupcakes for patients and visitors at JDW National Referral Hospital—appropriating other ministers’ ovens overnight to get the job done by morning.



With a trio of dedicated health professionals at the helm of government, and inspired by an astute King, Bhutan was resource-poor but leadership-rich. As Tandi Dorji put it, “We all had a karmic connection.”

IN HIS CORONATION SPEECH on November 6, 2008, a young King Jigme Khesar Namgyel Wangchuck said: “Throughout my reign I will never rule you as a King. I will protect you as a parent, care for you as a brother and serve you as a son.” It is rhetoric that sounds florid, almost alien, to Western ears. But nearly every Bhutanese can recite those lines—and they did so often during the pandemic. From the start of his reign, Wangchuck had earned the sobriquet “The People’s King.” The image of a monarch united with his people—as a protector and consoler and servant, though also, at times, as a stern parent—was frequently invoked in casual conversation and in the media. The concept of Nation as Family enabled Bhutan to rise to the occasion. This was nowhere more evident than in one of the less touted, but to Westerners perhaps most astounding, health ministry policies: publishing online the personal mobile phone numbers of every pandemic response team leader. In part the executive order was intended to clarify responsibilities and set accountability during the emergency. But it was also meant to support the Bhutanese family through the crisis and make sure that individuals felt cared for.

“I’ve never in my life received so many calls. My phone was never free, not even for one minute,” recalled Sonam Wangda, deputy chief program officer in the ministry’s health care and diagnostic division. “About 100-plus groups I was involved in: the escort group, the security group, the quarantine group, the contact tracing group. Responding to the phone, checking messages, responding to the messages on WhatsApp, Telegram, WeChat, Viber, Messenger, and other social media platforms—that was quite a task.”

“There were times I did not sleep the whole night,” said the national referral hospital’s Dr. Tshokey. “Any unknown numbers, any strange numbers, I made sure I took every call and called back if I missed any calls.” Many of the questions he fielded reflected Bhutan’s traditional way of life. “There was a local outbreak in the east. People are supposed to look after their neighbor’s cow and milk them. A simple farmer called to find out if milking his neighbor’s cow would be any risk to him, because his neighbor had tested positive and was taken to isolation.”

Dechen Wangmo, who ordered the phone number policy, was not exempt. “We often joke that Bhutan is the only country where anybody can pick up their phone and call the prime minister. But on the flip side, people have the assurance that, if things don’t work, they can call the prime minister or the health minister. During the pandemic I have received many calls. During lockdown, people would say, ‘I’ve placed an order for my groceries, but my vegetables are not delivered.’ Or, ‘My son is crying. He wants a Coke. The store is closed. Can Lyonpo facilitate?’ You have moments where you are facilitating a grocery delivery for someone, but the next day, you get a very motherly, emotional call. I remember someone calling me from the east and saying, ‘We see you on TV. You have lost weight. I hope you’re eating well.’ Or they say, ‘Can we get you something? Can we send you something?’”

Wangmo considers such calls a gift—a sign that, even in a pandemic, Bhutanese culture is alive and well. “It’s an emotional connection to your leadership. We can give a hotline number, but who is the hotline number? You can’t put a face to that number. For everybody I know at the professional level, it is inconvenient, because we get calls at very odd hours. But that access is important. That’s always been part of the Bhutanese culture. We entertain these calls because that’s the connection we don’t want to lose—the human connection.”



**King Jigme Khesar Namgyel Wangchuck meets with the staff of Samtse General Hospital in March 2020, as COVID-19 began spreading worldwide. (Photo: Royal Office of Media)**

*"At such a time, we must exhibit the strength that comes out of our smallness, remain united and support one another. During such exceptional circumstances, the government will take the responsibility of alleviating any suffering to the people due to the virus."*

**King Jigme Khesar Namgyel Wangchuck**  
March 22, 2020



**The King eats a simple packed lunch at Tempaling, between Phuentsholing and Samtse, in May 2021. He is sitting in front of a security outpost during one of many inspection visits to the southern border. (Photo: Royal Office of Media)**



## The King's Address to the People of Bhutan on March 22, 2020



Starting tomorrow, our land borders will be sealed. We are compelled to take this drastic measure in light of the COVID-19 pandemic. As you have been made aware through various government bulletins, the virus is spreading, causing immense disruption worldwide, and drawing closer to us each day.

At such a time, the health and safety of the people of Bhutan is of the greatest priority, and as such, we are putting in place every measure necessary to safeguard the people of Bhutan.

Should those of you who are abroad at this time wish to return home, the government will help you. I ask those of you who are studying or working abroad, not to worry.

COVID-19 will cause great disruptions to the global economy, and Bhutan will not be an exception. The economic repercussions will not just impact a select few sectors, but each and every one of us. At such a time, we must exhibit the strength that comes out of our smallness, remain united and support one another. During such exceptional circumstances, the government will take the responsibility of alleviating any suffering to the people due to the virus.



As you know, all schools have been closed as a preventive measure, and children are at home instead of in their classes. We do not know when the situation will improve and schools can be reopened again. Parents must guide their children, and children must take it upon themselves to use this opportunity to continue studying- at your age, education should be your most important concern. Do not waste time.

On the part of the government, there are already plans to make learning materials as widely available to students as possible. Internet providers, television, and even newspapers, have been tasked to bring learning materials to you. Therefore, it is your responsibility to take advantage of the avenues that will be made available to you.

According to experts, the elderly population is at the greatest risk from COVID-19. We must take care of our elderly, protect them, and ensure that their environment is safe and clean.

As a small country with a small population, we can overcome any challenge we are faced with, if the people and the government work together.

It is important, however, to not lose sight of our national objectives, and aim to bring normalcy as soon as possible so that when this pandemic is behind us, we can continue to work on making our future better and stronger. In the meantime, we will continue to work ceaselessly through this challenging situation.





**Prime Minister Dr. Lotay Tshering, in his office at the National Assembly building.** *(Photo: Prime Minister's Office, Bhutan)*

*"We cannot be complacent and let our guard down until we are absolutely sure that all the people of Bhutan are safe from coronavirus."*

**Prime Minister  
Dr. Lotay Tshering**  
March 7, 2020

## CHAPTER 2

# Readiness: A Pandemic Primer

**W**hen COVID-19 erupted at the start of 2020, Bhutan had only 336 physicians for a population of around 760,000—less than half the WHO-recommended ratio of doctors to people—and only 1,364 nurses. There were no infectious disease specialists, virologists, or immunologists, and only one physician was trained in ICU critical care. This small corps of health professionals was spread out over 51 hospitals, 184 primary health centers, and three municipal health centers. In such a thinly resourced health apparatus there was no room for error; the worst-case scenario that the King had repeatedly warned about was forever around the corner. Should cases soar, “We knew from day one that our health system would not be able to cope,” Dechen Wangmo observed.

Dr. Kesang Namgyal was the country’s sole intensive care physician, based at JDW National Referral Hospital, the country’s largest and most advanced medical facility. “We were worried how, if there was a surge of cases, we would deal with it,” he admitted. “We didn’t have enough infrastructure, we didn’t have enough ventilators, we didn’t have enough oxygen supplies, we didn’t have enough drugs.”

What Bhutan did have was a deep-rooted sense of self-sufficiency. “When we started responding to the pandemic, people were asking, ‘Will you require expertise from the outside?’” recalled the Royal Centre for Disease Control’s Sonam Wangchuk. “We said, ‘No, we will handle it.’ They were asking, ‘Do you want lab experts to help?’ I said, ‘No, we should manage it.’ We have not asked for any expertise outside. We managed with whatever we had—and there were only a few of us.” Victor Del Rio Vilas, one of the Bhutan focal persons in WHO’s South-East Asia Regional Office, was impressed that such a tiny, off-the-map nation could field such expertise. “Bhutan had excellent professionals, I must say, with brilliant and superb analytical capabilities.”

Bhutan also banked on a preparedness mindset it had been cultivating for years. In 2009, the health ministry had developed a plan to respond to the H1N1 pandemic flu—a plan that would become the starting point for responding to COVID-19. In 2016, the country had formalized a Health Emergency and Contingency Plan, as well as hospital emergency protocols. For years, the Royal Centre for Disease Control had been conducting surveillance for influenza-like illnesses, collecting weekly reports from sentinel sites across the country. And in 2018 and 2019, WHO had supported efforts to upgrade RCDC’s lab and to run a critical simulation exercise at Paro International Airport.

And so, in early January 2020, long before many other nations found their bearings, Bhutan’s health ministry sprang into action. On January 11, it began drafting its national preparedness and response plan. On January 20, the Bhutan Broadcasting Service, the national station, began TV and radio coverage. On January 21, Dechen Wangmo chaired the first coordination meeting of the health emergency management committee, which would gather daily, to assess the ever-changing pandemic landscape and act accordingly. On January 30, the ministry published the first full version of its national preparedness plan—the same day the WHO deemed the coronavirus

outbreak a Public Health Emergency of International Concern. By early February, Bhutan was plastered with posters on how to prevent infection.

January and February are normally busy tourist months in Bhutan. Between January 1 and February 7, of the 2,890 tourists who visited the country, 629 hailed from China, the pandemic ground zero. On January 15, with the international airport an obvious point of vulnerability, Bhutan began screening passengers for respiratory symptoms and infrared-scanning them for fevers; it also notified incoming passengers about the new coronavirus-caused pneumonia in Wuhan and advised them to visit a health care facility if they felt unwell. On January 22, in coordination with immigration authorities, Ministry of Health staff began collecting local contact addresses of incoming travelers and asking guides to report any concerning signs.

The 18-member Technical Advisory Group, initially just a few experts who met informally over dinner in early January, would play a central role in the response. It provided technical guidance, updated the national outbreak and global pandemic situation, and oversaw allocations of emergency equipment, medicines, and supplies. The TAG also wrote protocols for outbreak investigations, surveillance, and quarantine. Crucially, it reviewed new scientific studies that were being published in journals and pre-prints seemingly by the hour, whether peer-reviewed or not.

Bhutan's public health epidemiologists could be counted on one hand. In a highly unusual move, the TAG bolstered its expertise with five professionals from the animal health and food safety domains. This was made possible by the country's firm grounding since the 1990s in the One Health movement, which recognizes that most new and emerging human infections—not only COVID-19 but also antibiotic-resistant and vectorborne diseases—originate in animals. Because One Health equates the health of people with that of animals, it includes experts from both fields. When COVID-19 broke out, Bhutan's One Health colleagues could map and mobilize their shared resources quickly.

“We veterinarians have more experience in dealing with the management of contagious disease at the population level—having dealt with foot-and-mouth disease, rabies, avian influenza, and bovine spongiform encephalopathy, or mad cow disease—than human health specialists,” said Sithar Dorjee, TAG chairperson and director of Khesar Gyalpo University. Noted Sangay Rinchen, head of the disease prevention and control unit at the National Center for Animal Health, “Almost everyone in the Ministry of Health and the Ministry of Agriculture and Forests knows each other. We had been working together since the 2010 outbreak of highly pathogenic avian influenza in poultry and whenever we have dealt with zoonotic disease outbreaks like rabies and anthrax and brucellosis.” As he elaborated, “The skills that apply in COVID-19 are basically the strategies that we designed for the domestic animal population and for zoonotic disease in wildlife, though in the pandemic, it was more complex, especially taking into consideration the dynamism of human populations.”

Animal health and food safety offices also mobilized their reverse transcriptase-polymerase chain reaction, or RT-PCR, machines, a highly accurate molecular technology to test swab samples collected for SARS-CoV-2. And when the world was scrambling for protective gear for health workers, the animal health corps distributed its ample cache of PPEs and disinfectants—stockpiled in case of a bird flu epidemic—to district hospital isolation wards.

Large countries with sprawling bureaucracies could never have moved so nimbly—or taken such unorthodox steps. As Rinchen put it, “Our smallness has always been our strength.”

WHEN BHUTAN CONFIRMED ITS FIRST case of COVID-19—on March 5, 2020, in an American tourist—the cadence of its response measures intensified. Within days, the King ordered the formation of a National COVID-19 Task Force. By design, it was a small group. Chaired by Prime Minister Lotay Tshering, it was comprised of Dechen

Wangmo, Tandi Dorji, Chief of the Royal Bhutan Army Bato Tshering, and Chief of the Royal Bhutan Police Chimi Dorji. Regional and district task forces soon followed. Later, the core decision-making group expanded to include Karma Yonten, head of the office of performance management in the King's Secretariat, and Sonam Tobgay, chairperson of the Southern COVID-19 Task Force and the nation's Chief Election Commissioner.

On March 8, the health ministry formed its COVID-19 media team, which would communicate daily with Bhutanese citizens via press briefings, news releases, and social media. Unlike other nations, "We effectively controlled the narrative," said foreign minister Tandi Dorji, who led communications in the early days. "We debunked all the rumors that were on social media. We had one common point of the source of truth: the Prime Minister's Office page, which continues to be the main source of information, and the Ministry of Health's website. Very quickly, we managed to get the confidence of the people." When misinformation and disinformation proliferated on social media—ranging from advice that drinking alcohol and eating garlic could prevent infection to ghastly clips from the movie *Contagion*—the health ministry was armed with the facts.

On March 11, by which time COVID-19 had spread to 114 nations, the World Health Organization officially declared a pandemic. WHO Director-General Dr. Tedros Adhanom Ghebreyesus announced that the agency was "deeply concerned both by the alarming levels of spread and severity and by the alarming levels of inaction," and called on countries to take immediate measures to contain the virus. "We should double down," he pleaded. "We should be more aggressive."

Bhutan had already heeded that advice. Every aspect of life in this highly social culture was curtailed in one way or another. By late March, people were required to maintain physical distance at grocery outlets, vegetable markets, fuel depots, and other public places. All nonessential and leisure travel within the country was restricted. Schools and institutions were closed. Gatherings for religious purposes were discouraged. Social events such as birthday parties or wedding celebrations were disallowed. (The prime minister suggested marking such events instead by lighting a butter lamp.) Movie theatres, snooker rooms, and video parlors were shuttered. Sports such as football and basketball were banned, as were traditional games such as archery and darts. Picnics, a beloved Bhutanese pastime, were prohibited. By April, businesses were required to close by 7 p.m. to limit community transmission. The orange-uniformed volunteers known as De-suups, or Guardians of Peace, who in recent years had heroically responded to natural disasters and other emergencies, helped enforce these new strictures.

The health ministry's mission to persuade people to alter their behavior later became a multimedia campaign called Our Gyenkhu, or "Our Responsibility." The message: Taking individual precautions is tantamount to responding to the call of the King, protecting not only yourself but the nation at large. It was a message that Bhutan's monastic leaders also consistently backed in public announcements and in their own practices, conducting annual religious festivals without the signature, and tourist-magnet, dances and masks.

"By far, Bhutan was the most restrictive country in the region in terms of travelers' control measures," said the WHO's Del Rio Vilas. Starting on March 16, all those entering Bhutan were sent to designated facilities where they would be quarantined for two weeks. Unlike other nations, where COVID-19 patients who were not seriously ill were told to isolate at home, in Bhutan, anyone who tested positive for the infection was cared for in a hospital, whether or not they were symptomatic. On March 31, the government decided to exceed WHO guidance by extending the quarantine period to three weeks. "To decide to make it 21 days took a lot of courage," said TAG member Dr. Tshokey. "But the literature showed that there were cases detected after 21 days of quarantine, 23 days, even a few cases after 28 days. If we had enforced 14-day quarantine, we would have missed one case from every 100 people." His TAG colleague Sangay Rinchen believes the policy saved an untold number of lives. "Had the quarantine period been 14 days," he said, "there would have been one or two leaks—and that



would have done the damage: uncontrolled spread, mortality, and then the breaking down of the health system.”

On March 23, in what came as a shock to many, Bhutan sealed all of its land borders. The previous evening, the King had delivered an impassioned speech to the nation, explaining, “We are compelled to take this drastic measure in light of the COVID-19 pandemic. As you have been made aware through various government bulletins, the virus is spreading, causing immense disruption worldwide, and drawing closer to us each day.” Suddenly, people and vehicles would not be allowed to travel across the border or enter Bhutan except when authorized. At every border post, quarantine facilities equipped with isolation rooms and testing capacity went up.

Bhutanese health officials always knew that the 699-kilometer southern border with India was the country’s Achilles’ heel. Nine of Bhutan’s 20 districts adjoin four states in India, where COVID-19 was advancing in enormous waves. On some stretches of the border, Bhutanese and Indian communities stand barely 10 or 20 meters apart. These settlements share not only economic but close social ties, including by marriage. “My concern was: How do we quickly detect cases?,” said the RCDC’s Sonam Wangchuk. “There was no border. There was no checking people going in and out. If there was infection, it would come silently.” According to Lungten Jamtsho, executive secretary of Phuentsholing City, “In the pre-COVID time, the border between Phuentsholing and its neighboring state, West Bengal, was open. Any Bhutanese could go into India without any documents. Any Indian could come into Phuentsholing without any documents. It was a free-flow kind of thing until the Rinchening Check Point in Phuentsholing was built. On an average, we were getting 40,000 to 50,000 people entering per day—Bhutanese and Indians both.”

For many, the border closure was a startling Royal Command—but one that, in retrospect, seemed brilliant. “As a TAG, we were focused on science. It never clicked with any of us that securing the border was important,” said chairperson Sithar Dorjee. “But had the border not been secured, we would be living with the virus like any other countries in the world, and we would have had high mortality. It is one of the fundamental strategies that enabled us to live with the policy of zero COVID deaths.”

Part of the border closure strategy entailed bringing back the 5,000 Bhutanese who lived in Jaigaon, an Indian town adjoining Phuentsholing. “During pre-COVID times, because of a housing shortage in Phuentsholing and for their own convenience, our people used to live across the border. On March 16, 2020, when the international border was closed, we started bringing back our fellow citizens from India, and the evacuation was completed on March 23,” Jamtsho said. Initially sheltered in schools—where they were provided with mosquito nets to protect them from dengue and malaria in the subtropical climate—they later moved to the Amochhu Temporary Shelter, a housing colony in Phuentsholing specially constructed by the Royal Bhutan Army.

To the King, border security also meant halting the smuggling of narcotics, psychotropics, and tobacco products, activities that had been rampant for years but escalated with the pandemic. Patrols stepped up their efforts and CCTV cameras were installed. Still, the difficult terrain thwarted complete control of the border. As *The Bhutanese* noted in April, “Sometimes the patrol team is unable reach a certain place due to the presence of wildlife, like elephants.” In August 2020, *Kuensel*, the national newspaper, expanded on the challenges: “Hundreds of volunteers are serving along the border areas in heat, rain and insect and animal infested jungles to ensure that there is no illegal border crossing.” Bhutanese are in general remarkably law-abiding. During the pandemic, legal sanctions against misbehavior were notably severe—what other countries might consider draconian. That July, the Thimphu district court convicted a 51-year-old man of breach of public order and tranquility and criminal nuisance, and sentenced him to four years in prison. His crime: sneaking across the border to escape mandatory quarantine.

As an added layer of protection to head off community spread, the King ordered a second border—a kind of internal buffer zone—that would prevent transmission from the highly vulnerable south to the relatively safe

north. All travelers moving south to north had to undergo one-week quarantine and testing. Goods brought in through Phuentsholing—the main southern import point—were handled with elaborate safeguards. All vehicles ferrying goods from one part of the country to another via India were escorted by authorities to ensure that their drivers were complying with safety rules. Goods were unloaded and sanitized in transshipment sites before entering low-risk parts of the country. As the Southern COVID-19 Task Force warned, “A single lapse or breach of the protocol, whether deliberate or inadvertent, could put the entire nation at risk.”

Karma Yonten, of the King's Secretariat, views the border closure and its many economic ripples as “the first test of ‘lives over livelihoods.’” To ease the worries of the tens of thousands left jobless by the pandemic, the government in April 2020 launched the Druk Gyalpo's (the King's) Relief Kidu, to provide monthly subsistence income for people who had lost their means of earning a living and to waive interest on loans; the program was slated to continue through June 2022. Welfare support to the needy is an institution intertwined with Bhutan's monarchy. According to Nim Tshering, a member of the King's Secretariat, “The rationale is that difficulties and challenges come to anyone, often through no fault of their own. As a small country with a small population, where it is conceivable for us to look after each other and care for every person, His Majesty has always maintained that there is no reason why we shouldn't. We were to ensure that not a single person should be rendered homeless, helpless, or destitute because of the pandemic.” In its first 22 months, the King's relief fund sent money to more than 52,000 people and separate monthly child support payments to parents with children below the age of 18. Some 139,000 loan holders received loan deferrals and interest payment assistance.

ALTHOUGH BHUTAN'S FRONTLINE HEALTH WORKERS and medical institutions lacked sophisticated accoutrements, they proved extraordinarily adept at preventing infections. It was an all-hands-on-deck effort. Officials understood from the start that without extensive testing, the true reach of the coronavirus would never be known. First, the health ministry launched a campaign so sweeping that, by the spring, Bhutan boasted one of the highest per capita testing rates in the world. These tests included the highly accurate PCR tests, which amplify viral genomic material collected in a nasal or nasopharyngeal swab; rapid antigen tests, which detect specific viral proteins, with results arriving within a half hour; and tests that screen the blood for antibodies the immune system makes to fight invaders and which may indicate past infections.

Dechen Wangmo touted Bhutan's testing regimen as “the gold standard.” All individuals considered high-risk for COVID-19 received PCR tests. Depending on their symptoms, every patient admitted to the hospital and every attendant was screened with either PCR or antigen tests. Bhutan's considerable “mobile population”—businessmen, taxi drivers, travelers, and others—were required to be antigen tested every two weeks, as were all frontliners. Travelers moving from high-risk to low-risk areas were quarantined for seven days and tested. Drivers plying the main highways were randomly tested.

Health workers took swab samples of all primary contacts of positive cases—even those showing no symptoms, another protocol that exceeded WHO guidelines. People in quarantine facilities were repeatedly tested. To gauge the extent of silent transmission during dangerous surges of the virus and to ferret out cases, whole communities were PCR-screened. This all-out surveillance was made possible by the timely acquisition of tests when the pandemic first caught fire. “As the rest of the world struggled with shortage of testing kits during the initial months of the pandemic,” *Kuensel* noted in November 2020, “the ministry initiated mass testing wherever and whenever necessary.”

In Bhutan, “containment” was another watchword. When the crisis ignited, “I was quite worried that the infection might go into the inpatient ward,” said Chhimi Lhamo, deputy nursing superintendent and focal person

in infection control at the national referral hospital. In January 2020, hospital management singled out places that could be converted to critical care units and isolation rooms for COVID-19-positive patients. At JDW National Referral Hospital, the empty Mother and Child Health Clinic—old and deteriorating, bitterly cold in the winter, but physically detached from the main hospital campus—fit the bill. In order to transform the decrepit clinic into a COVID-19 isolation ward, workers did maintenance and installed a battery of medical devices. (WHO donated 12 wall-mounted electric heaters to make the facility more bearable.) Just after the first case was detected in early March, the health ministry also opened standalone clinics for daily COVID-19 and flu testing.

With waves of health workers dying around the world, Bhutan instituted strong infection-control protocols so that medical facilities did not become hubs of infection. Outpatient and inpatient departments deployed teams of doctors, nurses, x-ray technicians, sweepers, and others to work in completely self-contained units, never mixing with others. Teams tending to confirmed cases stayed in designated hotels during their deployment in the isolation wards. “Our biggest aspiration was striving for zero COVID infections among our health workers,” said Dechen Wangmo. Even the prime minister, arriving at the national referral hospital to perform his Saturday surgeries, was required to get a nasal swab—and posed for the news cameras doing so, tipping his head back and stoically submitting to the discomfort of specimen collection.

To Bhutan’s credit, not until 18 months into the pandemic did a health worker there become infected. In part, this may have reflected the attention given to adequate and proper donning and doffing of protective gear. As the medical university’s Deki Pem recalled, she and her colleagues had learned from textbooks during their training how to dress in PPE—but they had never actually seen or worked with the specialized garments and masks and face shields. Pem and her team pored over WHO guidelines and YouTube videos to pick up the fine points, and shot photos of one of their own nurses going through the steps. “We truly did it ourselves,” she said. “We came up with a step-by-step photo illustration. Then we made a brochure and a big poster.”

Given its acute shortage of doctors and nurses, Bhutan also had to boost its medical surge capacity. It recalled 48 doctors working abroad and 92 medical students earning their MBBS degrees in Bangladesh, Sri Lanka, and other places. All doctors and nurses got specialized training in managing intensive care units. “Over a period of about five months, we trained about 75 doctors. With the help of my ICU-trained nurses, we trained about 450 nurses,” said the intensivist Kesang Namgyal. “We gave them theory and hands-on practice. We trained them in intubating patients, proning, mechanical ventilation, putting in central lines and arterial lines—everything that needs to be done to manage a critically ill patient.”

Individual case management wasn’t the only concern. In Bhutan, it was distressingly obvious that if every hospital in the country had managed its own COVID-19 patients, the supply of health care workers and scarce PPE would quickly be exhausted. In January 2020, Dr. Tshokey foresaw these problems and proposed a unique scheme he called clustered case management. Only four hospitals in the country would treat COVID-19 patients: the national referral hospital in Thimphu, and three others in the country’s southern, central, and eastern districts. Through this clustering strategy, Bhutan managed not only to efficiently deploy its limited workforce and without staff burnout, but to avert shortages of personal protective gear.

In line with its commitment to primary health care, Bhutan also provided uninterrupted routine services during the pandemic. Patients could depend on emergency care, immunizations, maternal and child health services, chemotherapy, dialysis, mental health care, and treatment of other chronic conditions such as diabetes, hypertension, tuberculosis, and HIV/AIDS. The health ministry designated safe drop-off places for medicines, including contraceptives. Impressively, in the middle of a pandemic, the country achieved 95 percent nationwide coverage of the first dose of HPV vaccine, which prevents cervical cancer in women.

ALMOST IMMEDIATELY AFTER THE FIRST Wuhan cases came to light, Dechen Wangmo tasked her health ministry colleagues with procuring all the supplies they would need by the end of January 2020—a seemingly impossible deadline. Yet by the time Bhutan's first case was identified, the country was well stocked. Normally, the nation orders its medical supplies annually, but when the pandemic hit, the Ministry of Health managed to procure a full year's worth of supplies in advance. "When the whole world had issues with PPEs," Wangmo said, "we didn't." Sonam Wangdi, a national program officer at WHO, observed this lightning-fast frontloading. "The minister was on point. She was quite adamant, pushing people in the system to move faster. She would follow up time and again, making sure that people were on task. All credit to her—things were expedited much faster than they would have been in a normal working process."

It wasn't easy. In January 2020, Bhutan didn't even have a real-time inventory monitoring system. Ugyen Tashi, chief of the ministry's essential medicines and technology division and the national focal person for pandemic logistics and supplies, tracked the entire country's medical inventory using a Google sheet. The numbers gave him pause. "My main worry was that Bhutan is 100 percent dependent on the import of all medical items," he said. "We don't manufacture even a single surgical mask." Responding to the health minister's deadline, he quickly went to work. He obtained PPEs through the Royal Bhutan Embassy in Thailand. Laboratory testing supplies came from South Korea. N95 respirators arrived in the nick of time from India, Thailand, and a fortuitous World Bank procurement. With oxygen supplies a major worry, Tashi procured additional cylinders and, girding for the worst, drew up a national inventory of industrial-purpose oxygen tanks. The ICU ventilators ordered against all odds were ferried on a charter flight from Singapore.

Virus testing reagents were likewise in short supply in January. "I was frantically calling everyone," the health minister recalled. "We were probably the only country in the region where we didn't have a single case of COVID-19, but we were stocking up." Leveraging its long-time collaboration with the Armed Forces Research Institute of Medical Sciences in Bangkok, the RCDC acquired 100 test kits. Another 100 came from the WHO. Only later would larger allotments arrive.

Just after Bhutan's first COVID-19 case was detected in early March, the King directed that additional PCR labs be set up. On March 15, the RCDC's Sonam Wangchuk built a lab in Phuentsholing Hospital overnight. A few days later, in the eastern town of Mongar, he fashioned a similarly sophisticated lab in 24 hours—commandeering, of all things, three rooms in the community's newly constructed traditional medicine hospital. It was surely the only place on earth where SARS-CoV-2 ribonucleic acid was amplified in Biosafety Level 3 conditions by PPE-attired technicians while only meters away, healers in the 17th-century Tibetan Buddhist medical tradition were bloodletting, reading pulses and tongues for clues to the balance of the body's three humors, conducting acupuncture with heated golden needles, and dispatching patients to herbal steam baths.

Concerned about how Bhutan's elderly and vulnerable populations would weather a lockdown, the health ministry quickly drafted a list of the 60,000 people across all 20 districts above the age of 60, and of the 4,800 individuals with underlying medical conditions. The goal was to avoid disrupting their normal medical services—vaccinations, prescription refills—should a lockdown be declared. The King commanded that packages containing vitamins, soaps, and other basic self-care products be delivered to every elderly individual. In recognition of the country's strong religious beliefs, the government also distributed holy water, packed in small plastic bottles, to every resident.

Finally, with a novel pathogen raging, Dechen Wangmo recognized that the ministry would need to dramatically upgrade its data gathering, analytics, and communication systems. Health facilities were sending daily clinical reports via Excel spreadsheets and WeChat and WhatsApp messages. Many rural health centers

lacked computers and Internet access. The ministry itself was initially keeping track of COVID-19 cases on a whiteboard. On March 18, 2020, Wangmo turned to Jigme Tenzin, director of the department of information technology at the Ministry of Information Communications, and to Garab Dorji, the chief information and communication technology (ICT) officer at the Ministry of Health for help. They promptly convened a crack team of IT professionals from across Bhutanese society: civil servants, corporate business analysts, freelance coders, database managers, project heads, and others. The assignment was to create a suite of systems and apps in two weeks. “We had sleepless nights,” Dorji recalled. “If you don’t take time to plan the system out well, then the system becomes not so systematic. It gives a lot of errors and bugs. But we had to deliver.”

Miraculously, the ICT team pulled it off, rolling out several systems for pandemic management. These included the health facility system to test people for flu-like symptoms and to manage quarantine; an entry/exit system to keep track of foreign day workers along the borders; a StayHome app to monitor home-quarantined individuals remotely; and a real-time digital GIS dashboard to replace the low-tech whiteboard that had been used to display COVID-19 statistics.

In April 2020, the ministry launched Druk Trace, a mobile app that enabled users to scan a QR code and register their presence in an office, shop, park, restaurant, hotel, taxi, bus, or any other public places for COVID-19 surveillance. Over time, the computer-shy and technologically untrained workers in Bhutan’s far-flung health clinics became adept in entering clinical data online. In September 2020, the Check Post Management System, manned by the Royal Bhutan Police, was activated to carry out surveillance among inter-district travelers. The ministry also upgraded the national Health Help Center.

Thanks to a pandemic, Bhutan’s health sector took a giant technological leap into the 21st century. Indeed, as the crisis unfolded, nearly every aspect of Bhutan’s civic and cultural and institutional life—tradition-bound, often staid, sometimes even sclerotic—would in some way have to adapt. The disease was the medicine that the country needed to move forward.



**The King visits Phuentsholing early in the pandemic.** (Photo: Royal Office of Media)



**Minister of Health Dechen Wangmo (first row, center) with members of the Technical Advisory Group for COVID-19 management. The TAG was formed in early February 2020.**

*(Photo: Ministry of Health, Bhutan)*



**Minister of Health Dechen Wangmo (far left) chairs the Health Emergency Management Committee in her chamber.**

*(Photo: Ministry of Health, Bhutan)  
April 2020.*

## The People's Pandemic



### Regional and District COVID-19 Task Forces

Top left: Southern  
Top right: Zhemgang

Middle left: Tsirang  
Middle center: Samtse  
Middle right: Samdrup Jongkhar

Bottom left: Sarpang  
Bottom right: Pemagatsel





**Prime Minister Lotay Tshering distributes homemade hand sanitizer on March 7, 2020, a day after Bhutan's first case of COVID-19 was announced. Many stores had run out of commercial sanitizer. (Photo: Prime Minister's Office, Bhutan)**



**A thermal scanner was installed at Paro International Airport on January 25, 2020. (Photo: Ministry of Health, Bhutan)**

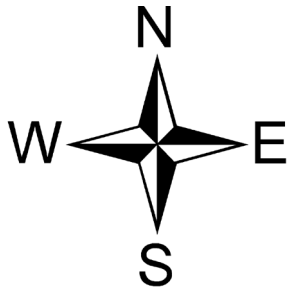


**A health worker sets up the COVID-19 isolation center in Phuentsholing on March 22, 2020. (Photo: Ministry of Health, Bhutan)**



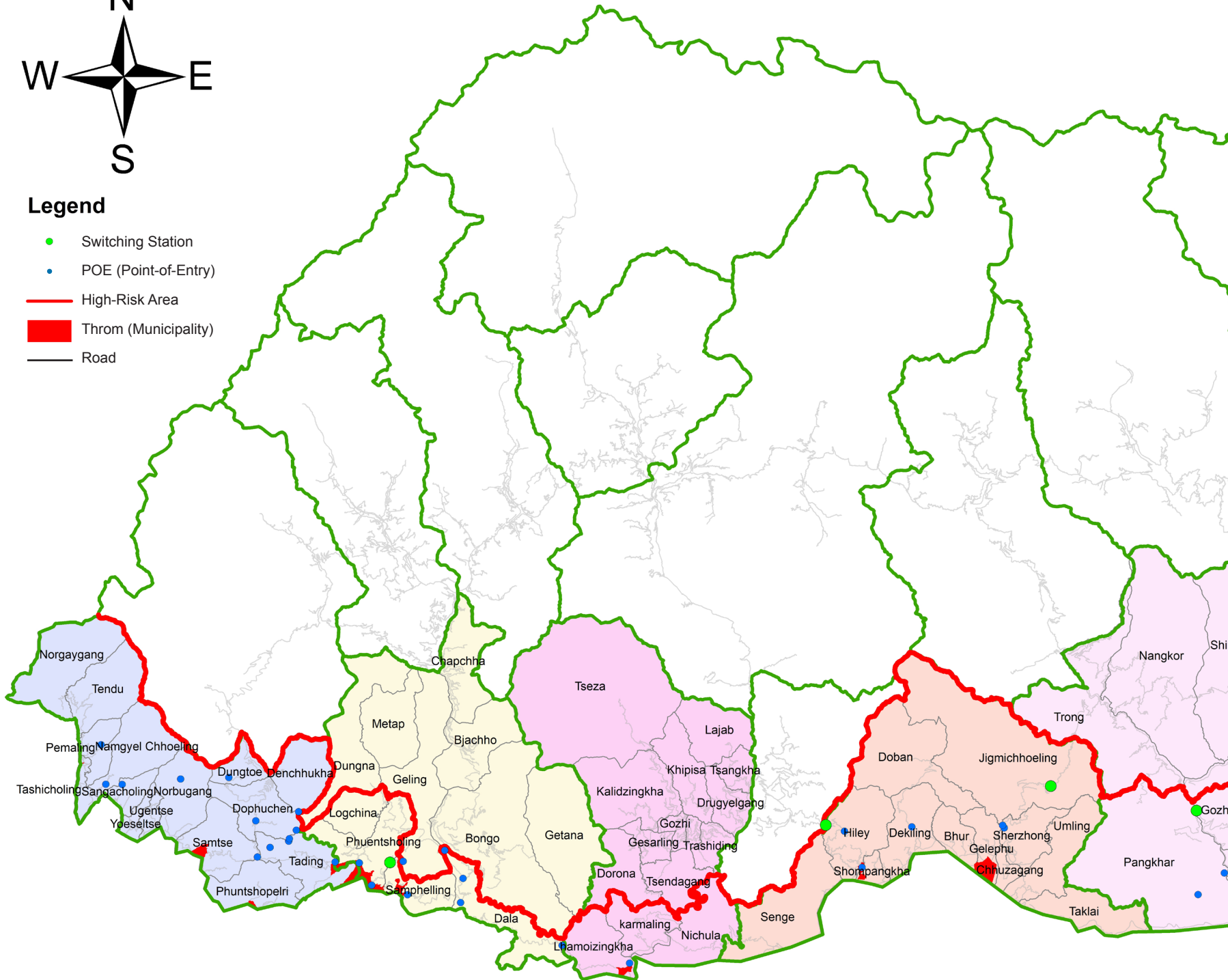
**Thimphu residents line up to receive hand sanitizer on March 7, 2020—the day after Bhutan's first case of COVID-19 was announced. (Photo: Prime Minister's Office, Bhutan)**

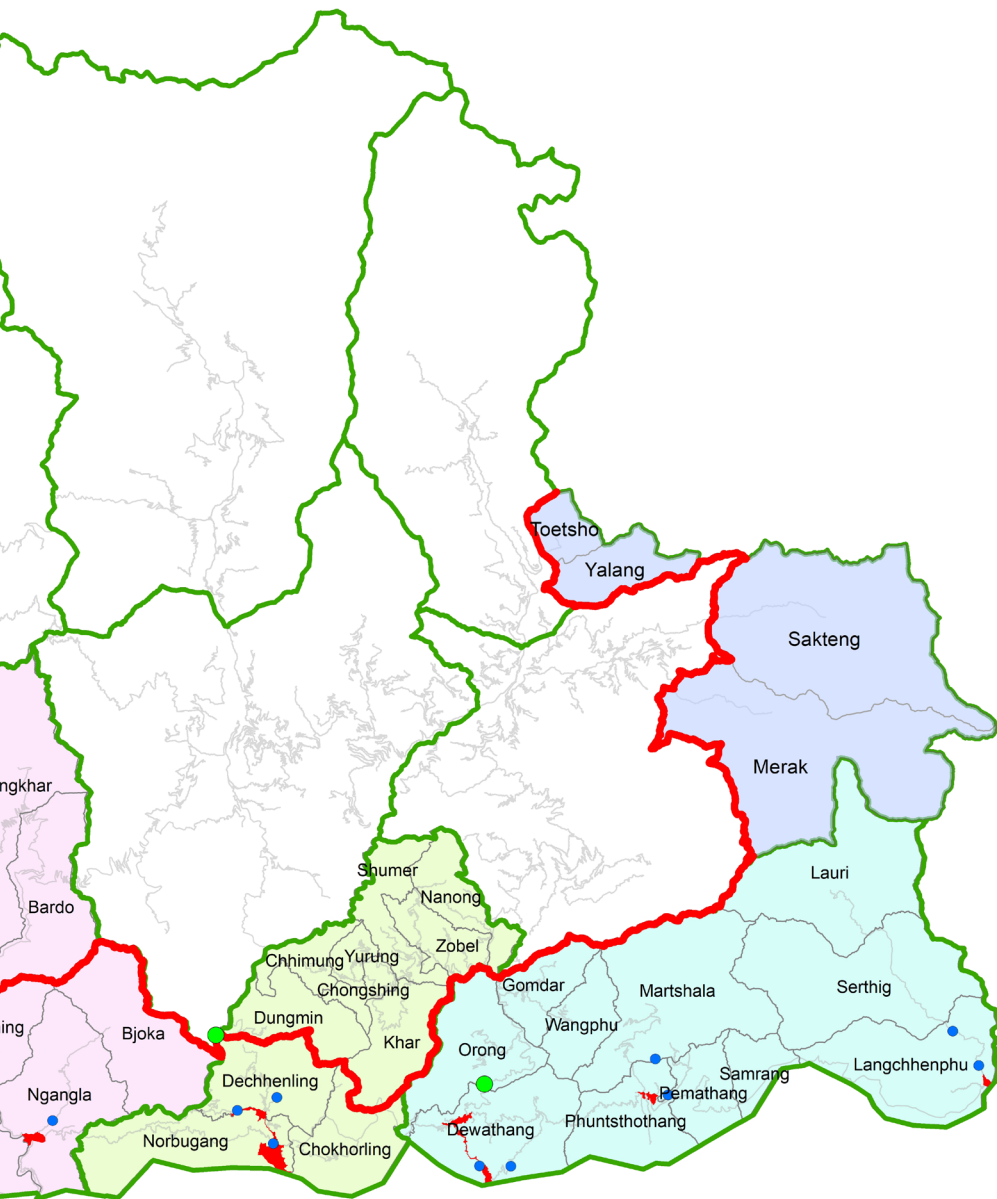
# National High-Risk Area Map



## Legend

- Switching Station
- POE (Point-of-Entry)
- High-Risk Area
- Throm (Municipality)
- Road





*The demarcation of high-risk areas was instituted on June 25, 2020 to prevent COVID-19 transmission to the interior parts of the country.*

*People traveling from high-risk to low-risk areas were required to undergo seven days quarantine. The policy lasted until April 4, 2022.*

**Bhutan's porous southern border with India—considered a high-risk area for COVID-19 transmission—underwent intense public health surveillance during the pandemic.**

## CHAPTER 3

# The First Case

**O**n the afternoon of March 5, 2020, the King paid an unexpected visit to the Ministry of Health. A few hours earlier, all of the nation’s high-level leaders in pandemic response had been called to attend: the health minister, the prime minister, the foreign minister, the chief of the army, the chief of police, members of the Technical Advisory Group (TAG), and others. The King was in a troubled state of mind, and his words were disquieting.

“I remember that day so clearly,” said Dechen Wangmo. “As I went to receive him, His Majesty said, ‘Oh, Dechen, today I feel very anxious. I feel like I couldn’t stay in my Lingkana palace. I wanted to come and touch base with all of you. I just don’t feel at peace.’”

Since the beginning of January, the health minister and her team had made meticulous preparations for the worst—devising public health protocols for preventing transmission, creating innovative arrangements for quarantine and for treating the infected, procuring a stockpile of essential supplies before other nations saw the need, and emphatically conveying to the public that the COVID-19 threat was serious.

Beyond Bhutan, the global response was vacillating and often in disarray. SARS-CoV-2 was racing around the world. In 86 countries, it had already claimed more than 3,000 lives—a figure that would soon rise exponentially. Thailand, a major airline hub for Bhutan, had confirmed more than 40 cases. While India, sitting across the porous southern border, had reported only a couple dozen cases, it was obvious that the figure merely reflected spotty surveillance and that the country was a viral tinderbox waiting to detonate. Indeed, just the day before, Bhutan’s social media had been buzzing with reports of two German tourists with fever and respiratory symptoms who had been caught by a thermal scanning gun as they arrived at the entry point near the main gate at Phuentsholing—the first arrivals singled out after more than 974,000 such scans since the pandemic had begun.

The King addressed the hastily convened group. His message was clear: Bhutan would not be spared. The country must rise to the emergency. Even as the rest of the world was succumbing, Bhutan must stay safe and secure.

“He said, ‘I won’t take long. I came to see how you all are doing and to convey the message that, if any of you are thinking that COVID may not come here, that we will escape COVID, that is wrong,’” recalled Dr. Tshokey, the clinical microbiologist at JDW National Referral Hospital. “‘From today, start working as if COVID is going to come anytime.’”

“His Majesty was saying it’s just a matter of time,” added Sonam Wangchuk, head of the Royal Centre for Disease Control and the first person in the country who would learn of any positive test results. “We should go all out. We should not wait. Whatever is required, now is the time.”

As Wangmo remembered, “His Majesty said, ‘Please be prepared for the worst-case scenario. What if immediately we have cases? What if suddenly there’s a huge outbreak in India? You should have Plan A, Plan B.’”

Around 4:30 that afternoon, the two-hour audience with the King came to a close. As he and the health minister walked down the stairs, he asked about the medical status of the German couple. Wangmo assured him that both had tested negative on a rapid antigen test and were almost certainly not infected with the coronavirus—and that, in any case, their movements and contacts had been thoroughly traced. “We have done all our homework,” she said.

After the King left, the TAG got down to work. Those assigned to draft contingency arrangements toiled over the document until well after 10 that night. Meanwhile, Wangmo and a few colleagues went to the isolation ward of the national referral hospital to make sure everything was in place: the furnishings, the pharmaceuticals, the flow of medical personnel, and the installation of heaters for the grim, chilly quarters. “Microscopically, we went through the whole plan,” she said. During their inspection, they passed a room in which an American tourist was receiving a workup. He was suffering what at first appeared to be a typical stomach bug, likely picked up during his travels in India.

Over the next 12 hours, the course of his illness—and of Bhutan’s entire public health effort—would take a dramatic turn.

SEVENTY-SIX YEARS OLD, trim and fit, Bert Hewitt was a physicist by training and a wanderer by disposition. He grew up in northwest England, just outside Manchester, but had worked and raised a family in the United States—most recently residing in Maryland, on the East Coast. Hewitt had skirted many close calls in his life—from surviving an unexploded German bomb that tore through his infant bedroom during World War II to near disasters spelunking to shrugging off a cancer death sentence in his 50s. His children were convinced he had nine lives. Hewitt had a circumspect pragmatism, an Anglo-bred equivalent of the earthier Drukpa resilience.

“I was interested in going to Bhutan originally because I’d hiked several times in Nepal. I’d really loved it there—the people and the culture and the religion. And I felt that Bhutan would be one step more isolated than Nepal was, more like it was originally,” he said. “I was surprised in that it probably wasn’t. Bhutan is quite modern, and the parts I saw, fairly well developed. It reminded me more of Switzerland than anywhere else.”

He and his partner, Sandi Fischer, a 59-year-old psychologist from Los Angeles, had embarked on their adventure on February 18. Their itinerary wove through India and Bhutan. Just before arriving at Paro International Airport, they had enjoyed a weeklong cruise on the Brahmaputra River, in northeastern India, stopping at small villages along the banks.

“When I boarded the cruise, I felt great. It was a ship designed for 40 or 50 passengers. When we boarded, it was only myself and Sandi—everyone else had canceled because of COVID,” he said. “We hadn’t worried about COVID because when I left the United States, I was only aware of two cases in the country.” (There were actually 14 confirmed cases by that time—a negligible number that belied the virus’ vast, insidious spread.)

Hewitt and Fischer were joined by two Englishwomen who had been touring India for several weeks. The only four passengers, they cheerfully sat together for all meals. By the middle of the cruise, one of the women had developed a cough and a splitting headache. By the last day, Hewitt was also feeling under the weather, having lost his appetite. “They had arranged a banquet, and I’m very fond of Indian food,” he said. “I couldn’t eat a thing.”

He and Fischer arrived in Paro from Guwahati on March 2. Presenting no fever or cough or respiratory symptoms, he breezed through the COVID-19 health declaration form and thermal scanner. By the time they arrived in Thimphu, however, he felt sick again, with nausea and a bloated abdomen. At the national referral

hospital outpatient clinic, a physician prescribed antacids.

On March 3, Hewitt returned to the hospital with gastrointestinal distress. On March 4, feeling somewhat stronger, he and Fischer took in the usual tourist sites—the splendid drive to Punakha, tea and lunch along the way, a religious festival, handicraft shops. On the way back to Thimphu, Hewitt said, “I knew something was wrong.” This robust world traveler, who back home hiked five miles a day, was out of breath and could barely climb the steps to a roadside tea house.

On March 5, Hewitt paid his third visit to JDW National Referral Hospital. By then, he had a fever, sore throat, cough, and shortness of breath. He was sent to the hospital's Old Mother and Child Health Clinic, now converted to a COVID-19 isolation ward, to prevent any transmission of the virus within the main building.

Although his vital signs were good, the oxygen levels in Hewitt's blood were alarmingly low, and his chest X-rays were cloudy, suggesting bacterial pneumonia. A doctor suspected tuberculosis. Hewitt briskly informed the physician that he was born in England, where every child at the time was vaccinated against TB. On a hunch, the doctor ordered a test for COVID-19. Hewitt's nose and throat were swabbed for samples, which were promptly sent to the Royal Centre for Disease Control.

DECHEN WANGMO, THE RCDC'S SONAM WANGCHUK, program officer Jamyang Choden, Dr. Tshokey, press officer Yeshey Pelden, and Wangmo's personal secretary, Pinkey Lhamo, finished their inspection of the hospital's isolation ward around 9:30 that night. They were famished, not having eaten since lunch. The health minister invited the group to her home for dinner (Pelden instead went straight to the office), after which they would return to the ministry and, as they had for months, work throughout the night—in this case, refining the worst-case scenario plan commanded by the King. *Emadatse* and beef *shakam* were set out on the table, but everyone was preoccupied. “It was a very intense mood,” said Choden, a longtime colleague of the minister, known for her diligence and meticulousness. “I don't remember how I ate the food or how we finished the food.”

The hovering anxiety was prompted by a development earlier that evening. An initial PCR screening test of a nose-and-throat sample had come up positive for SARS-CoV-2. It was an eerie corroboration of the King's presentiment. The next step was to confirm the positive result.

Around 10:10 that night, in the middle of the meal, Wangchuk's phone rang: a colleague at RCDC. The confirmation test was positive. And the virus-bearing sample hadn't come from the German tourists in Phuentsholing, on whom the media spotlight had been focused. It came from JDW National Referral Hospital—from Bert Hewitt.

WANGMO, CHODEN, AND LHAMO RAN out of the house and jumped into Wangmo's car, Choden carrying her long boots because she needed to sprint unimpeded. As the car sped along, she phoned a colleague at the airport and asked him to immediately send her all contact details for the passengers on Hewitt's flight. Arriving at the ministry, the three women ran to the gate—only to find it locked. After rapping on the gatekeeper's hut, they got inside. Every office in the building was dark, and only the three rooms in Wangmo's chamber could be accessed. Over the next urgent hours, this small space would become the national command center for what looked to be Bhutan's first COVID-19 outbreak.

Around 10:30, Ugyen Tshering, senior program officer, got the call from Choden: The coronavirus had breached Bhutan's defenses. An experienced hand in disaster contingency planning, he, too, rushed to the office, with the presence of mind to take a toothbrush and toothpaste.

Yeshey Pelden—a young civil servant whose career had only started at the ministry in 2019, but whose poise

quickly earned her the title of program officer and pandemic media focal person—had been in the office until 10:15 that night, working on the worst-case plan. Back home nearby, at 11:30 she received a concise text message from Tshering: “POSITIVE.” Minutes later, Pelden joined the group in Wangmo’s chamber.

Soon, nearly all of the government’s eminent leaders had gathered around the health minister’s desk: Prime Minister Lotay Tshering, Chief of the Royal Bhutan Police Major General Chimi Dorji, Chief of the Royal Bhutan Army Lieutenant General Bato Tshering, and others. “I felt like I saw such things that happened in movies only,” Pelden said. “Time to time, I got goose bumps, because many things unexpected were happening. High-level people were coming in, asking us questions. When I went back home, I realized we were preparing for a big mission.”

Around 11:45, the King and his security retinue strode through the ministry’s main entrance. Ugyen Tshering was there, standing under the main staircase to greet the King. “When His Majesty asked me a question, I was quite nervous. I was trying to say something but I couldn’t,” he said. “I had to repeat for a second or a third time. I made sure that I responded in the right way, because the situation was the first COVID-19 case in the country.” As he spoke, he noticed that the King was smiling. In his haste to get to the ministry, Tshering had barely changed out of his pajamas. He had donned track pants, a T-shirt, and sneakers; at the office he hurriedly wrapped his *gho* over the pants. His ankles were bare; he had forgotten socks. “There was a smile from His Majesty,” Tshering said. “He was smiling maybe because of my nervousness or because of my attire.”

Shortly before midnight, the King entered the health minister’s inner office. As had been his habit since January, he plunged into the fine print of planning. Tonight his attention was turned to logistics and security, and to reassuring the Bhutanese people so that the news of a possible case would not turn pervasive uncertainty into fear and chaos.

Wangmo presented a strategy for tracing all of Bert Hewitt’s primary and secondary contacts. “His Majesty looked at me and said, ‘How long will it take?’ I had no idea,” she recalled. “I don’t know why, but I said, ‘By 6 o’clock in the morning, we should be done, Your Majesty.’”

When plans on paper become practical action, the actors often take stutter steps at first. This wasn’t true for the health minister. She made assignments, as if this was her 50th pandemic, not her first. She handed Ugyen Tshering, Yeshey Pelden, and Jamyang Choden the laborious task of contact tracing. With all the suite’s chairs pulled into the health minister’s office for the assembled officials, the young trio sat cross-legged on the floor of Pinkey Lhamo’s outer office. Hunched over their laptops and mobiles, they pieced together Bert Hewitt’s travels from the moment he boarded the plane in Guwahati, drawing up a list of people he encountered, wittingly or not, along the way. Others interviewed Hewitt’s tour guide and driver and, digging even deeper, tracked Hewitt’s peregrinations through India.

Tshering, Pelden, and Choden were improvising. No script had yet been written—for reaching and informing contacts of positive COVID-19 cases, for gleaning information about their family members, for prying out where they had gone after their glancing contact with the index case, for requesting that they stay in place. They called Hewitt’s nine fellow passengers on the flight from Guwahati. They called hoteliers and shopkeepers. They called hospital staffers who had cared for him.

“We called and we called,” Pelden said. “There was one primary contact, a woman. She started crying when I talked with her. She panicked. She had a six- or seven-month-old baby, and she said, ‘I think my baby has symptoms of cough and cold. I’m afraid the baby got COVID.’ I’m a very emotional person, and I was on the verge of breaking down as well. My eyes were all teary. So I gave the phone to Ugyen, and Ugyen talked very well. Ugyen told me, ‘I know that you are emotional, but at this time, it’s not good if you react like that. If health

officials react like that, then the people will naturally panic.' Then we continued with the work.”

The King waited downstairs to avoid distracting the callers. He sent Wangmo vitamin water during the night to rejuvenate her. From time to time, he came up to listen in on the contact tracing conversations, in order to gauge the respondents' states of mind. “He was asking, ‘Where are those people now? Are they afraid? How are they responding to you?’” Choden recalled. Added Tshering, “The main questions he asked me were, ‘How are our people? Are they concerned about the situation? Are they worried?’ His Majesty is known to us as a manifestation of a god of compassion. He's the reason that I'm still in the country.”

Tshering, Pelden, and Choden, joined by others at the Ministry of Health, stitched together an account of Hewitt's movements over the previous five days, during which time he had started to display symptoms of infection and was therefore more apt to transmit the virus. “As we interviewed, we realized he'd been everywhere,” Wangmo said. The group pinpointed Hewitt's primary contacts—those who might have been infected by him through face-to-face encounters or by sharing a closed room. They also found his secondary contacts, people who had been face-to-face with primary contacts, such as family members or colleagues. As more and more information sifted in, the contact tracing team jotted down names and addresses and locations. Across the country, police fanned out to escort the primary contacts to designated isolation facilities and to instruct secondary contacts to remain in place.

Three whiteboards were deployed in Wangmo's office. “This is a classic epidemiological investigation,” the health minister explained. The parameters in such infectious disease probes are time, place, and people. Jamyang Choden had printed out and pasted on the whiteboards the names and addresses of all primary contacts. The health minister and Choden then filled in a sequence that depicted for each individual the possible time of exposure to the virus Hewitt was carrying, the incubation period for SARS-CoV-2, and when each potentially infected person would be shedding and possibly spreading the virus.

As the hours wore on, the team located everyone who had directly or indirectly crossed Hewitt's path: 73 primary contacts and 224 secondary contacts, all of whom were promptly isolated or quarantined in place. The ragtag group finished at 6:15 a.m., missing Wangmo's impulsively declared deadline by 15 minutes. As the health minister would later tell *Kuensel*, with evident pride, no other nation could have replicated this achievement. “It must have been a record.”

WHILE THE MINISTRY OF HEALTH team worked at high speed that night to flush out Bert Hewitt's contacts, another drama was playing out at the Royal Centre for Disease Control. Here the theatrics revolved around the polymerase chain reaction tests. PCR is the gold standard for detecting certain viruses in a sample. During the testing process, which takes about two and a half hours, if a sample contains a specific pathogen and its genetic material is duplicated, a fluorescent line progressively curves up on a graph—a biological movie recorded in real time by a camera.

After a PCR screening test earlier in the day had revealed that Hewitt's sample was positive for the family of coronaviruses, the final step was to conduct a PCR confirmation test, which is more specific and definitive, to corroborate the presence of SARS-CoV-2. The nation's monarch and top government officials were holding their breath.

But there was a hitch. The confirmation test came up negative. Once. Twice. Three times in a row.

Part of the problem involved Bhutan's meager stockpile of test kits. The RCDC lab crew first screened the sample with a kit from the World Health Organization and received a strong positive result. The technicians then ran a WHO confirmation test. Perplexingly, that came out negative. To try to settle the issue,



the lab team ran a confirmation test using a different kit of reagents—substances used to facilitate a chemical reaction—supplied by the Armed Forces Research Institute of Medical Sciences (AFRIMS), in Bangkok, a longtime partner and supporter of RCDC. The AFRIMS result was positive—it was what had instantly dispersed the late-night diners at Wangmo’s home. Under ideal circumstances, the RCDC team would then have backtracked and run the sample through the AFRIMS screening test, because it is always best to screen and confirm using the same PCR protocol. But the resource-poor RCDC had run out of reagents for the AFRIMS screening test.

One sample. One positive screening result with the WHO protocol. Three negative confirmation results with the WHO protocol. One positive confirmation result with the AFRIMS protocol. “We were confused,” said Binay Thapa, RCDC’s veteran lab supervisor. “If the sample was really positive, both the AFRIMS and WHO protocols should have come positive.” What to do? RCDC head Wangchuk leaned toward calling the sample a confirmed positive, because it had come up positive on the AFRIMS confirmation protocol. His colleagues were hesitant—they felt the sample should be labeled a “probable” positive, since the positive confirmations came from two different protocols.

The clock was ticking. Sequestered in the Ministry of Health—with the King, the prime minister, the health minister, and others anxiously awaiting word—Wangchuk began frantically calling his AFRIMS colleagues in Bangkok to solicit their opinion: Was the sample positive or negative? “Maybe that was a bad day for me,” he said. “They never picked up the phone.” He and his lab mates tried every other means they knew—WhatsApp, WeChat, LineChat, mobile numbers, fixed phone lines—to connect with someone from AFRIMS. No answer.

At RCDC, as the night of March 5 became the early morning of March 6, Binay Thapa’s mobile was continually ringing. On the other end: the aides-de-camp of both the Fifth and the Fourth Kings, physicians and other health staff around the country, regular citizens who were curious about the viral status of the German couple. “I was getting calls from so many strange numbers. I was getting calls from everywhere,” he said. “In a small society, everyone knows what is happening.” Most nerve-racking, he was getting calls from his boss, Wangchuk, every three to five minutes, desperately asking if the fluorescent line on the PCR screen was positively curving upward. It wasn’t. Wangchuk, a dogged laboratorian, offered a slew of troubleshooting suggestions.

For both men, everything was on the line. Wangchuk, an energetic scientist who had worked at RCDC since 1998 (when it was anonymously housed at the national referral hospital) had transformed the facility into a premier testing and surveillance operation, and this in a country that sorely lacked such research infrastructure. Even so, the institute was often overlooked, rarely mentioned in media reports and out of the public eye. If, during the greatest health crisis in Bhutan’s history, RCDC had come up with the wrong test result for the first apparent case of COVID-19, its credibility—and the reputations of Wangchuk and Thapa—would be forever tainted.

“When the test failed, we were under pressure,” Wangchuk recalled. “There was a moment”—he paused and laughed—“what do you say: do or die.”

In the testing room at RCDC, Thapa and three colleagues were huddled around the lab’s sole PCR machine. “Of course, sweating,” Thapa said. “Once there was a discrepancy in the results, we started getting anxious and tense. There was a pin drop of silence among us. We were praying individually for a good result to come out—or, at least, to verify or confirm the result. I was chanting things from inside. One of my colleagues, he was prostrating in front of the PCR machine.”

Finally, Wangchuk hit on a solution. He instructed the lab team to throw out the WHO confirmation test reagents and break open a brand-new WHO confirmation kit. For a resource-starved lab team that had tried

not to waste one precious drop of reagents, this felt profligate. But now, with the fresh chemicals, the sample came up positive. At 4:30 a.m., Thapa sent Wangchuk a screenshot of the upwardly curving fluorescent line: a positive display. On the phone, Wangchuk's relief was palpable. Bhutan's first COVID-19 case was no longer, in epidemiological lingo, "suspect" or "probable"—it was a fact. Wangchuk and Thapa now surmise that the lab's obsession with saving supplies meant that the original WHO reagents had been kept out too long and had deteriorated, giving a false negative. "That was the most stressful night in my career," Thapa said. "Because at that moment, the nation was waiting for our result."

Wangchuk rushed off to inform the prime minister and the health minister. In the ministry hallway he ran into the King. "I reported to His Majesty that we could confirm. He said, 'Okay. Yes, yes, good.'" An hour later, Wangchuk's phone rang: his AFRIMS colleagues in Bangkok. There is no doubt, they said, with oblivious nonchalance. The result was positive.

IN THE HEALTH MINISTER'S OFFICE, every scrap of contact information was now arrayed on three whiteboards. As the King had commanded, Wangmo had drafted a data presentation outlining the way forward under various calamities. The first step was to find everybody who had come into contact with Bert Hewitt, the index case, and place them in a quarantine facility: check. Second was calculating the spread of the virus should all primary contacts turn positive. Third was calculating transmission should all secondary contacts, in turn, become new primary contacts. In each scenario, how many people would become infected across the nation? What would be the ministry's Plan A and Plan B? "This is what we presented to His Majesty," she said.

Shortly after sunrise on March 6, after a sleepless night, the high-level officials stood solemnly in Wangmo's office. Wangmo formally presented her contact tracing results and proposed a plan of action to the King. "Of course, it was a very emotional moment," she recalled, "because there's a part of you that is: Okay, we have done it. But part of you is also: It's very scary to know that something that you have planned for and anticipated is now coming. Will I have the strength to face this? It reminded me of my first day of school. When you go to the school, you are excited—but at the same time, you have a certain apprehension. But then, I remember holding my mother's hand my first day of school. That gives you certain confidence: I'm going to be okay. My mother's there.

"That is exactly what I felt as I presented to His Majesty. Knowing that he is there gives you that sense of assurance that it's going to be okay. You have somebody to lean on, somebody to guide you. That assurance was an amazing feeling. His Majesty nodded. He said, 'You have done a good job. We'll take one day at a time. It's going to be okay.'" The King approved every element of her carefully thought-out plan.

That morning the Prime Minister's Office drafted a press release that the King reviewed. He advised the communications team to word it in such a way that Bhutanese wouldn't be alarmed. "We shouldn't let our people panic," he said. That afternoon, in the courtyard of the National Assembly of Parliament, live on BBS TV, the prime minister and the health minister held a press conference.

Given the high drama of the preceding 12 hours, the opening lines of the official press release were notably sedate:

*We would like to inform the general public that one positive case of COVID-19 was confirmed at 11 p.m. on March 5. The result was validated at 12.30 a.m. today.*

*The patient is a 76-year-old from the United States of America, who had come to Bhutan as a tourist. He had entered the country from Paro International Airport, after embarking Drukair flight KB241 from Guwahati, India on March 2.*

*Adhering to the National Preparedness and Response Plan, and the operating procedures in place, all follow-up actions*

*were initiated immediately. His Majesty The King personally oversaw implementation of the response strategy, as teams operated from the Ministry of Health all through the night.*

BHUTAN'S SPRAWLING CRISIS MANAGEMENT APPARATUS was set in motion. But at JDW National Referral Hospital, a sick man far from home was being tended to in a rundown, repurposed isolation ward. The previous evening, when the King had seen a photo of the ward, he ordered that a new unit be assembled overnight in the eye hospital, a beautiful building that had been inaugurated only months earlier. Thus Bert Hewitt became the sole occupant of a VIP isolation suite.

When the King learned that Hewitt had come from the United States, he arranged for an a la carte comfort-food menu to replace the bland hospital food. "His Majesty said he's a foreigner. His Majesty was asking us to ask what Bert wants to eat," recalled Jamyang Choden. As Dr. Tshokey recollected, "I received a command from His Majesty's chamberlains not to give Bhutanese food to Bert Hewitt. Order the best pizza in the town and the best sandwich in the town. We ordered pizza from the most expensive hotel for Bert."

The King further inquired whether Hewitt had an iPad or other device so he could talk to his family back home. He sent Hewitt a pair of blue silk pajamas, a handwoven silk blanket, and a pillow. One morning early in his stay, Hewitt watched as a state-of-the-art flat-screen TV was delivered to his room so that the English patient could watch a Manchester United football game. "I remember the TV showing up in its box, brand new. An orderly was hooking it up," Hewitt recalled. "I said I was amazed that the King had done this for me. And the orderly said, 'We all love him.'"

On social media, some Bhutanese were piqued at the tourist who had brought the pandemic into their country. On March 7, the Prime Minister's Office countered these sentiments with words of compassion: "Away from home and petrified with the virus he contracted, it is natural we give him best of our medical services. We also urge all Bhutanese to pray for his health and recovery." As Tshering Dolkar, senior clinical nurse in charge of the intensive care unit, told *Kuensel* in 2020, "Given the patient's condition, we were all worried. We were worried about the impression the world would have about our country if we had let our patient, a guest of our country, die." Ultimately, a dedicated team of 17—from doctors and nurses to X-ray technicians and cleaners—were enlisted in his care.

Dr. Guru P. Dhakal was appointed to monitor Hewitt's condition. "Dr. Dhakal came to me and said, 'I'm the head of internal medicine at this hospital and I'm going to be looking after you myself. I've been personally selected by the King,'" Hewitt recalled. "Both of those things gave me an enormous psychological boost. That I was being looked after by the head guy, at the instruction of the King." Bhutanese from across the nation sent cards and letters and flowers—"They were on every horizontal surface in the bedroom," Hewitt said. He was also buoyed by the view outside his window. On a distant hillside an array of white prayer flags fluttered in the breeze. "I don't know why, but I remember looking at it and feeling comforted."

These thoughtful amenities, however, didn't alter the infection's deadly course. Hewitt was already in the high-risk category of patients with comorbidities—in his case, hypertension, high cholesterol, and neuropathy; he had also had his spleen removed after a lymphoma diagnosis decades earlier, compromising his immunity. Now his blood oxygen saturation and blood pressure were plummeting. "He just progressively kept getting sicker and sicker," said Shankar LeVine, the emergency room physician who provided Hewitt's critical care. On March 5, LeVine had been the triage doctor whose hunch about COVID-19 not only likely saved Hewitt's life but stimulated Bhutan's pandemic response. At that time the WHO case definition for COVID-19 revolved around fever, respiratory complaints, and travel to Wuhan, China—not vague gastrointestinal symptoms such as Hewitt's. Having briefly talked with Hewitt about his recent travels, LeVine trained a different lens on the

diagnosis. He had been monitoring conditions in India, because he expected COVID-19 to blow up there. And he had been following the snowballing cases of cruise ship infections—by that time, hundreds across the globe. In his mind, India plus the Brahmaputra cruise set off alarm bells, and he had ordered that swab sample for SARS-CoV-2.

In many ways, LeVine was the perfect cross-cultural healer for Hewitt. Born in California, he was raised and homeschooled by metaphysically minded expat parents in a small ashram in the Coorg district, in the southern India state of Karnataka. He stayed until the age of 15, eventually attending college in the States. (He is now an emergency medicine physician at the Dartmouth-Hitchcock Medical Center, in New Hampshire.) The rich spiritual surroundings of his childhood conferred an ethic of social service as a guiding principle of an enlightened life—not unlike the Buddhist, and Bhutanese, embrace of interdependence and mutual responsibility.

On the third day of Hewitt's hospitalization, LeVine was frank with his patient. "I said, 'Listen, you're getting sicker. You're getting to the point where we need to intubate you in order to have enough oxygen.'" Hewitt asked what his chances of survival would be if he were intubated and if he were not. "I answered the question by saying, 'We don't know what the chances are,'" LeVine said. "But the only chance you'll have, given how sick you are, is if we intubate you." Hewitt assented.

The next night, Hewitt went into acute respiratory distress syndrome, or ARDS, a life-threatening condition in which fluid leaks into the lungs and oxygen cannot reach vital organs. LeVine, who had already placed Hewitt on antibiotics and antivirals, ordered intravenous medication to raise Hewitt's blood pressure as well as immunoglobulin to tamp down Hewitt's dangerously cascading immune response. Miraculously, Hewitt started to improve. Now it was time for more specialized care—the kind that Bhutan could not provide. As Hewitt's eldest daughter, Catherine Miller, recalled, "Shankar was emailing me pretty frequently. At some point, he said, 'If you're going to get him out, it has to be now.'"

On Day 8 at the national referral hospital, Bert Hewitt, still unconscious and intubated, was driven by ambulance to Paro and lifted onto a Gulfstream jet outfitted with a biological containment system. More than 30 hours and 8,000 miles later, he was wheeled into the University of Maryland Medical Center in Baltimore, where Catherine directs care management. Days later, he came off the ventilator, and eventually he entered a rehabilitation facility. Today, he again averages five-mile daily hikes.

"You knew that this case was being watched and monitored by the whole country. Everyone was waiting to see what would happen," LeVine said. All of Hewitt's caregivers "felt the weight of: This is a very important patient whom the King is watching, the ministry is watching, the whole country that's now stuck in their own homes because the schools are closed and all the offices are closed—everyone's watching. You felt the weight of the circumstance."

But the weight was not crushing. With this first and only case, LeVine said with a laugh, "We used to joke that Bhutan's mortality rate for COVID was either going to be zero or 100 percent."

"TO THE PEOPLE OF BHUTAN, I'd like to say thank you for the cards and flowers you sent to me in hospital. You could so easily have thought of me as a harbinger of disease, but instead, you all expressed concern for the welfare of a complete stranger," Bert Hewitt said in a February 2021 interview in *Kuensel*. In a Zoom conversation in November 2021, Hewitt was asked if he believed in divine intervention, as did most of his caregivers in Bhutan. He looked down and shook his head. "No. No," he replied. "But there must have been some influence that saved me. I also ask myself: Why was I saved?"

Catherine Miller was on the video chat. What she recounted was, not her father's harrowing ordeal, but her

phone conversations at the time with Dechen Wangmo. “She called me almost every night, when I’m sure she was extremely busy tracking down COVID. I remember that everyone else who would call me from Bhutan was very businesslike. But Dechen spent time acknowledging how scary it must be for me—that my dad was on the other side of the world—and she tried to reassure me that they were looking after him. She spent a lot of time thinking about and addressing our emotional state.”

For Miller, those middle-of-the-night conversations with the health minister embody the tenets of Bhutanese society. “I have a job in a hospital where I help families of people who are sick, and I frequently think of her. I am kinder and more generous with my time, and have a better understanding of how families feel and how my team needs to treat them, because of what Dechen did. During COVID, when I was feeling tired or compassion fatigue, I would think of what Dechen was going through, how she was so kind, how the whole country was so kind and giving. I have asked my team to give the same to the people that we see.”

As the coronavirus pandemic continued to unfold, she added, “There are a lot of lessons from Bhutan. First and foremost, that every life matters.”

## EPILOGUE

### **The Swiss Cheese Model**

“Whatever they tried in Bhutan probably saved your life,” a hospital physician in Maryland told Bert Hewitt. On one level, the JDW National Referral Hospital emergency doctor Shankar LeVine agreed. “Bert had the best supportive care you could have, regardless of where you are in the world,” he said. “We had the medicines, the ventilators. The level of care he needed, Bhutan was able to provide.”

But LeVine offers a larger perspective on Hewitt’s seemingly miraculous recovery, one that goes to the heart of Bhutan’s singular “all-of-society” pandemic response. “In medical literature, they talk about the Swiss cheese model. It’s this idea that all the holes of the slices of Swiss cheese line up perfectly in order for a good outcome, or a bad outcome, to happen. In Bert’s case, all the links of the chain worked out perfectly for a good outcome.

“Let’s start in the beginning. You had to have Lyonpo Dechen Wangmo, the health minister, to be smart enough in her planning for the country to say we need this old mother-and-child hospital to be designated as a separate zone for suspected cases. You had to have the creation of the TAG team. You had to have them bring in PCR so that, when Bert arrived, we had the capacity to test him. And unlike so many places in the world, the test was actually returned in hours, not in days. All that had to be necessary for him to even be diagnosed.

“Then you had to have doctors who were all aware of COVID. Everyone had been trained about it. The triage nurse didn’t let him back in the ER—she came and got me and said, ‘What do I do?’ That doesn’t just happen. That’s because of training beforehand.

“Then you have the King, who immediately takes an interest in this case. He says it’s not enough if this 76-year-old American tourist gets routine care. He is special. This is our first COVID case. How he does is important. So the King says, ‘Mobilize the troops. Roll out the red carpet. Let’s give him everything.’

“Then you have Bert, who—yes, he’s in his 70s; yes, he has no spleen; yes, he has high blood pressure. But he’s a very fit guy for his age. He hikes all around the world. And he’s strong in spirit. You have a patient who really gives it their everything to survive.

“And then you have the Bhutanese team. You could have medical situations where people are too afraid of COVID, so they don’t do a good job, they’re afraid of getting infected themselves. You could have people who don’t want to provide optimal care for a whole number of reasons—why should this foreigner, who is bringing

COVID to my country, get all this optimal treatment? That wasn't the case. Everyone on the team, whether the ambulance driver, the nurses, the doctors: Everyone felt the weight of the situation and worked together to do the best that they could. My perspective is, you had all these people who sacrificed so much, who were in the right state of mind. Everything came together."

LeVine reflected on Hewitt's place in Bhutan's pandemic story. "Bert's being the first case was the best possible situation. Just imagine if the first 100, 200 cases in Bhutan were asymptomatic, healthy people coming back to the country—which actually happened with the next 100 or 200 cases. Imagine how many people would have broken every quarantine, broken all the rules. Instead, there was already global fear about COVID. The first case comes in, gets super sick—as sick as he possibly can—and the outcome ends in success. With one case, you've created both fear and pride. And those two emotions are probably the biggest drivers of whether an individual will decide to break quarantine or to make a communal contribution to the country. Bert's was the right first case to get everyone on board."

## The First Case



**Prime Minister Lotay Tshering announces the first case of COVID-19 in Bhutan on March 6, 2020. (Photo: Prime Minister's Office, Bhutan)**



**The prime minister speaks to members of Parliament, government secretaries, and other stakeholders early in the pandemic, seeking solidarity in the nation's response. (Photo: Ministry of Health, Bhutan)**

## CHAPTER 4

# Voices from Isolation and Quarantine

**B**hutan's initial protocols on isolation and quarantine far surpassed those of other countries. The government required all individuals infected with SARS-CoV-2, whether or not they showed symptoms, to be monitored and treated in one of four designated hospitals across the country; later in the pandemic, cases that were not serious were sent to special isolation hotels. Meanwhile, all arriving visitors were dispatched to three-week mandatory quarantine in designated facilities, usually hotels. Once vaccinations were carried out, in 2021, the quarantine period was reduced to two weeks for those who were immunized.

By May 1, 2022, some 59,000 Bhutanese had been infected and isolated and nearly 150,000 quarantined. Here are a few of their stories.

### TALES FROM ISOLATION

#### **A Journalist Becomes a Patient**

Nima Wangdi

*Wangdi has been a reporter at Kuensel since 2004. He became infected with SARS-CoV-2 while accompanying Prime Minister Lotay Tshering's entourage to Bangladesh in March 2021, a trip during which an official in the Prime Minister's Office and 15 performers from the Royal Academy of Performing Arts (RAPA) also became infected.*

**I**t was 11 days after I had begun quarantine. It was nighttime. I was playing PUBG with one of my cousin brothers—it's a game you can install on your mobile phone. I was feeling a little abnormal, weird, feeling I was getting a headache, then a little bit of dizziness, and I was also feeling a little nauseous. I was quite confident that I had not contracted the virus. But that night, with all those symptoms, I called the media secretary of the prime minister. I told her that I'm feeling a little different, maybe I need to get tested for the virus. They sent health officials to do the test. I and another person from the Prime Minister's Office tested positive. They sent an ambulance to pick us up to be moved to an isolation hotel.

I was scared. I'm a divorced person. I have a son and I have a mom. I have two sisters. I'm from Trashiyangtse—my parents were farmers. My mother is old, and she always thinks that the coronavirus kills. So I didn't want to let her know because she would be worried. I just shared with my brother that I have tested positive for the virus.

When you have this coronavirus, more than the physical effects, it does damage mentally. I was so worried. Even to talk about supplemental oxygen—it scared me so much. Having reported on the coronavirus, I had some knowledge. I already knew that this virus was dangerous. In Bhutan, there had been only one death at that time.



So I was thinking Bhutan's health system will not let me die—it's going to save me. At the same time, I sometimes thought I could be the second to die from the virus. The possibility was always there.

The prime minister sent us fruits and nuts—he was still in quarantine after the trip to Bangladesh. Then, one day, there was a ring on my doorbell in the isolation hotel. I opened the door. I saw a plastic package. There was a message typed on paper, placed inside. It was from His Majesty the King and Gyaltshen, the Queen. Inside there was a blanket, a T-shirt, a talisman, medicines, vitamin C. Psychologically, that really helped in such a time. I still can't believe it. I was wondering, was I that important to my King and the Queen?

In the isolation hotel, the symptoms were still there in me. I had breathing complications, I felt suffocated. I was feverish. There was a little bit of diarrhea and I was not able to eat. I was worried. If you have other deadly diseases, like cancer, your loved ones can come and sit by you, talk to you. But with this virus, they can't. You have to be isolated. You can't meet your loved ones, your mother, your son, your sisters, your friends. This was quite difficult.

We had regular testing in that isolation facility. Every day, the number of patients was decreasing because they were turning negative and released home. I was still testing positive. One day, the RAPA team and everyone in the isolation facility tested negative except me. I peeked through my window. I could see the exit gate—everybody was leaving. They were dragging their luggage bags. The cars were coming in to pick them up. But I was still positive. I was quite devastated.

Let me just tell you. When you have that virus, you don't feel like talking to people. You don't feel like reading. You don't even feel like watching TV. I was quite depressed, in that sense. Friends were messaging me on Messenger—that was annoying. Friends were calling me and saying they heard that some members of the prime minister's delegation to Bangladesh had tested positive. They were curious. Then from my office, editors were calling me up and they were saying, "We heard some members of the PM's delegation tested positive. Who are they?" I said, "I don't know. I don't have any idea." They said, "Could you just call up the PM's media officer and confirm?" I said, "OK, I can do that." But I did not do it, because it was *me* who tested positive.

When you have that virus, your mind is so disturbed. I didn't want to let them know because if I told them, they would call me for an interview and would write an article on me. One of my colleagues called me saying that people were suspicious that I had tested positive. I was feeling quite bothered. Finally I said, "I'm one of the two who tested positive for the virus." He said he was to write an article about me. I was quite harsh to him. I said, "You can't do this. I'm going through so much mental stress, and you are calling me to write an article on me. Do whatever you want to do, but I'm not talking." Later, he did write an article about me.

While I was in isolation, I was reading articles on the Internet on COVID-19. Some people said you should be bathing twice a day. Some said you shouldn't be bathing at all. Some said exercise is good for your health when you have finally tested negative for the virus. Some said you should take a big rest. That's why I say there were no experts. I think there are still no experts on the coronavirus.

Below my hotel, there was open ground. I could see a group of people come in the evening to play *khuru*—it's a dart game. I was not supposed to leave my room, so I used to crane my neck out my door. That was the only entertainment that I could enjoy, because at least I could see people.

In the evening, I would play quiet, calming music and then meditate for about 30 minutes. In the morning, when I got up, I would sit on the floor by the door. I could see the Buddha up there sitting on the hill. I would pray to Buddha, saying, "You should help me get out of this." I also resorted to consuming bear bile. People were saying that bear bile helps fight the virus, so I consumed it. I also resorted to consuming other traditional medicines, but they didn't really help me. It was quite depressing.

After 40 days in quarantine and isolation, I finally tested negative and I was discharged. I went home and I

was alone for one week. The doctor advised me to remain indoors—self-isolation, we call it here in Bhutan. At the end of the self-isolation, I still had a fever, and I was quite worried that I might give the virus to other people.

I thought my colleagues at *Kuensel* would be hesitant to come up to me and talk to me, but they were not that way. In the office, there was no discrimination. My friends were quite welcoming. They came up and shook hands. They hugged me. They were joking, “You tested positive—so give us the virus. We need a break.” Those kinds of lines were quite comforting.

In the field of journalism, when you get a tip-off, you want to pursue the story. You don't really care about someone else's feelings. We don't think about how worried or how traumatized a person may be—we are always after their story. When I had this virus, and my colleagues kept calling me for stories, I was reflecting that, as a journalist, I must have done the same thing to newsmakers. We don't think about how a newsmaker must be feeling, what kind of situation he or she must be going through. We just want the story. We want them to share their problems.

What I feel is, as a journalist, you can't really censor yourself because of emotional issues. If the story is important, you can't let it go on the grounds of compassion. But for some stories, reporters need to be a little sensitive—especially when it has to do with people's emotions. As journalists, we always fail to do that.

## First Case in Phuentsholing

Tandin Ongmo

*After studying hotel management in India, Ongmo worked for four years in that country as a hotel front-desk receptionist. As COVID-19 spread around the world, she returned by train to Bhutan in late May 2020—a grueling four-day trip slowed by labor strikes across India. Ongmo entered facility quarantine in Phuentsholing on May 26. After her infection was confirmed, she was sent to hospital isolation and was released on July 3.*

I came back to Bhutan because, even if I fell sick, I would be with my family in my country. When I arrived in Phuentsholing, I could feel the freshness of the air, the silentness of the environment. I was happy.

While I was travelling from Delhi to Bhutan on the train, I had a cough and my throat was tingling. I never thought that I would have COVID-19. I thought that it might be because of the dust and because I was traveling on the train with so many people. The morning after I reached the quarantine hotel, they did a screening. That evening, I had a cough and a fever as well, and my throat started drying up. The next morning, they called me downstairs in the reception for a checkup.

In the evening, I got a call from the foreign minister. He said, “Do you have a cough and cold?” I said yes. Then he said, “Are you feeling dizziness or other symptoms of the COVID-19?” I said yes. He said, “I just want to tell you something, but don't worry, don't panic. You tested positive. You are the first one to get this virus in Phuentsholing.” He told me it's a curable disease and that I need to be mentally and physically strong. I couldn't say anything. Then the line cut off because of the bad network. He called me again, saying, “Don't panic. Doctors and nurses are ready.”

My body was all numb. My body was all sweaty. I had become blank. It felt like someone had put a big stone on my head and I couldn't move. I could only think about my family. What will my parents' reactions be? What will they think about me? What will my relatives say? What will the community say about me? There were so many questions coming up in my mind. Even though the country is developing these days, some people have negative thoughts—they have a mind of looking down on others. So one of my greatest fears was how would my family react when people tell them that your daughter was COVID-positive. Since I had come from India, they

would think I brought the disease from there and it will hamper everyone.

I was lying on the bed and was crying so badly. Then I got another call: “Hello, this is the Prime Minister of Bhutan.” I stood up from the bed and I said, “Yes, sir, this is Tandin.” He said, “Don’t worry. I just heard from the foreign minister that you are the first positive case from Phuentsholing, and I want you to know that we are all here for you. You are not the only one to get the disease. It’s a curable disease. And I just want to tell you to be mentally and physically fit. If you have any problem, do let me know.”

The doctors told me that they would be shifting me to a RIGSS [Royal Institute for Governance and Strategic Studies] facility. That hospital was so huge, there were so many rooms. The doctor told me to choose any room where I would want to stay. I went downstairs and I chose the first room on the left side, because it had a pleasant view of a green forest and it was very beautiful. My isolation started from there, May 28 morning.

I get afraid very easily and I can’t stay alone in a room. I am that kind of person. I asked the doctor, “Am I the only patient in this hospital?” He said, “Yes, you are our first COVID patient.” I was shocked. In that huge hospital, I was alone. He asked me, “What’s wrong?” I said, “I am afraid of being alone.” And he said, “In that case, we will never leave you alone. We will keep two staff members in the room next to you at all times.” They made a routine, shiftwise: two people in the morning, afternoon, evening, and night.

After reaching the hospital, I started becoming weak. My throat was all red, I had to have a lot of water at that time. Food was tasteless, odorless. I didn’t feel like eating. There was a separate dietician for me, and she was keeping in touch with me every day. She asked me what kind of food I want to have. I told her that I want some soup. So she made the local *thukpa*. When people fall sick and can’t eat, that’s what we give them. It’s made with rice, add some salt, then a little bit of chili and oil, then we mix it with water and boil it until it gets very soft. For a week I had to survive on *thukpa* as I was not able to eat.

Every few days a doctor and nurse would come to check me. Several times my result was positive and I was worried. I thought I will die from this disease. But they told me I will become normal soon and there is nothing to worry about. I didn’t share with my family that I had tested positive—I didn’t want them to get worried about me. But since my elder sister is close to me, I did share with her. She was my greatest supporter during my toughest time. She would call me every day and inquire about my health. She even went to the monasteries to offer a butter lamp for my speedy recovery.

After the test results came back three times negative, the staff was happy. They had a small celebration upstairs in their room and they brought a piece of cake for me. Once I was recovered in the hospital I was shifted to another hotel for 15 days of de-isolation. I had arrived in Bhutan on May 26 and on July 3 I went home. I was home-quarantined for another 15 days at my sister’s place in Thimphu. My body was still weak and I had lost weight and become so pale. She brought fruits, milk, and other eatable items so that I would gain strength.

When I was done with home quarantine, I went to my mother’s village to meet with my mom. It’s Dawakha, at Punakha. I was happy to see her, happy to feel the freshness of the village. It was the harvesting time. I was looking after the cattle, working in the garden, working in the fields, making food for my mother when she returned from her work. I learned a lot about village life. I can say they never rest. Although now the country is developing day by day and we had a television at home, they never had time to watch television. They woke up early in the morning, as early as 5:00 or 5:30, and then in the evening by 8:00 they used to go to sleep. For almost one year, I stayed in the village.

Now I live in Thimphu with my dad and sister. I am totally fit again and can live a normal life, like other people. I have completely changed my career as well. I have joined an engineering office in procurement. I can say that I am one of the lucky people who got a job in this difficult pandemic. At first, it was a headache for me, as it was completely different from what I knew. But now I am liking it. I am aware of the work, their rules and regulations.

It had been four years since I left Bhutan. Sometimes I think that it was planned by a god that I would come back and work in my own country. I would like to thank my King, the government, and the hospital staff for their hard work and care.

## **Ministerial Healing**

Dr. Tandi Dorji

Minister of Foreign Affairs; former pediatrician, JDW National Referral Hospital

I have spoken to scores of people. Tandin Ongmo is certainly not the first. As a pediatrician, one of my strong points has always been that I communicate with my patients. Fifty percent of healing is done by how you communicate.

The first Bhutanese who was positive was a student from the UK. She was detected towards the end of March 2020. Immediately there was panic in Bhutan: Now a Bhutanese has got COVID. She happened to be the daughter of a friend of my family. They were all crying. They felt discriminated against. They thought that people would shun their daughter: How could this girl bring COVID to Bhutan? I went to their house. I sat down with them. I told them how lucky their daughter was to get COVID, because now she's got natural vaccine—natural immunity. There was no vaccine at that time. I told them I was 100 percent sure she would recover and go back to the university.

We had a large outbreak of COVID among our embassy staff in Delhi. At the command of His Majesty, we flew them back to Bhutan to be treated in our hospital here, because it was difficult to get care in India—the hospitals were full. All of them were crying, and I spoke to them and reassured them. I called up their relatives and their parents, and I talked to them. I think everybody felt very reassured—firstly, because it was the foreign minister calling, secondly, because it was a doctor and a member of the National COVID-19 Task Force.

If somebody says, “Oh, that family is really distraught. Can you talk with them?,” I immediately get the number and I talk. Not only me, but the prime minister also calls up patients and their relatives. We are doctors and we know what patients go through when they're told that they have a serious disease. It requires compassion and being able to listen to their anxieties and then to reassure them. This is part of healing. As foreign minister, I take this as a very important role.

## **COVID Isolation Syndrome**

Dr. Damber Nirola

Psychiatrist, JDW National Referral Hospital

We Bhutanese are pretty gregarious. We want to be with family. We want to have parties. During weekends, four or five families will get together. We have dinners together, sometimes drinks together. We believe that if we don't go and meet a relative at least once a week, we are not connected. We feel that we are ignoring that individual or they are ignoring us. This is our habit from very long ago.

We are used to living in a close-knit society. If you have visited some of the houses in the rural areas, you know that they don't even have separate rooms. People just sleep together in a big hall, they share one common room. That closeness is still there in our psyche. People don't want to be left alone. When we are isolated, we really feel very low. You could call it COVID Isolation Syndrome.

## TALES FROM QUARANTINE

### **A Call from the Prime Minister**

Kinga Dema

*A former reporter for Kuensel, Dema currently serves as a corporate employee. She returned to Bhutan from Bangkok in January 2022, and was assigned to two-week facility quarantine in Thimphu. Near the end of her quarantine, Thimphu entered lockdown because of the Omicron variant surge.*

There were three of us—my mother-in-law, my husband, and myself. We had to stay in two weeks quarantine. My mother-in-law had comorbidity issues. When we entered quarantine, she was 74. We wanted her to have a comfortable stay during the entire quarantine period. We were transported to the Hotel Ariya in Thimphu, in a two-bedroom service apartment. It's a three-star tourist hotel, fairly new.

The way we were facilitated in Hotel Ariya was done well. It was very well coordinated. The food was good. There was timely information on when our next test would be. The De-suup volunteers on duty called every night, asking you how we're doing, how our mother-in-law is—that itself was very thoughtful. We had a hotel group, where all the information on the breakfast menu, lunch menu—everything was passed there. Basically, the 12 days were okay. We were allowed to get food from outside from relatives, whatever we needed. We had access to liquor as well. If you wanted to have wine, they allowed one bottle. The De-suups would drop it outside your room, knock on the door, and go away, after which you would open the door and bring it inside. I don't know how it is in other countries, but it was quite a good experience.

On the seventh day, we got tested. We all tested negative. Then around midnight on the 16th of January, we received a message saying that we had to change the quarantine facility because a De-suup on duty and a hotel staff had tested positive. We had to be moved to another quarantine facility. We were quite panicky, because we were not sure what kind of a hotel that would be. But at the same time, we didn't want to be fussy over it because if there were issues in the hotel where we were residing, if there were positive cases, then we might as well move. It would just be three more days at the most. On the 16th, they announced the blackout in Thimphu, a blackout for one day. After that, the lockdown began.

So we were moved to the other quarantine facility. I messaged the hotel group. I said, "It's fine being moved to another quarantine facility for our own safety. But since we have been in the same room for 12 days, how are you going to ensure our safety and make sure we won't be exposed to the virus further? There are some people who haven't even been tested, some who have been tested and are waiting for their results. How are you going to manage that?"

When we were called down, we went to the bus ourselves with all our luggage. There were eight people in that coaster bus. The time from carrying in our luggage until we reached the destination was around 15 minutes. We were moved to the other quarantine facility, Druk Noryang. It was a much smaller budget hotel.

Upon reaching there, we saw a lot of people from the bus before us. There was a lot of chaos. We waited on the bus for the crowd to be cleared. Then I went up to check the room. It was not cleaned, not at all livable. There were leftovers all over. No bedsheets were changed—nothing. I contacted one of the officials. I said, "We can't live in that hotel." He said, "Madam, you all have to be put up as a cohort. Please manage." So I convinced the rest of the quarantined individuals as well. I told them, "We don't have a choice, so let's clean the rooms ourselves. We can't put the blame game on each other in such a time. Let's just do it."

I also asked the official whether there were any positive cases from Druk Noryang. I said, if so, we will be

infected as well, because no cleaning was done. He assured us that there were no positive cases. Then we settled in.

Two days later, our tests were done—the 14-day COVID test. There had been eight of us on the bus. Four tested positive. I was almost on the verge of depression. More than for myself, I was worried about my mother-in-law, because she has comorbidity issues. When our results came, the three of us were negative. But they still didn't allow us to go out. They were like, "You cannot leave here. You have to stay until Sunday, seven days from the time when you reached Druk Noryang."

As a highly vocal person, as a former journalist—someone who always reported on behalf of the voiceless—I was really angry. I said, "It's not that we brought the virus from Bangkok. We were exposed to it here, and the chance is that with the next test, we'll also test positive because we were, by default, primary contacts—thanks to the government and all those task forces and all those who arranged the transportation."

That evening, I drafted a letter to the Prime Minister's Office. At 11 o'clock, I sent the letter. I sent it on his WhatsApp also, because as a former journalist, I had his contact number. The main issues that I highlighted in the letter were how we were moved in an ad hoc manner without following any COVID protocols from Hotel Ariya to Hotel Druk Noryang. How we became primary contacts of the four on the bus who tested positive. And with a mother-in-law who's 74 years old with comorbidity issues—she had breast cancer surgery, thyroid cancer surgery, and then had her gallbladder removed—we cannot take chances. I said there's been huge miscommunication and lack of coordination at all levels, of which I don't know whether His Excellency is aware or not. I said I could have just gone anonymous and posted it on social media, but as a law-abiding citizen myself, it's not right. I said the government and the task force or the quarantine management team must take accountability for the breach of protocols. For all of you, it's very easy to penalize people when they breach COVID-19 protocols. You must also take responsibility and accountability.

I sent the message around 11 p.m. I received a call around 11:15 p.m. from the Prime Minister of Bhutan. He acknowledged that there were breaches in quarantine protocols while transporting us to the hotel. He said that what I pointed out is right and it will be helpful. And he said he would start an investigation.

I was telling my husband, nowhere in the world would the prime minister call you back in the middle of the night to reassure you and to acknowledge that there have been lapses and that they will begin an investigation, and then to thank you for your feedback. It shows how concerned he is about helping people out in such a time. That itself is very touching for common people like myself.

## **A Deserted Hotel**

Sonam Wangda

Deputy Chief Program Officer, Health Care and Diagnostic Division, Department of Medical Services, Ministry of Health; Member, National Quarantine Team

*Early in the pandemic, Wangda was responsible for developing quarantine and containment protocols and for identifying hotels that could be converted to quarantine facilities.*

Initially, the hoteliers thought COVID-19 would go away soon. They were skeptical about making their hotels into quarantine facilities, because they thought that tourism would resume soon and that if tourists found out that the hotel had been used as a quarantine facility, they might not want to stay there. But with His Majesty's leadership and after much convincing, hoteliers were ready to come forward and give their facilities to be used for quarantine.

In the initial phase of the pandemic, I used to personally go to all the hotels and educate the hoteliers and the hotel staff about how it is okay to make the hotel a quarantine facility and how they will be helping our nation. One day, a repatriation flight landed in Paro and the travelers were to be quarantined in Thimphu. There was a new hotel, and the owners wanted to offer it as a quarantine facility. I informed the airport staff and the people involved with the transport to bring the QIs [quarantined individuals] to that hotel. I quickly went to the hotel to brief the staff. But when I reached there, it was empty. I called the hotel owner. She was like, “Sorry, sir, all my hotel staff ran away, because they knew it was going to be converted to a quarantine facility. I tried to call one of my staff and she said that her family members didn’t want her to work here in a quarantine facility. They informed her that there are better ways to die than in a quarantine facility.” I had to immediately look for another hotel.

## Quarantine Epiphanies

Kinley Tenzin

*Tenzin studied for a bachelor of commerce major in finance and served in various civil service positions for almost seven years, last with the Royal Monetary Fund. He moved to Australia in 2020, where his wife was pursuing a master’s degree. Tenzin returned to Bhutan in January 2022, spending two weeks in facility quarantine in Paro.*

**I**n Thimphu, it’s very crowded. I had heard that the neighbors of quarantine hotels, they complain if someone inside even opens a window. So I thought, Ah, I will not go to Thimphu. It’s better if I’m quarantined in Paro. The facility I booked, the Paro Kichu Resort, is a peaceful resort and far from town. The room was spacious. I had some privacy. I could open my window, open my door. There was some lawn. At least I could sit outside the door and breathe fresh air.

In Australia, I had been working in a warehouse. Life was very busy. When I came to quarantine in Paro, it was a bit difficult for me at first—even one day was very long, very boring. But I tried to manage my days. I watched movies on Netflix and browsed the Internet. I did chanting, then praying, prostrating. I was YouTubing on how to do yoga and meditation. The food was good. They served you mineral water, the bottled kind. There was a group chat from the quarantine facility manager—if there was any information, they would share it with you through the WhatsApp groups.

The reason I came back to my country is that my sister passed away from leukemia. My mother, she was very emotional, she was lonely. I came back to my country so that I could stay with her, spend time with her, and make her happy. In quarantine, I called my mom through the video call messenger. During the evening time, I did some prayers and chanting for my sister. *Om Ah Hung Bezar Guru Pema Siddhi Hung* is for the living, and *Om Mani Padme Hum* is for those who passed away.

For now, I’m unemployed. I’m looking for a job, because I don’t want to stay idle. If I don’t get a job, I’m going to become a De-suup. During the pandemic, I was amazed—so many De-suups in orange, they were everywhere. They were taking up the responsibilities of police, traffic control, security personnel, and health staff. They were even feeding the dogs. During the death of my sister, we did some rituals—we have a belief that we have to hoist prayer flags. Even then, there was support from the De-suups. Even at the funeral, like pitching the tent and serving the guests. This was the beauty of the De-suups.

I heard that there is a De-suup skilling project. The King has invited expertise from all over the world. I’m thinking of doing some skilling job—not like the jobs I had before. Right after my graduation, I worked with Bank of Bhutan Limited, Druk Air Corporation Limited, and the Central Bank of Bhutan, the Royal Monetary

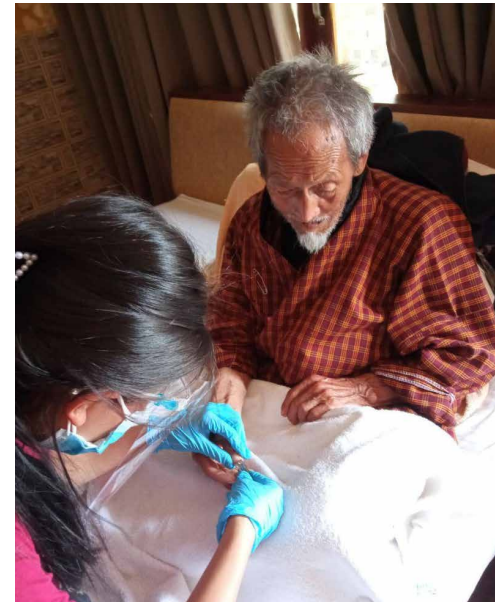
Authority. My final employment was with RMA. I had been in those jobs for almost four years. They were 9-to-5 jobs. Now I didn't want to do them. I learned when I was in Australia that skilled people, like plumbers and electricians, they are earning well. They are loving their jobs. They are more excited. They don't hesitate to go out and work.

In Buddhism, the great lama says it's good to think about your death every day. If you think about death, then at least when you are living, you will do some good things. I had gone to Australia to make some money while my wife studied. It was okay, better than what I had been doing in Bhutan. But I realized money is not the only thing. Family are important. Being in your own country is important. Bhutan is a very beautiful country compared to other countries, more peaceful. You miss those things.

The resort was far from the city. It was very calm and quiet. There was no one to disturb me. I had time, so I was planning. I was thinking, Okay, it's high time I change. From primary school until my graduation, I have been getting everything from the government. Now I should enroll in the De-suups. I can serve the nation plus get some skills. It is a win-win situation for the government and for the individual.

During my quarantine, I didn't struggle. I had so many things to think about, spiritual things and my future planning. Since you are forced to stay inside, you think. You feel this patriotism and love for country. All this was popping up in my mind during quarantine.





**Reverse isolation facilities were established in 20 districts to protect vulnerable individuals—including the elderly and people with co-morbidities—during periods of community transmission.** *(Photo: Ministry of Health, Bhutan)*

## CHAPTER 5

# Lockdown

In the spring of 2020, while half of the world's population was under some form of lockdown or curfew, Bhutan was enjoying a kind of eerie respite. After Bert Hewitt, no other cases of COVID-19 had turned up outside of quarantine. With its strict enforcement of personal precautions, the country seemed impervious to the chaos swirling outside its borders. “I will resist a national lockdown and this is not something that His Majesty wants,” said the prime minister, Lotay Tshering. Should any infections emerge in the community, he added, only local or regional restrictions would take effect.

Still, the health ministry was looking beyond the temporary lull. In April, the Technical Advisory Group published an illuminating report with a deceptively dull title, “Engaging high-risk communities for COVID-19 control and prevention.” It was based on an on-the-ground tour of the exposed southern border, and its findings revealed what Bhutan was up against in trying to seal off the country from the virus. Nurtured over decades were deep-rooted connections between adjacent communities in Bhutan and India: 74 percent of Indian and Bhutanese towns had hired daily workers from across the border before it closed; 83 percent attended rituals and marriage ceremonies together; and the vast majority of residents purchased vegetables, rice, and groceries from the other side. They even grazed their cattle in each others' pastures. In light of these strong reciprocal traditions, which set the stage for viral transmission, the team collected more than 1,000 samples in Bhutan's first-ever serological surveillance of people living in high-risk areas. A single positive result surfaced—triggering a week-long lockdown in the Jomotshangkha sub-district of Sandrup Jonkhar, in the southeast corner of the country. It was an early taste of the total movement restrictions that would be declared over the next two years.

The Ministry of Health was on high alert. By mid-June, India's COVID-19 caseload started steadily rising—and with it, the threat of community transmission in Bhutan, given the many routes by which the airborne virus could slip across the border. From July 30 to August 4, the ministry staged an exhaustive serological survey, screening blood with rapid antibody tests, which reveal not only active disease, but also past infections. Its tested seven southern border districts, sweeping from east to west. It tested the densely populated cities of Thimphu and Paro, where residents were often on the move. It tested individuals considered at high risk, such as De-suups, police and army personnel, truckers and taxi drivers, loaders at transport hubs, immigration and customs workers, money changers in banks, and others. In six days, the ministry ran 16,450 rapid diagnostic tests—at that point, the largest sero survey in Bhutan history. The results: zero active cases and only one person with evidence of past infection. “With that, we were confident that the virus had not entered the country,” said the Royal Centre for Disease Control's Sonam Wangchuk. Still, in early August, the ever-cautious King commanded that the National COVID-19 Incident Command System be upgraded.

“This is how we stay ahead of the epidemic,” health minister Dechen Wangmo told the press on August 4. With COVID-19 storming across the globe, she cautioned that Bhutan's reprieve was likely tentative: “We are looking at what will realistically happen if there is community transmission tomorrow.”

A week later, life in Bhutan was turned upside down.

ONE OF THE RULES of Bhutan's pandemic response was preserving patient anonymity. And so, in mainstream and social media, Tandin Wangmo was known as "the Gelephu woman," a lyrical and mysterious appellation that evokes the title character in a film noir or a 1940s rom-com. A shy and polite 27-year-old, Wangmo was neither of those things. But she did play a dramatic role in Bhutan's pandemic narrative, by saving the country—in a roundabout way that many locals ascribed to divine intervention—from a massive early wave of COVID-19.

At 3:15 a.m. on August 11, 2020, the Prime Minister's Office sent out an urgent notice: "Following report of a COVID-19 positive case in Gelephu, who has come in close contact with people in Thimphu, Gelephu and those along the way, the government announced national lockdown starting today. No movement of people and vehicles within or beyond Dzongkhags will be allowed unless authorised." A later missive elaborated on the middle-of-the-night alert: "Everyone is asked to stay home to protect themselves and their families from the disease, should there be undetected, rampant transmissions." "All schools, institutions, offices and commercial establishments will remain closed." "The unprecedented lockdown is enforced to identify and isolate all positive cases, immediately breaking the chain of transmission." To reinforce the gravity of the situation, Bhutanese were informed that the National COVID-19 Task Force "received guidance from His Majesty The King, who stayed with the team all through the night at the ministry."

All this in response to what turned out to be a noninfection.

Tandin Wangmo's case was perplexing from the start. A native of the Serzhong group of villages in Gelephu, she had returned on June 26 from almost two years in Kuwait, toiling in a hotel's food and beverage service. At the time, Kuwait was awash in the novel coronavirus, though few residents observed precautions. "I thought that maybe I got it from the customers," she recalled in November 2021. "I didn't have any symptoms. Only a cough and cold—it's normal. But I had heard from my company that some people were sick from COVID. It was dangerous for all." Wangmo never experienced COVID-19 symptoms back home in Bhutan. During her mandatory facility quarantine, she tested negative five times on PCR—the gold-standard test. But, strangely, she was positive three times on the rapid antibody test. On July 26, the 30th day of her extended quarantine, she was finally allowed to go home after again testing negative on PCR. In keeping with health protocols, she dutifully reported one last time to a flu clinic in Gelephu, on August 10. There, astoundingly, she tested positive on PCR. Wangmo was immediately sent into hospital isolation, while health ministry staff plunged into contact tracing.

"It was quite puzzling to the health care providers," Wangmo said. "I thought maybe there was a technical problem." Experts in the ministry's TAG strongly suspected that the positive result was triggered not by an active and infectious virus, but by the dead remnants of coronavirus that Wangmo had contracted and eliminated months earlier in Kuwait. "We knew it was viral shedding. But as per the protocol, we had to report the positive result," explained the RCDC's Sonam Wangchuk. "Technically, the lockdown was not necessary, because it was a recovered case. But some in the government were feeling that we needed a lockdown. There was even a comment from His Majesty that our people are not serious enough about the pandemic—that we should now do a lockdown and see how we're able to respond."

And so, on August 11, life in Bhutan entered a kind of suspended animation. On BBS radio, the prime minister, speaking in multiple dialects, spelled out what people were required to do and how those in need could get help. "We cannot blame the woman who tested positive," he added. "It's not her fault. At such times we've got to pray for her health."

Despite this admonition, Bhutan's vociferous social media erupted, accusing "the Gelephu woman" of

endangering the nation. Wangmo's travels after quarantine had been minimal—she stayed briefly in Thimphu, then was driven directly back home to Gelephu, where she visited with friends and family and did a few hours of shopping. But the health ministry counted 211 primary contacts—broadly defined as anyone Wangmo might have had even glancing proximity to, including shopkeepers and waitresses. And it was the people in this large group who, as the highly social and footloose Bhutanese are apt to do, subsequently fanned out across seven districts. Ultimately, all would test negative. But the media, mistaking the peregrinations of these primary contacts for Wangmo's own travels, portrayed the Gelephu woman as a careless gadabout. "Social media was going so fast," Wangmo recalled. "Seven dzongkhags? I didn't go anywhere." On Facebook and other forums, while many people offered support, others heaped on blame. "I was crying inside," Wangmo said. "I thought that I undid all of this peaceful country's efforts."

Cue divine intervention. On the same day the country locked down, a 25-year-old loader at the Mini Dry Port in Phuentsholing—the teeming shipping terminal where goods from India entered Bhutan—visited a flu clinic with fever and other telltale signs of COVID-19. The next morning, on August 11, the results came in: positive. At the very moment when Bhutan underwent a national curfew as a result of a spurious case of COVID-19, the true first community case of infection emerged. When the loader's illness came to light along with a cluster of other previously invisible cases, the script flipped. The Gelephu woman was suddenly a heroine, shielding Bhutan just as it was poised for a silent outbreak. On August 12, the prime minister addressed the nation. He called Wangmo's case a "blessing in disguise." Watching the broadcast from her isolation ward, the Gelephu woman felt a wave of relief. Tandin Wangmo didn't seek celebrity. Looking back, she humbly acknowledged her pivotal role in Bhutan's pandemic story but interpreted the whole drama through the lens of Buddhism: "It was my fate."

THE COVID-19-POSITIVE LOADER set off a barrage of public health responses. On August 15, 20 surge teams deployed from the capital began aggressive community surveillance in Phuentsholing, collecting a first batch of 7,000 samples—one from each household—then samples from every individual in the city, excluding children under 5: 25,757 samples over 10 days, combining both rapid antibody and PCR tests. "The instructions came from His Majesty that we have to test all the population, because we cannot just wait for the virus to take off," said Sonam Wangchuk. "We had to arrange PPE for them, viral transport media, cold chain boxes. Even small things—alcohol scrubs, gloves, everything. I felt as if we were leading the war from the lab." When the state-of-the-art RCDC building had gone up in 2016, Wangchuk supervised every stage of the process, from site selection to floor planning to construction. "A lot of people were saying, 'Is this a big white elephant?' I said, 'As time goes by, you will see,'" he recalled. "My thinking was that, at some point, we would face an epidemic or pandemic outbreak." In August 2020, his foresight bore fruit.

When sample collection began in Phuentsholing, temperatures reached 29 degrees Celsius (about 84 degrees Fahrenheit) and monsoon rains were falling. "For each day of collecting, a minimum of 800 samples and up to 1,500," recalled Ugyen Dorji, a student volunteer from Khesar Gyalpo University of Medical Sciences of Bhutan. In their Tyvek protective suits and N95 masks, the health teams sweated and itched and broke out in rashes; a few fainted from dehydration. Following COVID-19 precautions, they worked out in the open, under umbrellas, trees, or roof overhangs. As instructed, they took pains to be courteous to their subjects. "Afterwards, people wrote in Facebook, in the Bhutanese Forum, that the sample collection in this area was very good," Dorji recounted. "They said we spoke very nicely and offered respect."

Testing quickly revealed that the infected loader was one case among many. By August 29, 41 cases connected to Mini Dry Port workers and their families turned up, along with another 62 cases in the community.

The loaders, health ministry experts ultimately surmised, likely caught the virus from Indian truckers in the transshipment area where Indian goods, per pandemic rules, were removed from Indian trucks and hauled onto Bhutanese vehicles. In the scorching summer heat, some of the drivers may have dispensed with masks and other protections. Lax quarantine procedures for the loaders may also have been to blame. According to TAG chairperson Sithar Dorjee, “By the time we started detecting things, it was already two weeks, by our estimate, after the virus had been introduced.” Moreover, the coronavirus had infiltrated several other places. According to Dr. Pandup Tshering, secretary in the Ministry of Health, “That really brought down our morale, because we had worked so hard to prevent importation and community transmission.”

Phuentsholing was declared a red zone—a high-caseload hotspot. But the threat wasn’t limited to the city limits. Before the lockdowns, thousands of people and vehicles had left the commercial hub for other parts of the country, thereby exposing others to the virus. Random testing thus began along the country’s main national highways. Densely populated destinations fell under special scrutiny. “Everywhere, the experience of large cities from New York to Mumbai to Wuhan has shown that they are particularly vulnerable as large numbers of people are living together and so COVID-19 spreads like wildfire,” observed *The Bhutanese* on August 22. “Our New York and Mumbai are Thimphu and Phuentsholing and so these two places will be the hardest hit over time, and we have to prepare for COVID-19 spreading like wildfire in dry shrub.” Miraculously, no one who had reported traveling from Phuentsholing tested positive.

Meanwhile, the logistical fallout from lockdown was sinking in. “It was a nightmare,” said Lungten Jamtsho, executive secretary of Phuentsholing City. “We had around 150 loaders in the Mini Dry Port area. We had about 30 customs officials, including clearing agents. There were De-suups. Altogether, around 200 people were working in the MDP, facilitating import and export. If we had to quarantine all of them, what would happen to the dry shipments? There would be a complete standstill.”

Government officials had long planned for the halting of imports. On August 12, the Ministry of Economic Affairs assured the country that it had amassed adequate stocks of essentials—rice, oil, salt, pulses (legumes), sugar, milk powder, and toiletries—to last six months. When a few pampered city dwellers complained that convenience stores were stocking only one brand of hand soap, there came a stern retort from Lotay Tshering. “We need to get the list of all articles that is imported and exclude what we don’t need for the next six months,” said the prime minister. Among the non-essentials, he noted, were sofas, leather goods, and flat-screen TVs. Apparently, “Even shampoo is an essential product right now,” he noted with disdain. In a pinch, he advised, Lifebuoy soap could suffice for body, clothes, and hair. A *Kuensel* editorial chimed in: “Suddenly, the values Buddhism taught us, like being minimalist, awakened us. Many are realising that there should be subtractions in our lives, subtractions in our wants and needs.”

The government had promised that after the lockdown commenced, a large corps of civil servants and volunteers would deliver food and other essentials to every household in the country. (On August 14, at the command of the King, the Royal Bhutan Police also launched a nationwide program to feed the country’s 45,000-plus stray dogs during this period.) In Thimphu, pickup trucks were assigned to leave packages of potatoes, tomatoes, onions, green chilies, garlic, and ginger on people’s doorsteps. To the government’s credit, among the essential items included for delivery were contraceptives, including emergency contraceptive tablets known as I-pills. Even special orders for tobacco and alcohol were entertained—just enough to help chemically-dependent people get by without suffering withdrawal symptoms that would drive them to breach lockdown rules: a classic harm-reduction approach.

Initial delivery efforts were marred by poor coordination. Calls to designated numbers for orders were often

not answered. Deliveries were late or nonexistent. “Thimphu is not a refugee camp with the government handing out food aid. There are surely better ways,” *The Bhutanese* grumbled. “The inability of the galaxy of senior officials to even ensure the smooth flow of essentials shows the silo mentality of the bureaucracy and its implementation and coordination weakness.” Part of the problem was that, even well into the 21st century, Thimphu lacked a proper street address system. According to Garab Dorji, chief ICT officer at the health ministry, “We had attempted a city address plan back in 2009, but it did not take off, due to numerous challenges. We have a close-knit society and thought we did not require an address system, because everybody already knew everybody.” Spurred by the pandemic, a team began creating a GIS-based street map of Thimphu and other municipalities and initiated an IT system that not only helped with deliveries but enabled more efficient contact tracing.

For many Bhutanese, the pain was serious. “While we had all our preparations on paper, on the ground it was much more challenging,” said Karma Yonten, a member of the King’s Secretariat. “During the first lockdown, you could see that people were starting to suffer. A lot of people didn’t have rice, oil, grocery, and other essentials stocked sufficiently. Daily wage workers, who get paid for the day, were probably the hardest hit. While people had been informed to store enough food and essentials at home, the reality was that many people couldn’t do that. And unfortunately, the essential delivery system that had been set up was clogged and unable to respond to the requirements of the people.” The King was moving around the city, getting feedback from social media, and becoming concerned, Yonten explained. “His Majesty mentioned that soon, it’s not going to be the pandemic that’s going to be the big problem for us—it’s going to be the frustrated and desperate people locked up in their houses. If they don’t have food and essential goods, they might come out on the streets”—thus spreading the virus and defeating the very purpose of lockdown.

In a meeting at the De-suung headquarters, the King proposed a logistically ingenious scheme that also made smart public health sense. He articulated the key parameters of what would become known as the zone system. Break up Thimphu into small, discrete zones, the boundaries of which were easily identifiable, so that people didn’t inadvertently cross zones. Make sure there were enough shops within each zone so that people could pick up essentials, situated so that every zone resident need not walk for more than 10 or 15 minutes to reach them. To prevent crowding, allow only one person from each household to come out with a movement card; for individuals who could not leave their homes, send volunteers to deliver the goods. Enable people to shop for essentials and get exercise for physical and mental health, but discourage them from socializing. “Those were the broad terms that he laid out for the zoning system,” said Yonten, who was assigned to lead the zoning task force.

The result was a map comprised of 56 zones in the capital. Each household received a movement card that designated a three-hour time slot during which people could move about and conduct errands. And it worked.

Yet even with the new zoning system in the capital and in Phuentsholing, Bhutanese suffered other forms of lockdown pain. In rural areas, farmers weren’t able to leave their homes to feed their livestock, guard their fields from wild animals, clear weeds from rice paddies, and harvest their fruits, vegetables, and grains. The hardships of rural life, amplified during lockdown, were underscored in a September 26 article in *Kuensel*: “The delivery of essential items was hampered when two bridges, one in Zhodu, Lingzhi and the other in Shana, Paro, were washed away. Five horses carrying essential items were washed away at Shana. At Zamthangka, Lingzhi a landslide hampered the supply of essential items.”

In line with global trends, lockdown also exacerbated the longstanding problem of domestic violence. The National Commission for Women and Children was flooded with calls to its toll-free helpline number from the capital and rural districts alike. Most callers reported emotional, physical, and economic abuse. The violence was

often committed by low-wage earners who were suddenly out of work and fueled by alcohol or drugs.

THE NATIONAL LOCKDOWN LASTED 21 DAYS—the same duration as quarantine, both informed by the science around how long an infected individual could actively spread disease. Over those three weeks, 111 new cases of COVID-19 had come to light. Had the lockdown been delayed by even a week, health minister Dechen Wangmo explained, COVID-19 would have spread exponentially across Bhutan. She estimated it would have taken only five days for 13 positive cases to infect the entire population of Bumthang—more than 17,000 individuals.

On September 1, stringent restrictions began to ease, a process deliberately spread out over 10 days. A press release from the Prime Minister’s Office struck a note of gratitude and national pride. “We are aware that you have lost your income, compromised your businesses and livelihood,” it said. “Nevertheless, no country in the world would have been blessed with such solidarity and support from the people in such times.”

The next day the prime minister posted a letter on Facebook to “My dear friends across the country,” accompanied by photos from his first post-lockdown biking trip. “It is a warm, beautiful autumn day, a weather befitting of a new chapter of post lockdown we have embraced today. The bright sun has stroked the leaves that are gradually bleaching, and with this, revitalised our energy and renewed our hope ... But as much as we unwind from the stifling ways of lockdown, we should also stamp on our minds that the risk of getting COVID-19 was far lesser when we were indoor. ... Which mean our stepping outside should be that of caution and vigilance.”

As *Kuensel* dryly observed the next day, “The reply was there on the streets, the expressway and every open space. People came out in droves, some with mask and some without. Gathering is still disallowed, but the roads became a gathering place. The request, it seems, fell on deaf ears.” On September 11, another *Kuensel* dispatch described the scene when onions and tomatoes finally arrived at Thimphu’s Centenary Farmers’ Market: “The pandemonium had the people disregard health protocols. There was no physical distancing and many were not wearing face mask.”

On September 12 the King, perhaps goaded by the mayhem, gravely addressed the nation. “What we do next is critical. The road ahead will be arduous. The enemy that we are confronting is invisible,” he said. “When I look ahead, I see a period that will be fraught with difficulties for our people.” As usual, his words proved prescient.

ON DECEMBER 17, 2020—BHUTAN’S NATIONAL DAY—the King conferred on health minister Dechen Wangmo the Red Scarf, one of the country’s highest civilian honors, “in appreciation of the capable manner in which she performed her duties to safeguard the nation against COVID-19.” Three days later the cruel capriciousness of the novel coronavirus again sent Thimphu into lockdown, and three days after that overspread the entire nation. “Lockdown 2.0,” as *Kuensel* dubbed it, would be a far more serious undertaking than the first version.

“This time, we have obvious indication of rampant local transmission and urge people to take maximum precaution,” the Prime Minister’s Office advised. The outbreak was insidious. It began, as did Lockdown 1.0, with a positive case discovered at a flu clinic—in this instance, a 25-year-old Bhutanese woman who got tested in order to be able to travel to Canada for work. Jamyang Choden, senior program officer at the Ministry of Health, made the initial phone call. It was past midnight, and Choden was surprised to hear the sounds of a lively going-away party in the background. Pandemic protocols restricted such gatherings. Miffed, Choden asked, “Why are you still awake?” She told the Canada-bound woman that she was calling from the Ministry of Health. The woman started crying, intuiting that she had tested positive. Choden instructed her to pack essentials for isolation. A few minutes later the woman called back, frantic that she didn’t have shampoo or toothpaste. Choden, as she had done countless other times during the pandemic, arranged to deliver the items.

Tracking down the woman’s contacts, the health ministry found more infections. “Thimphu residents had

never been scared of Covid-19 as they are today,” said *Kuensel*. “With close to 20 testing positive in the core city as of yesterday, and more contacts being traced and tested, the fear is of a full-blown local transmission.” Perhaps most frightening, nine cases—none linked to the Canada-bound woman—had emerged in Thimphu, Paro, and the southern district of Dagana.

The health minister explained that the new outbreak was far more serious than the one in late summer, because it struck the densely populated capital and sprung up in multiple independent clusters. What was not different from the first lockdown was the fact that positive cases elicited public humiliation. In a country where everybody knows everybody, it was easy to get the mobile phone numbers of patients and harass them. Once again, the prime minister had to set a higher moral bar. “It is good if one can help all the sentient being irrespective of who they are,” he admonished. “It is rather important to pray for their speedy recovery, the moment one wakes up.”

Health ministry epidemiologists concluded that the virus had infiltrated Bhutan around the end of November, seeding infections far and wide. But how did the pathogen—a new, more contagious variant of the original virus—get in? Very likely on a flight that landed in Paro on November 27, in which 60 percent of passengers—most of them patients returning home after medical treatment abroad, along with some customs officials and crew members—eventually tested positive. From there, SARS-CoV-2 easily circulated through breaches in institutional protocols and when individuals flouted pandemic rules. Three main clusters centered on archery games in Thimphu and Paro, students in Paro, and painters at Thimphu’s school for traditional arts and crafts.

This lockdown lasted 42 days, putting a damper on holiday plans. In the midst of the shutdown, on January 7, 2021, Bhutan recorded its very first pandemic death: “With immense grief, the Ministry of Health would like to inform the nation that a 34 year old man with pre-existing medical conditions (chronic liver disease and renal failure) who was detected with COVID-19 passed away today.”

On January 29, the Prime Minister’s Office again issued a press release expressing gratitude and praise. “The fact that the busiest street in Thimphu, Norzin Lam wore a deserted look since the lockdown was announced, was a quality unique to Bhutan where its people valued solidarity and unity under His Majesty The King more than anything else.”

One of the health ministry’s most impressive feats, in order to assure that the virus had been eliminated, was to test every household in the capital—twice. This scrupulous effort was a tacit rebuke to more advanced nations where infections were spiraling. “In the entire process,” noted the prime minister’s press release, “our mission was to arrive at ‘zero’ number of cases in the communities, in contrast with the attempts most countries were making to reduce and flatten the curve.” In the end, 395 cases were identified and isolated. Bhutan was declared free of community transmission. Unlocking began on February 1.

### **169,148 Tests**

*During Bhutan’s 42-day second lockdown, the Royal Centre for Disease Control tested samples from waves of surveillance centered in Thimphu and Paro. RCDC’s lab was running 24/7, supervised by chief laboratory officer Binay Thapa. Forty-eight staffers and volunteers worked, slept, and ate at the facility, which was operating in containment mode. Sonam Wangchuk, the RCDC’s director, was assigned to the health ministry and had to supervise his center’s grueling workload from a distance. When the lockdown was at last lifted, Wangchuk hurried back to the RCDC building to address his staff.*

**Sonam Wangchuk:** What we had done during the lockdown in Phuentsholing in the fall was nothing compared



to the work that we did during the second lockdown in Thimphu. The population of Thimphu and Paro are tenfold that of Phuentsholing. During the Phuentsholing lockdown, on an average day, we were testing 2,000, 2,500 samples. But when the Thimphu and Paro lockdown came, we were testing 15,000 samples on average per night. Towards the end of the 42 days, we were testing around 36,000, 37,000. Mass testing and cluster testing and contact tracing. Almost 170,000 samples we tested.

Everybody had been committed to working 24 hours a day without any rest. Even I had not slept for the 42 days, because all the testing was done in the night and on a real-time basis they'd update me. I had to report the results early every morning to the honorable health minister.

On the last day, when all the mass testing had been done and all the samples were reported negative, we said that Thimphu and Paro are clear to open, there were no viruses among the people. The honorable prime minister announced the lifting of the lockdown. I quietly went to my lab and I called together all my people who had been working for the last 42 days, day and night. I called them into the conference hall. I said, "For the last 42 days, there were no complaints about our lab. We were testing on time. We were reporting on time." I just thanked them from my heart. In the process, I started crying. I couldn't help it.

**Binay Thapa:** During those 42 days, Dr. Sonam was in the ministry. He was doing a great job there, but he couldn't meet with his own people in RCDC. We let Dr. Sonam speak a few words. And in the middle of speaking, he just broke down. The room was filled with emotions. It was hard work that we did, basically keeping our own RCDC people, our family members, our relatives, and the people in Bhutan safe. For me, if our leader breaks down in front of our people, that demonstrates his leadership, how much he takes care.

He is very selfless. He's a hardworking guy. He is a very good mentor. You know, in Bhutan, we address authorities as "Sir" and "Madam." I don't address him as an official. I don't address him as "Doctor." I don't address him as "Sir." I call him "my brother."

IN THE FIRST FEW MONTHS after the second lockdown ended, in early 2021, a graph of Bhutan's COVID-19 caseload showed a few blips bobbing above a zero baseline. On March 18 of that year, there were no active cases of infection. With its first round of vaccinations scheduled for late March, a sense of optimism started to blossom and the country seemed to have found its footing amid the public health crisis. But on the morning of April 16, a 10-year-old boy visited the flu clinic in Phuentsholing with suspicious symptoms. By evening, PCR confirmed that he was positive for COVID-19. His 29-year-old mother, though asymptomatic, also tested positive. The two were living in the temporary Amochhu Colony, which had been built a year earlier for Bhutanese brought back from Jaigaon, the West Bengal town just across the border. So began one of the most grueling chapters in Bhutan's pandemic story.

On April 17, Phuentsholing—the bustling border municipality always in the sights of Bhutan's pandemic fighters—went into lockdown. The lockdown lasted for 115 days, until August 10, give or take a few days of relaxed restrictions that applied only to small enclaves of the town. It was one of the longest pandemic lockdowns in the world, and one that was strictly enforced. This time the enemy was the highly contagious Delta variant, likely brought in from India, where cases were surging. Unlike previous iterations of the SARS-CoV-2 coronavirus, Delta had a particular affinity for children and an ability to elude the immune system.

As the pathogen raced through the population, the lockdown took an unimaginable toll on the people of Phuentsholing. Many in the town survive on a meager salary or a daily wage, toiling in small, private-sector

enterprises. With no income, they faced mounting pressure to pay rents for shops and houses. By June 16, 35 structures across eight clusters in Phuentsholing were designated as red buildings, where cases had emerged, and were completely sealed off and guarded, with no movement permitted. Despite these severe measures, cases cropped up inside the buildings—incontrovertible evidence that Bhutanese neighbors, as Bhutanese neighbors will do, were mingling and visiting each others' living quarters. By the end of July, residents of Phuentsholing had endured three mass screenings. Each time, new community cases surfaced.

Some people managed to flee. In 2020, the population of Phuentsholing was around 32,000. By the end of August 2021, it had dropped to 23,000. Many who wanted to decamp could not, because there weren't enough quarantine facilities to house them for seven days, per pandemic protocol, before they journeyed to lower-risk parts of the country.

These stark deprivations, exacted to safeguard the nation, couldn't be ignored. According to Pema L. Dorji, director general of the Department of Immigration, "His Majesty would state that it is because of the sacrifices made by high-risk border towns such as Phuentsholing that other parts of the country are not only kept safe from the virus but enjoy a semblance of normalcy." An August 3 headline in *The Bhutanese* put it more bluntly: "Phuentsholing Residents Endure More Than 100 Days of Lockdown So That People in Other Dzongkhags Can Remain COVID-19 Free."

"As per the reports in the social media, people seemed to be frustrated, because for almost four months, they had to be inside their house. Their children were there. The old citizens were there," said Lungten Jamtsho, executive secretary of Phuentsholing City. "Their livelihoods were affected. Education was affected. We also got reports about domestic violence—because they had been staying in the same room or the house for many days." Chungku Dawa was born and raised in Phuentsholing. In 2017, she was elected a local constituency representative, a post she held until 2020 and one that put her in close contact with the people living in Megazone 2, the core part of town where most of the cases surfaced. "One of the biggest blows was of dwindling reserves of food stock and savings of many families, due to prolonged lockdowns. Many families were unable to pay rent. They ran out of the essentials. Students, who were on a long break from school, also had to face this," she said. "Some families received Kidu [relief funds from the King] and they are grateful for it, because it helped see them through the worst. However, there were also many in genuine need of help in the times of lockdown." Dawa served in a meaningful role throughout the pandemic as local coordinator with the Bhutan Red Cross in charge of "death management"—arranging vehicles, mainly taxis, to carry the deceased (not necessarily COVID-19 victims) to the crematorium and ensuring that all religious rites and rituals were properly observed.

For Jamtsho, the logistics of delivering essentials and finding quarantine facilities was challenging. "During those four months, the cases were sprouting every day. And for each one of those cases, we had to find the primary contacts and quarantine them. We could not fast-track the cleaning work due to manpower shortages, because the numbers kept coming in. There were complaints from people that the room is not good, it's stinking, there is no water, there is no AC."

On Facebook, the Residents of Phuentsholing Group bristled with anger. In May 2021, Parba Laxi Rai posted: "With positive cases from community increasing daily, our hope of things becoming normal in Phuentsholing is fading each passing day and each passing day is weighing heavy on our livelihood. Our business is closed and the rents have become due, our deposits are exhausting, our children away from school...well the frustration is building stronger each passing day. Now long duration of lockdown is going to increase our anxiety and depression. The question now is for how long can we go on like this??"

When the lockdown was finally lifted, Jamtsho recalled, "The first thing that came into my mind is that

people will be happy. They can come out. After 115 days, people could go for a walk. People will be relaxed. They will be relieved.” But that’s not what happened. “On the first day, sometime towards noon or afternoon, I went around the city. I wanted to see how the people were reacting and how the businesses were doing,” he said. “But not many people had come out. It was like this for a week. There was still fear that the virus was there in the community and that they would be the unlucky ones who might catch it. The people here, they’re not actually afraid of the virus—they’re afraid to stay in the isolation centers for 21 days or more, away from their family members.” It was as if the interminable lockdown had traumatized the entire community.

Despite these hardships, Chungku Dawa saw flickers of promise in Phuentsholing’s tribulations. “From shrewd businesspeople we have turned soft, willing to help one another rise,” she said. “This pandemic also made us realize how overtly dependent we are on the smallest of things from our neighboring Indian towns. As the situation gets better, we must all work together to rebuild ourselves better.”

## The Art of Pandemic Contact Tracing

Tandin Dorji

Director, Department of Public Health; Head of National Surveillance Team

**Y**ou can train somebody in contact tracing. But at the end of the day, you need someone who is very good in talking to people. You don’t need somebody who has got a PhD or a master’s. You need somebody who can really talk well and get the information. Some of the contact tracers just have a lot of empathy and a natural knack of talking to people.

Deki Yangzom

Member, National Surveillance Team

**T**he surveillance team has had a key role in the response to the pandemic. We were the main players, because all case investigations were dependent on us. How many contacts did a confirmed case have? Which contacts went to which districts? Our leaders would wait for our interpretation of the transmission. Based on that, lockdowns would be announced. The pressure was specifically high during the outbreaks.

We have a set of standard questions used for contact tracing, a case investigation template. We would already have basic information from the laboratory when they declare results—the name of the case, their age and contact number. We would call the cases as soon as possible, as we cannot afford to waste time while we try to break the chain of transmission. We get their travel history, people they came in contact with, their household members, comorbidities, etc. Then we need to line list all the primary contacts with their basic information, such as name, age, citizen identity number, address, and contact numbers. After that, we would call each and every primary contact and tell them that they have been identified as primary contact and will have to be quarantined. Then the list of primary contacts is shared with the quarantine team for their pick-up.

The art of contact tracing? It all comes with experience. It’s an acquired skill, I would say. Initially, you would only know how to ask the basic questions, as per the question template. As you gain experience, you find techniques or skills to further probe, to get other information that would help us to find the source of the infection or get the possible linkage between cases. For example, we would ask personal questions. “Do you have a

girlfriend?” “Have you stayed over at your girlfriend’s place?” Sensitive questions. This comes with skill over time. Sometimes you end up calling the cases more than once, and it can get pretty exhausting. We tell them that this is going to be confidential. We make them understand that it’s a public health issue, that we are trying to protect the health of the public at large, so this is going to be totally confidential between you and me. We explain all these things so that they are comfortable with us and then they can tell us all their secrets.

Some people would just have one or two contacts—household contacts, family members. Some have lots of contacts. We had a case where a person lied to us. Later, we found out that he had lots of contacts—a whole cricket team.

Sonam Wangda

Deputy Chief Program Officer, Health Care and Diagnostic Division, Department of Medical Services, Ministry of Health; Member, National Quarantine Team

We would say that you are doing a great service to the nation just by being honest about your contacts, and if you do not tell the truth or if you are not transparent with us about your contacts, it will affect the community and the nation as a whole. And we would also try—I don’t know if this is the right word—emotional blackmail. We would talk about Our Majesty, how hard he’s working, how he’s going to the southern borders, how it is our responsibility to unite against this COVID-19 pandemic and how we should ensure that there is no community outbreak.

THE AUTUMN OF 2021 was a relatively tranquil pandemic interlude for Bhutan. On October 1, there were only four active cases of COVID-19 in the country and a gathering sense that life could soon return to normal. But once again, the course of the pandemic took an unexpected turn. On November 24, South Africa, where infections were rising steeply, reported to the World Health Organization an alarming and heavily mutated variant of the coronavirus, dubbed B.1.1.529, or Omicron. On November 26, WHO declared the new virus a variant of concern—in this case, more transmissible and more capable of thwarting public health and medical measures. The fast-moving Omicron also appeared to evade immune system defenses marshaled against previous variants, so that it reinfected people who had contracted earlier strains. “Our concern is that if this variant escalates and is introduced in India, it can spread like wildfire and it won’t be long before we have positive cases in the country,” warned *Kuensel* on November 29. “[T]here is every chance that our health system and response mechanisms will be overwhelmed.”

That scenario nearly came to pass. Beginning in mid-December, Omicron cases steadily rose worldwide—a trend that would soon be mirrored in Bhutan. On January 1, 2022, the country harbored only seven active cases of COVID-19. On January 14, when officials first confirmed the presence of the new variant, the figure was 96. On January 13, a health worker treating a patient from Guwahati, India, tested positive—the first Bhutanese health frontliner to contract the infection while on duty. After that, Omicron blew up. Like everywhere around the world, the new variant’s spread was abetted largely by its highly infectious and transmissible nature, but also by lockdown fatigue and the government’s calculated decision to allow travelers more freedom to move around without being subject to quarantine or mandatory testing. On March 14 alone, 1,032 new cases were picked up, part of the total of 4,807 active cases that day in the country. Omicron’s advance forced government officials and citizens alike to rethink the zero-infection goal that had been guiding the nation’s response from the start. As *Kuensel* noted on

January 15, “We have learnt from past experience that all it takes is a case or two in the community to lockdown a country. None of us can afford this. We have not lost many lives, but the impact on livelihoods is there for all to see. The country’s economy is still reeling from the pandemic. There is pressure on the government coffer.”

The very next day, coining a new pandemic term, the Prime Minister’s Office announced a “24 hours blackout” in 14 districts. Employing the by now familiar language reserved for lockdowns, it added, “No movement of people and vehicles are allowed, unless authorised for essential purposes.” Cases were surging in quarantine facilities. More concerning was the fact that a tanker driver who supplied drinking water to some 200 workers at the Hindustan Construction Company camp, as well as for the company’s workers on site at the Punatsangchhu Hydroelectric Project I, appeared to have been infected and to have distributed it widely. The driver also frequented bars and shops next to a main highway. Moreover, cases skyrocketed among workers quarantined by private contractors hired by the hydropower project—most of these laborers expatriates from India, which was seeing a record number of infections. The day after the “blackout” was announced, more than 50 hydropower workers in the Wangdue Phodrang district tested positive. Soon, cases erupted in other districts. Subsequent investigations revealed a host of protocol breaches at the hydropower project and a likely leak from the company’s quarantine facility.

The merciless Omicron variant, now seeded in Bhutan, was there to stay. “The reality,” *Kuensel* observed on January 18, “is that we have to live with the virus.” In an editorial on January 22, the newspaper suggested that it might be time to rethink the nation’s strategies. Prime Minister Lotay Tshering disagreed. “We are still in the eliminations of virus,” he asserted, reiterating the King’s command to strive for zero cases of COVID-19.

By January 19, the term “blackout” had mutated to “lockdown”—and applied to the capital and a patchwork of red zone districts across the country where caseloads were high. How long the lockdown would last, government officials said, would depend on two factors. One was whether the public health goal would continue to be eliminating the virus or, as other countries had long ago decided, “flattening the curve” of new cases. The other factor was how compliant the Bhutanese people would be during another lockdown.

In a January 27 press briefing, Dechen Wangmo emphasized the extraordinary transmissibility of the new variant: “During the second national lockdown, there were only 1,300 cases in four months. This lockdown, the country recorded 1,500 within 14 days.” In response to the hovering question of whether Bhutan should declare a truce with the virus and restart its economy, Lotay Tshering said, “Under the current predicament, controlling the virus had to be accorded priority over the social and economic aspects.”

The next day, a COVID-19 tragedy cast a pall over the already anxious nation. Thirty-four-year-old Sostika Gurung, a patient with chronic kidney disease who was undergoing dialysis in Phuentsholing, died under murky circumstances. She had tested positive for COVID-19 and was referred to Thimphu for dialysis. Instead of being admitted to a hospital isolation ward, she and her COVID-negative husband were sent to an isolation hotel. Gurung’s health quickly deteriorated that night, and her husband, Krishna Gurung, frantically made calls to get help. There was a delay in the medical response, partly because of miscommunications. Sostika Gurung died early in the morning of January 28—Bhutan’s fourth COVID-19 death, and the first since the previous August. When Krishna Gurung went public with his grief, and outrage mounted, the Bhutan Medical and Health Council launched an investigation.

“We were shot with another dose of reality yesterday. Right in the middle of the battle, it felt like a bullet-hit to learn that one more precious life died with COVID-19,” Lotay Tshering posted on Facebook on January 29. The prime minister again argued for the country’s zero-tolerance policy. “Close to 130,000 children below 12 years are unvaccinated. We have to think about our parents and grandparents. More than 56,000 of our population are in the vulnerable group of above 65 years. And more than 90,000 people are with co-morbidities,” he wrote. “If we allow the wave to sweep us, we are indirectly saying we are ready to sacrifice the vulnerable sections of

our population. Isn't the inconvenience today far milder than the agonising pain of losing a loved one?" Most pointedly, he contrasted Bhutan's tenacious public health strategies with those of other nations that had struck a pragmatic balance between lives and livelihoods. "In other countries, the success rate is measured by the decreasing number of hospital admission, those on ventilation and the number of deaths. The measuring yards are different from ours. Our motivation is to eliminate the disease because we cannot afford to lose our people to something that is preventable."

Yet it seemed that the terms of engagement with the virus had quietly shifted. As the third year of the pandemic unfolded in Bhutan, the arguments over lives and livelihoods persisted—as they had everywhere in the world since the crisis began. In February, the King asked officials to assess the experiences of other nations that were easing restrictions to help Bhutan chart a new course forward. By early March, the virus had claimed seven lives in Bhutan. Well over half a million samples had been tested just since early January 2022—a figure that eclipsed all previous mass surveillance campaigns in the country. Clearly, the Omicron variant, while prodigiously contagious, was less lethal than its predecessors, and people across society were asking whether the government's stringent precautions, largely unchanged since the beginning of the crisis, were still warranted.

On March 12, Lotay Tshering issued a carefully argued press release announcing that, barring specific extenuating circumstances, the era of lockdowns in Bhutan would soon end. Once children ages 5 to 11 were fully vaccinated (more than 90 percent of adults 18 and over were already immunized), life would return—in a slow, deliberate, four-week process of easing—to near normal, although mask-wearing, hand hygiene, and other precautions would stay in place. He explained the government's rationale. "We know from international scientific information as well as our own experience that the Omicron variant is much more transmissible than previous variants, but also that it is milder. In such a situation, pursuing a zero-Covid policy with lockdowns, which are difficult for our people, is no longer the better choice." Lockdowns would only be put in place if cases surged beyond the country's hospitalization and bed occupancy thresholds, or if a deadly new variant emerged. Under the new strategy, the government would prevent infections as much as possible without lockdowns, continue to provide vaccines, and guarantee medical care to all positive cases. Under the new wave of relatively mild infections, the health ministry also devised a plan to use its personnel most efficiently. Healthy people with mild cases would isolate at home; infected individuals with underlying conditions would stay in special isolation hotels; and people needing hospital care would be treated in four dedicated hospitals across the nation.

In late March 2022, Lotay Tshering described how his thinking had evolved. "Many countries were beginning to live with the virus. Many were opening up their borders, because Omicron was mild and their vaccination coverage was good. We were observing the trends in those countries. They were not very encouraging," he said. "Those countries were happy living with the virus, because their mortality rates and hospitalization rates were now halved. If they had been losing 1,000 lives per week, they were now losing 500; if they had 10,000 people hospitalized, they now had 5,000. They felt they could afford to live with the virus. But we couldn't, because our death rates and hospitalization rates were close to zero—any increase would be a failure for us."

The decision to open up was, therefore, calculated, and based on several lines of investigation. In early February, the King had decided to find out first-hand how Bhutanese were faring with Omicron. He and the prime minister toured the south, to talk with Omicron-positive patients in isolation facilities. "The more people we met, the more they were asymptomatic or had just mild symptoms. That gave His Majesty the confidence to believe in what other countries were doing," said the prime minister. "We knew that because Omicron was highly infectious, we were not required to eliminate it—and it was not possible to eliminate it. So we shifted our focus from hunting the virus and counting the number of positives to finding symptomatic cases that would potentially

require hospitalization. We designed phased-in easings of restrictions to allow infections to rise at a very, very gradual pace, because our policy remained the same: preventing all preventable deaths.”

“We have remained guided by the science,” explained Dechen Wangmo. “His Majesty time and again said, ‘Let’s not just go by what is happening in the rest of the world. Let’s be guided by our own experience, our own data. With that, we had to answer two questions. One: Do we want to continue with the current intervention? Two: Can we *afford* to continue?’” Wangmo felt the country had enough public health safeguards in place to turn the page.

One feature of the new public health landscape was an intervention known as “reverse isolation”—a paradigm shift in the health ministry’s pandemic approach. The idea is that if the coronavirus surges in a community, the population most vulnerable to COVID-19—the elderly, the disabled, the immune-compromised, and others—would be isolated *before* they contracted the virus, an upside-down version of isolating those who are already infected. They would also receive vitamins, healthy meals, and other care to bolster their immunity. Reverse isolation residences—sited across all 20 districts in serene landscapes—would house dedicated health professionals as well as personal caregivers, and would be connected to larger health care facilities. According to Wangmo, “Learning from what has happened globally during peaks in the pandemic, when the elderly and the vulnerable were disproportionately lost, we thought we must give the maximum protection to the people who need it the most.”

These were all rational decisions, supported by the evidence, but not necessarily easy. “We must live with the virus as humans live with various diseases, but the tradeoff is that there will be disease within the community and if there are more number of cases then there will be deaths,” the prime minister told the press. Acknowledging the brutal economic effects of lockdowns, he said, “When risk to life is coming down and livelihood risk is going up, then we cannot have lockdowns.”

Four days after the prime minister’s announcement, two more deaths appeared on the Ministry of Health dashboard—a 62-year-old woman with cancer and a 52-day-old baby boy. Their passing underscored the fact that Omicron, while milder than the Delta variant, was still capable of killing the vulnerable. By May 1, 21 people in Bhutan had died of COVID-19.

Still, Bhutanese were more than ready to put the coronavirus pandemic in the rearview mirror. “When the day broke yesterday with the news of more relaxations, many literally took to the streets to celebrate. As if it was news of a victory over the infectious Omicron, people came out, walked over to the other zones, crowded shops and groceries,” said *Kuensel* on March 17. “There is a new trend—of forgetting the risk of the virus. And if this continues, we will soon be back under stricter, military-style lockdown.”

A popular multimedia journalist was equally indignant. “The government will not say it, but I will,” observed Namgay Zam. “The reason Covid-19 cases are on the rise is because we don’t follow Covid safety protocol. Lockdowns are failing because if we don’t have someone to mind us like children, we will break rules. It is on us. Not on the government. His Majesty thinks the best of us. As does the government. Hence the relaxation. But look at us. All covidiot.”

Bhutan’s ambitious and widely admired public health calculus had changed. But the Bhutanese, perhaps, had not. There was a poignancy in the fact that after so much national solidarity, collective sacrifice, and exquisitely calibrated policymaking, a ferociously fast-spreading virus coupled with an irrational, post-lockdown exuberance had left tens of thousands infected. COVID-19 was not going away. But Bhutan’s high-minded and canny game plan staved off the worst for as long as it possibly could.

The People's Pandemic



Top and bottom: Scenes from Phuentsholing during the first mass testing, in the summer of 2020.

*(Photo: Ministry of Health, Bhutan)*



Empty streets during lockdown in Thimphu, August 26, 2020.

*(Photo: Prime Minister's Office, Bhutan)*



The Royal Bhutan Army feeds stray dogs during lockdown, at the King's command.

*(Photo: De-Suong)*



## Lockdown



A team from Thimphu—consisting of the Technical Advisory Group, the Royal Bhutan Army, the Zoning Task Force, and De-suung—visited the Southern COVID-19 Task Force in May 2021. Participants shared lessons learned during pandemic lockdowns.

*(Photo: Ministry of Health, Bhutan)*



The Southern COVID-19 Task Force conducts its first lockdown simulation exercise in Phuentsholing in May 2021.

*(Photo: Ministry of Health, Bhutan)*

## CHAPTER 6

# All of Society

**D**uring the pandemic, while many nations were riven by arguments pitting individual rights against collective responsibility, the Bhutanese stood behind their monarch and political leaders and acted as one. “From the Government to the Opposition, monks to millionaires, villagers to volunteers and public servants to private citizens, we are all in it together,” wrote Chewang Rinzin, director of the Royal Institute for Governance and Strategic Studies, in *Kuensel*. Observed Tenzing Lamsang, editor of *The Bhutanese*, “This thing of coming together as a nation is a very Bhutanese characteristic. There is almost a hive mentality that comes in whenever there’s a crisis in Bhutan.” Journalist Namgay Zam agreed. “I have complained about ‘small-society syndrome’ and how suffocating it can get. But I believe it is this very closeness that has kept us together,” she told *The Atlantic*. “I don’t think any other country can say that leaders and ordinary people enjoy such mutual trust.”

Public health experts use the terms “all-of-society” or “whole-of-nation” to describe this country-wide pursuit of a common goal. In Bhutan, the task of fighting the pandemic did not fall solely on the government. It stretched across every institution and applied to every individual. To be sure, certain groups—including the orange-uniformed De-suups and the Central Monastic Body—played outsized roles. But everyone was expected to share the burden.

Villagers helped the Royal Bhutan Police and the Royal Bhutan Army patrol the southern border—sitting all day in crudely built observation posts and traipsing through marshy terrain. Hoteliers offered their properties as quarantine facilities. Taxi drivers managed crowds and monitored safety protocols during funeral rites at crematoriums. Landlords waived rents to tenants out of work. Red Cross volunteers journeyed to remote villages during lockdowns to deliver food and medicines to the elderly and those living with disabilities. Members of Parliament donated a month’s salary to the cash-strapped government. Individuals and organizations poured millions of ngultrums (the local currency, a total that was equivalent to tens of thousands of dollars) into the King’s Relief Kidu program and the government’s COVID-19 Response Fund. A hospital staff in the east collected money to feed stray dogs. Restaurants prepared meals for Ministry of Health teams working long into the night. Neighbors set up outdoor ovens and cooked for De-suups on duty. Members of the news media, temporarily suspending the separate function of the Fourth Estate, advised health ministry officials on how to most clearly and effectively phrase public health notifications. Elderly men and women turned prayer wheels as a spiritual gesture of support. One man anonymously left his SUV with the keys inside near the office of the King’s Secretariat, with a note explaining that the vehicle was being offered for the pandemic effort.

In a traditionally agrarian nation where one-half of the population is engaged in agriculture, and where crops and livestock production accounted for nearly 17 percent of the 2020 GDP, farmers played a crucial role. They donated their annual harvests to feed people in lockdown and quarantine, negotiating monsoon-slicked roads and dangerously swollen streams to ferry tons of vegetables: beans, broccoli, cabbage, carrots, cauliflower,

chilies, and potatoes. Butter, balls of cheese, bundles of ferns, cartons of eggs, even cooking oil and salt magically appeared where needed. In April 2020, a group of farmers drove up to the Prime Minister's Office in a Bolero laden with 800 kilograms of red rice.

There was a downside to the bounty: competitive giving. "One common occurrence during times like this is the risk of over zealous supporters competing with each other in their contributions," noted *Kuensel* on April 3, 2020. Ten days later, the newspaper resorted to editorial scolding. "Contributions are made for a good cause without expecting anything in return. It should not be for publicity. As Buddhist[s], we believe that the merits we earn are greater when offerings or contributions are kept low key without publicizing them."

### **De-suups: Heroes and Heroines in Orange**

Young men and women in handsome orange uniforms were everywhere—monitoring the porous border; building temporary living quarters for Bhutanese relocated from India; preparing rooms and serving meals in quarantine facilities; loading and unloading essential foods and supplies during lockdowns; patrolling the streets in Thimphu and Paro for breaches in safety protocols; screening travelers at points of entry; assisting surveillance teams during mass testing; manning vaccination posts. These were the De-suups—the Guardians of Peace—quietly effective members of a volunteer corps founded by the King in 2011 for disaster relief operations and other exigencies.

According to the mandate of De-suung, as the program is called, the corps' main training objective is to "encourage all citizens to be active in the greater role of nation building." De-suung emphasizes such values as community service, personal integrity, and teamwork. Before the pandemic, De-suups were known for being on the front lines of wildfires, landslides, and rescues. In 2015, when a major earthquake struck Nepal, the King sent De-suups to help run a district hospital. Although COVID-19 may be the most far-reaching and complicated crisis that Bhutan has faced in recent times, the intensive De-suung training prepared these men and women well.

Before the pandemic, standard De-suup training lasted five weeks, with each day beginning as early as 4 a.m. As the enormity of the challenge became clear, in the spring of 2020, the course was condensed to three weeks, with more people accepted into each class, or numbered "batch." Bhutan's armed forces, police, and disaster management personnel are all few in number. Because frontliners on the ground were desperately needed, the De-suup corps was dramatically scaled up. From the program's inception in 2011 to the first COVID-19 case in Bhutan, in March 2020, only 4,457 Bhutanese had completed the training; by April 2022, the figure was 26,257.

Who were these men and women in orange? They ranged across all of Bhutanese society: members of the royal family, parliamentarians, businesspeople, civil servants, teachers, homemakers, former monks and nuns, and unemployed youth. As *The Bhutanese* pointed out during the first national lockdown, in August 2020, "These heroes are ordinary fathers, mothers, wives, husbands, daughters, sons and siblings, all with families and familial responsibilities at home." That month, some 8,000 De-suups were deployed in lockdown duty across 20 districts—2,000 in Thimphu alone and 1,700 along the southern border. They slept on schoolroom floors and hotels, ate in a common mess hall, and typically didn't see their families for months at a time. They endured extreme winter cold in the north, intense summer heat and monsoon downpours in the south, smugglers and knife-wielding attackers along the India border, feral dogs, and all manner of wildlife (one De-suup barely escaped with his life when he was attacked by a wild elephant in Samtse).

In April 2021, sensing an opportunity to augment the vocational competencies of the younger members

of the corps—many of whom had never gone past grade 10 and were out of work—the King launched the De-suung Skilling Program to teach any member who was interested skills that he or she could convert into a post-pandemic livelihood. Among the program's graduates: Tandin Wangmo, “the Gelephu woman,” whose erroneously positive viral test fortuitously triggered the first national lockdown. After that lockdown ended, she joined the De-suups and moved on to the skilling program, specializing in culinary arts. Wangmo's chef-trainer praised Wangmo's *momos* (dumplings), and Wangmo now hopes to open a restaurant in her home village. What will she call it? “The Half Moon Restaurant,” she said, smiling with optimism during a Zoom conversation. “Because a half moon doesn't stay half—it becomes full.”

## The De-suup Transformation

Sonam Kinga

Chairperson, Steering Committee, De-suup Skilling Program

Former Chairperson, National Council of Bhutan

2014 graduate of De-suung training

**D**e-suung is more than a program. It has become a part of Bhutanese society and has also acquired a profile and a credibility that many organizations which have been in existence longer than ours have found difficult to achieve. People have an aspiration, a yearning, to be part of this community.

De-suung was started when young people approached His Majesty many a time and said, “We need to serve the country. We do not have wealth, we cannot make donations, we cannot make contributions, we do not have the skills to serve in any other ways. But we have our age and our time.” His Majesty thought about this and came up with the idea of the De-suung. As the pandemic unfolded and as De-suups were deployed to serve the country in diverse ways, many young people saw the crisis as a lifetime opportunity to serve the King and the country. It is intense. It is heightened. It is elevated. There have been transformative experiences and moments for them.

As a Bhutanese, and especially as a young Bhutanese, you don't travel as much across the country as people of my age used to do. But with the pandemic, you have De-suups from Thimphu, for example, being deployed to Trashiyangtse. You have De-suups from the south being deployed to the north. Suddenly, on deployment, young people are discovering their country in a totally new way. All of us imagine and conceptualize geography through cartographic representation—we see images of maps or on the TV. But as De-suups go on these deployments, particularly in the border areas, the country's geo-body comes alive for them. It is both a discovery of the country and a self-discovery.

## **Pandemic Guardians**

Reflections from De-suups Tenzin Pelden and Tshewang Rinzin

*Tenzin Pelden is a content producer at Yeewong Bhutan, a private multimedia company and the first and only women's lifestyle magazine in Bhutan. She trained as a De-suup in July and August 2020 and was assigned to assist in the first national lockdown, that August.*

*Tshewang Rinzin directs human resources and administration for the Bhutan Post, the country's postal system. He graduated from De-suung training in April 2020 and has continued his volunteer activities.*

**Tenzin Pelden:** At the essential food delivery team, during the first day of lockdown, we were overwhelmed with calls. People were quite scared. I attended more than 630 calls that first day. We each had a notepad and a pen. We had to write down people's names, mobile numbers, their orders. The lists were divided into grocery and vegetable items. Those on the delivery team had to go to the store and point their phone camera at an item on the shelf and video call the buyers to see if that's the item that they wanted. When I was on the delivery team, I was at the 8-11 store, and there were many varieties of tea bags—Lipton Gold, Tata, many others. I didn't know which tea bag the buyer wanted, so I had to video call the buyer and ask.

Once I encountered a man, I think he was a single father. We had just finished our duties delivering everything. He called me asking if I could bring him some baby diapers. It was around 10:00 or 11:00 at night. When placing orders, you're supposed to follow the protocols, but he wasn't able to finish all the formalities. After having to attend 100 or more calls a day, every day, you get the gist of a situation. You can actually feel what the other person is feeling. My friend and I were discussing the situation. My friend said, "I think he is unable to tell us what he wants, but it's urgent." We were off duty, but we went to buy the diapers. Buying diapers for a baby was quite difficult, because some babies are chubby and some are lean, and until the lockdown of 2020 I didn't even know that diapers had sizes! We dropped off the diapers. He was so thankful.

I stayed with the essential food delivery team for three weeks. After that, a group of us were shifted to the FCB—the Food Corporation of Bhutan—to unload and load. We unloaded trucks from India. They delivered rice, greens, other essential items like toilet paper or boxes of milk. You can imagine two 20-kilogram bags of rice on my shoulders.

There was, for each center or zone, one focal assigned as a mental health facilitator. That person was responsible for the health and safety and well-being of the citizens within the zone, and of De-suups as well. I was one of the focals of my center. One day, during the second lockdown, I was with one of the counselors at RENEW [Respect, Educate, Nurture, Empower Women]. He wanted two of us to tag along with him, because there was a man, he was in his early 20s, who was suffering from alcohol addiction. There was no domestic violence or anything, but he had relapsed. The man called us himself. He was telling us that he feels so angry, without any reason. He was frustrated living in a confined area, he was suffering from addiction. I realized that guy just needed someone to talk to. The counselor was asking questions, and listening, listening. They talked for some time. And after that, the man felt better.

**Tshewang Rinzin:** Jigme Dorji Wangchuck National Referral Hospital wanted to make some protocols for inside the facility. I worked with the JDW team. We had some difficult times with the health staff. They didn't understand at first what the coronavirus was and what the consequences would be if you didn't follow protocols. The protocols were mandatory face masks when you visit the hospital, safe social distancing, mandatory

handwashing before people entered the hospital. Since the JDW had so many entries and exits, we had to make one entry and one exit. We proposed ideas for how to decongest a crowd inside. If this hospital were compromised, there would be no other place people could go. We could not make a single mistake. Today, those protocols are still in place.

During the second lockdown, I led the essential items team that catered to red spot buildings [where positive cases had been found]. We had to cordon the red houses and cater the essentials to them. People would call us and we listed down what they wanted. We felt that during lockdowns, the idea is to basically make people comfortable, help them stay at home. So whatever they needed, we catered to them. In a family, since there are children, they want snacks, they want juices. Those things were not part of the 18 essential items published by the Ministry of Economic Affairs, but we still used to cater these to people in red houses. We also used to add these people to our personal WhatsApp contacts. Although we were strangers, we added them. We would chat. Later, we would become friends. That was how, as a small community, we worked together.

My patrolling in Thimphu was during the evenings. I patrolled from 6:00 p.m. to midnight. When I went around, I saw many youngsters going for drives, going for walks, not wearing face masks, not social distancing. When we used to encounter them and advise them, they were quite annoyed, because it was like taking away their freedom or like getting into their business. We explained why it is mandatory, we were very polite. During our training days, His Majesty had mentioned that we are His Majesty on the field. So we had to think like him, we had to act like him, we had to have compassion for his subjects like him. No matter how angry or disgruntled people were, we were very polite, very soft.

Anywhere in the world where there is a disaster, rescue people wear bright colors. In Bhutan, when people see our orange uniforms, they are relieved. Another perspective on why the uniform is orange is that, especially in the context of Buddhism, orange represents Buddhadharma. The work that we do right now is the same as Buddhadharma—with a lot of compassion, with integrity, helping humanity.

Most Bhutanese people, they visit the monasteries, temples, offer butter lamps. When I have briefings and debriefings with my De-suups, I tell them, “Since you are a frontliner, you don’t have to do these things. You don’t have to offer butter lamps. You don’t have to go to temples. The tasks that you do, the issues that you resolve, the things that you do to make people happy, those are the biggest accomplishments in your life. They will go on and pass as karma for your next life. Whatever service you give as a De-suup is in line with the teachings of Buddha.”

## **Pandemic Prayers and Practical Advice: Monastics on the Frontlines**

In Bhutan, a country where three-quarters of the population is Buddhist, religion pervades the culture. During the pandemic, the *Zhung Dratshang*, or Central Monastic Body, strongly shaped the nation’s public health response. Led by the chief abbot—Tulku Jigme Chhoeda, who is known as the Je Khenpo and is appointed by the King—red-robed monks and nuns were nearly as expeditious in their interventions as the health ministry itself. Though local Buddhist beliefs held that COVID-19 represented karmic retribution for humankind’s moral misdeeds—such as eating meat and exploiting the environment—the monastic agenda during the crisis was thoroughly pragmatic and rooted in science. For a country where citizens rich and poor, highly educated and illiterate, respect and follow the guidance of monastic leaders, the result was a strong dose of spiritual suasion. According to health minister Dechen Wangmo, “For us Bhutanese, there is no such thing as a religious life and a secular life—they are interwoven.” The Je Khenpo’s guidance, she said, “gave a lot of confidence to the people.”

Although the Central Monastic Body is apolitical, if its support had been lukewarm, it could have undermined the government's initiatives.

As Sonam Kinga explained in an April 2022 article in the *Journal of International Oriental Philosophy*, the Central Monastic Body provides wide-ranging services to lay people and local communities: conducting rituals and ceremonies during births, illnesses, and deaths; holding mass initiation and blessing events; reciting prayers and performing rituals on auspicious days in homes; consecrating the construction of houses and monuments; propitiating deities; and providing astrological services. In these ways, they embed themselves in the daily life of the society and influence its course. Early in 2020, as the novel coronavirus began its global assault, monks and nuns in Bhutan sprang into action.

They began chanting continuously in temples and monasteries—praying not only for the health of the Bhutanese, but of all people. On March 20, the chief abbot led the first-ever “initiation” or “empowerment” of the Medicine Buddha ritual over TV and social media platforms. In religious iconography, the Medicine Buddha is typically depicted sitting in a lotus posture, his entire body colored in blue, symbolizing healing and purity. In Vajrayana or Tibetan Buddhism, the lineage followed in Bhutan, the Medicine Buddha meditation is considered the most powerful for healing, dispelling illness, and awakening one's innate healing wisdom. The initiation both blessed participants and taught them the basics of visualizing the Medicine Buddha and reciting prayers and mantras associated with him. More than 9,000 Bhutanese tuned in to receive the oral transmission. Before the ceremony started, the chief abbot pointedly reminded the virtual devotees that they should play their part in thwarting the new infection. “Putting into practice the instructions given by the Ministry of Health is absolutely essential,” he said. Underscoring the point, he added: “During his time, even Buddha Shakyamuni consulted and followed the instructions of his physicians, despite the fact that he had already attained omniscience and mastered the tantras of the science of medicine.”

In a sense, members of the Central Monastic Body served as spiritual frontliners—often at the behest of the health ministry. In the spring of 2020, after the first positive case had been detected, the Je Khenpo, in a formal address to the public, urged mourners at funerals not to crowd cremation grounds, as was the Bhutanese habit. In early 2021, every time a shipment of vaccines arrived at Paro International Airport, monks performed elaborate rituals to cleanse the vials of defilements. In May 2021, as the Delta variant spread, the Central Monastic Body distributed sacred pills and holy water, said to be blessed by the Medicine Buddha. As Sonam Kinga wrote, “For the devotees, the sacred pills became the Bhutanese-Buddhist antidote to the disease. It boosted confidence and psychological resilience of the Bhutanese people.” After the long, painful lockdown in the south that spring and summer, the health ministry asked the Central Monastic Body to conduct a series of rituals and religious ceremonies to ward off any future coronaviral visitations. Whenever the ministry needed to schedule an important undertaking—such as the launch of a vaccination rollout—it consulted with lamas at the Pangrizampa College of Astrology, in Thimphu, to pinpoint the most auspicious dates. And when the highly contagious Omicron variant hit the scene, forcing closures in monastic precincts and making it difficult for people to have access to spiritual services, especially the astrological readings they depended on for everyday planning, the Central Monastic Body published the names and personal mobile numbers of all monk astrologers across all 20 districts of the country.

Put simply, Buddhist chants and prayers and actions echoed the health ministry's messaging, in spirit if not form, and could have been lifted directly from the public health playbook. Bhutan's monastics and ministry officials competed on the same team.

## **Our Gyenkhu: “Our Responsibility”**

From the start of the pandemic, Minister of Health Dechen Wangmo stressed the importance of personal responsibility in combatting the threat. She formalized that message in an initiative known as Our Gyenkhu—a term that means “Our Responsibility.” To amplify the message, the ministry enlisted a squad of social influencers—including actors, visual artists, bloggers, and sports personalities.

The chief abbot formally launched the Our Gyenkhu campaign on October 30, 2020, at Tashichhodzong, the impressive monastery/fortress on the northern edge of Thimphu. The initiative’s goal: to instill a sense of personal and collective responsibility and national solidarity. In the weeks and months that followed, “Our Gyenkhu,” “My Gyenkhu,” and “Your Gyenkhu” became catch-phrases that reinforced a sense of duty and national allegiance during the crisis.

### **Denkar’s Gyenkhu**

A prominent travel blogger reflects on her role in the Our Gyenkhu campaign

*Tshering Denkar, Bhutan’s first solo travel blogger and vlogger, launched “Denkar’s Getaway” in late 2017, initially focused on a niche audience of Bhutanese domestic travelers and trekkers. Since then, the blog has expanded in scope and subject, and Denkar has garnered some 100,000 followers across Facebook, Instagram, and other social media platforms. In 2018, Denkar had been granted an audience with the King, who gifted her an iPhone 10 to record her excursions to some of the least traveled parts of Bhutan. Denkar joined the Our Gyenkhu campaign in 2020.*

**G**yenkhu means “responsibility.” Because of our wide reach, social media influencers got summoned during the pandemic. But I took up my Gyenkhu way before the official announcement, by advocating and disseminating information when I was traveling. During the first case of COVID, it was still okay to move around, so I would travel to the villages. I like elderly people and senior citizens, so I would visit them, talk to them, and tell them about COVID-19 protocols and measures.

I never follow a script. For some people in Our Gyenkhu, the script works. But for me, the script does not work. Just give me the concept. I will do it on my terms. I play my own game.

After the initial case of COVID, the director of the Royal Office for Media and I discussed how to disseminate information to the local people. The brilliant idea was to go multilingual or multidialect. I am an expert in Sharchopkha [a language of Bhutan’s eastern population] because I’m Sharchop myself, so I started to do vlogs in Sharchop. Other actresses would speak in their own dialect—Khenkha, Bumthangkha, Lhotsamkha, etc.

We used social media platforms to the fullest, because that was the only way to reach the public. I did a piece on essential handwashing, keeping ourselves clean, just the COVID dos and don’ts. I had never spoken to Sharchops onscreen ever—it was my first time. That video is one of the highest viewed videos on my social media platform. It’s embarrassing. It’s not one of my travel videos, but that advocacy video in the Sharchop language that has gotten so many views—almost 200,000. My highest-viewed video so far is one where I got jabbed in 2021. I was just checking the stat: 10 million views.

With lockdown 4.0, the Omicron lockdown, people are pretty sick and tired of the information because we pretty much know what to do, right? Wear the mask when we go out. Wash our hands. Even I, I’m getting tired of disseminating this information. So I started a show named “Stories from the Frontline,” whereby I invited frontline workers to exchange light conversations with me on the social media platform. Our frontliners have been working tirelessly for the last two years. There’s only so much coverage the mainstream media can do. I have



announced to myself that I'm going to be their storyteller and bring the frontliners—who deserve to be known for their hard work, volunteerism, and sacrifice to keep the community safe—to the public. When we're on live, we talk about what they like, what their favorite things are, their education, and then, gradually, we talk about their work, their nightmares, the best things, the extraordinary things in the pandemic. In that way, at least people learn about the existence of that particular frontline worker.

I try to make the blog as inclusive as possible. I've been talking to specially-abled people. I've been talking to people living with blindness. I've been talking with people who are not able to work. I talk to them, I ask them about their stories, I ask them about the struggles they are facing amid the pandemic and how we can be of help. Some people don't even have bread and butter for the next day. Although I'm not able to financially support them, through the stories I share on social media platforms, compassionate and selfless people come forward to support and help the needy ones. Knowing that I made a difference makes me utterly happy.

During the pandemic, I started this initiative called Toys for Joy. Many people do not even have the income to buy their children toys. So I collect secondhand toys—which the urban kids take for granted because they have so much. Every time I go to villages to disseminate information or meet kids, I give them a toy and make them happy.

I hadn't realized that social media could become an important platform or mechanism or tool to disseminate information. But now with the pandemic, people have become dependent on social media platforms for news and entertainment. With more viewers and followers on my social media handles, I have more responsibilities to consciously use the digital platform to the optimum in disseminating information and sharing stories of both people and travels. After the pandemic, my responsibilities as a social media influencer will continue.

### **Divine Intervention: The Scientists Speak**

For most people in Bhutan, “all of society” includes a group of unseen constituents: the guardian deities that populate the local Buddhist belief system. As journalist and editor Kinley Tshering wrote in 2016, “We worship the deities. We seek their protection. We entice them with gifts. We offer butter lamps, alcohol, and money to please them. We seek their blessings for success, wealth, and health ... The gods are part and parcel of our mundane lives.” These invisible presences asserted themselves during the pandemic as well—even among the scientists who led the public health counteroffensive. Normally, the scientific enterprise rests on facts and rationality, not serendipity. As the French microbiologist Louis Pasteur famously said, “In the fields of observation, chance favors only the prepared mind.” But in Bhutan, many of the successes or lucky events that other cultures would have ascribed to diligent preparation were chalked up to protective deities.

The fact that not one among the thousands of tourists in January and February 2020 brought COVID-19 into the country: seen as divine intervention. That the World Health Organization mistakenly shipped 2,500 sets of urgently needed virus test kits to Bhutan when they were supposed to go to the Maldives: divine intervention. That a tabletop exercise was staged in Thimphu just days before the sudden first lockdown: divine intervention. That the first lockdown, triggered by a spurious case of infection in Gelephu, helped uncover an actual outbreak in Phuentsholing: divine intervention. That the first vaccine rollout took place just before the deadly Delta variant emerged: divine intervention. That health officials managed to secure at the last minute Moderna vaccines for the second rollout: divine intervention. That Bhutan's cabinet was well stocked with health professionals: divine intervention. “This is something hard to scientifically prove, but then again, we don't have to prove

anything,” Dr. Sithar Dorjee, chairperson of the Technical Advisory Group, told *Kuensel* in September 2021. “I truly believe there is divine intervention at work here.”

So did others who led the public health response. Below are some of their reflections.

Dechen Wangmo

**Minister of Health**

This might sound very philosophical, but as human beings, when there are things you cannot explain, you want to believe in something. We don't expect magic per se. But we believe in the divine. You would be surprised. Even the date that we wanted to have the first discussion with Moderna—we picked an auspicious day based on the astrological calendar. It was a very important day in my life. I did a meditation in the morning. There's a temple in the Thimphu Valley, where one of my protecting deities is, because I was born in Thimphu. I remember the health secretary saying, “Please go there and do a ritual in the morning.” I called the monk and said, “It's a very important day for me today. Please make sure that I do all my offerings. And please do all the prayers. These vaccines must come through.” Having grown up in a culture where deities are so much part of your everyday life, would not doing all this make any difference to the outcome? I don't know. But doing it does give you a psychological assurance: Okay, I've done everything. Now let's see how it goes.

Dr. Tshokey

**Clinical Microbiologist, JDW National Referral Hospital; Member, Technical Advisory Group**

I am a born Buddhist. I believe in bad karma, good karma, rebirth. I also believe in the supernatural and the divinity of things. A scientist can be an outright believer of divine intervention—you don't have to choose only one, you can choose both. But we have to know when to apply science and when to leave things to divine intervention. During this pandemic, I personally believe that divine intervention has played a great role. It is happening even now. Every day, I come across and handle many near-miss events. And at the end, I go, “Wow, divinity saved us again.”

Deki Yangzom

**Member, National Surveillance Team**

I am a strong believer in divine intervention. Science gives us all the facts and the practical aspects. But there are certain things which are beyond what we can see and perceive. All those causes and conditions are beyond the scientific explanation, beyond the control of human beings. Divine intervention does not mean magical things will happen. It's the trust, it's the motivation, it's the guidance and blessings from the elders, from the leaders, from the spiritual masters that keeps us going. That positive energy is a divine intervention. I would say there was a divine intervention for me as well, getting the opportunity to be a part of this team, because when the pandemic came, I was not working for the Ministry of Health, I was working for an allied health agency. But somehow, due to divine intervention, I became a part of the surveillance team. I would say this was divine intervention. And I seriously believe that.



## Message From His Holiness the Je Khenpo on the Launch of the “Our Gyenkhu” Campaign

**O**n this auspicious day, I am very happy to be launching this unprecedented initiative which is being made possible through the strong cooperation between the royal government and the people of Bhutan in combating the ongoing pandemic.

I understand that “Our Gyenkhu” is a campaign strategically designed not just to reinforce COVID-19 mitigation efforts but also to initiate a new nation building movement through a collaborative approach that we commonly refer to as “Whole of Nation/Society Approach”.

Furthermore, it is a campaign inspired by the wisdom and compassion of our beloved Kings and their vision to instill collective responsibility and national solidarity- through the spirit of true nationalism- in order to effectively navigate through these arduous times and overcome any national obstacles for all times to come. I strongly feel that this is a very timely reminder and initiative as no single individual /entity in our country is solely responsible for the growth and wellbeing of our nation, and that we must all act collectively to achieve our collective vision and goals.

We should all be inspired by His Majesty’s selfless and compassionate actions and play our parts in shielding our precious country from the pandemic, and in kick starting a brand new movement to make Bhutan a stronger and more resilient nation.

I pray that the initiative will turn out to be a very successful one. I wish all of you good luck and success. It is indeed Our Gyenkhu to work towards a more stronger, resilient and prosperous Bhutan.



**His Holiness the Je Khenpo launched the “Our Gyenkhu” campaign on October 30, 2020. Minister of Health Dechen Wangmo is at right.**

*(Photo: Ministry of Health, Bhutan)*



**The Central Monastic Body conducted a series of rituals and prayers to help curb the spread of COVID-19.**

*(Photo: Ministry of Health, Bhutan)*



**Members of the Central Monastic Body perform purification rituals on vaccines in Lhuentse, in eastern Bhutan, in March 2021. Religious figures were key in helping lead the public health campaign against COVID-19.**

*(Photo: Ministry of Health, Bhutan)*

## The People's Pandemic



**Students from Khesar Gyalpo University of Medical Sciences of Bhutan helped the Ministry of Health in data cleaning during the vaccination campaign.**

*(Photo: Ministry of Health, Bhutan)*



**Residents of the Logchina group of villages, in the Chhukha district, expressed their appreciation to De-suups with a truckload of fresh vegetables.**

*(Photo: De-suung)*



De-suups handled hotline calls throughout the pandemic, providing the public with critical information on quarantine procedures, health protocols, travel and flight delays, and movement passes.

*(Photo: De-suung)*



Thimphu Comics' rendition of Bhutan's whole-of-society pandemic response.

*(Photo: Wang Rana Gurung)*

## CHAPTER 7

# Vaccinating a Nation

**F**rom the start of the pandemic, the capricious behavior of SARS-CoV-2 convinced public health experts that the only lifeline against future viral waves was a vaccine. But around the world, immunizing whole populations often turned out to be as problematic as containing the infection. This was not the case in Bhutan. While other countries were struggling, in part because of ill-informed and antagonistic vaccine holdouts, Bhutan drew on its communal strength to swiftly construct a vaccine bulwark against COVID-19—one that would, by the summer of 2021, be extolled in the global press and serve as a rebuke to other places where antivaxx sentiments proliferated.

Back in April 2020, after infected American tourist Bert Hewitt showed that Bhutan was not impregnable, the King commanded that the country procure doses as soon as they became available. Cost would not be an issue. The command was handed down just as the world was starting to wrap its mind around vaccine production and distribution. Several companies had launched clinical trials. That month, the Coalition for Epidemic Preparedness Innovations (CEPI), the vaccine alliance Gavi, and the World Health Organization, along with UNICEF, established the COVID-19 Vaccines Global Access Facility, or COVAX. The collaboration was forged to speed the development and manufacture of vaccines and to guarantee fair and equitable access around the world. COVAX's lofty goal: to deliver two billion doses by the end of 2021, enabling nations to immunize 20 percent of their populations (a goal that was not even halfway achieved). In July 2020, Bhutan joined the COVAX alliance.

Several vaccines of various types were in the pipeline, made by AstraZeneca, Pfizer-BioNTech, Moderna, and other firms. By the summer of 2020, the AstraZeneca, Pfizer, and Moderna products had shown promise in early trials. By November, all three proved at least 90 percent effective in preventing infection. In December, the U.S. Food and Drug Administration approved Emergency Use Authorization for the Pfizer and Moderna vaccines, and the United Kingdom approved emergency authorization for AstraZeneca's.

In Bhutan, the reigning guidance for a vaccination campaign came down in November 2020, when officials were finalizing the country's deployment plan. Unsure of vaccine supplies, they had initially selected vulnerable priority groups for the first rollout. "When the plan was presented to His Majesty, he said no. He wanted the vaccine to be given to the whole population," recalled Dr. Mimi Lhamu, the pediatrician at JDW National Referral Hospital and chairperson of the National Immunization Technical Advisory Group (NITAG). Added Karma Yonten, head of the office of performance management in the King's Secretariat, "That way, no one's going to be upset about being left out, and the country as a whole is undivided in its response to the pandemic. You can see the much broader and deeper way in which His Majesty thinks, rather than just the logical and limited way in which we tend to think."

On January 9, 2021, Bhutan asked India—its closest diplomatic partner—for help in procuring more than one million doses of the AstraZeneca vaccine, known as Covishield, which was being manufactured by the Serum Institute of India: enough doses to inoculate (in two rounds) Bhutan's entire eligible adult population of 533,500.



Bhutan officials breathed a sigh of relief when the Government of India donated a total of 550,000 doses, split into two shipments, in January and March.

At 3:25 p.m. on January 20, an Indian Air Force An-32 turboprop glided into the Paro valley, ferrying the first 150,000 Covishield doses. Flanked by senior government officials, the Venerable Laytshog Lopen Sangay Dorji—a high-ranking member of the Central Monastic Body—led prayers and conducted a purification ceremony. On March 22, Bhutan received its second vaccine consignment from India of 400,000 doses.

As a defensive move against vaccine hesitancy, which was becoming rampant across the globe, the prime minister spoke for two hours on January 29 on a casual Facebook live session. “I will not mislead the nation. It is not a political game or to show to others how courageous I am,” he asserted. “I’m a professional and I know the vaccine has a high level of protection, which is why I’ll take the jab, 100 percent.”

In February, the Ministry of Health conducted its first social media survey of more than 7,000 respondents, to gauge vaccine hesitancy. Some 60 percent said they would take the jab, 30 percent said they probably would, and barely 1 percent reported they definitely would not. While misinformation about vaccine dangers poured across social media, Bhutan by and large did not take the bait.

The Ministry of Health intended to launch its vaccination campaign on the most favorable date possible according to the Buddhist astrological calendar. The period from February 14 to March 13 was deemed an inauspicious month during which no new ventures should be undertaken—not even a high-stakes rollout of lifesaving vaccines. “In our society, we have very strong beliefs in culture and traditions,” said Mimi Lhamu. “Any new thing we start—new work, laying a new foundation for a new building, shifting to a new house, taking a newborn baby out into the open air—we try to avoid during inauspicious days.”

The postponement gave health officials more time to work on any vestiges of vaccine reluctance. Early reports from other countries of serious side effects after immunization, including deaths, were circulating. “There was a lot of negative information in the Indian media. We were very worried about the uptake of the vaccine,” said Lhamu. “I was sincerely praying that all the eligible population would come forward and we would have a smooth campaign.”

ON THE AUSPICIOUS DAY of March 27, 2021, at the auspicious time of 9:30 a.m., the first dose in the Bhutan’s COVID-19 vaccination campaign was delivered to a 30-year-old woman born in 1992, the auspicious Year of the Monkey. Her name was Ninda Dema, and until this ceremony she had labored in relative anonymity as an intellectual property officer at the Ministry of Economic Affairs, though during the pandemic she was deputed to the King’s Relief Kidu effort. The honor seemed foreordained, she told *Kuensel*. When the Prime Minister’s Office announced her selection on March 23, “Everything seemed to have aligned together. As I was turning my car after sharing the news with my sister, a man walked out of her office with a bottle of milk. That was a very auspicious sign,” she said. Media coverage of her selection introduced an obscure medical term into the popular imagination: *trypanophobia*—fear of injection or needles—an affliction Dema overcame to fulfill her historic role. (As she would later tell *Kuensel*, “The cameras were more intimidating than the injection itself.”)

In the days leading up to the momentous jab, Dema visited temples in Thimphu, to receive blessings. Now, inside the hall of Lungtenzampa Middle Secondary School, latterly turned into a vaccination center, rhythmic chants filled the air and fragrant butter lamps waved in the breeze. Dema gave a secular double thumbs up before elegantly folding the left sleeve of her blue *kira* jacket and baring her upper arm. Administering the shot was Sister Tshering Zangmo, a ponytailed nurse born the same year, per astrological advisory. Surrounded by masked health personnel, monks, and cameras transmitting the event live, Dema pressed her palms together over her heart, closed her eyes, and offered her own prayer: “Let my action here today bring peace to all sentient beings.

Let my deed today help materialize our Monarch, Je Khenpo, and the government's prayers. And let this small step of mine today help us all prevail through this illness.”

Dema's inoculation was the signal across the country for other 30-year-old women born in the Year of the Monkey to kick start their districts' campaigns. Collectively, their brief accounts in *Kuensel* made up a portrait of what some refer to—nostalgically or objectively, or perhaps both—as the “Real Bhutan.” In Haa, Kezang Wangmo received the jab in a basic health unit, went home to milk her cows and feed the cattle, took to bed with a post-immunization headache, and woke up at night to cook for her family. In the Dogar village block of Paro, Sangay Wangmo was immunized in the morning and was sowing seeds in her field by afternoon. In Trashigang, a woman from Bihar who insisted on anonymity endured the injection and immediately went to her loom to resume weaving. “I was not trying to be famous. I volunteered in an effort to encourage those unsure about the vaccine,” she explained. Back in Thimphu, the prime minister followed Ninda Dema, along with more than 50 members of his extended family, including his two 80-year-old parents and his physician wife, Ugyen Dema, the breastfeeding mother of a one-year-old—tacit encouragement to other young mothers that the jab was safe.

What followed was a national dosing blitz. Between March 27 and April 3, the vaccine was given to all eligible adults above the age of 18: farmers and shopkeepers, college students and senior citizens, artisans and civil servants, people from all across society. In the Lingzhi subdistrict of Thimphu, vaccination teams trekked to the highlands to immunize nomads, prisoners and police personnel on duty renovating a *dzong* (a fortress-monastery), and four hermits meditating in Naro. In Pemagatshel, a 102-year-old woman cheerfully showed up at a vaccination booth. In the days after the main campaign, as part of the Ministry of Health's “Reaching the Unreached” program, volunteers personally took the shots to the elderly and disabled who couldn't make their way to vaccination posts. A retired forester named Dorji Penjor Drukpa was, at the age of 104, the oldest person in the country to receive the jab. Unlike in other nations, where besieged health workers were prioritized for first immunizations, in Bhutan they got the shot after everyone else.

By April 9, Bhutan had immunized 472,139 individuals, 94 percent of those eligible. Globally, the figure represented the largest share of a population to be vaccinated other than in the Seychelles, and far outstripped coverage in wealthy nations such as Israel, the United Kingdom, and the United States, which had been waging aggressive campaigns for months. “How the Tiny Kingdom of Bhutan Out-Vaccinated Most of the World,” teased a *New York Times* headline. “Small but quick: Bhutan vaccinates 93% of adults in 16 days,” declared the Associated Press. And the rollout didn't stop at Bhutan's borders. Using official lists of Bhutanese residing all over the world, the government dispatched vaccines to India, Nepal, Bangladesh, and other countries to safeguard the far-flung members of its nation-family.

There were some 37,000 holdouts. For them, the Ministry of Health debuted a different campaign, combining moral opprobrium and practical inconvenience. On April 9, Dechen Wangmo released an official statement fortified with boldface: “Just as a parent would put the happiness and welfare of their family first, His Majesty the King has shared thoughts about taking the vaccine only after every eligible person in the country received their shots safely.” To back up her request, she asked the districts to identify those eligible who had not stepped forward. They would face mandatory periodic testing and seven-day quarantine when traveling from high- to low-risk areas. Local officials were enlisted to convince the resisters to set aside their worries for the common good.

Only 46 people suffered serious aftereffects. Eleven vaccinees experienced alcohol withdrawal symptoms. In a country with high rates of alcoholism, public health officials had feared this possibility. “In the first campaign, there was fake news going around saying that, in order to get the vaccine, you needed to abstain from alcohol for two or three weeks. So many people wanted to get the vaccine that alcoholics stopped drinking. Afterwards, they had withdrawal seizures,” Lhamu said. During the initial rollout, she added, “One person had come with

withdrawal symptoms. We told him, ‘We cannot give you the vaccine today. Come the next day.’ This guy said, ‘No, no, no. I want to get the vaccine today so that I can go home and drink.’” It was a classic clinical dilemma. “Yes,” conceded Lhamu with a smile, “we gave him the vaccine.”

THOUGH HEADLINES ABOUT BHUTAN’S vaccination triumph read like a public health parable, the achievement had a long backstory. It began in 1979, when the country established its Expanded Program on Immunization (EPI) with the objective of reducing seven common vaccine-preventable infections (tuberculosis, diphtheria, pertussis, tetanus, polio, measles, and hepatitis B). By 1991, Bhutan had reached universal childhood immunization and has maintained childhood vaccination coverage of more than 95 percent. It notched major successes in other vaccine-preventable diseases as well, with poliomyelitis eradicated in 1988, measles eliminated in 2017, and rubella verified to be under control. Bhutan introduced into the national immunization schedule the pentavalent combination vaccine in 2009, human papillomavirus (HPV) vaccine in 2010, inactivated polio vaccine in 2015, pneumococcal vaccine in 2019, influenza vaccine in 2020, and gender-neutral HPV vaccine in 2020.

All these campaigns planted trust in the idea of immunization. They also paved the way operationally for COVID-19 vaccine rollouts. “Bhutan banked on this existing infrastructure and network, which the country had invested in since the 1960s,” said UNICEF’s Will Parks. “Providing COVID-19 vaccines was, in a way, an extension of the routine immunization services.”

Of course, the scale and scope of a vaccine rollout during a lethal pandemic went well beyond that set up for routine inoculations. In public health parlance, “microplanning” became paramount. Every aspect of the campaign—from transporting the vials and keeping them cold to administering the shots and closely monitoring people afterwards for complications—had to be exquisitely choreographed. The doses went to 1,217 sites across the country. Nearly 3,300 health workers and 4,400 De-suup volunteers assisted.

The logistical hurdles were high. The vaccines were ferried by a convoy of refrigerated vans to accessible locales and by choppers and airplanes to eastern districts and the highlands. Given Bhutan’s rough and often perilous terrain, “They had to calculate how many days on foot it might take to reach the final destination. Do we need a helicopter to take things up? Are there rivers that may have flooded or burst, where the vaccines would have to be winched across?” said Parks. “Microplanning is a standard of public health that must be met, and the Bhutanese health system is extremely adept at microplanning.”

Planners also had to accommodate the unusual temperature controls for the new COVID-19 vaccines. The AstraZeneca doses could be conveniently stored at +2°C to +8°C and opened for up to six hours at room temperature, which meant they could easily be dispatched to all corners of the country. But the Moderna vaccine required refrigerators that maintained -15°C to -25°C, and the Pfizer needed ultralow temperature freezers set at -70°C to -86°C. According to Parks, “When you get vaccines that require such low temperatures of storage, it’s a complete game-changer.” By June, Bhutan’s capacity for quality storage of routine and COVID-19 vaccines had expanded threefold, from 95,000 liters to 372,638 liters across a range of temperatures. Said Parks, “It was an amazing game of chess, or a jigsaw puzzle, putting it all together.”

Meanwhile, the Ministry of Health, backed by the WHO country office, was training frontline workers in immunization basics: arranging furniture to ease the flow of staff and patients through vaccination sites, giving the shot, responding to and monitoring side effects. Teams composed of a doctor, nurses, and health assistants were assigned to village, community, and urban centers. It was a home-grown effort. As Lhamu explained, “We didn’t recruit any new people. We roped in orthopedic technicians, dental technicians, clinical nurses working in the hospitals, other categories of health workers.” To supplement a shortage of doctors, hospital physicians and

postgraduate trainees from Khesar Gyalpo University, as well as nursing students, were called up.

To reach every single vaccine-eligible person, timing was everything. “Yak herders are a nomadic population. We scheduled their vaccination to when we knew they would come down to a certain post,” Lhamu said. “For the hermits, if they’re in a strict retreat, then we do not disturb them. But once they come out of retreat, we ask them to get vaccinated.” In Bhutan, every primary health center has its own customized arrangements for immunization. Health workers are personally acquainted with the residents in their respective zones and know how to reach them. “They know all of the families,” Parks said. “Up on the walls of the clinics they have all the charts of where people are living and maps of the local villages. The health workers, particularly the frontliners, are in tune with the local communities. That’s the essence of primary health care.”

One of the bonuses of the COVID-19 immunization campaign was the creation of the Bhutan Vaccine System. Before the pandemic, vaccination data had been collected and recorded manually. But in late December 2020, the government’s IT team was told to design a digital system for COVID-19 vaccination that could also be used for other immunizations. The BVS portal allowed citizens to register for shots online. The system also enabled officials to keep track of vaccine stock, generate real-time reports, produce vaccination certificates, and gather in advance information on medically vulnerable individuals.

“We had to work in a very short span of time, within three weeks,” said Garab Dorji, chief ICT officer at the health ministry. “It started as a COVID vaccine system. But now, every vaccination—such as flu, HPV, childhood vaccinations—will be organized through the system.” For Bhutan, it was a point of pride that this and other new technologies were developed locally—unlike in the past, when the country depended on foreign IT support.

Added Lhamu, “We had dreamed about having an online vaccine system, but we could never get around to doing it. Thanks to the COVID pandemic, we could. Every morning, we knew how many people would receive the vaccine. At the end of each day, we could get numbers on a real-time basis. What is the coverage for each and every district? In those areas where the coverage was low, we could reach out and ask what was going wrong and then try and solve the issues.”

During both the first and second vaccination campaigns, NITAG members were stationed in a small, windowless room in the Health Help Center in Thimphu, keeping tab on the country-wide rollout via WhatsApp groups. According to Lhamu, “We were troubleshooting, answering all the queries that we got, especially in the first campaign. ‘Can I give vaccine to this category of person?’ ‘This person is taking this medicine—can we give them vaccines?’” During the first rollout, even Prime Minister Lotay Tshering, who happened to be in quarantine, fielded SMS messages and phone calls from frontliners.

Most critically, the BVS allowed Ministry of Health staff to do real-time monitoring of adverse events following immunization, or AEFIs. Because COVID-19 vaccines were developed in record time, nagging questions about safety remained. In its first vaccination rollout, Bhutan saw more than 8,000 AEFIs. Every one was reported, investigated, graded, and followed up with a personal phone call from the health ministry. Staffers tracked people who experienced minor side effects, such as fever or headaches, for up to a week after vaccination. They monitored those who suffered serious AEFIs, such as seizures or breathing difficulties, for up to 28 days. “We reported serious AEFIs within 24 hours, investigated them within 72 hours. After the investigation, we reached out to the media to say, ‘This serious adverse event happened. These were the reasons,’” said Lhamu. “That way, we could sustain the confidence of the public. At the end of the campaign, we did a detailed causality assessment with technical experts from outside and from within WHO.” This trove of information was submitted to the Uppsala Monitoring Center, the world’s largest repository of drug safety and monitoring data. In its modest way, Bhutan was helping build the scientific database.

## Bringing Vaccines to Lunana

On the trail with Dhan Kumar Rai, Dema, and Dr. Kinley Dorji

*During the first COVID-19 vaccination campaign, a team of 10—four medical staffers and six De-suups—negotiated the treacherous Himalayan passes of Lunana, Gasa, to deliver vaccines to some of the most remote villages in the nation. Three of the group stayed together for the entire trip. Each wore a backpack weighing more than 30 kilograms, filled with medical equipment and supplies. They traveled between villages at night to meet the stringent deadline of one week to finish the campaign.*

### The Team

#### Dhan Kumar Rai

Health Assistant, Lunana Primary Health Centre

Born and raised in Wangdue Phodrang. Joined the Lunana PHC in 2015.

When I was assigned to Lunana, I was young. I wanted to experience things that I didn't get to experience in the urban areas—rural places, beauty, nature. At first, it was difficult for me to adjust. Now, I don't know if I could leave.

More than 700 people live in Lunana. I know each and every one of them—by their name, from which village they are. Some older people call me son and hug me tightly. Some elderly call me younger brother. Some younger children call me elder brother. There are children who were born in my hands—now they are getting an education. I have become a part of their family and they have become a part of me.

#### Dema

Staff Nurse, Lunana Primary Health Centre

Born and raised in Punakha. Assigned to the Lunana PHC in November 2020, just before the COVID-19 pandemic struck. After completing three years of nursing training in India, supported by a scholarship from the King's office, Dema became the first female staff nurse in the Lunana village group.

After completion of my twelfth grade, in 2014, I went to Lunana to meet my grandparents. The local leaders suggested that because I was the most educated in Lunana at that time, I should go and study nursing and then come back, because until then there was no female health staff who was willing to come and work there.

When I went to Lunana, there were lots of issues, women's issues. They didn't go for antenatal checkups, as there was no female staff. If they had intimate issues, they were too shy to go to the male staff, so they just hid themselves. I wanted to change the women's reluctant mindset. I wanted to change their lifestyle by educating them. They were so happy when I reached there. They treat me as their daughter, their sister.

#### Dr. Kinley Dorji

Medical Officer, JDW National Referral Hospital

Born and raised in Thimphu. Joined JDWNRH in 2019. Member of the Bhutan Emergency Aeromedical Retrieval Team.

In the vaccination campaign, they were looking for a couple of doctors who could be assigned to different areas of the country as an emergency backup for any sort of acute reactions occurring with the vaccine. I volunteered to be a part of the team. I had heard about Lunana. I had never seen it. I didn't know about it. It was like Narnia to me—walking into a closet and walking out somewhere else, full of snow. A magical place.

## The Trek

*The six-day route started at the Lunana Primary Health Center, in Lhedi, and took the team first to the upper villages of Tshojong, Toenchoe, and Thangza. After circling back to Lhedi, they set out for Threlga and, in the most difficult stretch of the journey, across Kechala Pass to the village of Wachey—the same path on which they would return after they finished the assignment.*

**Dhan Kumar Rai:** To reach Thangza, we had to cross three streams and a river, then walk through a forest. Tshojong is the place where the tree line ends. It's sandy, windy. The wind goes through you. To reach Wachey, we had to cross a mountain. Then there are forests. There are chances of encountering the wild Himalayan bear—I have encountered it once or twice in the past. Then comes the path to the mountain—rocky mountain, all rugged. Then again there comes a forest. There are a lot of streams to cross. Sometimes in summer, the river swells. Sometimes the water flows above the bridges. We had to cross all those things and then we reached Wachey.

**Dema:** The order was to complete the vaccinations within one week. But as there was no motorable road, we were worried. We had to travel at night. There was no rest. We were working day and night.

## The Jobs

*The Lunana team vaccinated 381 residents—96.7 percent of the eligible population, exceeding the national figure of 94 percent. Even more impressive, the campaign took place in a harsh, high-altitude landscape and during the highlanders' critical barley-planting season.*

**Kinley Dorji:** Because it was plantation time, it was very difficult to get people to come for the vaccination. Especially in Thangza and Thenchoe, they were occupied with the plantation. Some of them had a notion that when you get vaccinated, you will feel lethargic, you will feel out of energy, and you won't be able to work. Dhan Kumar noticed that in some of the places where the plantation was going on, people were not coming to the vaccination booth. At around 3:00, 3:30 in the afternoon, he and I went to the fields and started calling out people who had not turned up.

Dhan Kumar was very convincing. Everyone knows him, so it was easy for him to convince them. He had a very good way of speaking to people. Their concern was not being able to work after vaccination, that everyone would fall sick. Dhan Kumar told them that this vaccination is very important, that our government had put in a lot of work to get these vaccines here in Bhutan and bring them to you, so please don't be scared about it. He told them about the minor AEFIs which were associated with the vaccines. He managed to convince each and every one of them.

## The Mountain

*The final leg of the vaccination rollout took the team to the farthest village, Wachey. To reach it, they crossed Kechala Pass, 4,480 meters above sea level, a visually breathtaking route that took in snowcapped peaks and a lake—but in poor weather turned into a perilous path. On the way to Wachey, a blizzard struck. Two days later, vaccinations complete, the trio headed back to their station in Lhedi. By then, the entire landscape was blanketed in white. A slick, snow-clad one-meter-wide path separated the granite mountain face from an 85-meter dropoff to the frozen lake. A local resident named Tshering Drukpa—18 years old, tall and strapping—volunteered to lead the group on the return journey.*

**Dhan Kumar Rai:** Without snow, from the river to reach up to the top of the Kechala, it takes two to three hours. On this day, it took us more than five hours to reach the path. It was really windy. The blizzard came like

anything. Our boots were drenched in water because the snow melted in our boots and in our pants.

The doctor was brought up in Thimphu. He said he had never seen that much snow. If he slipped and went down, there wouldn't be anything that he could hold on to. He would directly go into the lake. So he had to walk on all four limbs. There are places where there are crevasses that were covered by snow. At these places, we, too, were afraid, because if we missed our step, we would directly go down the cliff. It was really windy at a certain point, so to not lose each other we held hands. I was scared not only for myself, but for the safety of all the people. Like the doctor—he was our guest.

We gave him sticks to find the path. We showed him how to walk on the snow and how to keep his footing. We told him to rest. We talked with him, told him not to get afraid. Nurse Dema was very supportive. She told the doctor to not worry, that we were all here together, that we'll get through this easily.

Only at night did we reach Lhedi. It took us 11 and a half hours.

**Dema:** The doctor was scared. While we were walking through the snow, I told him nothing will happen. I said that it's safe. I made him believe that nothing will happen and that, because it was the first time for him, that's why he was so scared.

I was also scared. But it wasn't my most frightening experience. In 2015, when I first came to my home village, while moving from Punakha to Lunana, we had to walk eight or nine days. I had to cross the biggest mountain, Gangzhulaa. That time, the snow reached my hip.

**Kinley Dorji:** I had never seen snow like that. At one point, it was up to my thighs. I am six feet tall, and if it comes to my hip, then it's really a huge pile of snow. It was just snow and the climb and the cliff. Your steps needed to be very precise. One slip or one wrong step would send you directly towards that lake.

The path was completely covered by snow. The person in the lead would take really high steps and make deep holes inside the snow. The ones following behind him would place their foot exactly where he had stepped. The person leading needed to be someone with a lot of stamina, a lot of physical energy, with a very strong physique to tear across those huge piles of snow. Initially, it was Tshering Drupka. Dhan Kumar also did it along the way.

At one point, I was basically crawling, using both of my hands and my feet, because I'm a little bit taller and I was really concerned about falling into that lake. Dhan Kumar and Dema were totally upright. You couldn't actually hear what they were saying because of the wind. But they didn't have to say anything to give me reassurance. Just their presence and the way we hiked, it was reassuring for me—that we are in this together and we are going to make it through together.

When I nearly slipped down, I did pray a little. Also in the moment when I started crawling on my hands and feet. It was one of the most frightening experiences of my life.

## **The Takeaway**

*Bhutan's COVID-19 vaccination campaign was not governed by cost-benefit ratios or calculations of diminishing public health returns. The Royal Command to immunize every single individual was strictly adhered to. Nobody—no matter how distant or difficult to reach—would be left behind.*

**Dhan Kumar Rai:** We were not heroes. We were just doing our work. Sometimes for emergencies, we have had to walk to see a yak herder, which takes a day. Sometimes we walk at night. Sometimes when we have had to walk to Gasa, we pass 5,700 meters above sea level. So this was normal for us.

After finishing the vaccinations and all the things going well, there was a sense of proudness within us. We had

a sense of happiness, a sense of lightness. Plus the feeling that we did something for our country.

**Kinley Dorji:** Bhutan's strength lies in how small we are and how closely knit we are as a community. In Lunana, there are only a few hundred people, living very far apart. But when it came to this vaccination program, even with the mountains separating these villages, that didn't affect people's chances of getting the vaccine. Everything worked smoothly. Everyone had information about the vaccine. Everyone knew exactly what was going to happen and when it was going to happen. This sort of campaign is not something that could have taken place without preparation. The majority of the credit should go to the health workers, like Dhan Kumar and Dema. It's mainly because of them that this campaign was successful in Lunana.

**Dema:** At the end, we vaccinated almost every eligible individual. It's because we are under the dynamic leader, the Fifth King. It's all because of his leadership. He sacrificed whatever he had and he's still sacrificing just for the sake of people's safety. Also the supportive government and our current health minister, she being a professional. And the supportive public.

I want the world to know that, during the pandemic, Bhutan didn't face crises like other countries faced. If you have great leadership, everything can go well. A shout-out to the other nations, a shout-out to the world, that cooperatively and instinctively, everyone should stand together and fight the pandemic—or any crisis. It's worth working hard.



**Dema and Dr. Kinley Dorji on the Lunana vaccination trek.** (Photo: Dema)



**Dhan Kumar Rai delivers vaccines to Lunana.** (Photo: Dema)



IN BHUTAN'S NATIONAL VACCINATION PLAN, second doses were supposed to be delivered four weeks after the first. But in the spring of 2021, India was hit by a massive second wave of COVID-19 infections, and exporting its precious Covishield vials was out of the question, both practically and politically. Bhutan would have to find its second doses elsewhere.

Thus began the country's scramble for follow-up vaccines—one of the most nerve-racking chapters in Bhutan's pandemic story. Just as they had during the initial response and containment phase, Bhutan's leaders ran a full-court press. They faced daunting challenges. The highly transmissible and infectious Delta variant of SARS-CoV-2, which originated in India and was fueling that country's surge, was now racing around the world, soon to become the dominant strain. The global scrum for vaccines was intense. And in this competition, as *The Bhutanese* pointed out, Bhutan's diplomatic footprint was modest, consisting of formal relations with only 54 countries and the European Union, but none of the Permanent Five members of the Security Council, including the U.S., the dynamo of vaccine production. Bhutan had established embassies and missions in only seven countries.

Spurred by the King's Royal Command in April 2020, the foreign ministry had been laying the groundwork. It assigned its embassies and diplomatic missions in New York, Switzerland, Thailand, Japan, and Australia to do everything to secure doses. The ministry had formed a team to keep abreast of advances on the vaccine front and to reach out to longtime development partners. Bhutan also offered to serve as a staging ground for research trials. Over the next year, these all-out efforts put Bhutan in touch with political leaders, vaccine company executives, businesspeople, honorary consuls, friendship associations, well-wishers, even former tourists. Bhutan's Permanent Mission to the United Nations, led by Ambassador Doma Tshering, met her counterparts and contacted officials at the U.S. Department of State. Members of the Royal Family drew on their longtime connections.

Yet by the spring of 2021, Bhutan was in dire straits. That March, the foreign minister, Tandi Dorji, had requested AstraZeneca vaccine from the U.S. government, which held an excess of 60 million doses—to no avail. In May, U.S. President Joe Biden announced that America would be giving away 80 million doses of vaccines to countries in need—but Bhutan was not on the first list of recipient countries. Japan had also assured Bhutan of AstraZeneca follow-up doses, but licensing snafus scuttled the deal.

Over the next few months, the foreign ministry approached every nation that appeared to have surplus doses. Bhutanese leaders assured their counterparts abroad that Bhutan was willing to pay for the vaccines—it was not expecting handouts. They promised to carry out all logistics, including the risky flight into Paro. Moreover, based on the first vaccine rollout and on efficient immunization campaigns in the past, they could confidently state that Bhutan would not waste a drop of the precious medications. All told, Bhutan approached 27 countries for vaccines.

They struck out.

Ironically, one of the main reasons for the rebuffs was Bhutan's exceptional success in responding to the pandemic. Against a global backdrop of devastating mortality, Bhutan's pandemic plight did not seem urgent. The country had so far seen only one death. Its lightning-fast rollout of the first dose gave the entire eligible population some measure of protection at the same time that many low-income nations had yet to administer a single shot. More than perhaps any other nation on the planet, Bhutan had heeded the public health mantra of "flattening the curve": vigorously tamping down cases, preserving the health system, and buying time until vaccines would arrive.

In the shifting vaccine landscape, the WHO had recommended that second doses of AstraZeneca vaccine should come no longer than 8-12 weeks after the first. "We had a clock ticking," said Will Parks. By late June, 12

weeks had passed. Infections were breaking out in Bhutan's high-risk southern areas of Phuentsholing, Samtse, and Samdrup Jonkhar, attributed to the Delta variant. Single doses of the AstraZeneca vaccine conferred only 33 percent protection. Delta also appeared to readily infect children, a cohort that was completely unimmunized—a fact that kept Dechen Wangmo up at night. With no second doses in sight, *The Bhutanese* warned in late June that the country “will be heading into uncharted vaccine territory.”

Looking back on that frantic period, “We were quite desperate,” Tandi Dorji conceded.

But then, whether by divine intervention or brilliant strategizing, Bhutan's vaccine fate suddenly changed.

DR. LISA DANZIG, now chief medical officer at Excision BioTherapeutics, is esteemed in the field of vaccine development and blood screening diagnostics, with more than two decades of R&D experience. The San Francisco-based infectious disease physician has shepherded novel vaccines from the research stage through clinical development. In that role, she has forged strong connections with top scientists, industry leaders, and policymakers throughout the biotech universe and has mastered the mazes of institutional and government bureaucracies.

While rising in the ranks of biomedicine, Danzig had also become a friend of Bhutan. She serves on the board of the Karuna Foundation, which has launched a number of initiatives to help Bhutan combat and adapt to climate change. Through Karuna, she connected with the Washington, DC-based Bhutan Foundation and with Dechen Wangmo.

And so it was that, in the spring of 2021, Danzig was highly attuned to Bhutan's vaccine predicament. She was also in a position where she could make a difference. “From the beginning, I knew we had to get them vaccine. It was going to be difficult. It was going to be a heavy lift. Bhutan's leaders knew this as well,” she said. “But it was hard to make Bhutan a priority when they were doing such a good job. They were controlling things well. We just couldn't get them high enough on the priority list to get the first wave of vaccines.”

Given the fluctuating state of the global vaccine supply, the King's command to immunize the entire population simultaneously in March and April was a bold move. In an uncanny stroke of luck, this decision proved to be Bhutan's saving grace. That's because, during the late spring and early summer, evidence began to percolate that a new approach to COVID-19 vaccinations might yield superior results. The model was known as heterologous prime-boost dosing, or, more informally, “mix-and-match.” In this approach, individuals would first receive a so-called priming vaccine, such as AstraZeneca's, which used a harmless adenovirus to carry genetic material from SARS-CoV-2 into cells, turning on the body's immune system—especially its strong T-cell response, which kills infected cells. The follow-up dose would be a nonviral mRNA vaccine, such as Moderna's or Pfizer's, which used messenger RNA fashioned in a laboratory to stimulate the body's own natural immune mechanism and produce not only T-cells but high levels of antibodies to fight the pathogen. Deploying these two different kinds of vaccines in sequence, the thinking went, could provide the best of both worlds.

A number of European countries not only approved the mix-and-match approach but encouraged it, because it appeared to induce stronger immunity than two doses of the same vaccine. Studies in Spain and Germany generated evidence about the benefits of mix-and-match. But these preliminary investigations included too few participants to detect rare medical complications or to show how effective mixed doses were in preventing infections. Most glaringly, the studies only looked at AstraZeneca-Pfizer combinations, not AstraZeneca-Moderna.

Danzig saw an opening. “Hi Randy, It's Lisa Danzig,” began the text message on the morning of June 16. “Would like to talk to you about the situation in Bhutan which could be an interesting opportunity for you. Can you let me know if you have any time to chat today?” Randy was Dr. Randall Hyer, senior vice president of

global medical affairs at Moderna. A longtime friend and colleague of Danzig's, Hyer had a distinguished and wide-ranging career in biotechnology and global health, leading initiatives to develop new vaccines and life-saving biopharmaceuticals. "He has this global lens. He's a global public health ambassador," Danzig said. "So I knew he would be open to the proposal." For his part, said Hyer, "I trusted that Lisa wouldn't call me on something that was superfluous or a waste of time. I thought this was valid. Of course, I had to quickly look at the map to remind myself where Bhutan was."

Delivering a second dose of the Moderna vaccine across all of Bhutan, where the entire population had initially been vaccinated with AstraZeneca's Covishield, would amount to the most extensive real-world study of mix-and-match, generating priceless information about the vaccine's effectiveness, safety, and tolerability—facts that would also settle the question for well over 100 countries around the world, many of them low- and lower-middle-income. "In a pandemic, the best thing from a company perspective is to get access to data from a whole country, working with the ministry of health, and be part of a program that's able to administer vaccine, follow the safety data, and do sub-studies of immunogenicity," Danzig explained. "That's some of the best real-world data."

"I saw it as scientifically very interesting," said Hyer. "We felt that this study would be a factor in the future because the virus was already showing its ability to mutate—we were dealing with Delta at that point. Because Bhutan is somewhat isolated, it's also epidemiologically cleaner in terms of the routes of transmission and the introduction of variants. And Bhutan's not large, so the study was scalable. We could do this without taking a huge number of resources away from our efforts elsewhere."

A Zoom session was convened the very next day, June 17, spanning 10 time zones—morning for Moderna, evening for Bhutan. Among those on the Bhutan side were Danzig, Dechen Wangmo, and Bhutan Foundation executive director Tshewang Wangchuk, who, calling on his deep network of connections, had helped orchestrate the meeting. They assured Hyer that the country would be a proficient research partner, capable of preserving a vaccine cold chain, handling logistics, and vigilantly monitoring vaccine side effects. "It's a motivated country. They're very well spoken, very aware of scientific data, scientific rationale, mechanisms, all the information we care about," Hyer said. Five days later, on Tuesday, June 22, a second Zoom meeting took place. Both teams fielded larger contingents—including epidemiologists on the Moderna side and, on the Bhutan side, Prime Minister Lotay Tshering and UN Permanent Representative Doma Tshering.

Hyer was struck by the fact that the Bhutanese government was led by health professionals. "You're talking to the prime minister—and the prime minister is a doctor who understands all the things you're talking about. Obviously, the health minister does, too. How often does that happen?" For Hyer, during countless pandemic negotiations, the answer was never. "It tells you a couple things," he explained. "Politicians are subject to many pressures, particularly in a pandemic that's on the front page of every newspaper every day. However, I needed to be able to speak these people about science. They would understand it and that would help decisions get made that would be conducive to a good outcome, a robust outcome. I certainly mentioned this when I talked to my colleagues about the study. I said, 'By the way, the prime minister is a physician and the health minister is a global health expert. I think we're in good hands here.'" The proliferation of scientific knowledge in Bhutan's "front office," so to speak—with the foreign minister also a physician—likewise helped Moderna convince the U.S. State Department to swiftly direct the doses to Bhutan. "Nothing's easy," Hyer said, "but it was a prompt sell." Bhutan couldn't buy the vaccine directly from Moderna because the allocation would be handled by the U.S. government, which owned the company's vaccine. The doses would come through the COVAX facility.

On July 9, 2021, White House Press Secretary Jen Psaki announced that the United States government would be sending 500,000 doses of Moderna vaccine to the Kingdom of Bhutan. The shipment was part of a

U.S. pledge to share American-manufactured doses globally to address disparities in vaccination rates between developed and developing countries. To many observers gaming global vaccine distribution, the news came as a surprise. Like Hyer, they had to look Bhutan up on a map.

THE NEXT HURDLE WAS FERRYING the vaccines from Kentucky, the rolling “Bluegrass State,” to the eastern Himalayas. With the pandemic grounding commercial flights and with explosive demand for doses, UNICEF’s supply hub in Copenhagen estimated that delivering the Moderna allotment would take up to three months. Will Parks coolly informed his colleagues that the doses needed to arrive within two weeks. Thus began one of the most improbable fast-tracked deliveries of the pandemic. UNICEF tapped Tri-M.G. Airlines, an Indonesian cargo service, to charter an aircraft that would pick up the half-million doses in Kentucky. The plane flew to Singapore and on to Calcutta, where a Bhutanese pilot named Yeshey Dorji had just arrived. An unflappable veteran who had worked for Druk Air and Bhutan Airlines for two decades, Dorji had often navigated foreign medical flights into Bhutan. Strapped into the jump seat behind the two Indonesian co-captains, he guided the pair through the spine-chilling mountain passage.

Paro International Airport is considered one of the most dangerous places to land a plane. The aircraft must maneuver its way around 18,000-foot peaks, through a long, winding valley buffeted by wind shear, and onto a runway a mere 7,431 feet long. No radar: The pilot flies manually using visual landmarks, only in daylight, only under good weather conditions, and at speeds and altitudes refined over the years through trial and error. No published procedures: Each pilot customizes his or her methods by feel and memory. As the plane nears the airport, the pilot must take care not to clip electrical poles or roofs on the houses that dot the verdant hillsides. At the last moment, he or she must bank the aircraft 45 degrees and descend quickly to the runway—a tiny strip of concrete that becomes visible only in the final five or ten seconds before touchdown. Twenty pilots in the world are certified to make this landing. Complicating matters on this momentous day, it was the first time a Boeing 737—a comparatively bulky machine—had ever landed in Paro.

During the hour-long flight from Calcutta, Dorji shouted instructions. “I told them turn left, turn right, descend now, what speed, what height, until at the very end they saw the runway,” he reported. He was shouting because the plane’s automatic alarms were screaming, triggered by the looming mountains. (Bhutanese pilots normally turn off the alarms.) Off to the north, a thunderstorm was approaching. The plane had to make what pilots call a positive landing: an abrupt, firm, slightly angled touchdown. Dorji complimented the crew on their aeronautical derring-do—a textbook landing, Paro-style. “Welcome to Bhutan,” he said.

Big square boxes were unloaded and placed on the tarmac in front of a flower-decorated platform. Buddhist monks and abbots, joined by government officials—all masked—intoned prayers to ensure that the second vaccination campaign would proceed unhindered. The welcome party circled the boxes three times, tossing rice as the monks chanted. “That interface between the deep spirituality, the traditions, and something called Moderna—a modern vaccine for a once-in-a-century pandemic. I thought: This is Bhutan at a turning point,” said Parks.

Within an hour or so, the rains came. Walls of water flooded the airport. In Buddhism, rain is an auspicious sign. “It was torrential, with high levels of auspiciousness,” Parks quipped. Indeed, had the bad weather arrived an hour earlier, the vaccines may never have reached Bhutan in time for the urgent second rollout. Looking back on that harried day, Parks observed, “It was a knife’s-edge situation.” For his part, immediately after leaving the cockpit, pilot Yeshey Dorji headed off to 21 days of mandatory quarantine, during which he chanted the Medicine Buddha prayer thousands of times.

THE FOREIGN MINISTRY'S PARALLEL VACCINE CHASE also ended in success. In the end, Bhutan received 250,000 doses of AstraZeneca from Denmark; 82,500 doses of AstraZeneca from Croatia and Bulgaria; 5,850 doses of Pfizer from the COVAX facility; and an astonishing 50,000 doses of Sinopharm from the People's Republic of China. Health officials ordered 200,000 doses from Pfizer, vials that would arrive in September. With a miraculous surfeit of vaccine, Bhutan donated its now-dispensable doses to Nepal and Thailand.

Minister of Foreign Affairs Tandi Dorji had played a critical behind-the-scenes role throughout Bhutan's vaccine drama. Reflecting months later on how the pandemic changed him, he cited the tribulations in acquiring the second-dose vaccines. "I have become more patient," he said. "Normally, I'm very impatient. But I realized with COVID, it's not possible."

Minister of Health Dechen Wangmo's indefatigable sense of mission also turned the tide. "When she knows that someone can help Bhutan, she will go after that person's life," said WHO country representative Rui Paulo de Jesus. "She is a fighter." Wangmo conceded the point, laughing. "I think the prime minister would sometimes say I'm very stubborn. I'm also very pushy." On the assumption that, as she put it, "If you want something, you need to catch the big fish," she had sat up nights typing emails to executives at Moderna and Pfizer. "Please make this happen for us," she would write. In Geneva in late May, basking in her role as the new World Health Assembly president, Wangmo received a phone call from her father, informing her that the prime minister had just told the National Assembly she would be coming back to Bhutan with a vaccine deal. She implored Randy Hyer at Moderna: "Please make it happen before I come out of the quarantine, because I have to face the nation with answers."

On July 20, 2021, Bhutan embarked on its second vaccination campaign. Even more efficient than the first, it took merely a week to complete. In a UNICEF statement, Parks described the rollout as "arguably the fastest vaccination campaign to be executed during a pandemic." As he elaborated in *VOA News*, "If Bhutan can succeed in a monsoon with so few health workers to get almost the entire population vaccinated and then move to the children, maybe Bhutan can be a beacon of hope in a region that is on fire." Underscoring the urgency of the second vaccination was a tragic news story. On July 15, the country had seen its second death from COVID-19: an 82-year-old woman from Samtse. She had not been vaccinated.

Starting on July 28, children between 12 and 17 years old received their first dose of Moderna vaccine. By December 24, 93.5 percent of Bhutan's entire population ages 12 and up had gotten their second jab. On that same day, the Ministry of Health launched a one-week juggernaut to give booster doses to some 228,000 people in priority groups—ultimately covering 99.6 percent of that population, including health workers, frontliners, the elderly, the medically vulnerable, and those living in high-risk locales. On the astrologically auspicious date of March 5, 2022, at the auspicious time of 10:30 a.m., a girl born in the auspicious Year of the Bird became the first Bhutanese between ages 5 and 11 to receive the pediatric dose. By mid-April 2022, upwards of 91 percent of the entire Bhutanese population had received two standard doses of vaccine and a booster shot. That month, vulnerable groups got second booster doses.

Two years after the King had commanded a swift and smart vaccination campaign—back when COVID-19 vaccines were still an idea, not a reality—the country carried out the monarch's vision and became the envy of the world. It wasn't the last chapter in Bhutan's pandemic story, as the Omicron variant would soon prove. But by any measure, it was an extraordinary achievement. "Today, our Nation stands secure and peaceful," the King said in his December 17, 2021 National Day address. "Yet, the foremost question in our people's minds is when the pandemic will end. While it is difficult to provide a definitive answer, the most important task ahead is for us to remain fully prepared and vigilant."



**The King observes  
the first vaccination  
administered to a De-  
suup in Mongar.**  
*(Photo: Royal Office of Media)*

Vaccinating a Nation



Top: The Ministry of Health's Pemagatshel vaccination team reach the Woongborang vaccination post, after a three-hour hike from Yurizampa, during the second vaccine rollout in July 2021. (Photo: Ministry of Health, Bhutan)

Left: A helicopter prepares to ferry vaccines to remote districts in March 2021, during the first vaccine rollout. (Photo: Ministry of Health, Bhutan)



**Ninda Dema receives Bhutan's first vaccination, in Thimphu, on March 27, 2021.**

*(Photo: Ministry of Health, Bhutan)*



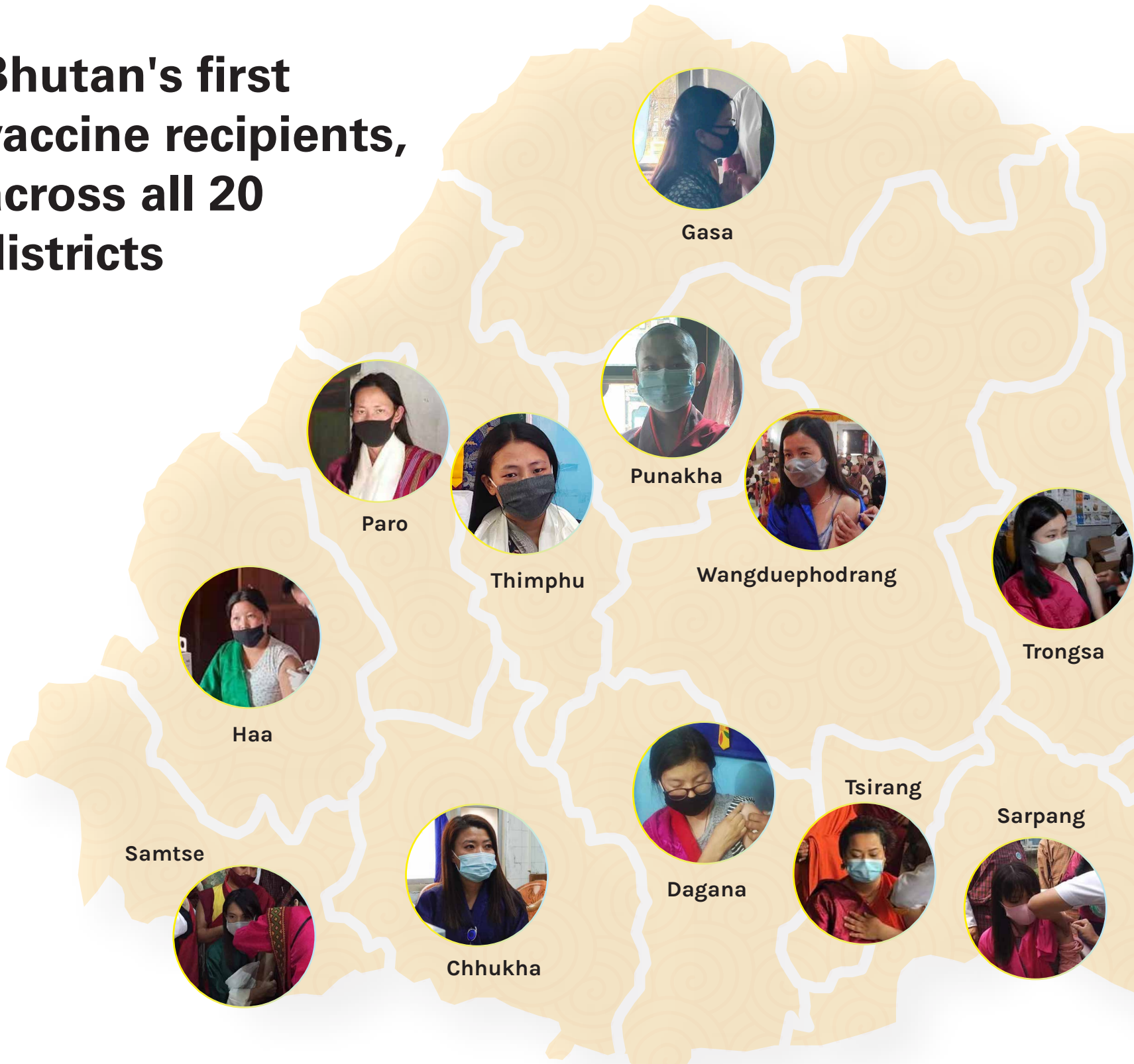
**Bhutan receives its first consignment of COVID-19 vaccines from the Government of India on January 20, 2021. (Photo: Ministry of Health, Bhutan)**



**Minister of Health Dechen Wangmo comforts a little girl who received the first pediatric dose of the COVID-19 vaccine, in Thimphu on March 6, 2022. The girl was born during the astrologically auspicious Year of the Bird. (Photo: Ministry of Health, Bhutan)**



# Bhutan's first vaccine recipients, across all 20 districts



Gasa



Paro



Thimphu



Punakha



Wangduephodrang



Trongsa



Haa



Dagana



Tsirang

Samtse



Chhukha



Sarpang



## CHAPTER 8

# WHO: Pandemic Partner

One warm, sunny afternoon in late February 2020, Dr. Rui Paulo de Jesus, Bhutan’s country representative for the World Health Organization, was strolling down the forested trail from Phajoding Monastery, a 13th-century edifice overlooking the Thimphu Valley. He was returning from a pleasant day hike with his wife and colleagues from WHO and the Ministry of Health. In a hut on the side of the trail stood a group of helmeted, suited-up mountain bikers. De Jesus was struck by their presence—quiet, physically imposing, highly alert. Clearly, one of the group was a VVIP—the South Asian acronym for Very Very Important Person.

“*Kuzuzangpo la*,” said de Jesus, the usual Bhutanese greeting, nodding toward a cyclist in the center of the group.

It was the King.

Suddenly apprehending the situation, a flummoxed WHO colleague explained to the monarch that de Jesus headed the agency’s Bhutan office.

“Oh, you’re with WHO,” said the King with a smile. He launched into questions. “What is the situation in Bhutan? What is the situation in the region? Tell me: Are we ready?”

“My immediate reaction was that this is Bhutan’s top leader, the pandemic was at the top of his mind, and I needed to give him some sort of reassurance,” de Jesus recalled. “I said, ‘The Ministry of Health is working very hard, Your Majesty. And we are working closely with the Ministry of Health. Whatever is requested from WHO, we will contribute. We are there for you.’”

As COVID-19 relentlessly spread across the globe, de Jesus, backed by the local WHO team, kept this pledge. From the first mention of a seemingly dangerous new coronavirus in China, Bhutan’s WHO office worked in tandem with the ministry, negotiating every twist and turn of the public health crisis. In the first two years of the pandemic, WHO contributed some \$7 million in direct funding. It donated more than two million pieces of personal protective equipment. It supplied hundreds of thousands of tests. It trained nearly 15,000 frontliners. It analyzed the science and helped draft protocols and led critical simulation exercises.

One week after de Jesus’ chance encounter on the Phajoding trail, Bhutan saw its first case of COVID-19, in the American tourist Bert Hewitt. With the health ministry and WHO acting in concert since early January, Bhutan was prepared.

THE WORLD HEALTH ORGANIZATION was established in 1946 as one of the specialized agencies of the United Nations, authorized to direct and coordinate health matters within the UN system. Its membership consists of 194 countries that meet every year in May at the World Health Assembly, the agency’s decision-making body. Among WHO’s manifold roles: providing leadership and forging partnerships on critical health matters; shaping

the research agenda and disseminating up-to-date knowledge; articulating ethical and evidence-based policies; offering technical support and building institutional capacity; and monitoring health trends.

Bhutan formally joined WHO in March 1982—at a time when the nation’s communication infrastructure was still rudimentary and many districts were connected only by mule trails. But the country had begun engaging with the global agency in 1979, when it adopted the Alma Ata Declaration of “Health For All” as its guiding principle for health services. Bhutan sought WHO’s guidance in building a modern health care system. Today, the WHO-Ministry of Health collaboration encompasses more than 40 public health program areas, including maternal, adolescent, and child health; HIV/AIDS; and water and sanitation.

When people think of WHO’s presence during the pandemic, they usually think of weighty pronouncements from its director-general, Dr. Tedros Adhanom Ghebreyesus, who is based in the organization’s Geneva headquarters. Closer to Bhutan, they may think of Dr. Poonam Khetrapal Singh, who leads WHO’s South-East Asia Regional Office (SEARO) and had made emergency risk management one of her flagship programs—tangibly fortifying Bhutan’s defenses before the pandemic struck.

But most of WHO’s efforts take place out of the spotlight in its individual country offices, where broad visions from Geneva are translated into pragmatic measures on the ground, and where deeply rooted social norms and idiosyncratic bureaucracies must be accommodated. “The country office is there to assist in any demands but also to prompt or nudge the MoH or the local authorities to do better,” explained SEARO’s Victor Del Rio Vilas. “The country office brings in a global perspective and, in doing so, creates a wider field for comparison and a reference line. And WHO is, you could say, the honest broker in the country, one that supports coordination of partners and initiatives within the country but also outside the country’s borders.”

In fulfilling these roles, the national program officers, or NPOs, act as a bridge between WHO’s mission and the local culture. In Bhutan’s country office, all of the NPOs are Bhutanese, most of them former health ministry employees. “I see the NPOs as the foot soldiers of the WHO,” said program officer Sonam Wangdi. “There are statements and guidelines coming out from the headquarters, but we are the ones that pick up what is relevant to the country context.”

As WHO representative (or WR, in the agency’s lingo) since 2017, Rui Paulo de Jesus brought to Bhutan’s pandemic response an unusually apt skill set. He is a native of East Timor—another small nation in which everybody seems to know everybody else and whose local textiles bear an uncanny resemblance to those woven in Bhutan. De Jesus earned his medical degree from Udayana University, a curriculum that required every physician-to-be to follow a family living in a remote valley for six years. The assignment: Learn about the social forces and traditional practices in people’s daily lives that help or hurt their ability to stay healthy. “When I look back,” he noted, “I feel like, Wow, this experience was the start of my love for public health.” At SEARO, where he spent 12 years, de Jesus worked in emergency planning and response, communicable diseases, and member state support.

Throughout the COVID-19 crisis, de Jesus led the Bhutan country office with a steady hand. “One of the things that struck me was his ability to be calm and think things through very clearly,” said Sonam Wangdi. “When you’re in an emergency, you respond immediately, and it can be overwhelming. He was someone who did not jump into panic mode.”

In health minister Dechen Wangmo, de Jesus found a natural collaborator. “The personal relationship between WR and the minister of health is warm and friendly. They work seamlessly together,” said program officer Dr. Lobzang Dorji. De Jesus cited Wangmo’s “open door policy” as the basis of their mutual respect. “She is open for opinions or ideas from anyone. And her knowledge of public health is amazing.” Wangmo returned the praise. “I would call Dr. Rui into my office and say, ‘This is what we need, this is how we need to do it, we need to

get this going, we need to get this done'—and he would get it done. That partnership is very important, because in times of crisis, there is no room for negotiation.”

By tradition, WHO honors and facilitates each member country's unique way of carrying out the agency's public health mission. By mandate, country offices support the goals of the national government and, in particular, the health ministry. In early 2020, with much about the behavior of SARS-CoV-2 still a mystery, many countries wanted to proactively defend themselves and vault beyond WHO's formal recommendations. This was nowhere more true than in Bhutan. Take, for example, the Ministry of Health's bold decision, in March 2020, to extend mandatory facility quarantine from 14 days—the WHO recommendation—to 21. “My approach is that I didn't want to impose anything,” said de Jesus. “I told them, ‘WHO's position is to go for 14 days. However, you have the prerogative, as a member state, to decide what is best for you.’”

Observed Sonam Wangdi, “The biggest strength of Bhutan has been that we have a king, a leader, who doesn't sit on a throne or in some castle far away. He is on the ground, at the front lines. With his guidance, there were always clear goals for the Ministry of Health, for the government, and even for WHO to pursue. At WHO, we were driven by the King's vision. He always said that we are a small country, and what people in much bigger countries can do in one month we should be able to do in one week. We all just had to buckle up and meet those goals.”

IN ANY EMERGENCY, preparedness equals survival. Well before the COVID-19 pandemic, Bhutan had nurtured a preparedness mindset—indeed, the country had made it a national priority, with WHO closely advising.

In 2005, Bhutan became a state party to the WHO's International Health Regulations, which were revised in the wake of the 2003 SARS coronavirus epidemic. The goal of IHR is “to prevent, protect against, control, and provide a public health response to the international spread of disease.” To this end, Bhutan had been honing its surveillance and disease reporting mechanisms to comply with the regulations. In 2017, led by WHO, Bhutan evaluated its capacity to detect, assess, and respond to public health emergencies—an exercise that revealed shortcomings in surveillance, operations, and mobilization of health personnel. The following year, WHO lent technical know-how and funding to scale up Bhutan's Royal Centre for Disease Control laboratory from Biosafety Level 2 to Level 3, enabling it to handle deadly infectious-disease agents. WHO delivered a health emergency operations center—two small, earthquake-proof structures (Bhutan sits in a seismically active zone) loaded with communications equipment and satellite phones. WHO also strengthened Bhutan's national early warning system, designed to pick up nascent signals of unusual or priority diseases, from dengue and malaria to new infections such as COVID-19.

Between 2016 and 2018, WHO supplied Bhutan with seven medical camp kits—pop-up hospitals intended for use in disaster zones, such as the 2015 earthquake in Nepal—and trained frontliners to use them. As the pandemic intensified around the world, these kits were innovatively repurposed in Bhutan as stand-alone flu clinics.

Perhaps most presciently, on November 6, 2019—just a month before SARS-CoV-2 appeared on the scene—teams from all three tiers of WHO led a simulation exercise at Paro International Airport, Bhutan's main gateway. The plot: a passenger arriving from Thailand is infected with a dangerous new strain of coronavirus. The simulation tested coordination among a wide range of employees, including those working in customs, immigration, the airport authority, airlines, and various national agencies. According to de Jesus, “That exercise was still vivid in their minds when COVID-19 hit.”

“Many times, we have plans lying on a table. But it's not enough to have a plan. We have to see whether the

plan works on the ground and serves its purpose," said Sonam Wangdi. "We couldn't have timed it better."

DESPITE THIS PRE-PANDEMIC LEVEL of readiness, the prospect of COVID-19 racing through Bhutan troubled the WHO country staff. "They didn't have enough resources to be able to respond in a way that big countries were responding to it—a resource-intensive response," explained de Jesus. "They knew they had to act very quickly. It couldn't wait." On January 2, 2020, all three tiers of WHO activated their emergency response systems. In practical terms, this meant remaining on standby, turning on their incident command systems, and sizing up their material and human resources.

"We met in my office immediately with the staff," said de Jesus. "I said, 'Let's do a stock-taking exercise. What do we have? What do we not have?' By that time, some science had started to come out. This is a very infectious new virus—have the staff been trained in donning and doffing of PPEs? We looked at the rooms designated for isolation at JDW National Referral Hospital. It was winter and there was no central heating. We needed heaters. I said, 'Okay, you will get heaters immediately.' WHO does not usually act that quickly, but I had to make a decision. We supplied the ministry with simple, practical equipment that we could immediately acquire from the local market."

WHO installed thermal scanners at Paro airport to monitor the thousands of Bhutanese returning from abroad. It worked with the health ministry to draft standard operating procedures for minimizing transmission at points of entry. It procured medical supplies to protect health workers and bolster testing. And with an eye to maintaining routine medical care in the midst of the crisis, WHO donated noncommunicable-disease kits that could meet the needs of 10,000 people over three months—kits containing essential oral medicines, basic diagnostic equipment, and products for patients suffering hypertension, diabetes, cardiovascular and chronic respiratory diseases, and cancer.

In January 2020, the health ministry established its Technical Advisory Group (TAG), which throughout the crisis would make recommendations based on the most current research. Part of this entailed adapting WHO technical documents to the unique context of Bhutan. In the ensuing months, these guidelines would expand and evolve, covering every possible area: emergency coordination, case definitions, surveillance and testing, infection prevention and control, pharmaceutical treatments, medical waste disposal, dead body management, quarantine and isolation, contact tracing, risk communications, and frontliner training. WHO's guidance addressed questions such as how to construct a safe quarantine facility in a remote village, when to ease lockdowns, and how to set up hotlines for mental health crises.

The WHO country office assigned three of its national program officers to the TAG, all of whom had worked previously in the health ministry: Sonam Wangdi, a longtime professional with strong experience in public health and emergency response; Dr. Lobzang Dorji, a physician with vast experience across every level of Bhutan's health care system; and Kencho Wangdi, an expert in emergency response and international health regulations. "In the first few weeks and months, they spent many sleepless nights in the Ministry of Health," said de Jesus, "monitoring what was happening in the country, in the region, and globally, and trying to analyze what we had and what we needed."

AS THE PANDEMIC WORE ON, Bhutan's early success in containing the virus gave way to concerns that waves of infections in India would penetrate the southern border. To avert that threat, the health ministry and other government entities stepped up surveillance along the high-risk border and staged simulations to sharpen the country's defenses. De Jesus felt that something was missing: an exercise in the capital, Thimphu, where nearly one-fifth of the Bhutanese population of some 760,000 resides. On August 7, 2020, a tabletop exercise—a

discussion-based session hewing to a WHO template that clarifies attendees' roles and responsibilities in an emergency—took place in Thimphu, with 70 key officials, including Thimphu's mayor, in attendance. The exercise's story line: two men and a woman, none with any travel history nor known contact with an infected person, test positive for COVID-19 outside of the capital's quarantine facility. Four days later, the country was pitched into its first real lockdown.

During their travels to the field, WHO's national program officers served as cultural translators. In March and April 2020, Lobzang Dorji was assigned to visit eastern districts to help officials prepare contingency plans in line with the national COVID-19 response plan. In the southeast district of Pemagatsel, he delivered his standard talk about safely handling a dead body and protocols for cremation. "I remember some people getting scared as well as emotional," he said. "In one meeting, there was a monk in the room. We were presenting on how a dead body should be handled. He was saying that for Buddhists, it would be very hard for families not to be able to meet, or for a primary contact to be quarantined during the funeral and not be able to bid their loved one farewell or witness the cremation. They felt a bit emotional. Personally, I did, too."

Dorji added: "From the scientific perspective, we have to follow protocols. But we also have to keep in mind cultural and religious sensitivities of the people. In Buddhism, when someone dies, people prepare the body a certain way, flexing the limbs and tying the legs and hands in a fetal posture. But in order to prevent the spread of the disease, we had to have minimal handling. We said dead bodies should be in the supine position and placed in a three-layer body bag. But we also said that loved ones could collect the ashes afterward and that a monk could preside over the ceremony to help people with their grief."

When Sonam Wangdi traveled to the southern border to conduct surveillance, he keenly felt his role as what he called the "eyes and ears of WHO." Wangdi visited small villages in the Sandrup Jonkhar district, some with no roads, which meant that his team had to swing through India and back again across the effectively nonexistent border to reach the village. The southern "border," he discovered, is often inapparent. "There are no formal walls or boundaries that separate Bhutan and India. At various places, you have a border pole or a boulder with markings. But even these are not always there." He discovered "how easy it is for people to move across the border. You can see the houses on the other side. Some people had family members just across the border. There were intermarriages. Some had their parents or their spouse on the other side of the border. As part of the government or the surveillance team, we found that people were not willing to share these facts. But when you talk to their neighbors, the neighbors will tell you, 'Oh, this guy, he always crosses the border.' We also came across people who were smuggling items across the borders. And there is irrigation water that comes from Bhutan and flows across the border. Indians would cross the border to fix their water lines. As part of the COVID response, the local government had to fix the irrigation channel for villages in India, so that people didn't cross the border into Bhutan."

Wangdi's official conclusion: "There was a high risk of virus importation. Vigilance needed to be maintained and surveillance needed to be conducted." But personally, he said, "The biggest takeaway from the trip was that we have to consider local context when we are planning at the central level. Two-way communication was key."

WHEN POTENTIAL COVID-19 VACCINES entered clinical trials in 2020, Bhutan's WHO office provided the health ministry with the latest facts and guidance. In November 2020, WHO financed and facilitated a workshop to help draft the nation's vaccination deployment plan. In March 2021, WHO supported "training of trainers" sessions, after which the 76 initial trainees—medical officers, district health officials, and others—would in turn train 372 frontline health workers on the special requirements of COVID-19 vaccines.



WHO purchased and delivered 27 refrigerators and 28 deep freezers to strengthen cold-chain storage for COVID-19 vaccines. During the rollout, vials were dispatched to all 1,217 vaccination posts—with WHO underwriting the costs of helicopter transport to some of the most remote locales. The WHO country office also worked with Bhutan’s Drug Regulatory Authority to speed up emergency use authorization of the newly formulated vaccines and to monitor their safety. And in May 2021, after Bhutanese received an initial dose of Covishield, WHO supported the health ministry’s strenuous review of the immunization campaign. Informed by these insights, the second-dose campaign was smoother, completed in just one week.

WHO staff also channeled their expertise to a very different area of concern: mental health. One of the nine domains in the Gross National Happiness development model is psychological well-being. In Bhutan, joblessness, isolation from family and friends, and school closures were acutely painful, triggering a rise in depression, anxiety, and domestic violence. At the start of the pandemic, Bhutan’s mental health specialists were few in number, with only two practicing psychiatrists and a handful of trained psychiatric nurses and clinical counselors. In March 2020, the Ministry of Health set up, with guidance from the WHO country office, a National COVID-19 Mental Health and Psychosocial Response Team. In the pandemic’s first two years, the team trained more than 20,000 frontline workers and community volunteers in how to identify risk factors for suicide and support people in distress. The response team also set up a crisis hotline and offered counseling 24/7.

AFTER THE COVID-19 PANDEMIC EASES, WHO will continue its close collaboration with Bhutan—circling back to the issues on which it has long focused while accommodating the enormous toll that the pandemic has taken on the country. “Life here after this pandemic will not be easy,” Rui Paulo de Jesus acknowledged.

De Jesus’ post-pandemic agenda includes raising the quality and quantity of personnel across Bhutan’s health care and public health system. He wants to enlist the country’s private sector in the public health mission. Bhutan will also need to leverage current technologies to extend the reach of its health services—including scaling up web-based telemedicine. And it will need to keep an eye on any spikes in the region’s ever-present vectorborne infections, such as dengue.

Until then, Bhutan’s Ministry of Health and the World Health Organization can take a moment to bask in their shared achievements. “I always tell my friends, if there’s one country that can stop the virus, it’s Bhutan,” said Sonam Wangdi. “We had all the right ingredients. For me, a takeaway message from this pandemic was that you can’t do anything without the support and the engagement of the public.”

On May 24, 2021—39 years after Bhutan formally joined WHO—Minister of Health Dechen Wangmo was elected to a one-year term as president of the World Health Assembly. For Bhutan, it was a moment of glory, a testament to her astute leadership during the pandemic. For Wangmo, the honor retraced the route of her early professional passion. As an undergraduate and later as a postgraduate student of public health, she had managed to attend annual WHA meetings—seated far from the stage, in a corner aerie near the ceiling. “As I walked into that big hall for my presidential speech this time, I looked up to where I used to be seated as a student,” she recalled in a *Kuensel* interview, adding, “To all public health students and health workers, dream big. The sky’s the limit. Anything is possible if your heart is in the right place.”

In her formal acceptance speech, Wangmo invoked the principles guiding not only Bhutan’s all-of-society pandemic response but also WHO’s mission and mandate. “We must remember,” she said, “that only solidarity and science, and not solitude, will get us out of this pandemic.”



**Dechen Wangmo,  
Minister of Health,  
Bhutan.**

*(Photo: Ministry of Health,  
Bhutan)*



**Dr. Rui Paulo  
de Jesus,  
Bhutan country  
representative,  
World Health  
Organization.**

*(Photo: World Health  
Organization)*

On March 11, 2020, Dr. Tedros Adhanom Ghebreyesus, the World Health Organization's director-general, declared the coronavirus a pandemic and called for countries to act in unison against the new global threat. "Let's all look out for each other," he said, "because we're in this together to do the right things with calm and to protect the citizens of the world." (Photo: Agence France-Presse-Getty Images)



## CHAPTER 9

# Looking Back, Looking Ahead

**W**hy was Bhutan's pandemic response so successful, especially when much of the world was flailing? And what can other countries learn from its example?

In some ways, these questions are easy to answer. Bhutan is a small nation, sparsely settled, with a young population (median age: 28 years) whose immune systems could easily weather the virus. But there were larger reasons for Bhutan's standout performance. "For my small country, the singular moral authority of the sovereign with its ability to unite the nation, augmented by a technocratic cabinet with strong public health and medical background, was instrumental in averting a major public health crisis," health minister Dechen Wangmo told the World Health Assembly in May 2021. As JDW National Referral Hospital microbiologist Dr. Tshokey put it, "We may not be the leaders in science, but we will be a guiding example on how to blend science with good governance and social harmony."

Equally critical was the willingness of Bhutanese to obey their leaders' directives, which reflects the Asian collectivist mindset but also the nation's comparatively law-abiding populace. Bhutan's often stringent measures would not have been tolerated in many Western individualistic cultures. When Bhutan closed its borders, imposed onerous lockdowns, conducted blitz vaccination campaigns, and enforced myriad travel restrictions, protests were practically nonexistent. "Every Bhutanese played their part. When we asked them not to come out, they did not come out. When we asked them not to travel, they did not travel. When we wanted them to come out for the vaccinations, all came in droves. Our religious bodies stayed inside and did all the rituals and prayers for the well-being of our country," explained the prime minister, Dr. Lotay Tshering. "The Bhutanese nature in them gave them that willingness to listen, because even if it was harsh on them, even if they didn't want to follow it, subconsciously, the Bhutanese in them told them that they had to. I knew the grievances among the Bhutanese public. I knew that tolerance levels were being pushed to the extreme end. Yet they went along."

In Bhutan, the term "solidarity" comes up frequently to describe the nation's impressive cohesion as it fended off the novel coronavirus. "I would not want to use the word 'nationalism,' but rather 'solidarity,'" said Dechen Wangmo. "Leaving your differences aside and fundamentally recognizing that your country is in trouble and that you need to do something—that's a huge thing. If you look at it globally, not many countries have done that, and they have had to heavily pay for it in lives lost." As *Kuensel* observed in September 2020, the example set by the fully involved King deflected the kind of political mudslinging that could have crippled the government's efforts. "Politics takes a backseat as unity is the weapon of the nation. We have regained respect for our unity and inter-connectedness."

That unified response was swift, decisive, and bold—and regularly surpassed World Health Organization recommendations, which at the start of the crisis were sometimes slow to be issued. Bhutan was one of the first countries in the region to draft a COVID-19 preparedness plan, which centered on timely screening, enhanced

testing, and mandatory quarantine for all entering the country. Its decision to close the southern border, the country's Achilles' heel in terms of transmission, was a dramatic move—but a necessary one, because it bought officials time to prepare. The King's command to strive for zero deaths—an almost impossible goal in the face of a new, lethal, airborne pathogen—informed every subsequent action. “When you have one single goal that is very clear, you absolutely know what you need to do,” said Karma Yonten, of the King's Secretariat. “Everything falls into place.” Bhutan did not see even a blip in its normal tally of annual deaths—about 500 a year.

In 2020, Bhutan's GDP was about \$2.3 billion—equivalent to that of a pint-sized America city. Yet the country threw all its meager resources into controlling the pandemic. As the King soberly explained in his April 10, 2020, address to the nation: “Under ordinary circumstances, we have always exercised extreme prudence and carefully weighed the costs and benefits of every expenditure, to ensure the most judicious use of our limited resources while constantly keeping the long term interest of the nation at heart. However, the situation we are in today is extraordinary, and unlike any we have experienced thus far. We are confronted with a dangerous global pandemic of an unprecedented scale posing an imminent threat to our people. Therefore, building the resilience, confidence and security of our people must take greater priority over conserving our resources.” He reiterated this all-chips-on-the-table strategy in a July 2021 address to the Southern COVID-19 Task Force. “Even if we have to spend everything and empty out our coffers, it can always be replenished. We can all work hard, display ingenuity, and earn again.”

Despite having marshaled the right cultural and institutional ingredients to fight the pandemic, Bhutan's success was not guaranteed. “The world needs to understand that you've got a country that is extremely small, both financially and in human resources,” said UNICEF's Will Parks. “It's rugged terrain—it's beset with landslides, floods, earthquakes, all the time hampering delivery of information, hampering services. Power lines go down. Telephone lines go down. Cell towers get damaged. During the pandemic, Bhutan was located in a region that was absolutely on fire. People's lives were being upended, livelihoods were disrupted. Facing those three things—lack of resources, terribly difficult terrain, and a porous southern border in a region that was raging with the virus—Bhutan defied the odds.”

IN FEBRUARY 2022, *The Lancet* published a study that further illuminated some of the reasons for Bhutan's outsized achievements. Researchers looked at 177 countries (Bhutan was not included), examining which conditions correlated with rates of COVID-19 infections and with the proportion of infections that led to deaths. This project was inspired by the fact that what had been standard metrics for pandemic preparedness—such as health system capacity and government health expenditures—didn't hold up when COVID-19 struck, in part because these metrics failed to account for the consequences of poor leadership and dysfunctional political environments. The countries that experts had believed were best prepared to mitigate the effects of a pandemic—such as the United States and the United Kingdom—were overwhelmed by the virus, while many low-income and resource-poor nations held their own. In the study, two of the strongest indicators of pandemic preparedness, as gauged by infection rates, were trust in government and interpersonal trust; these factors were also tied to higher vaccination coverage. “Trust is a shared resource that enables networks of people to do collectively what individual actors cannot,” the authors noted. Similarly, a May 2021 study in *Scientific Reports* assessed the impact of various non-pharmaceutical interventions in 50 countries during the pandemic. The researchers found that good risk communication was tied to lower infection caseloads.

Bhutanese trust in government and in each other, along with clear public health messaging, demonstrably empowered communities during the crisis. “We must be honest with our public—that is something that I learned from

day one,” Dechen Wangmo said. “We’ve been very transparent with whatever information we had. We put it out there, we told people what is right, what is wrong, but that it was for them to make the judgment call.” Wangmo also learned that widely disseminating that information is just as important. At first, the health ministry had focused on the literate population. “When we realized that people in the villages were left out, we had to change our strategy. So during our first, second, and third outbreaks, I came on TV every day, giving status updates,” Wangmo said. “Every day, they would look forward to it.” As the crisis dragged on, she refined the ministry’s communications approach. “When we do health education messaging, we usually think about the traditional pathways of printing something in the paper or doing something on social media, on the website, on the apps. Suddenly, you realize that there’s a population that does not have access to any of these. They have the national TV, but they cannot read *Kuensel*, they don’t have access to Facebook. We realized that we had to vocalize the content, so that it could be disseminated over other social media platforms, such as WeChat, and so that the voice recording could be shared. We reached out to our cabinet colleagues, the parliamentarians who speak the local dialects, got the messages recorded, and disseminated them through big WeChat groups.” The health ministry not only walked the walk, it talked the talk.

JIGME KHESAR NAMGYEL WANGCHUCK, the Fifth Dragon King of Bhutan, proved to be one of the world’s most unstinting leaders during the COVID-19 pandemic. The language he used to characterize his monarchical role in his 2008 coronation address—“I will never rule you as a King. I will protect you as a parent, care for you as a brother and serve you as a son.”—foretold his actions during the crisis.

Often, the King’s solicitude came in the form of small gifts that carried great weight in a country where material comforts are scant. Though many government buildings in the capital are clad with marble, they lack proper central heating—leaving offices almost intolerably cold in the winter. (On Zoom calls, many interviewees for this book were wearing thermal vests and woolen ski caps.) “During the second lockdown, we were hosted in the Royal Bhutan Army headquarters compound with the national surveillance team. We were all in the same big hall, with no cubicles or partitions as established call centers would have,” said Garab Dorji, the health ministry’s chief ICT officer. “It was cold in the winter, and during the King’s frequent visits to the center, he observed that people were frequently getting up to fill small cups with coffee and hot water, distracting others as they were trying to do contact tracing over the phone. He provided everyone on the team with thermal flasks, shawls for the ladies, gloves and scarves for the guys, and also gave everyone wireless AirPods earphones and plenty of snacks.”

The King regularly turned up in unexpected places, leaving the impression that he was everywhere at once. “In the initial phase of the pandemic, I was collecting reports from the districts. Every night, in turn, we had to report to the high authorities,” said Sonam Wangda, of the quarantine team. “One time, I was waiting for a report from one of the districts. It was delayed and I kept calling him. I was frustrated, because it was getting quite late, and the report was not coming. Suddenly, somebody tapped my back from behind. I didn’t know who it was, so I turned my head. It was His Majesty. I certainly thought I should hang up the phone and bow to him. But he said, ‘Don’t worry about it. Just continue talking and tell whoever is on the other line that I’m here and we need the reports.’ I did as he said. Within a short time, the report was there. And from then on, not many issues with the reports.”

As a rule, the King does not give press interviews, and this remained true during the pandemic; his travels were mostly documented by photos on his official Facebook and Instagram sites. But in *Kuensel* and *The Bhutanese*, the monarch’s unsparing efforts were evident, even in pro forma accounts of his itinerary. “His Majesty The King is on a Royal Tour of the central, eastern, and southern parts of Bhutan to inspect the impact and works related to COVID-19.” “His Majesty The King is back in Thimphu after a two-week Royal Tour of the south to review and reinforce security measures in place, with active Covid-19 cases on the rise in the neighbourhood.” “In

Phuentsholing, where the temperatures have soared to over 40 degrees Celsius this past week, His Majesty walked across six villages along the border in Sampheling gewog, meeting people and reminding them of the dangers if the virus spreads in the community.” “In Mongar, His Majesty visited the Royal Guest House, which has now been converted into a Covid-19 hospital. His Majesty commanded that after the pandemic is over, it would become a mother and child hospital for the east.”

Inevitably, the Bhutan press contrasted the King’s self-sacrifice with the self-absorption of the American president. “Last week we were witness to the leader of the world’s most powerful nation, and by extension the world’s most powerful man, the US President, come down with COVID-19,” noted *The Bhutanese* in October 2020. “Donald Trump was the global symbol of not taking COVID-19 seriously from making fun of masks to having mass campaign rallies and meetings. On the other end, Bhutanese saw the touching images of His Majesty The King and even His Majesty The Fourth King travelling in the high risk southern belt to shore up our COVID-19 defences.”

Within this explicit personal comparison lay an implicit institutional comparison: democracy versus monarchy. Bhutan is a bit of both—a democratic constitutional monarchy, in which the prime minister is head of the government but the King is the head of state. Casting a skeptical and perhaps arrogant eye toward the West, many Bhutanese see monarchy as a form of rule more concerned with the long-term well-being of the country, not with cutthroat elections and short-term promises. Karma Yonten elaborated on the idea. “One of the weaknesses of the democratic form of government is the short duration of elected governments. Consequently, one is often not sure whether decisions made by politicians serve their own self-interest or the long-term interest of the country. There is no such ambiguity with the decisions and Royal Commands granted by the King, as people have complete faith and trust in the King. So when there are national issues at hand and Royal Commands are granted, everyone supports it,” he said. Pointedly, Yonten added: “Many tough decisions and swift actions had to be taken during the pandemic, and were it not for the leadership provided by the King, I think our democratic system would have failed terribly in responding.”

Irrespective of political systems, the pride that Bhutanese took in this particular king during a time of acute uncertainty was palpable. *The Bhutanese* put it plainly in August 2020, during the first national lockdown: “While certain government officials and even expert committees may have tended to downplay dangers and issues, it has always been His Majesty who has stared the devil in its eye and not only acknowledged its presence but also geared the nation for its eventual arrival.”

Looking back over the first two years of the pandemic, Prime Minister Lotay Tshering underscored the King’s scrupulous information-gathering on the ground and his persistent commands to prepare for any eventuality. “His Majesty would not leave any stones unturned. He would push us to prepare us for the worst. His first question was always, ‘What would be the worst-case scenario?’ Immediately followed by, ‘Have you prepared for that?’” During his inspections along the southern border with the King, Tshering gained a deeper perspective on the monarch’s thinking. “In one of our tours, His Majesty was speaking his heart out, saying that he never anticipated this massive health crisis during his reign. He was telling me that he wouldn’t be able to tolerate so many lives lost to this pandemic. He would not like to go back to this era of the pandemic and call it a black chapter in his reign. Rather, it should be a brighter side of his reign, a chapter in which he did everything to protect the lives of our people—which is exactly what happened.”

“I don’t speak Dzongkha, but I remember sitting in quarantine in my hotel room, watching the King on BBS, on March 22, 2020,” said the American physician Shankar LeVine, referring to the King’s first national pandemic address. “I didn’t understand a word that he said, but I watched him, partially because of his presence as a caring, kind, comforting, we-will-get-through-this-together kind of person. I didn’t need to know what he

said. You can feel his presence. He saw this as an opportunity to build even more national pride and an even greater sense of everyone taking care of each other.”

But it was the King's second pandemic address to the nation—19 days later, on April 10—that lodged itself in the minds of Bhutanese. Twenty minutes into the speech—after urging his virtual audience to be alert and to summon courage, and reassuring them that together, Bhutanese were capable of overcoming far greater adversities than the coronavirus—the monarch lost his composure and had to pause: a 16-second interval of raw emotion, an eternity on live TV. He then quickly ended the address, telling his listeners not to despair, not to lose hope, and to care for one another and the country.

IN HER CABINET ROLE, Dechen Wangmo was also inspirational. She had never run a political campaign before joining the DNT ticket and had never held a government or civil service job. Yet she emerged as one of the guiding lights during the pandemic. “Politically, I still feel challenged,” she said with a laugh. “I don't know if I'm designed for politics.”

In the Ministry of Health, the younger staff call her “Ama”: Mother. “She's very caring. She will teach you. If you do not know something, she will call you personally and teach you the things that you don't know. She has always been there like a mother, guiding us and working with us,” said media focal Yeshey Pelden. “Had it been a different leader, I'm not really sure if we would have worked that hard and put our heart and soul into what we have accomplished.”

Elected in 2018 to represent the North Thimphu constituency in the National Assembly, Wangmo, who holds a black belt in taekwondo, was the only woman to be selected for the cabinet—a conspicuous position in Bhutan, where relatively few women stand for office. “As the only woman in our cabinet, I feel I have the extra responsibility of giving my best and showing to the next generation of girls that they can excel. I want a young girl somewhere in the remote village of Bhutan dreaming of becoming the prime minister,” she told the Women for Politics website in 2021.

Pelden admired her boss's obsession with details in the vaccination rollouts. “Every vaccination team was instructed to draw up a triage system, whereby people register themselves, then got the vaccine, then the blue ink on their nail, and then went to observation. At some of the vaccination sites, that triage system was not done in a very logical manner. So Lyonpo Dechen would make sure that a De-suup moved a table from one room to another room, to make the order logical. Or she would instruct people to move refreshments from one side of a table to the other side. Lyonpo Dechen made sure that everything went well. She always said, ‘It's for our people, and everything that's happening for our people should happen smoothly.’ She would say she overdoes everything, and that's how she sticks to her mandate and does what a health minister should be doing.”

“One of the earliest Zoom calls I had with her, she was managing an outbreak and had some questions about vaccines,” recalled Lisa Danzig, the chief medical officer at Excision BioTherapeutics, who was instrumental in procuring the second-dose Moderna vaccines in the summer of 2021. “She was not wearing her traditional garb. She was wearing a sweatshirt because she was out in the field working to contain an outbreak. That told me everything. That's the image I have when I think of her. I don't know of any other health minister who will roll up their sleeves and lead the troops on the front line. She does the work. She's earned the trust. She's quiet about it. She embodies the ideal leadership attributes.”

“THIS COVID IS NOT A BAD THING. In fact, it was the best thing that happened to Bhutan, because it allowed us to see where we were heading. It has laid bare our vulnerabilities, our weaknesses, what we were doing wrong.



So many things it exposed to us. Now, we are able to chart out a new path ahead.” So said the foreign minister, Tandi Dorji, in January 2022. Many Bhutanese concurred. As *Kuensel* put it, “2020 made us better,” and over the next year the newspaper went on to list some of the ways: leaders took action to diversify the economy and train young people in new, nation-building skills; government was streamlined; digital technology was widely adopted; new forms of energy, including solar and wind, were being studied; agencies began GIS-mapping the country; and farmers finally received the attention they long deserved—a concession that Bhutan, an import-driven country, needed to attain greater food self-sufficiency. “It is now or never. If we can’t grow our own food, as an agrarian society, it will be hard to achieve other things,” observed the paper in 2021.

Often it takes major disruption, even tragedy, to shake people and institutions out of complacency and bad habits. In Bhutan, the whole-of-society efforts to contain the pandemic showed the people and their leaders that change and innovation were possible. “One lesson we are surely learning is that we need to work hard; we have unimaginable opportunities to do better and become stronger,” wrote Chewang Rinzin, director of the Royal Institute for Governance and Strategic Studies, in April 2020. “During one of the visits to the Control Centre, His Majesty said that if all of us worked the way we do today, Bhutan could become a first-world country in 10 years. This is a powerful food-for-thought.”

It will take a mighty effort to get there. Like virtually every nation across the globe during the pandemic, Bhutan suffered a severe economic blow, with its GDP contracting by 10 percent in 2020. For Lotay Tshering, reviving the economy is critical. But woven into that mission are broader goals: reforms in education and the civil service, a digital identification system, skilling and re-skilling programs, and what he called the “ICTization of schools,” which will make information and communications technology the “third language” in which students are proficient, after Dzongkha and English. It is a dream that the King reiterated in his December 2021 National Day speech—a sign that his gaze was now set on the post-pandemic recovery: “Blockchain, Fintech, Quantum Computing, Artificial Intelligence, Virtual Reality, Metaverse, Robotics, Machine Learning and Web 3.0 are just some of the rapid and sweeping changes brought about by technological advancements that we are beginning to see. Breakthroughs in nanotech, biotech and genomics will transform the future. What deeply concerns me is whether our people will be in a position to take advantage of these opportunities. Or if we will be left behind due to our inability to adapt.”

For the Ministry of Health, the pandemic marked a turning point. In 2018, the DNT party had run on a platform of “narrowing the gap”—a phrase that largely referred to the socioeconomic gap, but also to gaps in health services, gender equity, and other domains. Dechen Wangmo believes that Bhutan’s health gap actually did narrow during the pandemic. “I often have this conversation with our prime minister. I have said that this pandemic was a blessing in disguise, because suddenly, people realized that health is important. We have never received this kind of financial support from the Ministry of Finance.” Leveraging the moment, Wangmo energized a broad array of medical and public health initiatives. She installed x-ray and ultrasound machines in all health facilities. She deployed specialized medical personnel—surgeons, oncologists, radiologists, and other health workers—from the capital to far-flung locales in nearly every district in the country, in monthly medical camp visits. “People who had never seen specialists are now seeing them in their village.” She amped up surveillance for all diseases, based on technology designed to track COVID-19. “Today as we speak, every single person in a vulnerable population is being identified and documented with GIS mapping, so we know exactly where a person with chronic kidney disease or a transplant lives.” Building on this technology-driven approach, the health ministry will be adopting a sophisticated eHealth system known as the Electronic Patient Information System, or ePIS, which will prove invaluable in understanding the causes, courses, and population patterning of disease. According to Garab Dorji, who leads the project, “It will be the Swiss army knife of health information systems.

It's going to have a record of medical, patient, and health data, as well as a biobank. We will be able to collect information from the day that a person is conceived in his or her mother's womb until the day he or she dies. It will represent a frog leap in state-of-the-art technology adoption."

When pandemic restrictions were finally lifted in April 2022, Wangmo had already plotted out the remaining 18 months of her ministry tenure. One goal was to upgrade services for maternal and child health. Another top priority was to expand mental health care. "In our part of the world, we often say, 'Only Westerners see therapists. We don't.' Suddenly, with the pandemic, there are conversations happening around mental health," she said. During the crisis, Bhutan's Queen, Jetsun Pema, spotlighted the issues of domestic violence, sexual violence, violence against children, and abandonment of children, and called for a comprehensive system of mental health services to address these longstanding problems, which are typically precipitated by alcohol or substance abuse. In November 2021, she led the groundbreaking for the Pema Center—a facility for mental health and well-being housed within the JDW National Referral Hospital complex.

The most critical need, in Dechen Wangmo's mind, is human capital. Bhutan remains desperately short of health care personnel—especially physicians. "Something that's very sad is that allopathic medicine started here in the late 1960s—but even now, our doctor-population ratio is below 50 percent of what is recommended by WHO. I make this argument in the Parliament, saying that we can't wait any longer. Do we want to take another five decades to reach a minimum standard, or do we want to take action now and meet that target? With the pandemic, we realized that we can't produce doctors overnight. When we go through a crisis like this, we also can't import doctors or health workers, because nobody is willing to come. We have to achieve self-sufficiency. And if we want that, then we have to invest in it now." In 2022, Wangmo set a seemingly unreachable goal: "In the next five years, we must achieve the WHO standard. If you want countries to evolve and develop economically, socially, and intellectually, then there has to be investment in human capital."

Human capital, mental health, maternal and child health: no post-pandemic breather for Wangmo. "I need to get these three things done, you know? If I don't do these three things, I will feel very guilty."

JUST AS THE COVID-19 PANDEMIC was a global tragedy that forced reassessments in every realm of life, it prompted self-reflection among Bhutan's leaders. "I used to share an analogy with my friends," said Prime Minister Lotay Tshering, in March 2022. "If you are running the 100-meter dash, you have to give everything to the race and run as fast as you can. Don't think about needing a little energy for your next day's work. If you think about conserving energy for tomorrow's activities during today's race, then you lose both. Look at the countries where, as they were managing the COVID pandemic, they were also worried about losing the economy: They lost both. In Bhutan, we went all out. We did not worry about tomorrow. We wanted to save lives." Now, with the worst of the upheaval apparently behind him, Tshering is again focused on tomorrow. "In my political tenure, I have a little less than two years left. But carrying this lesson forward, I think I can achieve what I had planned to achieve in five years in the next one-and-a-half years—no doubt about that. I know how to work on it now."

Tshering acknowledged that this uncompromising pandemic effort posed dilemmas—some emotionally wrenching. "One of the most difficult things that I can recollect is signing the lockdown notifications. Because we knew how a lockdown would impact the common lives. We knew that many, many people would not be in their homes but at different places away from home. We knew as we declared each lockdown, with immediate effect, that many would be traveling on the highways. Many would have gone on a night out. Many would be in the process of preparing a wedding. Many would be facing hardships in a family, maybe the death of a near and dear one. All those activities would be coming to a standstill. Knowing that, I had to send out the notifications."

The implacable rules around quarantine were especially agonizing. “A young lady was in quarantine. She was in a very strict, government-catered quarantine facility, guarded by law enforcement people. Her father was stabbed to death in his village. Lyonpo Dechen and the surveillance team could not stop her emotions. She was at the verge of jumping out of the window to go and see her father’s dead body. I had to intervene. I got dozens of calls where a mother was dying in the ICU, and her daughter was calling me to allow her to leave quarantine and be next to her dying mother—I couldn’t allow that. A daughter’s dead body in the cremation ground—I could not allow the mother to attend to her daughter’s cremation because I thought that would cause transmission of the disease. If I knew that making those few exceptions would still have allowed us to achieve what we achieved, I would have allowed them. That would qualify as my regret: how cruel I had to be to be kind.

“Those were very, very tough conditions. And I know that those people are not happy with me. One hundred percent, they will not forgive me. I know that. And not just in this life—they will not forgive me in the next life. I know that. Yet those are the decisions that we had to take. We had to do what we had to do.”

COULD BHUTAN’S APPROACH BE ADOPTED or at least adapted by other nations? Or is it folly to try to apply the lessons from a tiny Himalayan Buddhist kingdom to a fractious Western democracy such as the United States? “I don’t think it’s folly. But when people do comparative health systems work or studies on lessons learned, there’s a risk of overreach and a risk of underreach,” explained Dr. Asaf Bitton, executive director of Ariadne Labs, a Boston-based center for health systems innovation. “With overreach, people might say, ‘Oh, you should be the Costa Rica of primary health care. You should be the Bhutan of COVID.’ There can be misuses of that framing. With underreach, people assume that every context is unique and special and different—that nothing is applicable and every country is an N of 1. But it shows a lack of humility to say that nobody could learn anything from anyone else. I’m somewhere in the middle. I do believe that lessons can be learned. But I don’t think that countries offer blueprints—they offer directions, questions, new approaches that can often inspire interesting, contextually bound interventions in a different place. It’s less about a recipe and more about a compass.”

Bitton was struck by several aspects of Bhutan’s response. “Number one, you don’t have to be a giant, authoritarian state with an almost panopticon, command-and-control approach to COVID to minimize morbidity and mortality, nor do you have to be literally an island in the middle of the Pacific. Maybe Bhutan is not a full, open democracy like we think about in the West—there is more centralized ‘thou shalt’ from the King and the health ministry. But it’s important to have another model besides China, besides New Zealand, besides American Samoa, besides the very few other countries that have managed to get through COVID with a relative minimum of deaths and infections. Second, the lack of politicization and the pragmatic, thoughtful, continually learning approach in Bhutan. Trying something, doing it again, iterating: these are quality improvement principles. New reality on the southern border? Try something different. Or with the Omicron surge, a zero-COVID policy in the country until you don’t have a zero-COVID policy and instead you move to zero deaths. There’s a level of agility here that’s highly unusual. And agility suggests a level of humility. Third, Bhutan is using COVID as an opportunity to upgrade to modern, 21st-century-enabled systems that give you a kind of John Snow map of COVID in 2022—that’s what we need, but very few places do that.”

Bitton was perhaps most impressed by Bhutan’s uncompromising attitude to protecting its people. “It’s an important counterexample to the narrative that has washed by much of the U.S., which is that COVID is the new reality and we should just expect to live with a few hundred deaths a day in the good part of the year, and a few thousand deaths a day in the bad part of the year. In the U.S., we had an inability to imagine the unimaginable, and then a concomitant and strange ability to become OK with it. We had to accept 300,000 or 400,000 deaths

a year, as if that's acceptable. What's the whole point of a \$3.5 trillion health care investment if we have to accept the unacceptable? We should be ashamed of what happened here. There was no shared mental and social model, no shared understanding of what we were facing. The second that this became a Democratic and Republican issue, it started us down a road of almost farcical and horrendous inability to respond."

Dechen Wangmo doesn't dismiss the singularity of the Bhutanese context. "The idea is not for other countries to scale up what Bhutan has done, but to recognize the core principles," she said. "Our own health system, a state-funded health system today, is not a perfect system, it has a lot of inefficiencies. But the underlying principle is that the state has a major responsibility to protect the health of the population, especially the vulnerable population. It's this principle that life is important."

And that is precisely, Bitton said, where many nations failed. "The second we start to say that fundamental humanistic tenets are not pragmatic—or in the language of cost effectiveness, not worth the expense—we're really up the creek. I think that what the health minister is saying is profoundly important. You can't replicate Bhutan's tactics. It's not that we should have this Pollyanna-ish view that that's what we need to do in the U.S. and other places. But Bhutan's example should make us look in the mirror. Look at what happens when you privilege every life, when you care, when you do not accept the unacceptable and you instead imagine the unimaginable. Look what could be different. In the U.S., we had enough money to stage a much more effective response. But we didn't have enough political and social cohesion, and we didn't have enough heart."

THIS ACCOUNT OF BHUTAN'S PANDEMIC experience began with Dechen Wangmo's New Year's wishes for a happy and healthy 2020, an online greeting accompanied by a photo of her and her then-eight-year-old son, Tenzin, in matching holiday brocade. Over the course of the pandemic, she spent endless days and nights away from him. During the second national lockdown, they were apart for 49 days. At times, mother and son would connect briefly via video chats. Tenzin also sent his mother handwritten letters; when she could steal a few minutes, she read them at her desk and cried. "He has a learning disability. He is cognitively challenged. But when I was explaining to him that I have to go away and be here, and he has to be at home, in his own amazing ways, he understood. One thing he said is, 'Oh, OK, you have to serve your team.'"

The Omicron lockdown lasted 77 days. Having weathered the previous two years, Tenzin remained his mother's most stalwart and loyal ally, but he couldn't always hide his emotions. "For a 10-year-old, it's difficult to understand why it's like this. However much I'm trying to explain the national interest and the need of the country, my roles and responsibilities, he just wants his mother," Wangmo said. "Why isn't his mother home? He's trying to put up a very brave face. But in my conversations with him over the phone, he becomes very teary. Everybody says, 'Oh, Lyonpo Dechen, you are doing well.' But I feel I'm failing miserably in my motherhood responsibilities. That, I would say, has been the most painful part of this pandemic. We often say we have to prioritize. But in a situation like this, it's very difficult to prioritize."

In the early spring of 2022, more than two years after COVID-19 surfaced in China, Bhutan at last started to loosen its public health restrictions. Dechen Wangmo could finally come home for good. "The moments that I spend with Tenzin, these will be very unconditional moments, with no distractions. For him, his happiness is just going out with me to have a lunch or hang out in the park. His happiness is very—he just wants me around. With his limitations, it's difficult for him to express himself. I hope and pray that he will understand, growing up, that Mama had to do some things for the greater good."





**The King speaks with a woman at her home in Thongling village, in the southern district of Chukha, in August 2020. (Photo: Royal Office of Media)**



The Ministry of Health received the Druk Thuksey recognition from the King during the 113<sup>th</sup> National Day celebrations, in Punakha on December 17, 2020. (Photo: Ministry of Health, Bhutan)



**King Jigme Khesar Namgyel Wangchuck (center) and Prime Minister Dr. Lotay Tshering (right) with members of the Royal Bhutan Police and De-suung at the Champela outpost in June 2021. The monarch's engaged leadership and the government's timely action during the COVID-19 pandemic were credited with protecting the country during the unprecedented global health crisis. (Photo: Royal Office of Media)**

# Bhutan's Pandemic Timeline

The Prime Minister briefs the press about the pandemic after the first confirmed COVID-19 case, on March 6, 2020.



The King delivers his first national address about the pandemic on March 22, 2020.

2019

2020

2020

2020

2020

2020

20

**December 31**

China reports to the World Health Organization a cluster of pneumonia cases in Wuhan, Hubei Province.

**January 11**

Ministry of Health begins drafting its national preparedness and response plan.

**January 15**

Paro International Airport begins screening passengers for respiratory symptoms and fever.

**January 21**

Minister of Health Dechen Wangmo chairs first coordination meeting of the health emergency management committee.

**January 29**

Screening begins at ground crossing areas along the southern border.

Government officials hold first press conference on the novel coronavirus.

**January 30**

Ministry of Health publishes first version of its national preparedness and response plan.

**February 7**

Government recommends postponing mass gatherings.

**February 11**

World Health Organization officially names the new infection COVID-19 and the causative virus SARS-CoV-2.

**March 5**

In the afternoon, the King visits the Ministry of Health to urge heightened vigilance.

In the evening, the first case of COVID-19 is detected in Bhutan, in an American tourist.

**March 11**

World Health Organization declares COVID-19 a pandemic.

**March 16**

All travelers entering Bhutan sent to designated mandatory quarantine facilities.

**March 18**

All schools and institutions closed until further notice.

**March 20**

His Holiness the Je Khenpo leads Medicine Buddha ritual on TV and social media.

**March 22**

King Jigme Khesar Namgyel Wangchuck delivers first national address on COVID-19.

**March 23**

Bhutan closes all land borders.

**March 26**

First Bhutanese tests positive for COVID-19, in a quarantine facility in Thimphu.

**March 31**

Bhutan extends mandatory quarantine period from 14 to 21 days.

**April 10**

The King delivers second national address on COVID-19.

**April 14**

The King's Druk Gyalpo Relief Kidu launched.

**April 15**

All businesses must close by 7 p.m.

**April 20**

Druk Trace app launched.

**April 27**

Ministry of Health begins first serological surveillance of high-risk communities in five southern districts.



## Bhutan's Pandemic Timeline



The King delivers his third national address about the pandemic on September 12, 2020.



**May 1**

Jomotshangkha lockdown.

**July 30**

Ministry of Health begins exhaustive sero surveillance of southern districts.

**August 8**

National COVID-19 Task Force established.

**August 10**

First case outside of quarantine detected in Gelephu.

**August 11**

First national lockdown declared. Loader at the Mini Dry Port in Phuentsholing tests positive for COVID-19.

**August 15**

Community surveillance begins in Phuentsholing.

**September 1**

Phased easing of the national lockdown begins.

**September 11**

Seven-day quarantine required for all individuals traveling from high-risk southern areas to other districts.

**September 12**

The King delivers third national address on COVID-19.

**October 30**

The Je Khenpo launches Our Gyenkhu campaign.

**December 14**

Minister of Health Dechen Wangmo awarded the Red Scarf from the King.

**December 20**

Lockdown declared in Thimphu, after positive case detected in flu clinic.

**December 24**

Mass testing begins in Thimphu.

# Bhutan's Pandemic Timeline

Minister of Health Dechen Wangmo was elected president of the 74th World Health Assembly on May 24, 2021.



2021

2021

2021

2021

2021

2021

2021

## January 7

First COVID-19 death in Bhutan, a 34-year-old man in Thimphu with pre-existing medical conditions.

### January 21

Bhutan receives 150,000 doses of Covishield vaccine from India.

### January 29

All 20 districts unlocked.

## February 25

Bhutan Vaccine System established.

## March 22

Bhutan receives 400,000 doses of Covishield from India.

### March 27

Nationwide campaign begins for first dose of COVID-19 vaccine.

## April 16

Lockdown begins for cities and towns in southern border districts, after two positive cases detected in the community in Phuentsholing.

## May 24

Minister of Health Dechen Wangmo elected president of the 74th World Health Assembly.

### May 31

World Health Organization names a new, highly transmissible variant of the coronavirus, first detected in India in late 2020, the Delta variant.

## June 10

Mass testing of every household begins in Phuentsholing

## July 12

Bhutan receives 500,000 doses of Moderna COVID-19 vaccine for nationwide campaign of second doses.

### July 20

Nationwide campaign begins for second dose of COVID-19 vaccine.

### July 23

Nationwide vaccination begins for children ages 12-17.

## Bhutan's Pandemic Timeline

2021

2021

2021

2022

2022

**August 10**

Phuentsholing lockdown, which lasted 115 days, is lifted.

**August 20**

Central Monastic Body conducts religious ceremonies in the southern district to pacify the COVID-19 pandemic.

**August 30**

Mandatory quarantine period is reduced from 21 days to 14 days for inbound travelers with proof of vaccination.

**November 24**

South Africa reports to the World Health Organization an alarming rise in COVID-19 infections, soon attributed to the highly transmissible but less virulent Omicron variant of the coronavirus.

**December 24**

Nationwide campaign begins for booster doses of vaccine.

**January 14**

Bhutan reports its first 14 cases of the Omicron variant.

**January 19**

Lockdown declared for Thimphu and other red zone districts.

**March 5**

Nationwide campaign begins for vaccination of children ages 5-11.

**March 12**

Prime Minister Dr. Lotay Tshering announces a new phase of pandemic response in Bhutan, in which lockdowns would end except for specific extenuating circumstances. A gradual process of easing restrictions begins, ending in late April.

**May 1**

Bhutan has recorded a total of 21 deaths from COVID-19.

# In Appreciation

The following individuals kindly took time to share their experiences and reflections:

Dr. Asaf Bitton

Ms. Jamyang Choden

Dr. Lisa Danzig

Ms. Chunku Dawa

Ms. Kinga Dema

Ms. Tshering Denkar

Dr. Rui Paulo de Jesus

Nurse Dema

Dr. Ugen Dophu

Dr. Sithar Dorjee

Mr. Garab Dorji

Dr. Kinley Dorji

Dr. Lobzang Dorji

Mr. Pema L. Dorji

Minister for Foreign Affairs Dr. Tandi Dorji

Mr. Tandin Dorji

Mr. Ugyen Dorji

Mr. Yeshey Dorji

Mr. Bert Hewitt

Dr. Randy Hyer

Mr. Lungten Jamtsho

Mr. Sonam Kinga

Dr. Shankar LeVine

Ms. Chhimi Lhamo

Dr. Mimi Lhamu

Ms. Catherine Miller

Dr. Kesang Namgyal

Dr. Damber K. Nirola

Ms. Tandin Ongmo

Mr. Will Parks

Ms. Tenzin Pelden

Ms. Yeshey Pelden

Ms. Deki Pem

Mr. Dhan Kumar Rai

Mr. Sangay Rinchen

Mr. Tshewang Rinzin

Dr. Dhruptob Sonam

Mr. Ugyen Tashi

Mr. Kinley Tenzin

Dr. Binay Thapa

Prime Minister Dr. Lotay Tshering

Mr. Nim Tshering

Dr. Pandup Tshering

Mr. Ugyen Tshering

Dr. Tshokey

Dr. Victor Del Rio Vilas

Dr. Sonam Wangchuk

Mr. Tshewang Wangchuk

Mr. Sonam Wangda

Mr. Nima Wangdi

Mr. Sonam Wangdi

Minister of Health Dechen Wangmo

Ms. Tandin Wangmo

Ms. Deki Yangzom

Mr. Karma Yonten

## About the Author

Madeline Drexler conducted all of the research and interviews for this book, and wrote the text. Drexler is a Boston-based journalist and a visiting scientist at the Harvard T.H. Chan School of Public Health. For 10 years she served as editor of *Harvard Public Health* magazine. She has been a senior fellow at the Schuster Institute for Investigative Journalism and a Knight Science Journalism Fellow. Drexler's books include *Emerging Epidemics: The Menace of New Infections* and *A Splendid Isolation: Lessons on Happiness from the Kingdom of Bhutan*. Her work has appeared in *The Atlantic*, *The New York Times*, *Undark*, *The Nation*, *The American Prospect*, *The Virginia Quarterly Review*, *Tricycle*, *Saveur*, *Nieman Reports*, *The Best American Travel Writing*, and many other publications. She has received numerous national writing awards and has been reporting from Bhutan since 2012. Drexler began her career as a staff photographer for The Associated Press.

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Madeline Drexler  
August 2022











**World Health  
Organization**



**Ministry of Health**  
Royal Government of Bhutan