

# NATIONAL TERRITORY

## Location and National Territory

The Korean Peninsula lies between 33 and 44 degrees north latitude and 124 and 132 degrees east longitude and has a cool, temperate climate. Korean Standard Time (KST) is nine hours ahead of England, where the prime meridian passes through Greenwich. The Peninsula is surrounded on three sides by water. The edges of Korean territory, including the Peninsula and its islands, can be traced from its

westernmost point, Bidanseom Island (Maan-do, Yongcheon-gun, Pyeonganbuk-do), to Yuwonjin, Onseong-gun, Hamgyeongbuk-do at the northernmost point, to Dokdo, Ulleung-gun, Gyeongsangbuk-do at its easternmost point, and finally, to its southernmost point at Marado Island (Seogwipo-si, Jeju Special Self-Governing Province) and back to the west.

## Territory and Territorial Waters of Korea

### Four Edges of Korea





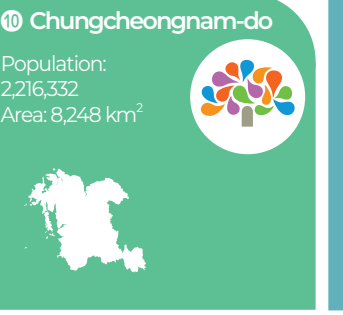
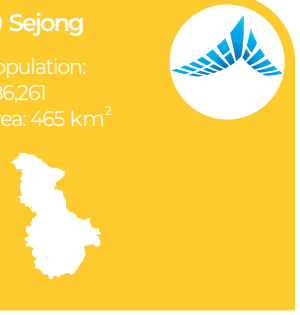
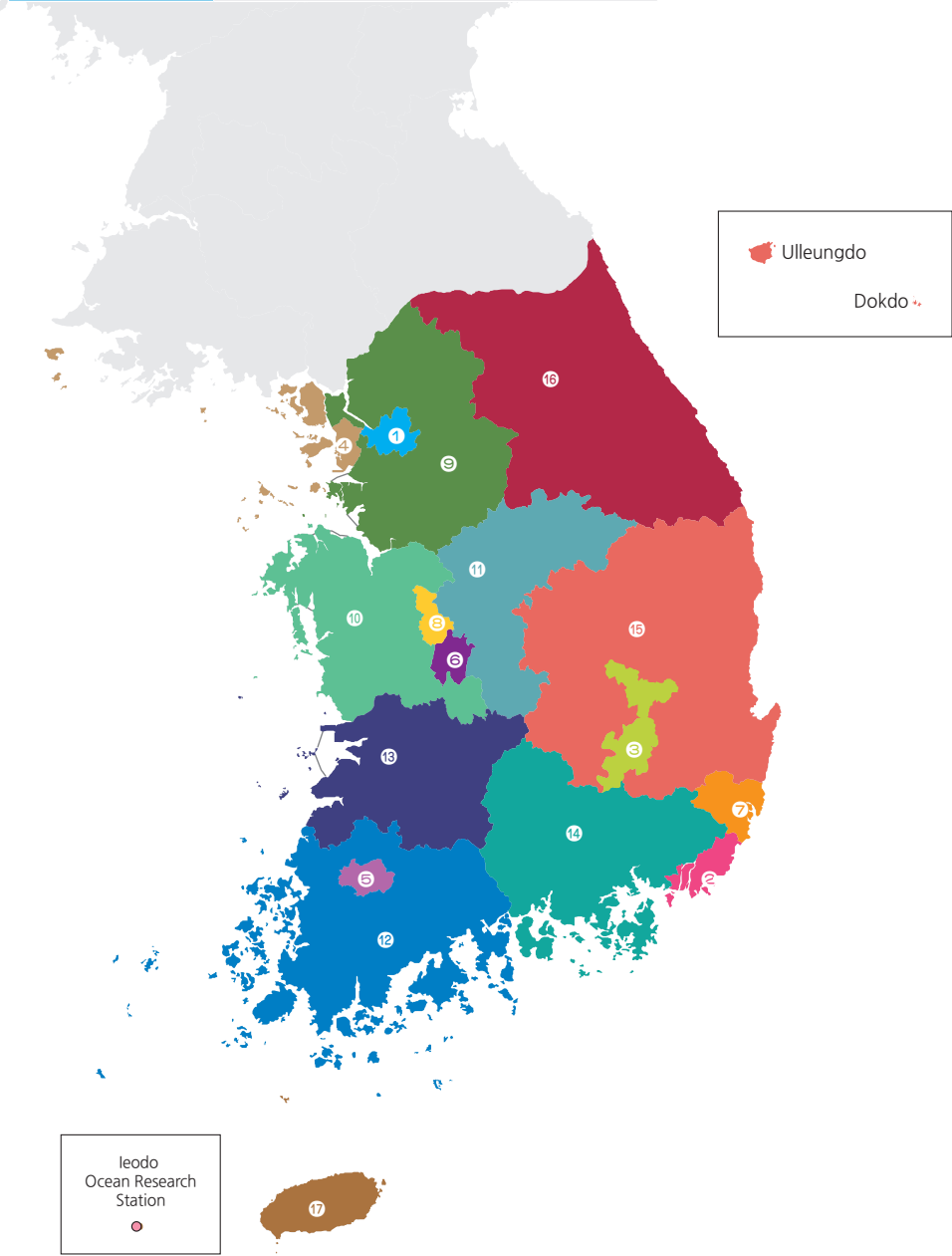


Administrative Areas of South Korea

The Republic of Korea has Seoul Special City, Sejong Metropolitan Autonomous City, and the following six metropolitan cities: Busan, Incheon, Daegu, Daejeon, Gwangju, and Ulsan. The nation is composed of six provinces (Gyeonggi-do, Chungcheongnam-do, Chungcheongbuk-do, Jeollanam-do, Gyeongsangnam-do, and Gyeongsangbuk-do), and three special self-governing provinces (Gangwon Special Self-Governing Province, Jeonbuk Special Self-Governing Province, and Jeju Special Self-Governing Province).

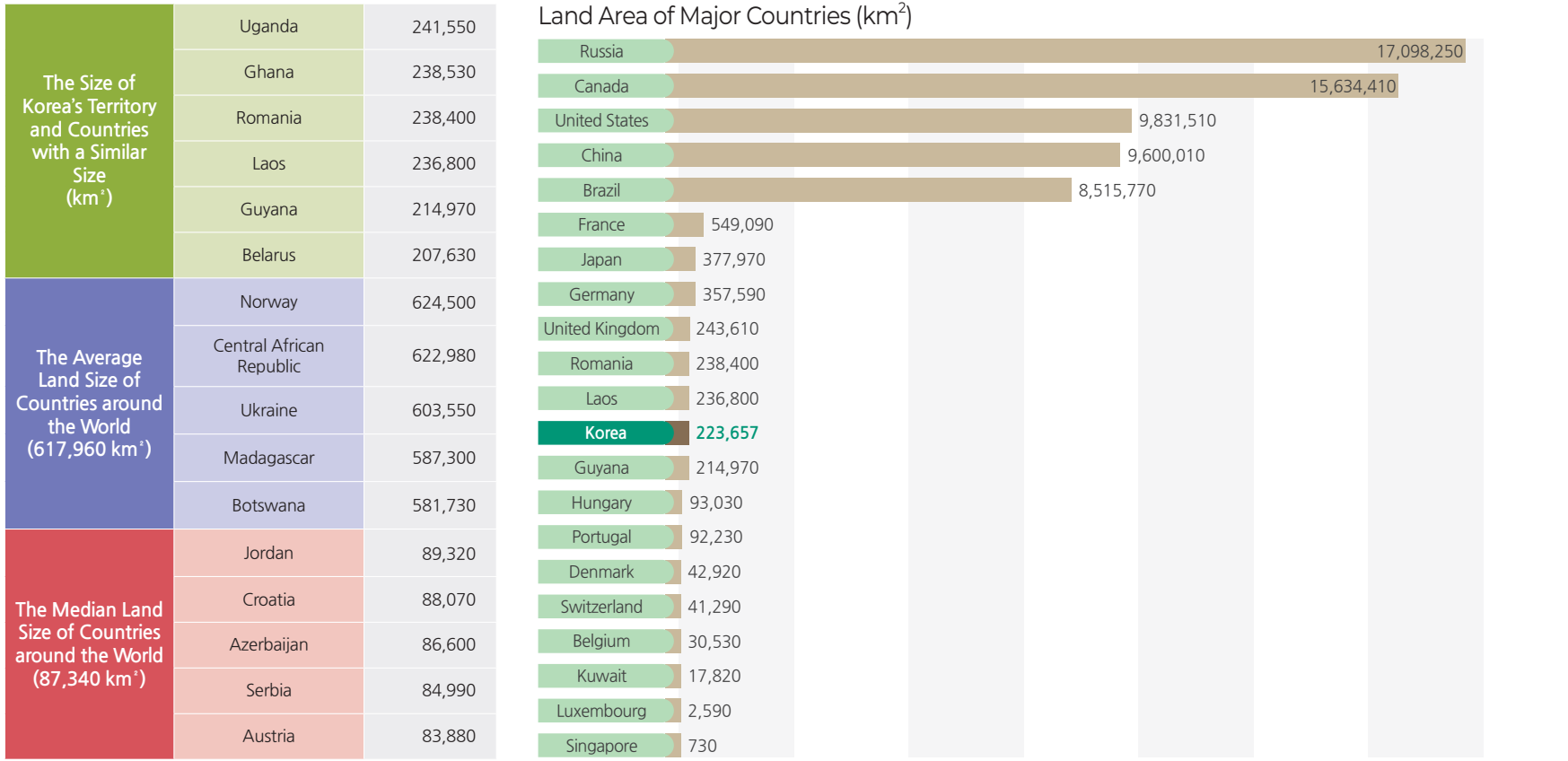
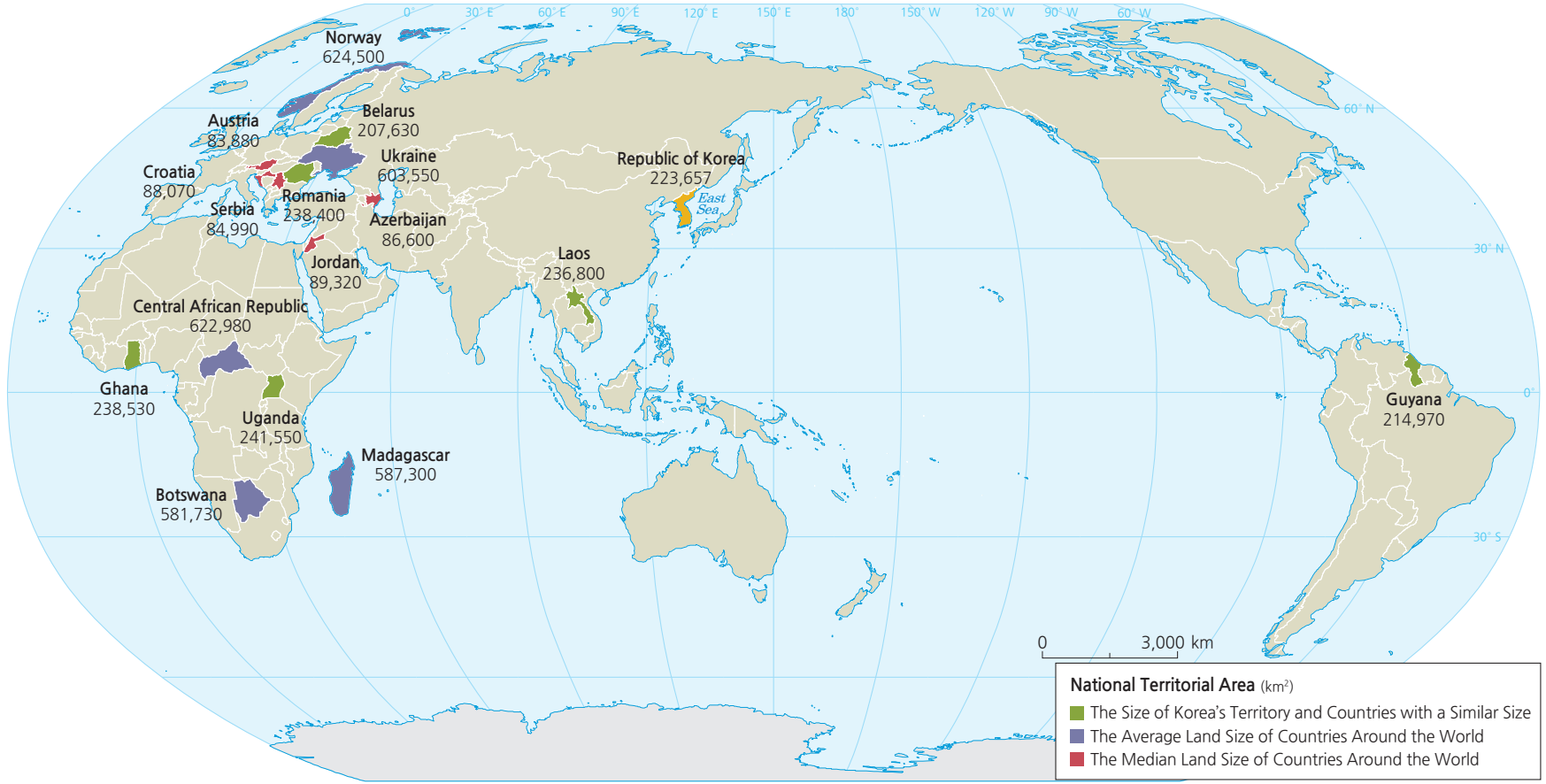
Area, Population, and Administrative Areas of Korea

Area	223,657 km <sup>2</sup> (South Korea only 100,449 km <sup>2</sup> ) (* Area, as of December 2023)
Population (South Korea only)	51,774,521 (* Population, as of December 2023)
Administrative Areas of South Korea	One Special City, Six Metropolitan Cities, One Metropolitan Autonomous City, Six Provinces (-do), Three Special Self-Governing Provinces



Area of the Land

The Territorial Area of Countries around the World



The total size of Korea's territory is 223,658 km<sup>2</sup> (North and South combined), which ranks Korea 85th among the 230 countries around the world. In comparison to other countries in the world, Korea is slightly larger than Guyana (214,970 km<sup>2</sup>) and Belarus (207,600 km<sup>2</sup>) and around two-thirds the size of the Philippines (300,000 km<sup>2</sup>), Vietnam (331,340 km<sup>2</sup>), and Japan (377,970 km<sup>2</sup>). The size of the Korean territory is similar to that of Uganda (241,550 km<sup>2</sup>), Ghana (238,530 km<sup>2</sup>), Romania (238,400 km<sup>2</sup>), and Laos (236,800 km<sup>2</sup>). The total area of South Korea alone is 100,444 km<sup>2</sup>, which ranks it 110th in the world, and the area of North Korea is 123,214 km<sup>2</sup>, which ranks it 100th in the world.

The average land area of countries around the world is 617,960 km<sup>2</sup>. Countries

of approximately this size include Norway (624,500 km<sup>2</sup>), the Central African Republic (622,980 km<sup>2</sup>), Ukraine (603,550 km<sup>2</sup>), Madagascar (587,300 km<sup>2</sup>), and Botswana (581,730 km<sup>2</sup>). These countries are ranked in the top 50 for land area. Countries whose territories are close to the median size include Croatia (88,070 km<sup>2</sup>), Azerbaijan (86,600 km<sup>2</sup>), Jordan (89,320 km<sup>2</sup>), Serbia (84,990 km<sup>2</sup>), and Austria (83,880 km<sup>2</sup>).

Korea's land area (North and South combined) is smaller than the global average but bigger than the global median. If the few nations with vast territories such as Russia, Canada, and the United States are excluded from the global average, Korea shows no significant difference from the average nation in terms of land area.



Reclamation Projects and Territorial Expansion



1 Sihwa (1998–2016)  
Reclaimed land area: 36.36 km<sup>2</sup>  
13 times the size of Yeouido



3 Daeho (1980–1996)  
Reclaimed land area: 39.04 km<sup>2</sup>  
13 times the size of Yeouido



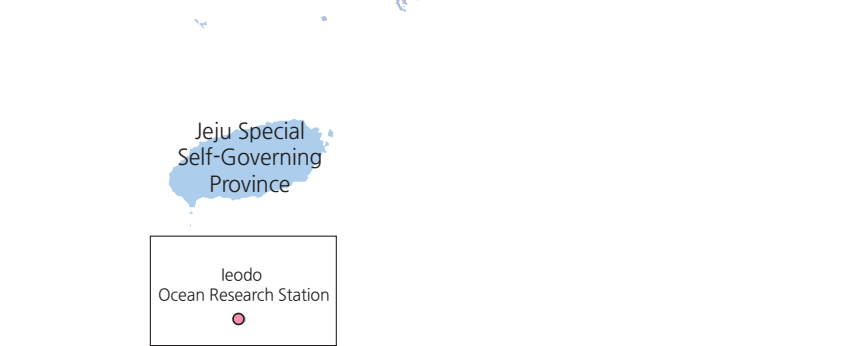
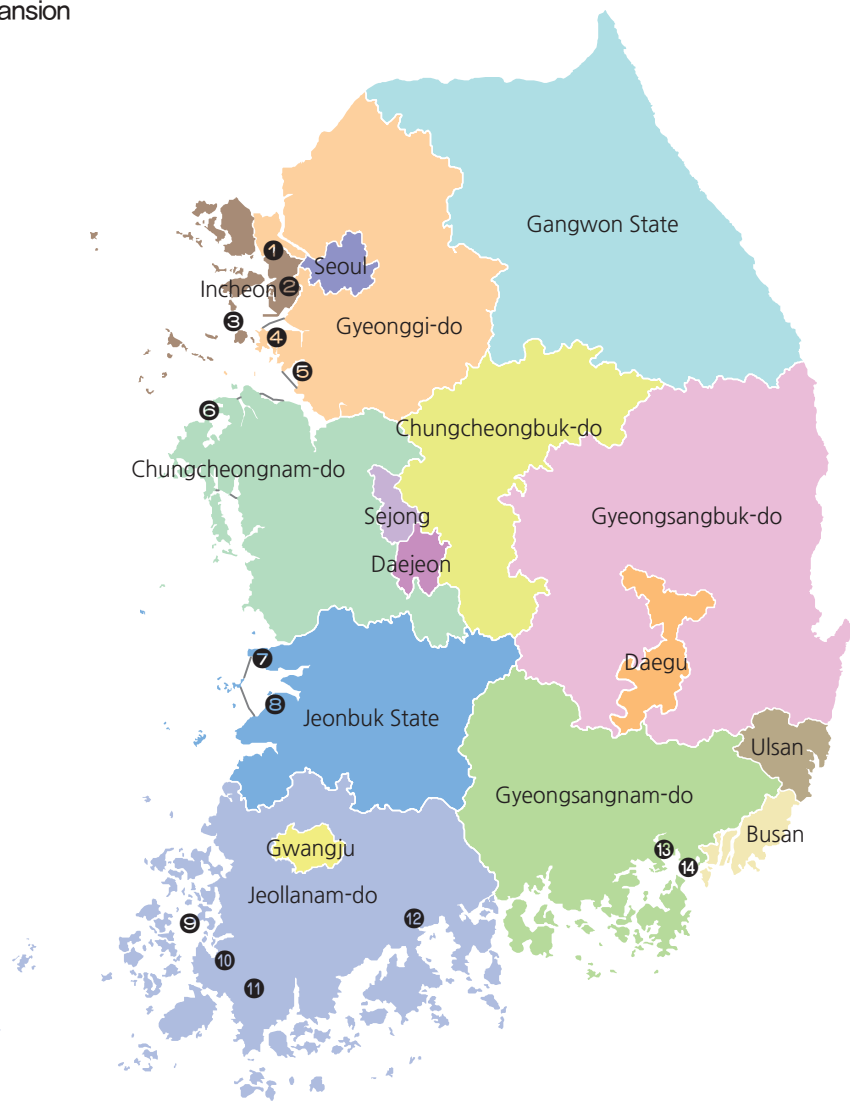
5 Pyeongtaek (1970–1977)  
Reclaimed land area: 26.82 km<sup>2</sup>  
9 times the size of Yeouido



7 Saemangeum (1991–2020)  
Reclaimed land area: 283.00 km<sup>2</sup>  
98 times the size of Yeouido



11 Haenam (1985–2004)  
Reclaimed land area: 22.44 km<sup>2</sup>  
8 times the size of Yeouido



8 Gyehwado (1974–1979)  
Reclaimed land area: 24.67 km<sup>2</sup>  
9 times the size of Yeouido



12 Goheung (1991–2008)  
Reclaimed land area: 20.75 km<sup>2</sup>  
7 times the size of Yeouido



9 Yeongsangang 2 (1976–1998)  
Reclaimed land area: 48.65 km<sup>2</sup>  
17 times the size of Yeouido



13 Seohang / Gapo District (2004–2024)  
Reclaimed land area: 0.63 km<sup>2</sup>/0.433 km<sup>2</sup> (1.063 km<sup>2</sup>)  
0.4 times the size of Yeouido



2 Hwaong (1991–2016)  
Reclaimed land area: 44.82 km<sup>2</sup>  
15 times the size of Yeouido



4 Seokmun (1987–2005)  
Reclaimed land area: 28.31 km<sup>2</sup>  
10 times the size of Yeouido



6 Seosan A & B (1980–1995)  
Reclaimed land area: 101.21 km<sup>2</sup>  
35 times the size of Yeouido

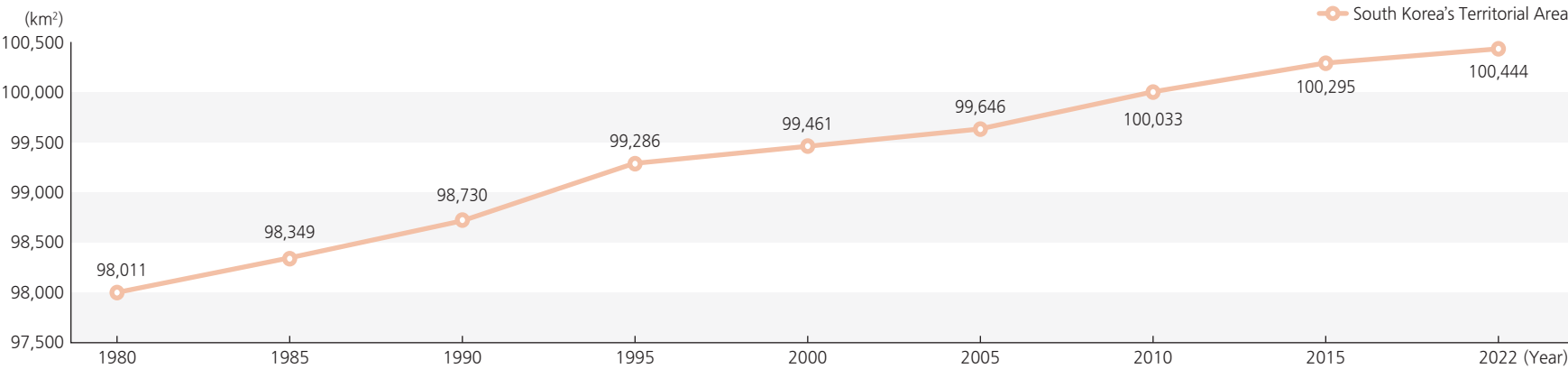
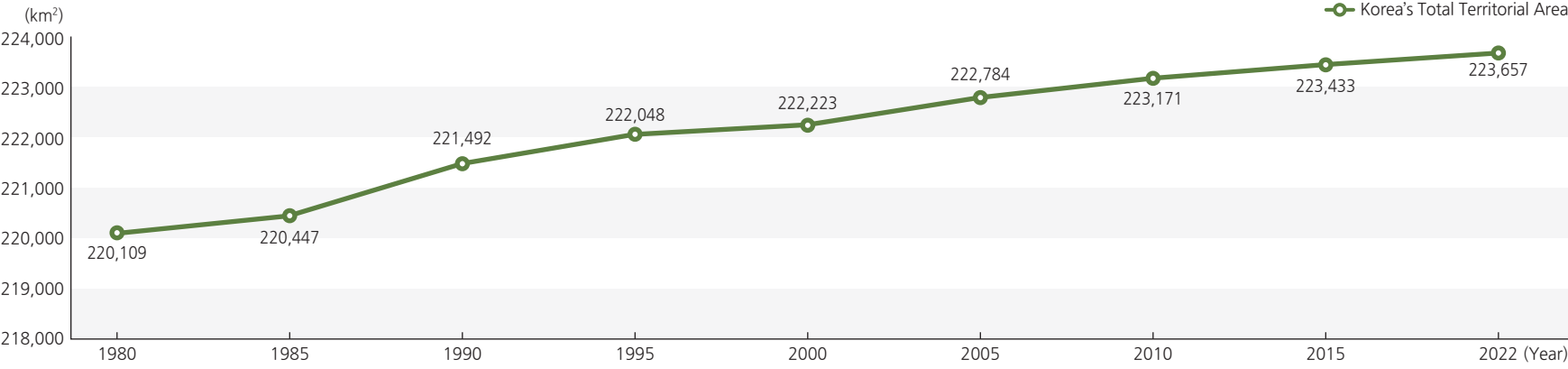


10 Yeongsangang 3 (1995–2015)  
Reclaimed land area: 125.00 km<sup>2</sup>  
43 times the size of Yeouido



14 Gadeokdo New Airport (2023–2030)  
Reclaimed land area: 6.669 km<sup>2</sup>  
2 times the size of Yeouido

Change in Land Area



View of Sihwa



Saemangeum National Industrial Complex, Saemangeum Development Office



Saemangeum National Industrial Complex, Saemangeum Development Office



Saemangeum National Industrial Complex, Saemangeum Development Office

The land area of Korea has steadily increased from 220,109 km<sup>2</sup> in 1980 to 223,657 km<sup>2</sup> in 2022. The territorial area of South Korea alone increased from 98,011 km<sup>2</sup> to 100,444 km<sup>2</sup> during the same period. In 2010, the area of the South exceeded 100,000 km<sup>2</sup> for the first time. The land expansion was largely due to reclamation projects. Estuary banks and floodgates were built, breakwaters were erected to block the sea, and former tidelands were changed to create land for agriculture, industry, residence, and public facilities. Through extensive reclamation projects, the land area continues to increase gradually.

Agricultural land expansion and large-scale reclamation projects began in earnest in the 1960s and 1970s. Along the West and South Seas, the government led large-scale reclamation projects to secure more agricultural land. In the 1980s, the private sector joined the projects. Since the 1990s, the awareness of and interest in the value of reclaimed lands have grown. Various aspects such as environment, ecology, landscape, and education have been balanced to ensure that the impact

of agricultural and industrial use of reclaimed land is minimized. In the 2020s, advancements in technology have contributed to growing interest in utilizing reclaimed lands for the development of diverse urban areas and residential zones.

The northern part of the Sihwa District (near Ansan and Siheung) was developed into a multi-functional high-tech complex through the Sihwa Multi-Techno Valley (MTV) project in 2023. The southern part of the Sihwa District (near Hwaseong) is being developed into an eco-friendly mixed-use city called Songsan Green City, with completion targeted for 2030. The Saemangeum District in Jeonbuk Special Self-Governing Province is continuing development as a national industrial complex, with a completion goal of 2030. Currently, it is attracting numerous companies and large-scale investments. In 2023, it was designated as a National Strategic High-Tech Secondary Battery Specialized Complex, where core secondary battery industries are clustered. Additionally, many reclaimed lands are being repurposed and developed.



Dokdo Island



Panoramic View of Dokdo



Geographic Information about Dokdo

Item Description		Content	Remarks
Distance	Dokdo to Ulleungdo	87.4 km (47.2 nautical miles)	The shortest distance between coasts
	Dokdo to Jukbyeon, Uljin-gun, Gyeongsangbuk-do	216.8 km (117.1 nautical miles)	
	Ulleungdo to Jukbyeon, Uljin-gun, Gyeongsangbuk-do	130.3 km (70.4 nautical miles)	
Surface Area	Dokdo	187,554 m <sup>2</sup>	
	Dongdo	73,297 m <sup>2</sup>	
	Seodo	88,740 m <sup>2</sup>	
	Attached islets	25,517 m <sup>2</sup>	
Distance between Dongdo and Seodo		151 m	The nearest distance between coasts
Number of Attached Outcroppings		89 not including Dongdo and Seodo	
Coordinates	Dongdo	37° 14' 26.8" N 131° 52' 10.4" E	At peak of island
	Seodo	37° 14' 30.6" N 131° 51' 54.6" E	
Elevation	Dongdo	98.6 m	
	Seodo	168.5 m	
Circumference	Dokdo	5.4 km	
	Dongdo	2.8 km	
	Seodo	2.6 km	
Tidal Range		16 cm	

\*1 nautical mile = 1,852 m

Dokdo is a set of islets of the Republic of Korea that are located at the easternmost edge of the national boundary in the East Sea, Dokdo-ri, Ulleung-gun, Gyeongsangbuk-do, Korea. Dokdo has been a part of the Korean territory since General Isabu of the Silla dynasty claimed Usanguk (The Kingdom of Usan) for Silla in 512. Dokdo has historically been referred to by various names such as Sambongdo, Gajido, Usando, Jasando, and Seokdo.

According to Korean historical records, the administrative name of “Dokdo” was first used in 1906 by magistrate Sim Heung-taek of Ulleung-gun. Dokdo was officially incorporated into Gyeongsangbuk-do in 1914. Dokdo is actually not one island, but consists of two large islets, Dongdo (East Island) and Seodo (West Island), and 89 smaller islets, with a total area of 187,554 m². The shortest distance between the two main islets is 151 meters at low tide. Dongdo is located at 37° 14' 26.8" N, 131° 52' 10.4" E, and Seodo is at 37° 14' 30.6" N, 131° 51' 54.6" E. Dokdo is 87.4 km east of Ulleungdo and 157.5 km northwest of Oki Island of the Shimane Prefecture of Japan. Dokdo is visible from multiple points on Ulleungdo, which has itself always been regarded as Korean territory. In the Sejong sillok jiriji (Geographical Records in the Annals of King Sejong, 1454), it is noted that the two islands of Usan (Dokdo) and Mureung (Ulleungdo) lay not far apart, and are visible to one another on a clear day.

The Korean government has confirmed through various historical archives that Korea has long recognized Dokdo as its territory. Along with the Sejong sillok jiriji, Sinjeung dongguk yeoji seungnam (The New and Expanded Complete Conspectus of the Territory of the Eastern Country, 1530), Dongguk munheon bigo (Reference Documents on the Eastern Country, 1770), Mangi yoram (Essentials of Governance, 1808), and Jeungbo munheon bigo (Comprehensive Study of Civilization, Revised and Expanded, 1908) all show consistency in depicting Dokdo as Korean territory.



The Stone Post of the End of the Republic of Korea



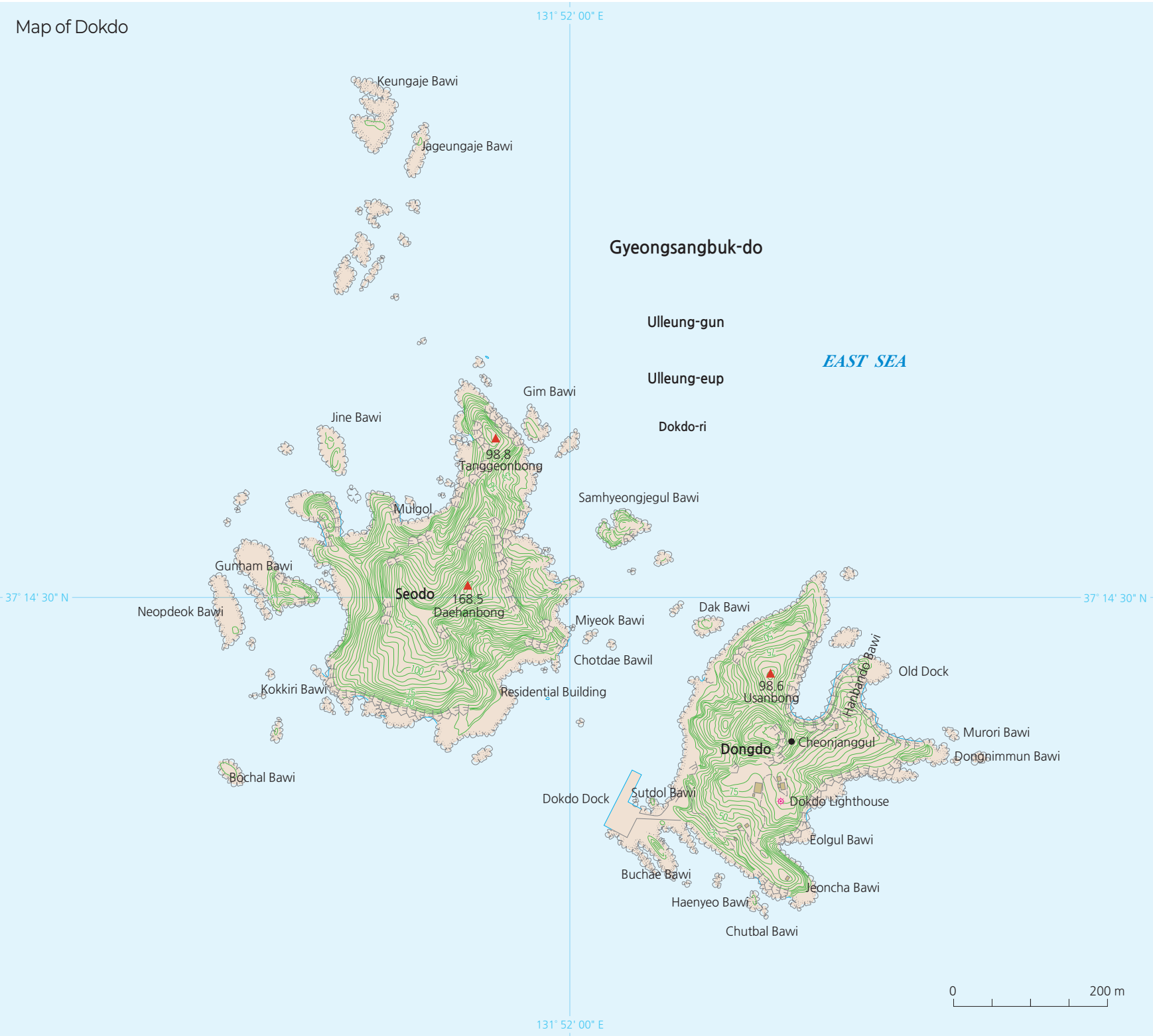
SCAPIN-677

According to the Reference Documents on the Eastern Country, “Ulleung and Usan are part of the State of Usan, and Usan is referred to as Songdo by the Japanese,” reaffirming that Dokdo is Korea’s territory. In 1900, Emperor Gojong of the Korean Empire declared Ordinance No. 41, confirming that Dokdo is in the jurisdiction of Uldo-gun (Ulleungdo) and assigned the Mayor of Uldo-gun to administer Dokdo.

Even Japanese historical documents reveal that Dokdo has always been a part of Korean territory. In the late 17th century, the Joseon government and Edo Shogunate negotiated an agreement regarding illegal fisheries activities, which was called the Ulleungdo Dispute. As a result, the Edo Shogunate officially acknowledged on December 25, 1695, that both Ulleungdo (Jukdo) and Dokdo (Songdo) did not belong to the Tottorihan of Edo Shogunate and placed a ban on Japanese fishing in the Ulleungdo area. Despite that, Japan tried to illegally occupy Dokdo through the Shimane Prefecture Public Notice in 1905. However, the Japanese government acknowledged that Dokdo is a Korean territory before the notice was issued. Another notable example, confirming Dokdo as Korean territory, was the Dajokan Order of 1877, which was published by the Dajokan, the highest administrative organization of Japan at the time. Thus, Japan has acknowledged Korea’s sovereignty over Dokdo throughout history.

Additionally, multiple discussions on the international order before and after World War II have confirmed Korea’s sovereignty over Dokdo. The Cairo Declaration of December 1943 stipulated that “Japan shall be stripped of all islands she has seized or occupied by violence and greed.” The General Headquarters of the Allied Powers issued the two instruction codes SCAPIN-677 and 1033 in 1946 to exclude Dokdo from Japan’s governmental or administrative control. It was also reaffirmed by the Treaty of San Francisco in 1951.





Dokdo and Taegeukgi



The Mark to Show that Dokdo is Korean Territory



The Stone Post of the Territory of the Republic of Korea

# Physical Geography of Dokdo



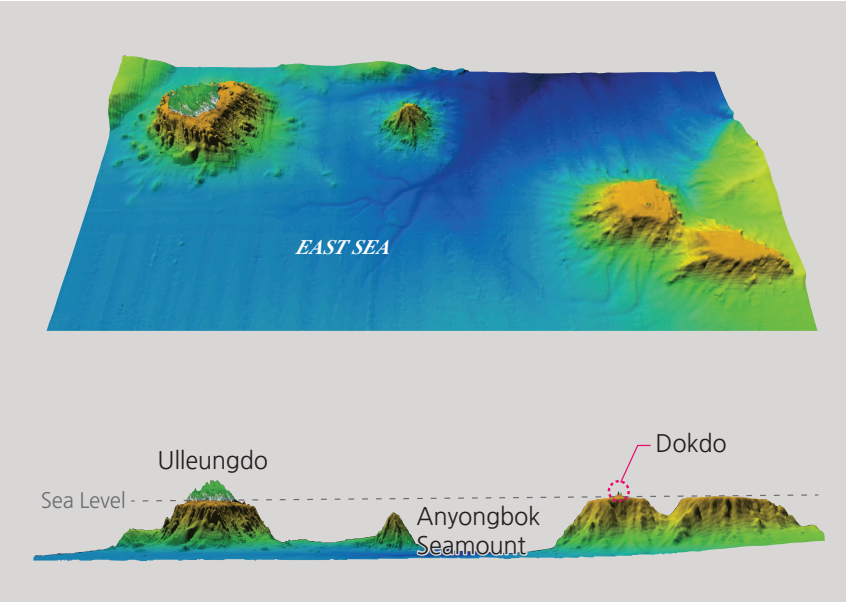


Dokdo is a set of volcanic islets that formed from lava that erupted from about 2,000 m below the surface of the East Sea. Dokdo presumably formed between 4.6 million and 2.5 million years ago. It is estimated to have been 2.5 million–10,000 years old when Ulleungdo was being formed. Dokdo’s geologic composition is alkaline volcanic rock: the main rocks above sea level are made of andesite, and below sea level, the rocks are believed to consist of basalt. Part of a gigantic, round volcano (the Dokdo Seamount), Dokdo’s highest point is more than 2,000 m above the seafloor, with the radius of the seamount being 30 km at the bottom. As the topographic map shows, the Simheungtaek and Isabu Tablemounts are in the eastern part of the Dokdo Seamount, while the Anyongbok Seamount is located between Ulleungdo and Dokdo.

Surrounded by the Korean Peninsula, Russia, and Japan, the East Sea where Dokdo is located belongs to the group of marginal seas in the North Pacific, running from the Okhotsk Sea to the South China Sea. The North Korea Cold Water (NKCW) and the East Korea Warm Currents (EKWC) meet in the waters around Dokdo, which is located at the center of the East Sea. The seabed in the East Sea near Dokdo consists of three topographic highlands and is more than 2,200 m deep in the west, getting shallower in the east. The strait between Dongdo and Seodo is 110–160 m in width, 330 m long, and 5–10 m deep. The waters near Seodo are shallower than those near Dongdo, but the depth of water off Dongdo reaches hundreds of meters.

The waters near Dokdo where the warm and cold currents circulate and meet are rich in zooplankton and phytoplankton. Good environmental conditions are maintained in large part due to the islands’ long distance from land. The sea around Dokdo is relatively undisturbed by human activities, and as a result, it is home to a large diversity of marine life. The waters around Dokdo are abundant with squid and many different types of fish. Squid accounts for more than 60% of the total catch in areas near Dokdo and Daehwatoe Fishery. The drift catches of ray, Korean anchovy, flatfish, saury, yellowtail, blowfish, sea eel, shellfish (such as abalone, conch, and mussel), and seaweeds (such as sea mustard, kelp, agar, and fusiformis)

3D Seabed Images of Dokdo



are useful marine resources. Additionally, the trap fishery of red snow crab, shrimp, and sea cucumber results in millions of KRW in profit annually. As of 2018, 379 marine species have been recorded in Dokdo, which includes 220 invertebrate animal species, 110 marine plant species, 21 coral species, and 28 fish species. Most notably, marine plant species and coral species serve to create a rich habitat and spawning ground for a diversity of marine organisms. Additionally, the waters near Dokdo are rich in methane hydrate. Dokdo can be used to establish exclusive economic zone rights for Korea and also can play a pivotal role as an advanced marine base for the Pacific Ocean and a transportation hub in the East Sea.

Dokdo serves as a midpoint rest stop for several bird migration routes. As such, it also serves as an important natural laboratory for scientific research on these birds’ origins and population distribution. A 2005 study confirmed the existence of

a total of 25 species of birds in Dokdo and that number increased to 76 in 2013. The huge difference in findings is attributed to the gap in bird species by season, and the variety and diversity of birds according to the research period and frequency. Twenty-two different species of birds are found year-round, and they include black-tailed gull, stormy petrel, shearwater, kestrel, osprey, dusky thrush, swan, harlequin duck, brambling, yellow-throated bunting, white-faced wagtail, golden-crested kinglet, and quail. Among them, the black-tailed gull has the largest population, followed by the stormy petrel, then the shearwater. Eight species are endangered: one first-grade endangered species (the hawk), and seven second-grade endangered species (Siberian honey buzzard, black kite, crested murrelet, owl, osprey, swan, and hooded crane). The shearwaters, stormy petrels, and black-tailed gulls that call the islands of Dokdo home only reproduce in Northeast Asia. Namsa-myeon of Seodo (Dokdo), the west region of Dongnipmun Rock, and the places where the perennial plant couch grass grows are known breeding grounds for the black-tailed gull. The islands also welcome common summer migratory birds (common sandpiper, cattle egret, heron, and streaked shearwater), common winter birds (dunlin, herring gull, and Korean buzzard), and others (snipe, gray-tailed tattler, and common greenshank)

for temporary stopovers.

A minimum of 34 species to a maximum of 75 species of plants in Dokdo have been researched by many different organizations; however, a total of 48 groups of species are acknowledged to inhabit Dokdo. From among these, the Ministry of Environment designated 13 groups of floristic regional indicator plants. Along with Japanese black pine, shrubs such as broad-leaf olive, broad-leaf spindle tree, and honeysuckle, and herbaceous plants such as couch grass, aster, hare’s ear, false lily of the valley, holly fern, and red fescue are growing in Dokdo. The honeysuckle is found only in Ulleungdo and Dokdo, and hare’s ear and false lilies of the valley have been designated as protected plants by the Ministry of Environment. Thirty-seven species of insects have been recorded in Dokdo, including dragonflies, earwigs, grasshoppers, cicadas, beetles, flies, and butterflies.

Because of Dokdo’s migratory importance and species diversity, the government designated the islands collectively as Natural Monument No. 336, and the Dokdo Natural Protection Zone was proclaimed on December 10, 1999, and expanded to 187,554 m² on September 14, 2006.

Ecosystem in Dokdo



Lischke's Top Shell



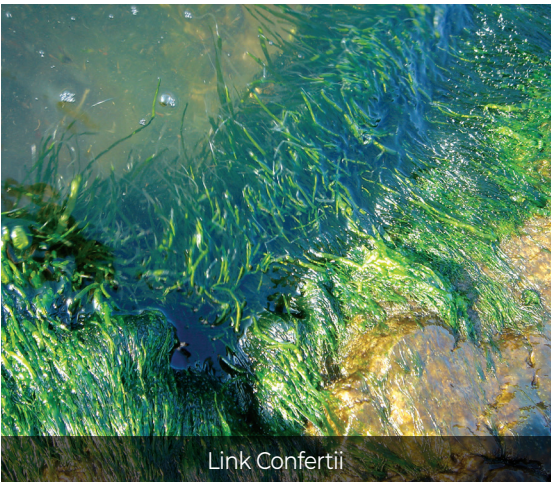
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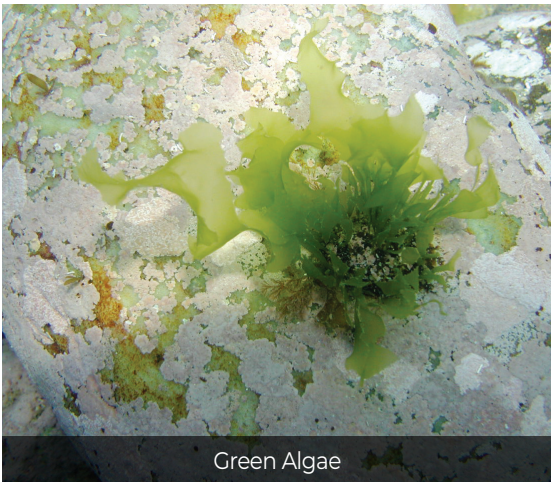
Purple Sea Urchin



Top Shell



Link Confertii



Green Algae



Wood Sorrel



New Zealand Spinach



Arctic Daisy



Morrow's Honeysuckle



Spindle Tree



Wood Pigeon



Siberian Rubythroat



Stormy Petrel



Black-Tailed Gull



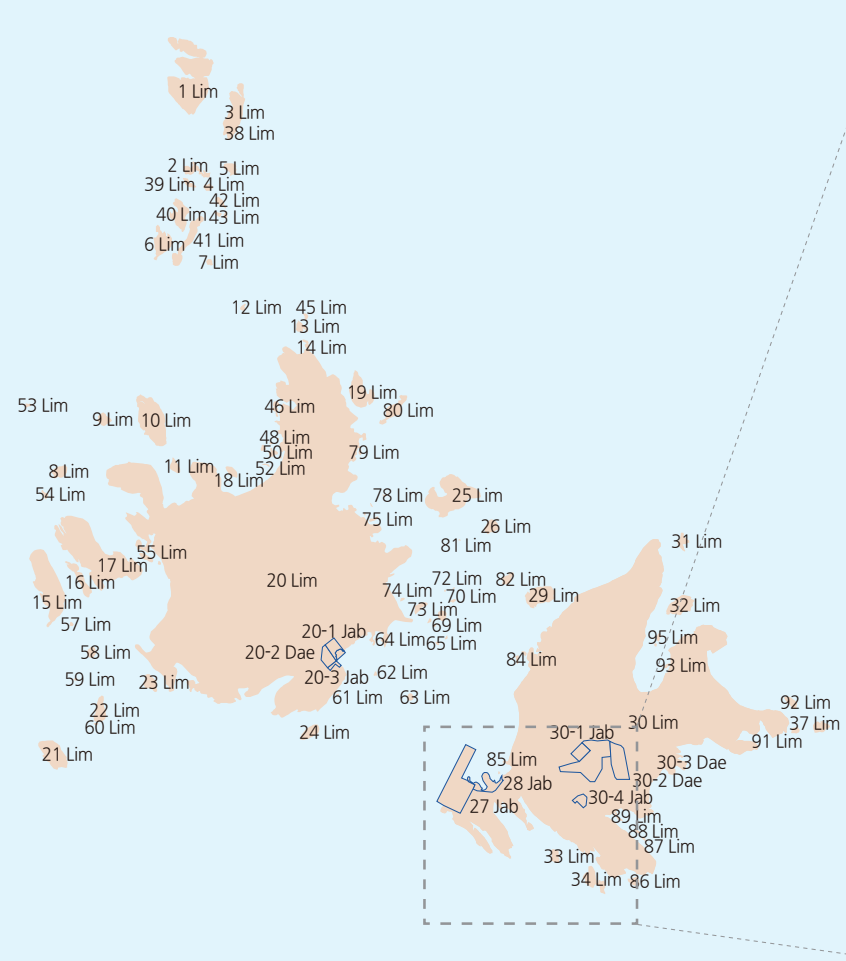
Human Environment of Dokdo

The Republic of Korea exercises its sovereign power over Dokdo by holding legislative, administrative, and judicial jurisdiction over it. First, there is a Korean police force stationed in Dokdo, patrolling the islands. Second, the Korean military defends its territorial waters and airspace. Third, various laws and regulations of the

Republic of Korea apply to the islands. Fourth, a lighthouse and docking facilities have been installed, and these facilities are managed and operated by Korea. Fifth, Korean civilians reside in Dokdo.

Dokdo is classified as an administrative property in accordance with Article 6 of

Cadastral Map of Dokdo



the National Property Act (Management Office: Ministry of Oceans and Fisheries). It consists of 91 islands and 101 lots, and its publicly assessed and individual land prices were published. The construction of the docking facility in Dokdo was completed in November 1997 and was registered in the cadastral records in August 1998. On March 20, 2000, the Ulleung-gun Council passed a bill “Pursuant to Act Amending Ri-Administration,” which was enacted on April 7th, 2000. The administrative designation of Dokdo’s addresses as 42-76, Dodong-ri, Ulleung-eup, Ulleung-gun, Gyeongsangbuk-do, Korea was changed to 1-37, Dokdo-ri, Ulleung-

eup, Ulleung-gun, Gyeongsangbuk-do, Korea. With the change in the numbering system in Dokdo-ri, it was once again changed in 2016 to 1-96 beonji, Dokdo-ri, Ulleung-eup, Ulleung-gun. Again, with the newly enacted Road Name Address Act, the new road names Dokdoyisabu-gil and Dokdoahnyongbok-gil were selected from a public contest and are in use. Therefore, the current administrative areas are 3, Dokdoahnyongbok-gil, Ulleung-eup, Ulleung-gun, Gyeongsangbuk-do (Residential Building); 55, Dokdoisabu-gil (Dokdo Coast Guard); and 63, Dokdoisabu-gil (Dokdo Lighthouse).



Post Box in Dokdo



Memorial Stone in Dokdo



Dokdo Dock

The docking facility (maximum 500 tons) was constructed in 1997. Length: 80 m; Area: 1,945 km²; The Warf was constructed in July 2003.



Residential Building

Extension and renovation in August 2011 (two residents and two staff members from the office of Ulleung-gun; 373 km² four-story building/two water treatments (4 ton/day); diesel generator (50 kW).



Dokdo Residents' Doorplates

“Dokdo-ri, Ulleung-eup, Ulleung-gun” Delivery ceremony for Munpae residents.



Dokdo Guards

Extension of the facilities in August 1997; 30 guards; one residential building (658 km² ); water treatment (27 ton/day); heliport (400 m²); cableway (1 unit); sea water purification facilities.



Dokdo Lighthouse

First set up in August 1954; extension of facilities and introduction of manned service in December 1998; 1 Unit (Lighting up to 25 miles); Staff: 3; Height: 15 m; Area: 161 km²; 2 diesel generators (75 kW); sunlight generators (15 kW).



The first registered resident in Dokdo was Choi Jong-deok, and his address was 30 Dokdo-ri (San 67, Dodong-ri), Ulleung-eup, Ulleung-gun, Gyeongsangbuk-do. He moved from Ulleungdo to Dokdo in March 1965 to fish commercially and began the construction of facilities in May 1968. He was registered as a Dokdo resident on October 14, 1981, and died on Seodo Island on September 23, 1987. As of December 2019, there were 14 registered residents on the resident registration list. As of August 2023, there are 26 residents in Dokdo, including 20 Dokdo Coast Guard personnel, three lighthouse keepers, and two officers from the Ulleung-gun Dokdo Management Office.

Various government institutions have managed Dokdo for its use and operation. Gyeongsangbuk-do and Ulleung-gun are responsible for administrative services for the islands, such as improving and supporting settlement and living conditions for the residents. The Dokdo Coast Guard is under the command of the Gyeongsangbuk-do Police Agency. The Ministry of Maritime Affairs and Fisheries

offers directions for various activities allowing for the sustainable use of Dokdo and its surrounding waters in accordance with Law 7497 on the Sustainable Use of Dokdo Act, enacted on November 19, 2005. Major activities include ecosystem preservation, management, and protection of fishery resources; research and development of marine mineral resources; facility management plans in Dokdo; and the procurement of resources. In an effort to preserve the natural environment and the ecosystem of Dokdo, the Ministry of the Environment has designated the islets of Dokdo as a “specific island” in accordance with the Special Act on Preservation of the Ecosystem in Dokdo and Affiliated Islands. The Korea Heritage Service designated Dokdo as a natural monument according to the Cultural Heritage Preservation Act and protects the islands. In addition, the Ministry of Interior and Safety is responsible for maritime patrols around Dokdo and ensuring the safety of passenger ferries to Dokdo.



Ulleungdo, Dokdo Sea Route



Coastal Guardship of the Korea Coast Guard



Ship of Dokdo Peace (for the Management of Dokdo)



Dokdo Nuri (Dokdo-only research vessel)



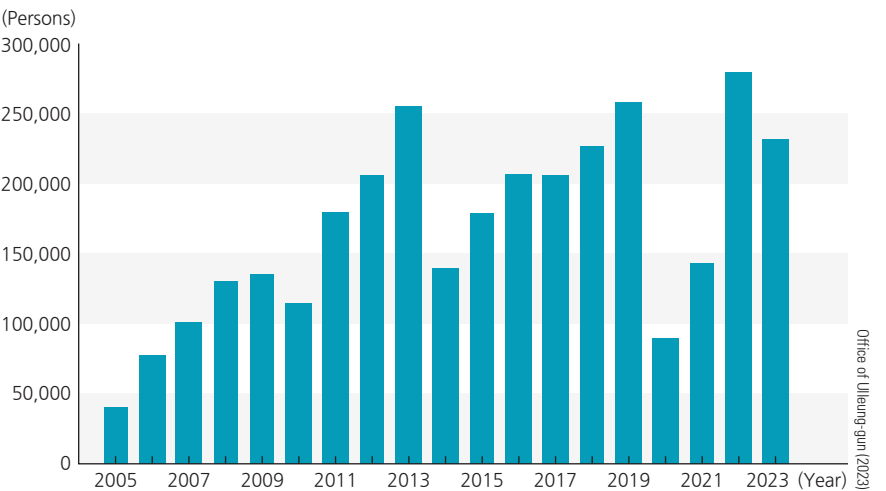
Korea Coast Guard

When Dokdo was first designated as a natural monument for its geological and ecological significance, the government restricted individual trips to the islets to protect the natural environment. As late as the early 1990s, it was difficult for civilians to visit Dokdo except for academic, administrative, or educational purposes. Since visits to the islets were approved on an application basis, more people took an interest in Dokdo, and the number of visitors has increased. However, the numbers were limited to around 1,000–2,000 every year until 2004. In June 2005, the visitation ban was lifted for Dokdo, and the application-based visit became a reporting system. Tourism in Dokdo has ushered in a new era as passenger ships travel between Ulleungdo and Dokdo regularly. The number of visitors has jumped sharply, and the daily visitor quota was raised, allowing up to 1,880 people/day. However, it is still limited to 470 persons per group. Since the introduction of the visitor reporting system for the eastern islet of Dokdo in 2005, the number of visitors had reached approximately 3.2 million by December 2023. In

2022, the number of visitors surpassed 280,000 for the first time.

Those who wish to visit Dokdo need to go via Ulleungdo. Historically, the first liner services began between Ulleungdo and Busan in 1912, and services between Ulleungdo and Pohang began in 1963. These services brought expanded connectivity between Ulleungdo and the mainland. With the introduction of the 800-ton, high-speed passenger ships running this route, the number of tourists to Ulleungdo has drastically increased since 1977. Additionally, the travel time to Ulleungdo has decreased to around three hours. Five passenger ships are in operation between Ulleungdo and Pohang, Mukho, Gangneung, and Hupo. The trip from all of these locations takes approximately three to six hours. For the route between Ulleungdo and Dokdo (docking at Dokdo’s eastern islet), a total of six ships operate, with a travel time of approximately one and a half hours. Passenger ferries between Ulleungdo and Dokdo are typically scheduled to run from March 15 to November 15, depending on weather conditions.

Yearly Visits to Dokdo



Dokdo, located at the easternmost point of South Korea, holds immense value. It serves as a vital maritime hub for domestic and international sea routes, expands maritime territory, supports monitoring of border waters, protects ecosystems, and preserves biodiversity. Additionally, the seas around Ulleungdo, where cold and warm currents intersect, serve as spawning and habitation grounds for marine life, playing a crucial role in the East Sea’s marine ecosystem. This makes the area an optimal site for studying climate change on the Korean Peninsula. Furthermore, Ulleung-gun, which includes Dokdo, possesses the largest maritime territory among all local governments in South Korea. If Dokdo were lost, an estimated 60,574 km<sup>2</sup> of surrounding maritime territory would also vanish. To preserve Dokdo, diverse efforts are being made at governmental, local, and civilian levels, recognizing its significant meaning and value.

Since 2016, the Ministry of Education has designated and implemented an annual Dokdo Education Week to promote a proper understanding of the significance and value of Dokdo. Efforts have been made to raise awareness and foster appreciation for Dokdo through programs such as “Knowing Dokdo” education and the establishment of “Dokdo Keeper Schools” for elementary, middle, and high school students. Additionally, the Gyeongsangbuk-do Provincial Government manages

Passenger Liners

Route	Number of Passenger Ships	Travel Time	Maximum Passenger Capacity
Dokdo ↔ Ulleung (Jeodong Port)	3	1.5 hours	400–450
Dokdo ↔ Ulleung (Sadong Port)	2	1.5 hours	440–450
Dokdo ↔ Ulleung (Dodong Port)	1	1.5 hours	440
Ulleung ↔ Pohang	2	3–6.30 hours	970–1,200
Ulleung ↔ Gangneung	1	3–6.30 hours	440
Dokdo ↔ Mukho	1	2.7 hours	440
Ulleung ↔ Hupo	1	4.5 hours	630

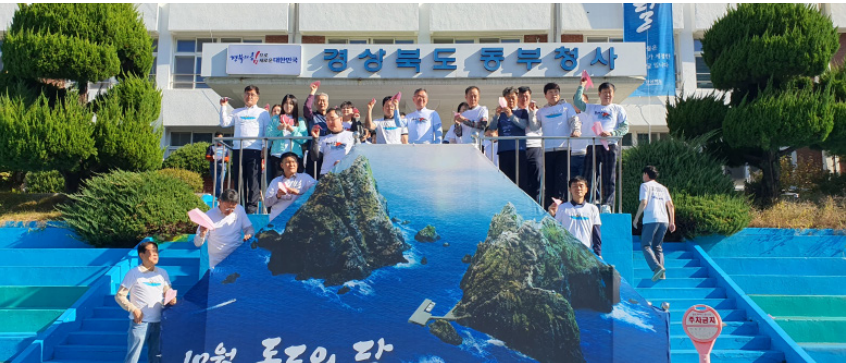
the Dokdo Foundation, organizing various academic and cultural events, including Dokdo tours for youth and international visitors.

The civilian organization Dokdo Guardians established October 25 as Dokdo Day to commemorate Emperor Gojong’s proclamation of Imperial Edict No. 41 of the Korean Empire on October 25, 1900, which officially designated Dokdo as an annexed island of Ulleungdo. In 2010, the Korean Federation of Teachers’ Associations (KFTA), in collaboration with 16 provincial and metropolitan teacher associations, the Korean History Education Research Association, the Korea Youth Association, and the Dokdo Research Institute, declared a nationwide Dokdo Day, which continues to be observed to this day.

Since November 2010, the Dokdo Management Office has been issuing Dokdo honorary resident cards to visitors who have visited Dokdo and taken a tour around the islet, for those who wish to become honorary residents of Ulleung-gun. Starting with 44 individuals in 2010, by May 2023, a total of 100,000 people had received honorary resident cards. In total, 140,000 honorary residents were registered as of May 2023. The number of honorary resident cards issued has steadily increased, indicating a growing interest in Dokdo.

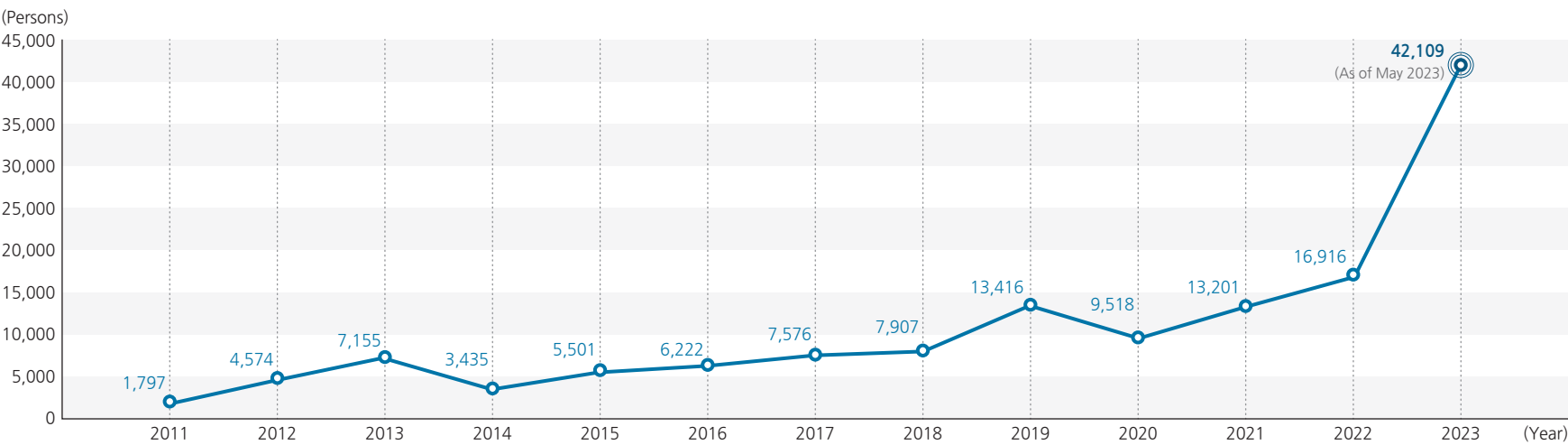


Dokdo Exploration Event



2023 Dokdo Month Event

Number of Dokdo Honorary Resident Certificates Issued by Year





Geographical Overview of the DMZ

The Korean Peninsula’s DMZ (Demilitarized Zone) area generally includes the DMZ established by the Armistice Agreement, the Civilian Control Line (CCL) area defined by the Military Facilities Protection Act, and the border areas specified by the Special Act on Support for Border Regions. It spans 248 km in length. The area of DMZ within South Korea is 453 km².

The DMZ is a buffer zone where military forces are prohibited, as outlined by treaties or agreements. It is an area where the presence of armed forces, deployment of weapons, and the establishment of military facilities are not permitted. The DMZ in South Korea was established following the Korean War, which began on June 25, 1950, and ended with an armistice on July 27, 1953. After the cessation of hostilities, the front line became the Military Demarcation Line (MDL), and a 4 km-wide zone was created, with both North and South Korea agreeing to withdraw their forces 2 km from either side of the MDL. This zone stretches from the mouth of the Imjin River at Jeongdong-ri, Paju, Gyeonggi Province, to Myeongho-ri, Goseong, Gangwon Province, covering a total of 248 km, and is marked by 1,292 signposts.

The border areas refer to military contact zones and their surrounding areas that have faced disadvantages in terms of regional development and private property due to national security concerns following the division of the Korean Peninsula. These areas are defined under the Special Act on Support for Border Regions. The 15 cities and counties covered by this law are located in Incheon (Ganghwa-gun, Ongjin-gun), Gyeonggi-do (Goyang-si, Gimpo-si, Dongducheon-si, Yangju-si, Paju-

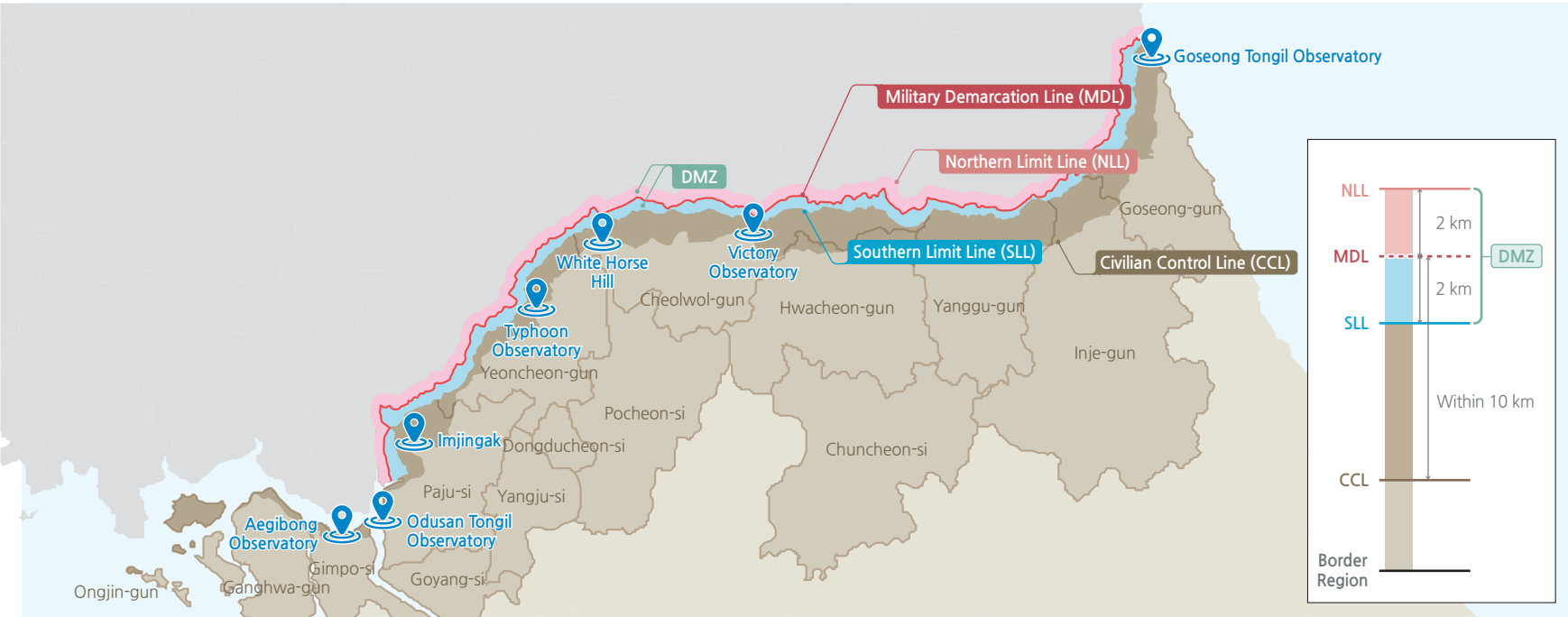


Military Demarcation Line Sign

si, Pocheon-si, Yeoncheon-gun), and Gangwon-do (Chuncheon-si, Goseong-gun, Yanggu-gun, Inje-gun, Cheorwon-gun, Hwacheon-gun).

The area extending from the mouth of the Imjin River to Mal Island in Ganghwa is designated as the Hangang River Estuary Neutral Zone, a special area jointly managed by North and South Korea. In 1953, the Northern Limit Line (NLL) was established as a military control line to limit South Korea’s naval and air patrol activities in the East and West Seas.

DMZ



The DMZ, having been free from human activity for an extended period, has developed a rich and unique ecosystem. Since the Korean War, the restrictions on military operations and civilian access have resulted in an excellent refuge for various wildlife, allowing for a unique process of ecological restoration. With its diverse range of forests, valleys, wetlands, reed fields, marshlands, and mudflats, the DMZ is a paradise for a variety of wildlife, including numerous rare species of plants and animals. Rather than being a “preserved ecosystem,” the DMZ is characterized as a “unique ecosystem,” where biodiversity is richly maintained in specific areas under harsh environmental conditions influenced by military activities and restricted civilian access. It possesses a distinctive natural ecosystem rarely found elsewhere and serves as an invaluable site for studying post-war changes in the natural environment. It is regarded not only as a treasure trove of South Korea’s natural ecology but also as one of the world’s most valuable ecological areas.

The DMZ, spanning 248 km across the central region of the Korean Peninsula, forms an unbroken ecological corridor from east to west, serving as a crucial part of the East-West Ecological Axis. Along with the Baekdudaegan, which serves

as the North-South Ecological Axis, the DMZ plays a key role in connecting the Peninsula’s core ecosystems. The East-West Ecological Axis is divided into three main regions: the eastern mountain area, the central-western inland area, and the western region. The eastern mountain region, ranging from the Baekdu-daegan to the Hanbuk Jeongmaek and encompassing the North Han River Basin, consists of high mountains and dense forests, with the Hyangnobong area maintaining a near-pristine ecosystem. The summit of Daeamsan Mountain is home to South Korea’s only high-altitude swamp, Yongneup. The central-western inland region, including the Cheorwon Plain and Yeoncheon in the volcanic area of the Hantan River Basin, is shaped by the Imjin River. The western region, encompassing the Han River and Imjin River Estuaries, is a brackish zone with expansive wetlands and mudflats, and the Han River Estuary is the last remaining natural estuary in South Korea. The habitats and land cover across the DMZ area range from mountainous terrain in the east to the flat landscapes of estuaries and mudflats in the west, creating a striking contrast of high in the east and low in the west.

The DMZ has transformed over time from the ruins of war into a treasure trove

Natural Environment of the DMZ



Yong Swamps  
Korea's First Ramsar Wetland

of biodiversity. A 2022 survey revealed that the Korean Peninsula’s DMZ is home to 6,512 species, including 52 mammal species, 277 bird species, 34 amphibian and reptile species, 138 arachnid species, 2,954 insect species, 417 benthic invertebrate species, 136 freshwater fish species, and 2,708 plant species. This represents over 30% of the plant and animal species found on the Korean Peninsula, and includes 44 endangered species, such as the red-crowned crane, black-faced spoonbill, otter, and wild goat, all of which are in urgent need of protection.

The plant distribution in the DMZ area is also unique. It is home to endangered species such as the Arctic starflower, Siberian lily, and Halenia corniculata, as well as endemic species like the Hanabusaya asiatica and Leontopodium coreanum. Additionally, non-native plants like the dandelion and common ragweed are thriving in the area. These alien species are believed to have been introduced during the Korean War through U.S. military supplies.

The DMZ area is home to well-developed wetland ecosystems. These wetlands are widely distributed in various forms, from valley wetlands and lake wetlands in



Hantan River Column Joint  
2020: Hantan River UNESCO World Geopark Designated

the eastern region to lowland wetlands in the western region. Areas that were once agricultural land and lowlands have developed into wetland ecosystems over the course of more than 60 years since the Korean War. These wetland ecosystems serve as important nesting sites and migratory routes for migratory birds from Northeast Asia, including the red-crowned crane, white-naped crane, and hooded crane. The Han River Estuary Neutral Zone, in particular, has gained international attention as a critical area for protecting migratory birds and was designated as a Han River Estuary Wetland Protection Area in 2006.

The DMZ also boasts a variety of geological landscapes. The Chugaryeong Tectonic Valley, columnar joints along the Hantan River and Imjin River, and the Red Cliffs not only are indicators of the geological history of the Korean Peninsula, but also hold significant value as beautiful tourist attractions. The natural ecosystems of the DMZ, along with its volcanic geological features, were recognized for their value, and in 2020, the Hantan River was designated as a UNESCO Global Geopark.

Endangered Species



Red-Crowned Crane



Black-Faced Spoonbill



European Otter



Naemorhedus Caudatus



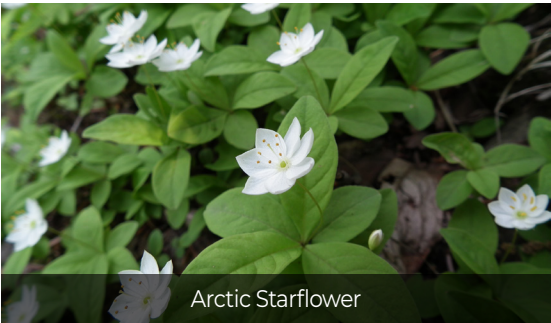
Seoul Pond Frog



Rat Snake



Common Korean Bitterling



Arctic Starflower



Siberian Lily



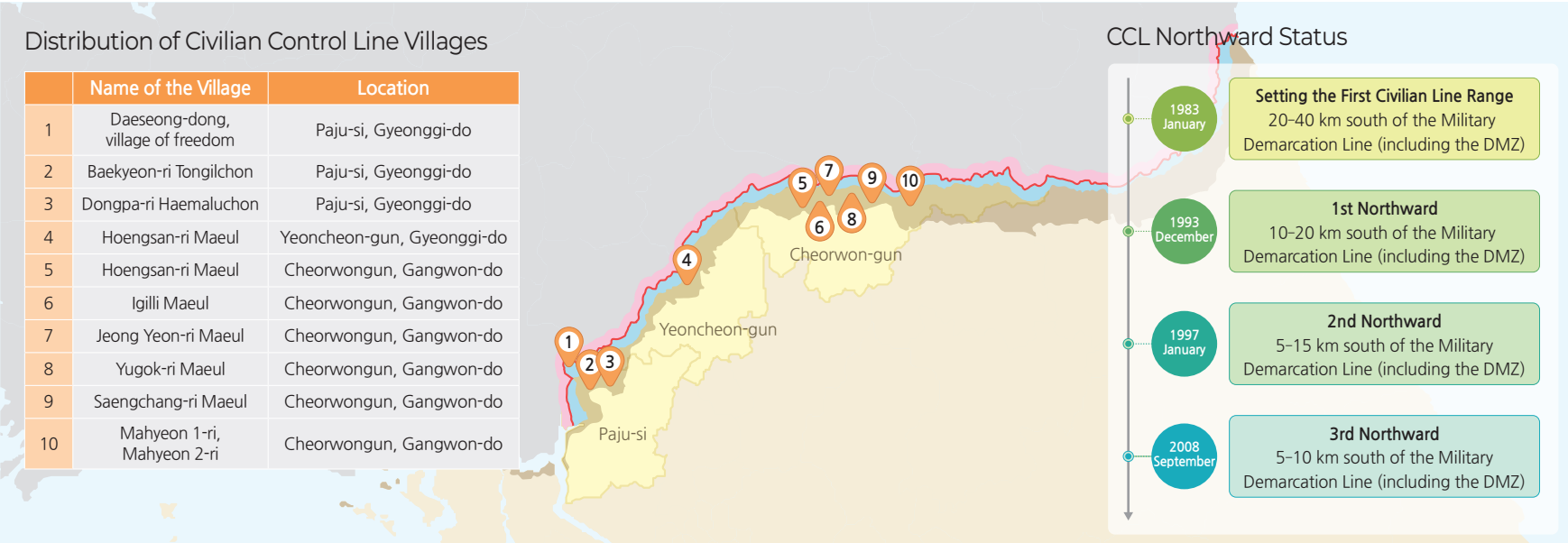
Human Environment of the DMZ

The Civilian Control Line (CCL) villages were established after the CCL was set up in 1954, when the South Korean government relocated soldiers and residents to create these areas. There are a total of 10 villages within the CCL, including Daeseong-dong Freedom Village in the Paju DMZ and Baegyeon-ri Unification Village in the restricted protection area, along with eight other villages. Although there were once over 100 villages in the CCL, the line has moved northward three times, leaving only 10 villages today. In these villages, agriculture is the primary livelihood, and natural monuments and historical sites in the DMZ area are often utilized as tourist resources.

Most of the villages within the CCL near the DMZ have a higher proportion of non-native residents than indigenous residents, resulting in a mix of different customs and traditions, along with a unique military culture specific to border areas. Over time, however, these distinct cultures have blended and assimilated, creating a unique local culture for each village. The CCL villages can be categorized based on their founding type into self-sufficient villages, reconstruction villages, unification villages, and strategic villages. Although the founding purposes of these villages varied slightly depending on the period, location, and members, these distinctions have become less clear over time.

The Daeseong-dong Freedom Village, located in Paju, Gyeonggi Province, is the only village within the DMZ in South Korea. It is situated 500 meters south of the Military Demarcation Line (MDL). The village is approximately 12.5 km north of

the Freedom Bridge and about 11.5 km south of Kaesong, with Panmunjom located about 1 km northeast. The village was established when some of the residents who had fled during the Korean War returned to their hometown. It is home to the tallest flagpole in South Korea, standing at 99.8 m. Less than 2 km from Daeseong-dong is the North Korean village of Gijeong-dong, which also serves as a propaganda village, featuring a 158-m flagpole with a North Korean flag. Before the Korean War, Daeseong-dong was part of Josan-ri, Gunnae-myeon, Jangdan-gun, but after the administrative restructuring in 1962, it became part of Gunnae-myeon, Paju City. The residents of Daeseong-dong primarily earn their living through rice farming and the cultivation of beans, red beans, and peppers. While Daeseong-dong is under the control of the United Nations Command, it is practically governed by the South Korean government. Due to its location within the DMZ, the village faces several restrictions, including limited freedom of movement. Only direct descendants of people who lived in the village at the time of the armistice are allowed to reside there, and the process for securing residency rights is stringent, meaning that the population of the village has remained largely unchanged over the past 60 years. It is nearly impossible for the general public to visit the village, except for relatives and direct family members who have received permission from the United Nations. As a result, access to Daeseong-dong has been strictly controlled since the armistice, and the area around the village remains well-preserved.



Meaning and Value of the DMZ

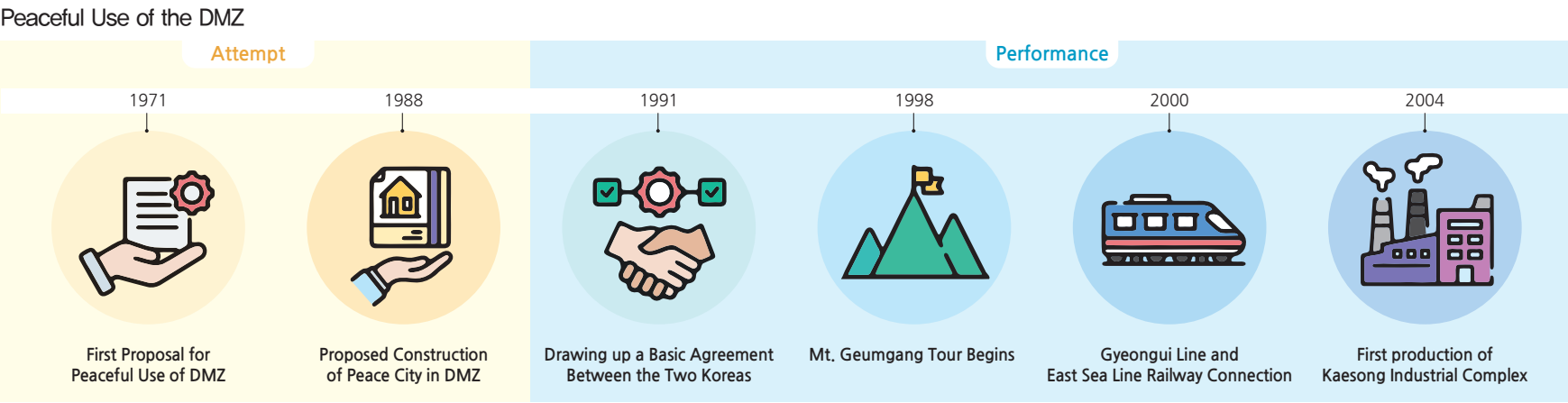
The DMZ is a region with a pristine ecological environment untouched by human activity, and it has served as the heart of history for an extended period, making it a historical museum of the Korean Peninsula. Since the armistice of the Korean War, the DMZ has remained undisturbed by human presence. This unique characteristic has naturally enhanced the historical, security, ecological, and cultural value of the DMZ.

The lower Han River and its surrounding areas at the western end of the DMZ have been at the center of Korean history from ancient times to the present. The Silla Kingdom, which occupied this region, unified the Three Kingdoms, including Goguryeo and Baekje. Later, Gaeseong, the capital of Goryeo, became the center of power and was the location where the armistice agreement of the Korean War was signed, as well as the site of the Kaesong Industrial Complex, a symbol of inter-Korean exchange. The capital of the following Joseon dynasty, Seoul, has also functioned as the central city of the Korean Peninsula for over 600 years, situated at the lower Han River.

More than 70 years have passed since the armistice that ended the Korean War, which lasted for over three years, yet North and South Korean soldiers still face off in the DMZ. As the world’s only Cold War zone, this area serves as a symbolic

place for all generations who visit, representing both war and peace. Foreign visitors to South Korea recognize the DMZ as a unique tourist destination that cannot be found in any other country. With its war relics, records, and cultural resources, the DMZ serves as a site that raises awareness for those who have not experienced war, guiding them to dream of world peace. For those pursuing a world without war, it becomes a place of pilgrimage to the history of war, serving as a venue for both tourism and historical education.

Efforts to peacefully utilize the DMZ have been diverse and ongoing, with initiatives proposed at various times. Notable proposals include the initial suggestion for the “Peaceful Use of the DMZ” on June 12, 1971 (Military Armistice Commission), and the “Proposal for the Construction of a Peace Zone within the DMZ” by President Roh Tae-woo in 1988. These proposals have led to concrete efforts and achievements toward the peaceful use of the DMZ today, such as the first inter-Korean agreement on the peaceful use of the DMZ in 1991 (Inter-Korean Basic Agreement), the start of Mount Geumgang tourism in 1998, the connection of the Gyeongui Line and Donghae Line railways and roads after the June 15, 2000 North-South Summit, and the first product produced at the Kaesong Industrial Complex in December 2004.



The Path of Peace

The DMZ is also a place where continuous communication occurs between local residents and the world. Since 2019, the DMZ Peace Trail scenic course has been operated in regions such as Ganghwa, Gimpo, Goyang, Paju, and Yeoncheon, and the DMZ Peace Walk event has been held. Local residents lead efforts to revitalize villages near the DMZ by organizing various tourism resources and programs. Additionally, to actively utilize the DMZ in a manner similar to the

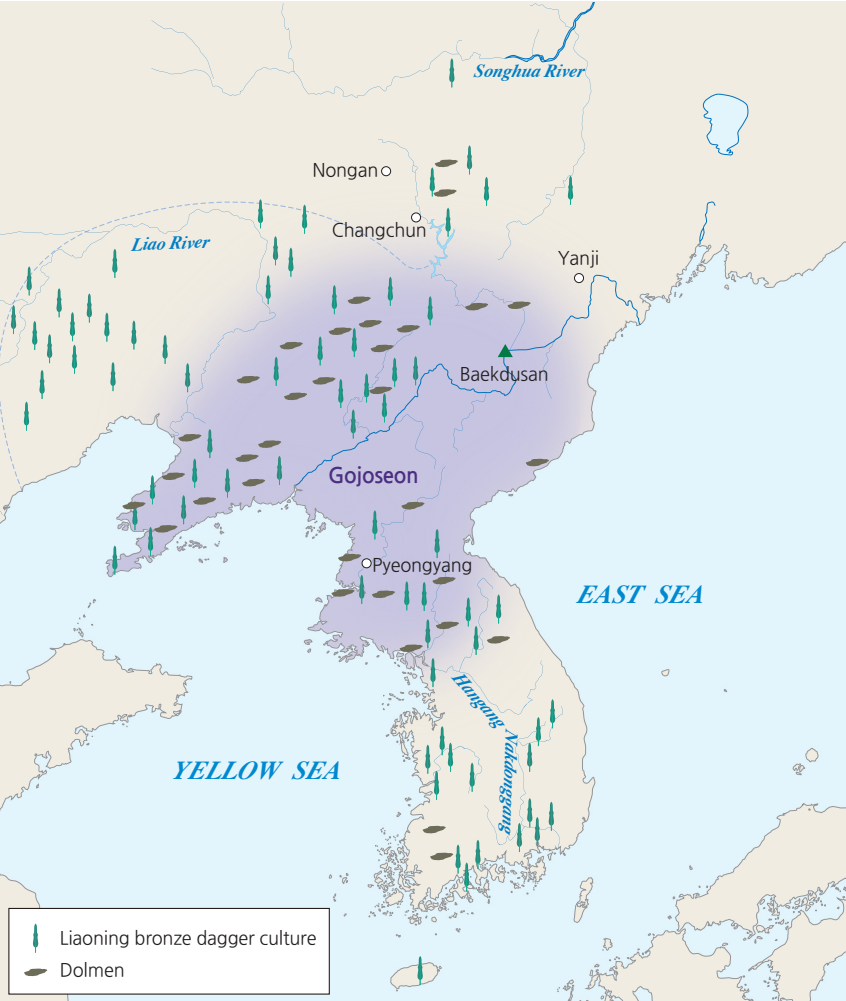
Grünewald, which preserved the border area between East and West Germany before reunification, Gyeonggi Province and the German Federal Agency for Nature Conservation (BfN) signed a mutual agreement in 2012. They have pursued cooperative projects, including hosting the Ecotourism Conference, attending the World Conservation Congress together, publishing a joint photo album, and organizing photo exhibitions in Pyeongchang and Berlin.



# Territorial History of Korea

## Territory of the Ancient Era

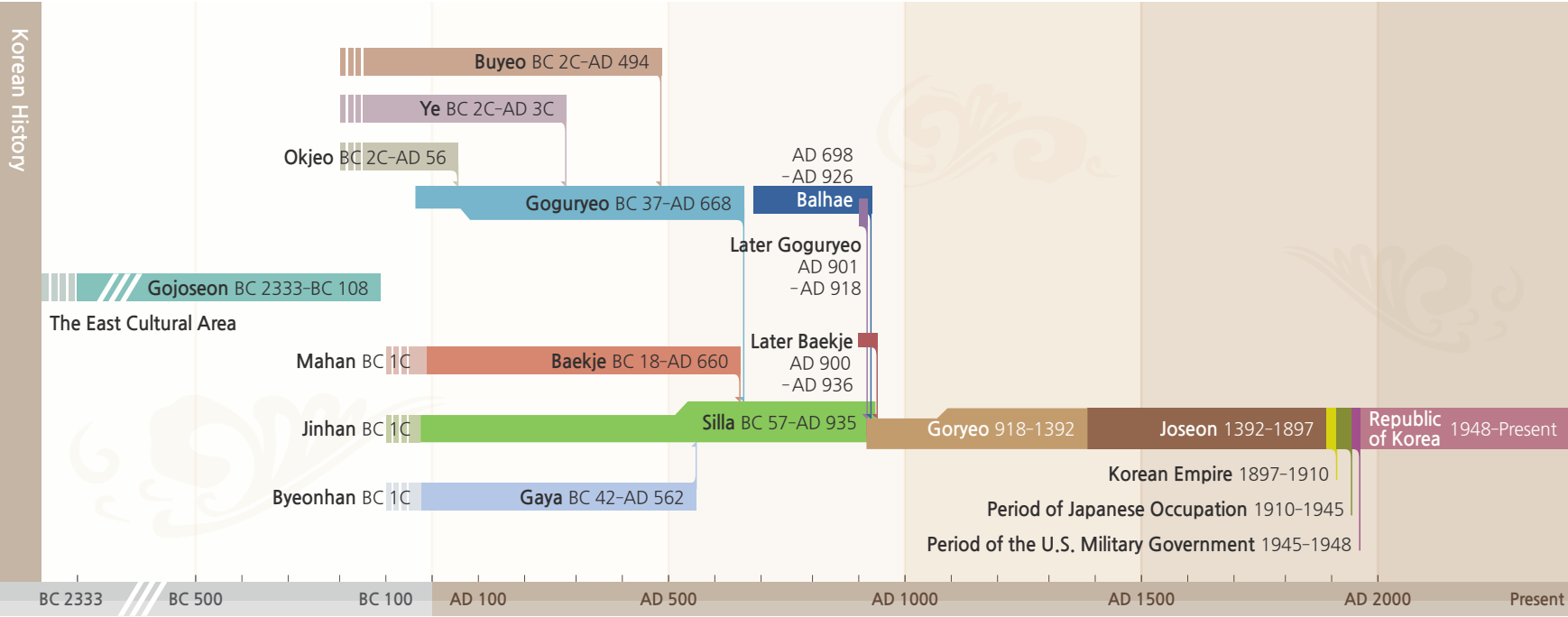
Gojoseon



Around the Beginning of the Common Era



Chronological Table of Korean History



The ancient history of Korea developed across Manchuria and the Korean Peninsula. The first Korean nation, Gojoseon, was founded in the year 2333 B.C. and lasted until the year 108 B.C. The tribal countries were founded afterward: Buyeo, Dongye, Okjeo, and Samhan. The period is called the original Three Han States Period, and the entirety of Manchuria and the Korean Peninsula were under the domain of one of the tribal countries at that time. Buyeo held power mainly over Manchuria. Dongye and Okjeo were formed in the northern and central areas of the Korean Peninsula, and the Three Han States of Mahan, Jinhan, and Byeonhan thrived on the central and southern part of the Peninsula.

From the 1st century B.C. to the 1st century A.D., Goguryeo, Baekje, Silla, and

Gaya were founded from succeeding and merging tribal nations. This period is referred to as the Three Kingdoms Period, when like other times, Korea's territory stretched across Manchuria and the entire Korean Peninsula. Goguryeo occupied mainly Manchuria and the northern part of the Korean Peninsula, Silla thrived on the southern and eastern areas of the Peninsula, and Baekje dominated the southern and western regions. During the 7th century, Silla conquered both Goguryeo and Baekje, forming a unified nation on the inner region of the Peninsula, extending from Daedonggang River to Wonsanman. In 698 A.D., Balhae was founded by Goguryeo refugees. The time period is referred to as the North-South States Period.

During the Goryeo Dynasty (918–1392) and the Joseon Dynasty (1392–1897),

efforts to expand into the northern territories were made. By defending itself from the first invasion of Khitai in 933, Goryeo confirmed its occupation of six coastal provinces (Gangdong Yuk Ju). Goryeo started building the Great Wall (Cheolli Jangseong) in 1033 to defend its border with Khitai-Qidan. The erection of the wall established Goryeo's northern border, stretching from Sinuiju to Hamheung, and continued its efforts to expand the northern territory until the late Goryeo Period. Such efforts lasted even into the Joseon Dynasty. As a result, in the 15th century, Joseon installed four forts in the Amnokgang Basin and six posts in the Dumangang Basin. By the establishment of these forts and posts, the territory of Joseon became the same as Korea's modern-day territory, which extends up to Amnokgang River and Dumangang River. In the 18th century, the Joseon Dynasty built the Baekdusan National Boundary Monument, marking its border with China's Qing Dynasty.

The modern and contemporary history of Korea can be summarized through a series of incidents: the establishment of the Korean Empire (1897–1910) following the Joseon Dynasty, Japanese colonial rule (1910–1945), liberation from Japan (1945), U.S. and Soviet military governments in Korea (1945–1948), and the Korean War (1950–1953). In 1897, Emperor Gojong officially declared the establishment of the Korean Empire to respond to growing international imperialism. He then carried out internal reforms only to witness the temporary loss of Korean sovereignty over its territory as it succumbed to colonial rule by Japan, whose power was strengthening over East Asia. This time period is referred to as Japanese colonial rule, which lasted until 1945. The independence movements for recovering the sovereignty of Korea never ceased, and the Korean people hailed liberation from colonial rule as Japan was defeated in the Second World War.

However, the national territory was unfortunately divided into North and South along the 38th parallel north, and the division became permanent after separate governments for the North and the South were established in 1948. Korea then suffered the tragic Korean War beginning on June 25th, 1950 and ending with an armistice on July 27th, 1953. The two Koreas have been in a state of truce for seven decades, and those seven decades have been defined largely by competition and

antagonism. Despite these tensions, the two Koreas have also made sincere and meaningful efforts to build mutual trust to overcome the division, such as reunions for separated families, inter-Korean summits, and the economic cooperation at the Gaeseong Industrial Complex.

Generally, in the history of Gojoseon, the period around the beginning of the common era is called the Era of the Liao River. The Liao River region was the center of competition for Koreans, Chinese, and northern powers from the 4th century B.C. to the 4th century A.D. For Korean history, it was the period when Gojoseon and Goguryeo were thriving, and when China was competing with both for the region. Korea's first country, Gojoseon, was expanding its power and made inroads into the Liao River region, inevitably engaging in a power struggle with the Yen Dynasty of China. Gojoseon could not recover the region after it lost the region at the end of the 4th century A.D. and the state perished. Goguryeo waged a war against the Xianbei Tribe, the force that had secured the Liao River region since it was established in the 1st century B.C. Goguryeo took over the region under the reign of Great King Gwanggaeto at the end of the 4th century. During those times, the sovereignty over the Liao River Region by the two nations of Korea established a historical connection between Koreans and the Yodong Region (the eastern part of Yoha River), and this became the foundation for a series of conquests in the region.

The Era of the Hangang River refers to the period from approximately the 4th to 7th century A.D. During that time, Goguryeo, Baekje, and Silla confronted each other on the river to gain power over the Korean Peninsula. The Hangang River stems from Baekdudaegan (Baekdu Mountain Range) and runs to the Yellow Sea across the Peninsula. The branches stretch to the Gwangju Mountain Range and Cheolryeong to the north, and spread around the Sobaek Mountain Range and the mountains connecting Gwangju and Eumseong. From the late 4th century to the 7th century, three nations fought to gain supremacy over the Hangang River.

Baekje first occupied the Hangang River as it was raised near the river. At the end of the 4th century, Goguryeo marched down and occupied the river. The competition for territory centering on the Hangang River became fierce. Silla joined forces



Around the 5th Century



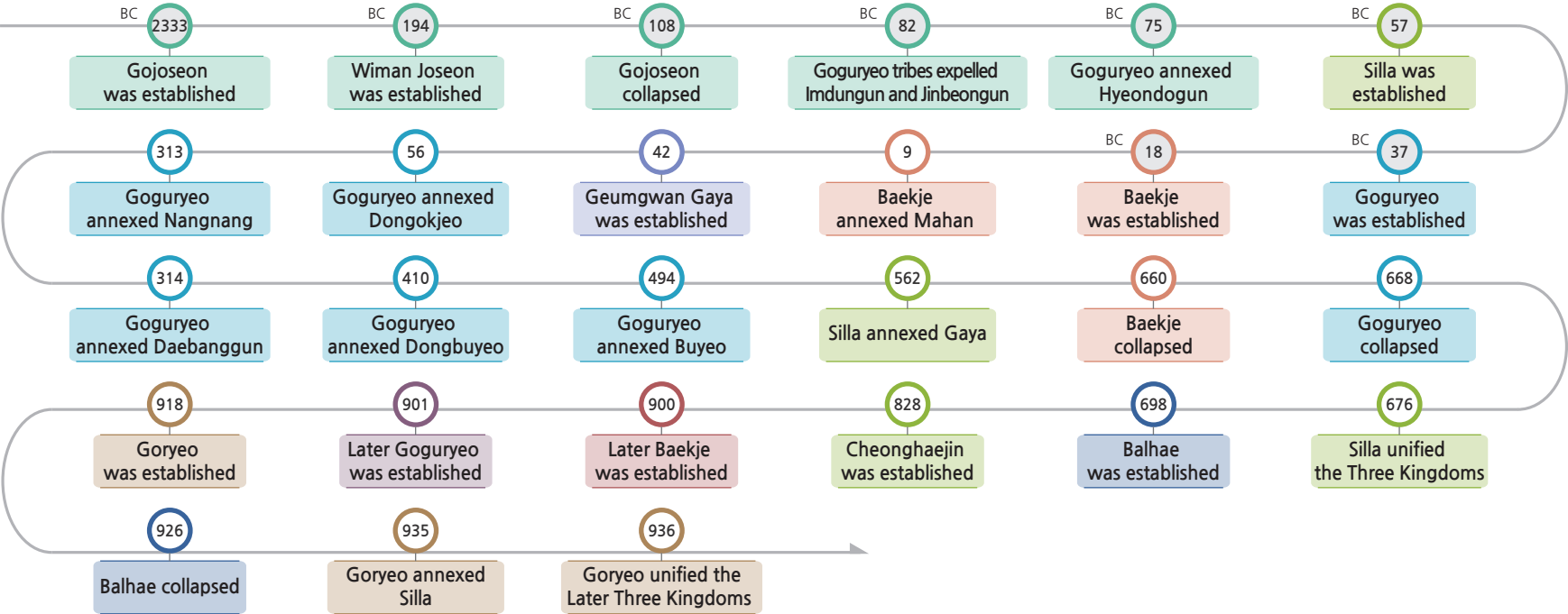
with the Tang Dynasty to bring down Goguryeo and Baekje. Silla discouraged the ambitious try of the Tang Dynasty to occupy the Korean Peninsula and threw the Tang forces off of the Peninsula. The unification of the country forged during that time survived through the Goryeo and Joseon Dynasties.

On the other hand, 30 years after the collapse of Goguryeo, Balhae, the self-claimed successor nation of Goguryeo, was founded on the old territory of Goguryeo. Balhae made incursions into Unified Silla on the Daedonggang River for 200 years, from the late 7th century to the early 10th century. The era is called the Era of Daedonggang River, the Era of Two Nations, or the Era of Northern and Southern States. Consisting of 5 gyeongs, 15 bus, and 62 jus, Balhae had achieved remarkable land expansion since its founding. After securing the region surrounding the Songhua River and the Heilong River in Manchuria, Balhae never stopped

Around the 9th Century



its march south. Amid the tension, The Tang Dynasty requested that Silla attack Balhae in the early 8th century, and Silla acquiesced. Unified Silla, with nine jus and five sogyeongs, accelerated its policy to go north to the Daedonggang River area. Balhae, who was on the move south and Silla, who was marching north, met at the Daedonggang River. However, the two powers co-existed. Unlike the Era of Daedonggang River, the Era of Daedonggang River was not characterized by specific wars, indicating the two countries were in peaceful coexistence and were checked by the Tang Dynasty. However, early in the 10th century, the collapse of the Tang Dynasty caused chaos in the Northeastern Asian order, and during the reshuffling, Balhae collapsed. The fall of Balhae signified the loss of sovereignty over Manchuria in Korea's history. During the same time, Unified Silla declined, and the Later Three Kingdoms Era began.



Territory of the Medieval and Modern Contemporary Era

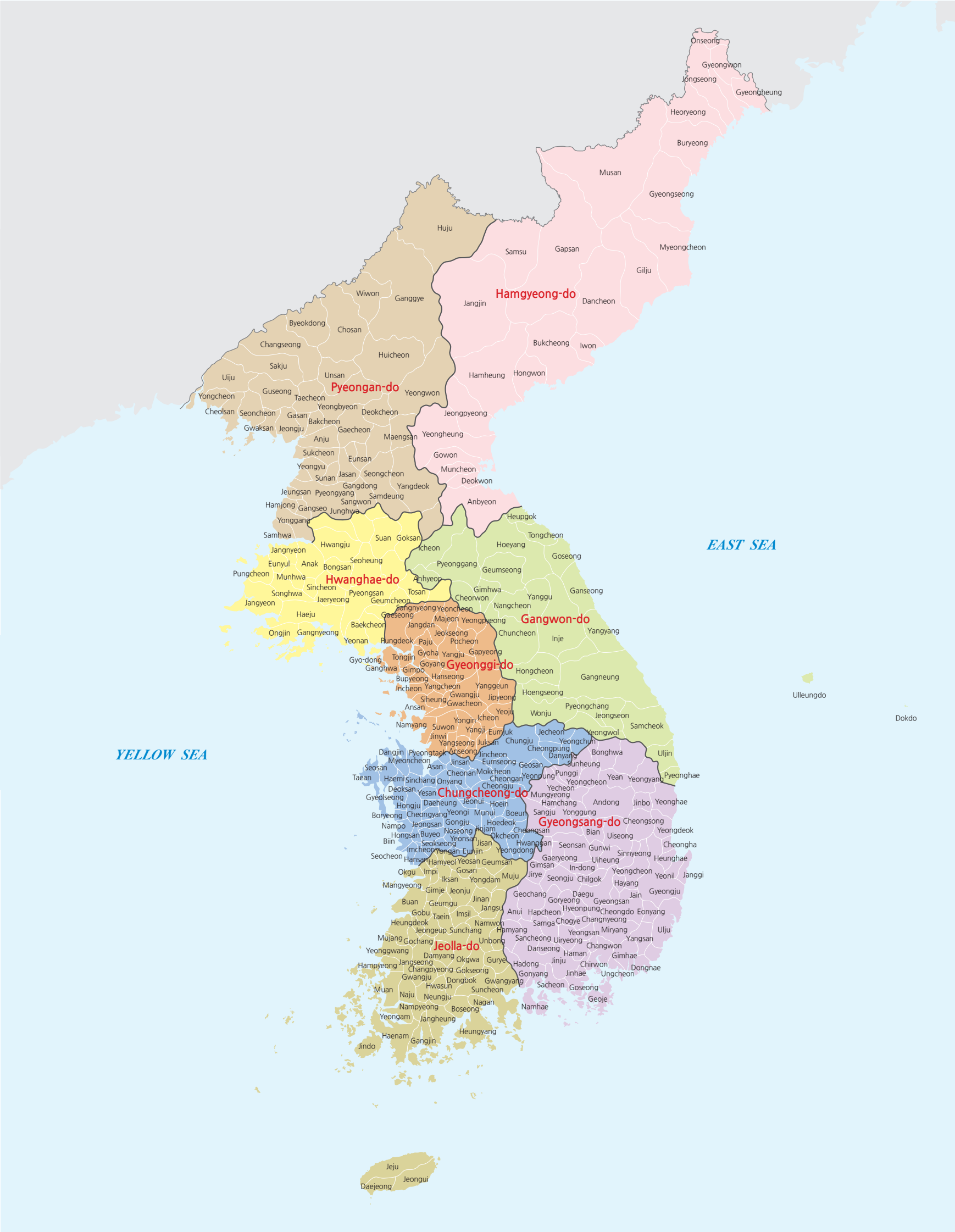
Goryeo Dynasty (The 11th Century)



\* Note: Exclaves are not labeled.



Joseon Dynasty (1861)



Korean Empire (1897)





After Liberation



Korean War

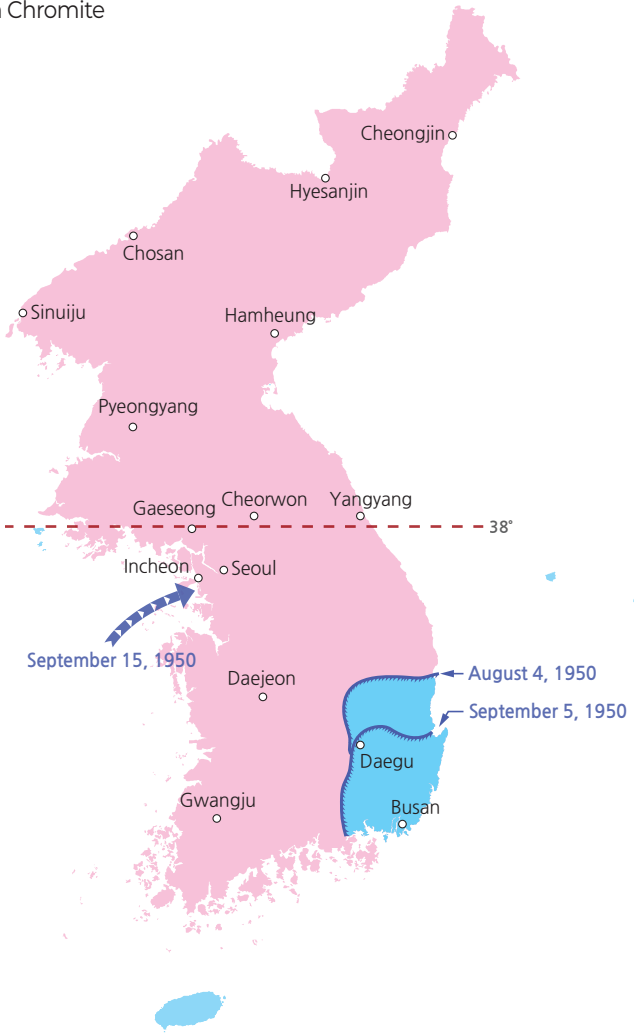
June 25, 1950: Outbreak of the Korean War



October-December, 1950: Advance to the North of South Korean and UN Forces



August-September, 1950: Nakdonggang River Defense Line and Operation Chromite

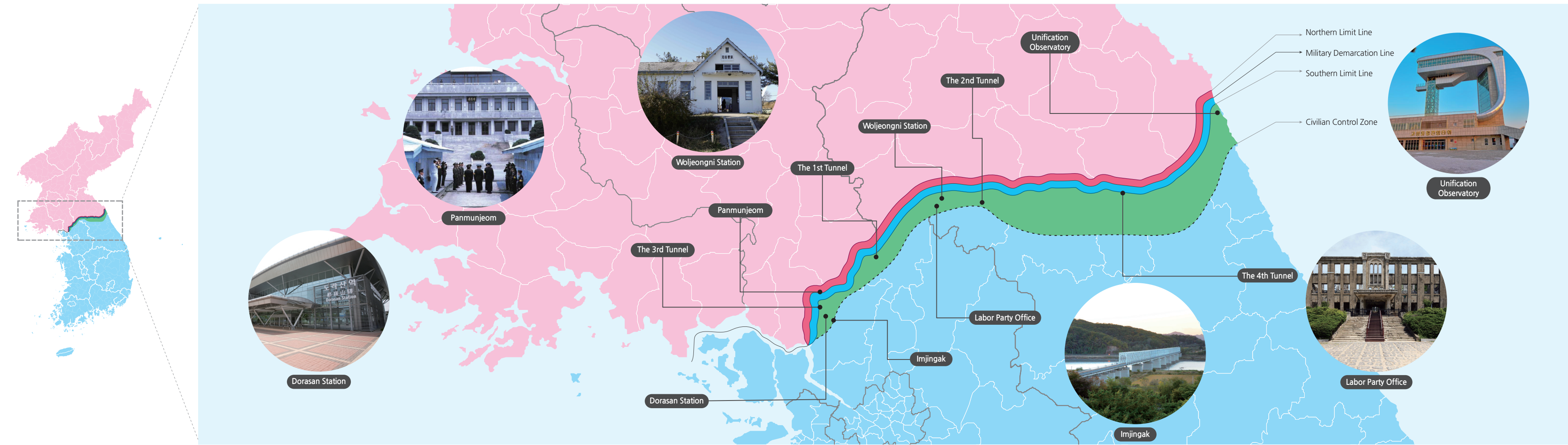


July 27, 1953: The Truce





Demilitarized Zone and Civilian Control Zone



The Demilitarized Zone (DMZ) refers to a buffer zone between the South MDL (Military Demarcation Line) and the North MDL in which arms are prohibited in accordance with agreement or treaty. Military deployment, arms arrangement, and the installation of military facilities are prohibited in the DMZ. Korea's DMZ was set up by the ceasefire that put an end to the Korean War. When the agreement was signed in 1953, the line of military contact became known as the Military

Demarcation Line (MDL), and a 4 km band of land extending 2 km to the north and 2 km to the south of the MDL was designated as the DMZ.

The Civilian Control Zone (CCZ) is a stretch of land that lies between the DMZ and the Civilian Control Line (CCL). The CCL is a line designated to restrict public access in areas adjacent to the MDL where the legal protection of the military is required. The CCL was initially drawn in 1954, and since then three adjustments

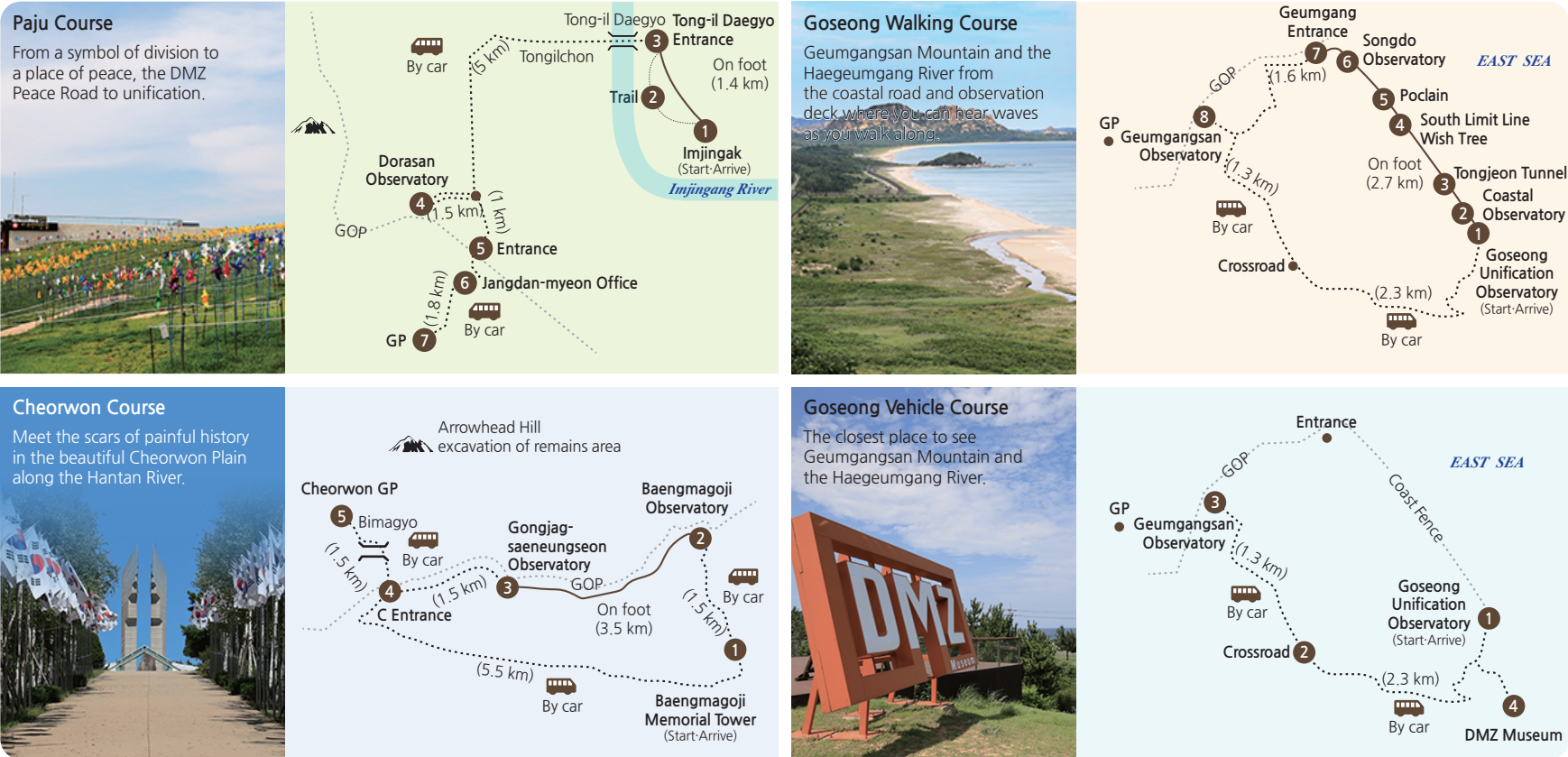
have been made, reducing the CCZ to resolve property right infringements. The current CCL is designated within 10 km south of the MDL.

The DMZ and CCZ are the areas where human contact is restricted to a minimum, except for farming activities by a few villages along the CCL. These two zones both have diverse natural environments that are well preserved and that are home to a vast diversity of species. These species include animals listed as Grade

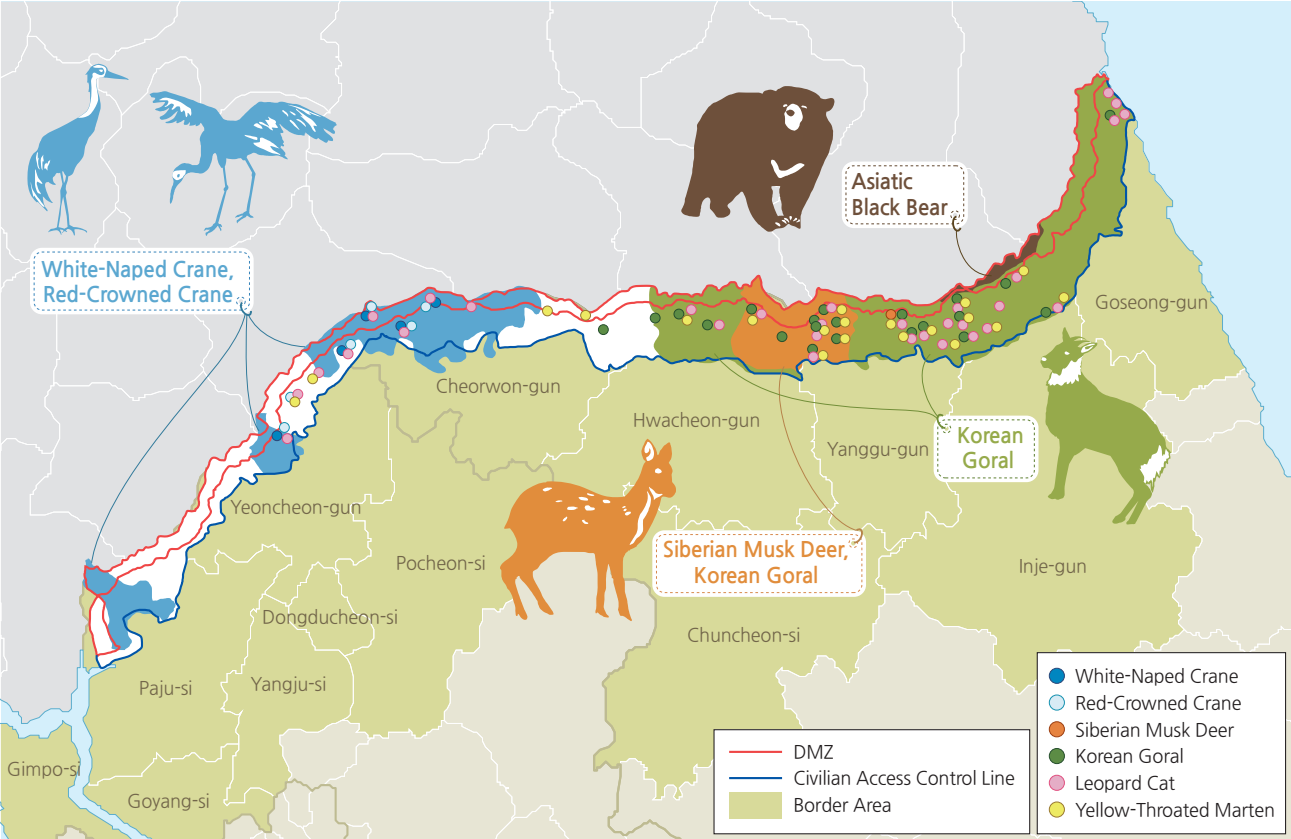
1 endangered wildlife, such as musk deer, mountain goats, otters, white-tailed sea eagles, and golden eagles, and Grade 2 species such as martens, flying squirrels, goshawks, and the Siberian lily. Recently, tourism in these areas has become popular for the well-preserved environment as well as the historic sites that are related to the military activities of the tragic war. In 2018, the North-South Summit agreement and sideline agreements laid a foundation to make the DMZ a zone of peace, and

the heads of the two Koreas agreed to make the DMZ a peace zone in the Panmunjeom Declaration announced on April 27th, 2018. The Korean Government promotes the DMZ Peace Trail Project to bring peace to the DMZ and to promote development and prosperity in the border regions. The DMZ Peace Trail Project is provided at three locations (Paju, Cheorwon, and Goseong) where efforts to ease the tension between the two countries are being made through the demolition of the guard posts and joint recovery operations in accordance with the Comprehensive Military Agreement signed on September 19th, 2018.

DMZ Road to Peace



Distribution of Animal Species around the DMZ





Ancient Maps

Korean territory was represented on old maps created in the pre-modern era. Although the boundaries of the territory on these maps are not as clear as on maps made in the modern era, these antique maps reflect various and unique aspects of historic Korean territory and serve as evidence for territorial claims made today. Collectively, they represent Korean land ownership and Korean territorial perceptions of land as they have been shaped over time. These territorial documents are found not only on maps of prefectures, military maps, and general maps of Korea, but also on world maps made by cartographers, both Korean and others from around the world.

Although mapmaking in Korea dates back to before the Three Kingdoms Period, only the maps made during the Joseon dynasty now survive. The oldest existing Korean map today is the *Honil gangni yeokdae gukdo jido* (Map of Integrated Lands and Regions of Historical Countries and Capitals), which was made in 1402. This map is recognized as one of the best world maps among those in both Eastern and Western civilizations at the time. On the *Gangnido*, Joseon territory is bigger on the map than Africa, which reflects the Joseon dynasty’s pride in itself as a civilized state akin to China. Korean territory is most precisely delineated in a series of maps entitled *Joseon jeondo* (Complete Maps of Joseon).



Amnokgang byeongyedo 鴨綠江邊界圖

Map of Amnokgang River (Yalu River) Frontier, 18th century, color manuscript copy, 68.0×106.0 cm, National Museum of Korea



Paldo chongdo 八道總圖

General Map of Eight Provinces, 16th century, woodblock print, 28.5×34.0 cm, Kyujanggak Institute for Korean Studies at Seoul National University





Dongguk daejeondo 東國大全圖

Great Map of an Eastern Country [Korea], Jeong Sang-ki, mid-18th century, color manuscript copy, 272.7×147.5 cm , National Museum of Korea

In the 15th century, cartographic efforts at making world maps and general maps of Joseon were largely based on land surveys. Under the reign of King Sejong, the fourth king of the Joseon dynasty, the distances between counties and prefectures were measured, and the latitudes of Baekdusan Mountain, Manisan Mountain, and Hallasan Mountain were determined, which prepared the future scientific foundation for the efforts of the Joseon dynasty cartographers. Jeong Cheok completed a map of the two border regions (currently Hamgyeong Province and Pyeongan Province) in 1451 and made the *Dongkuk jido* (Map of Korea) with Yang Seong-ji in 1463 (the 9th year of King Sejo). The *Joseon bangyeok jido* (Map of the Korean Territory) is a great example of the *Joseon jeondo* series made in the 15th century. This map features the Korean Peninsula, Manchuria to the north of the Amnokgang River, and the Dumangang River. It represents the view of the national territory held by Korean elites and scholars like Yang Seong-ji, who believed Korean territory extended beyond the Peninsula to include Manchuria.

The *Paldo chongdo* (General Map of Eight Provinces) included in *Sinjeung*



Haejiwa jeondo 海左全圖

General Map of Eastern Sea [Korea], 1850s, woodblock print, 105.9×61.2 cm, Kyujanggak Institute for Korean Studies at Seoul National University

*dongguk yeoji seungnam* (Complete Conspectus of the Territory of the Eastern Country), which was made in 1530, is one of the most representative maps of Korean territory produced in the early Joseon dynasty. This map takes the form of an appended chart to complement the geographical description, but its description of the land is rather crude. The purpose of the map is not to delineate the country's territory in detail, but to express the establishment of royal authority and Confucian ideas for governance by means of commemorative rites of the national land. The map indicates noted mountains, large rivers, and seas that are included in ritual codes. It also features some islands in the East Sea and the Yellow Sea such as Ulleungdo, Usando (currently Dokdo), and Heuksando, which highlights the fact that they belonged to the Joseon dynasty as long ago as the 16th century.

In the late Joseon dynasty, after the two devastating wars with Japan and Manchuria, various types of maps were made with the specific intention of defining the boundaries of Joseon territory. The increased awareness of border regions, such as the northern part of the Peninsula and the coastal and insular areas, was

reflected in these maps. Military maps like *Yogye gwanbang jido* (Map of the Yogye Borderland) and *Seobuk pia yanggye malli illam jido* (Comprehensive Map for Defense of the West and North Border) identified the borderlands near the Amnokgang River and the Dumangang River. Sea route maps were needed to defend the territorial boundaries and coast. These maps prove that the specified borderlands belonged to Joseon.

In the mid-18th century, the *Dongkuk jido* (Map of Korea), made by Jeong Sang-ki, was a watershed moment in late Joseon dynasty mapmaking. Unlike the maps of the early Joseon Period, the scale of this map is large at 1:420,000. It contains the channels of the Amnokgang River and the Dumangang River and describes the coastlines as precisely as contemporary maps. The *Dongkuk jido* was hailed as the first map to truly describe Korean territory. It was widely copied and used by government offices and civilians, later becoming the basis for block-printed maps of Korea, such as the *Haejwa jeondo* (Complete Map of Haejwa). When the two volumes are unfolded side by side, the sections combine to form a comprehensive view. In 1861, Kim Jeong-ho completed the *Daedong yeojido* in wood-blocks, a splendid cartographic masterpiece of the Joseon dynasty.

The territorial boundaries of the Joseon dynasty were firmly established when Kim Jeong-ho made the *Daedong yeojido* (Territorial Map of the Great East). KiJeong-ho compiled an atlas entitled the *Cheonggudo* (Map of Korea) in 1834 based on previously accumulated cartographic knowledge and accomplishments. The *Cheonggudo* is comprised of two books: Volume 1 includes odd-numbered sections and Volume 2 contains even-numbered sections.

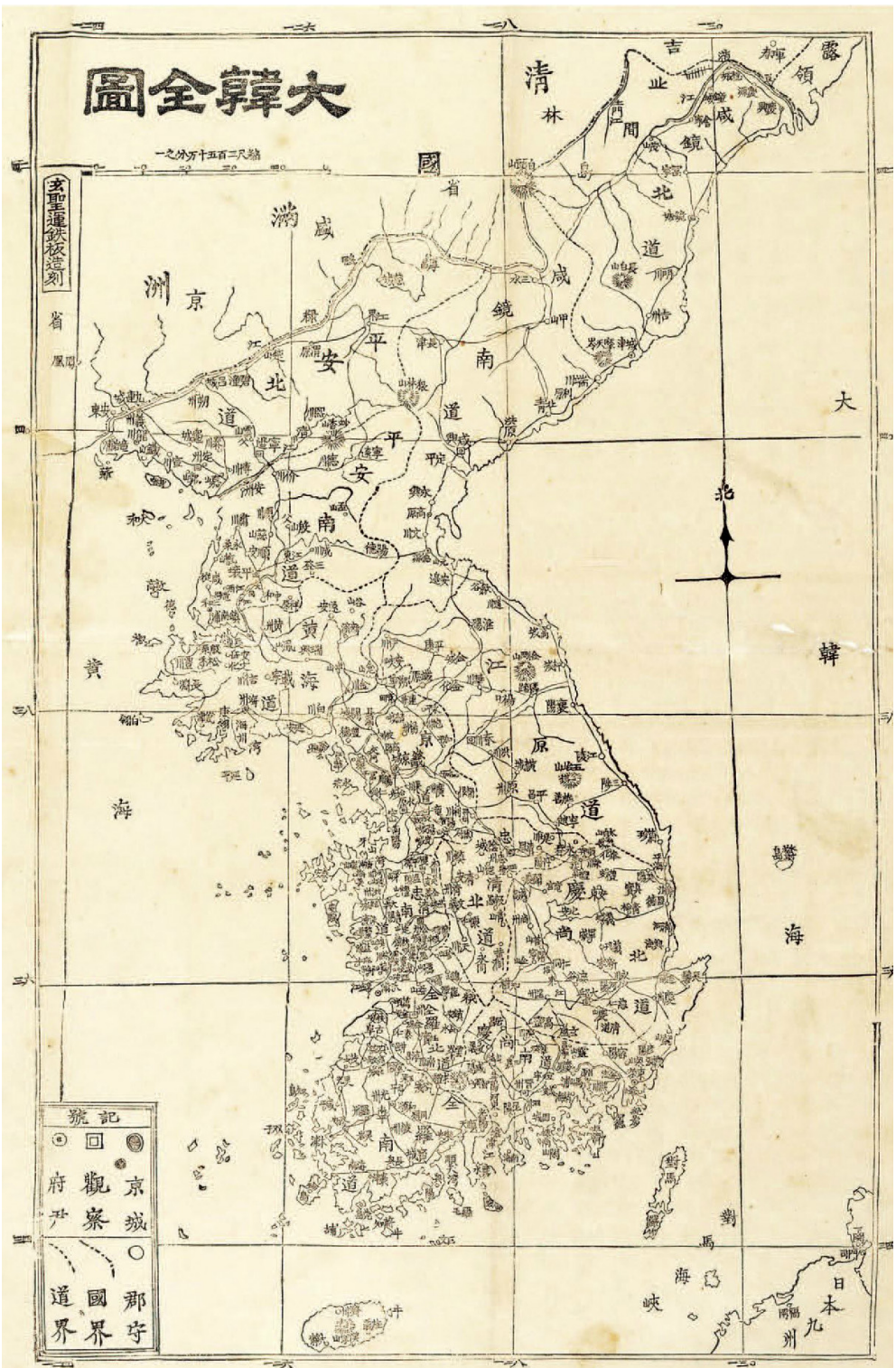
Complementing the *Cheonggudo*, the *Daedong yeojido* was an innovation in terms of its form and content. The *Cheonggudo* was presented in book form, but in the *Daedong yeojido* Korean territory is divided into 22 sections, and each section is assembled into a foldable booklet. Each booklet is easily carried and unfolded, and several booklets can be pieced together for an overall view. Mountains and rivers are shown in a realistic perspective, and various symbols are used on the map. The pathways are marked at every 10-ri (approximately 3.9 km) for an easy understanding of geographic distances between locations. The map skillfully delineates the unique aspects of Joseon territory from inland mountains and waters to coastal and insular regions.

Korea's cartographic tradition initiated another watershed moment in 1876 when Joseon opened its ports. Joseon cartographers at that point adopted modern survey techniques brought from Japan by practicing cartography using the scientifically-based method of triangulation to create accurate cadastral maps (large-scale, carefully surveyed maps). Triangulation was first conducted in Seoul. Cadastral maps were also made in other areas through surveys. Such techniques were used for the maps created in that period. *Daehan jiji* (Geography of Korea) and *Daehan shinjiji* (New Geography of Korea), which were both created for textbooks, included complete territorial maps of Korea based on a coordinate system with lines of latitude and longitude. *Daehan jeondo* by Jang Ji-yeon, in particular, shows North Gando, a major settlement of ethnic Koreans, and includes it as part of Korean territory. In 1910, when Japan began its occupation of Korea, the long tradition of Korean cartography devoted to the delineation of the national territory on maps was interrupted; this interruption lasted for the duration of the Japanese occupation.



Woodblock of Daedong yeojido 大東輿地圖 木板

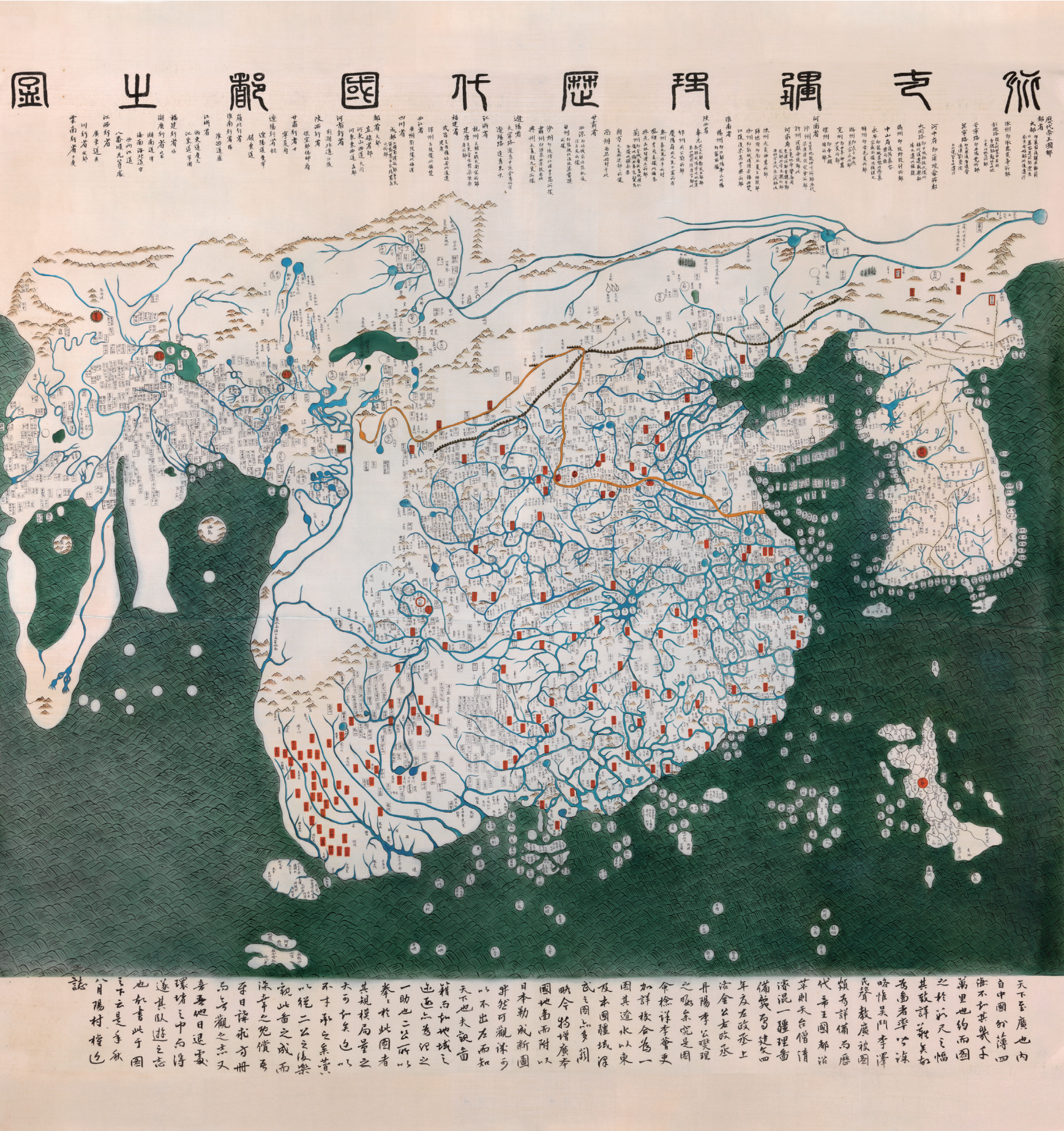
Kim Jeong-ho, 1861, 32.0×43.0 cm, National Museum of Korea



Daehan jeondo 大韓全圖, Daehan sinjiji 大韓新地誌

Jang Ji-yeon, Hyun Seong-woon, 1907, 33.7×25.0 cm, Busan National University Library





Honiil gangni yeokdae gukdo jido 混一疆理歷代國都之圖

Map of an Integrated Territory of Historic Countries and Their Capitals, Kwon Keun and Lee Hoe, 1402, color manuscript copy of an original now kept in Ryukoku University, Japan, 158.0×168.0 cm, Kyujanggak Institute for Korean Studies at SNU

This map is a copy of a manuscript world map made by Kwon Keun, Kim Sa-hyung, Lee Mu, and Lee Hoe in 1402 (the 2nd year of King Taejong). With China at the center of the map, it depicts the general form of the Old World, including Africa and Europe in the west with Joseon and Japan in the east. The western part of Arabia is also drawn on the map as it was known to Joseon cartographers thanks to the diffusion of Islamic cartography imported through Mongol influence during China’s Yuan dynasty. The map shows that Joseon cartographers were aware of and

interested in different parts of the world, and is based on the China-centric world view. According to the preface at the bottom, the map was constructed from sources based on two Chinese maps (*Shengjiao guangbei tu* and *Hunyi jiangli tu*), a map of Joseon, and a map of Japan. The map is recognized as one of the best world maps among those produced in the early 15th century and in particular, as the first world map that depicts the African continent as a whole.



Cheonha DOJIDO 天下都地圖

Map of the World, late 18th century, color manuscript copy, 60.0×102 cm, Kyujanggak Institute for Korean Studies at SNU

The *Cheonha DOJIDO* is a western-style world map drawn in Joseon based on *Wanguo quantu* (Complete Map of All the Countries) in *Zhifang wai ji*, a book-length geographical description of the entire world authored by Giulio Aleni, a Christian missionary. Like the *Kunyu wanguo quantu* (A Map of the Myriad Countries of the World) made by Matteo Ricci, a Jesuit priest, this map placed China and East Asia at the center of the projection with the central meridian placed

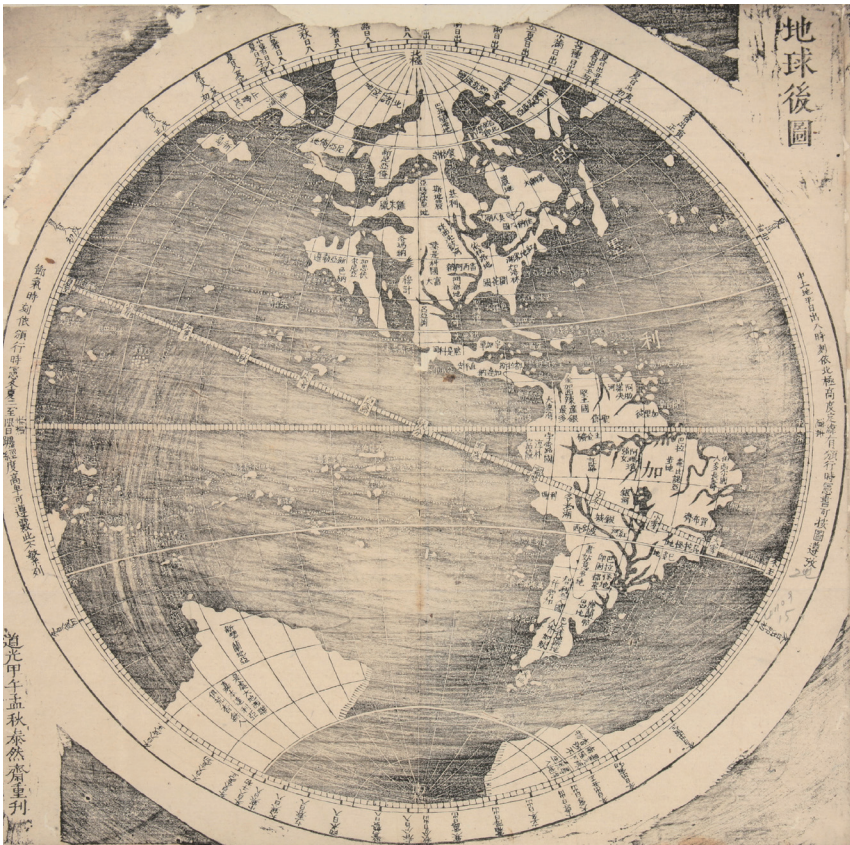
in the middle of the Pacific Ocean. It was an intentional arrangement promoting Sino-centrism. Southern continents were marked as mystery lands, reflecting that the southern hemisphere, including Oceania, was not yet known to the cartographer. The *Cheonha DOJIDO* clearly labeled the “Small East Sea” and the “Small West Sea,” referring to the East Sea and the Yellow Sea, which did not appear on Aleni’s map, *Wanguo quantu*.





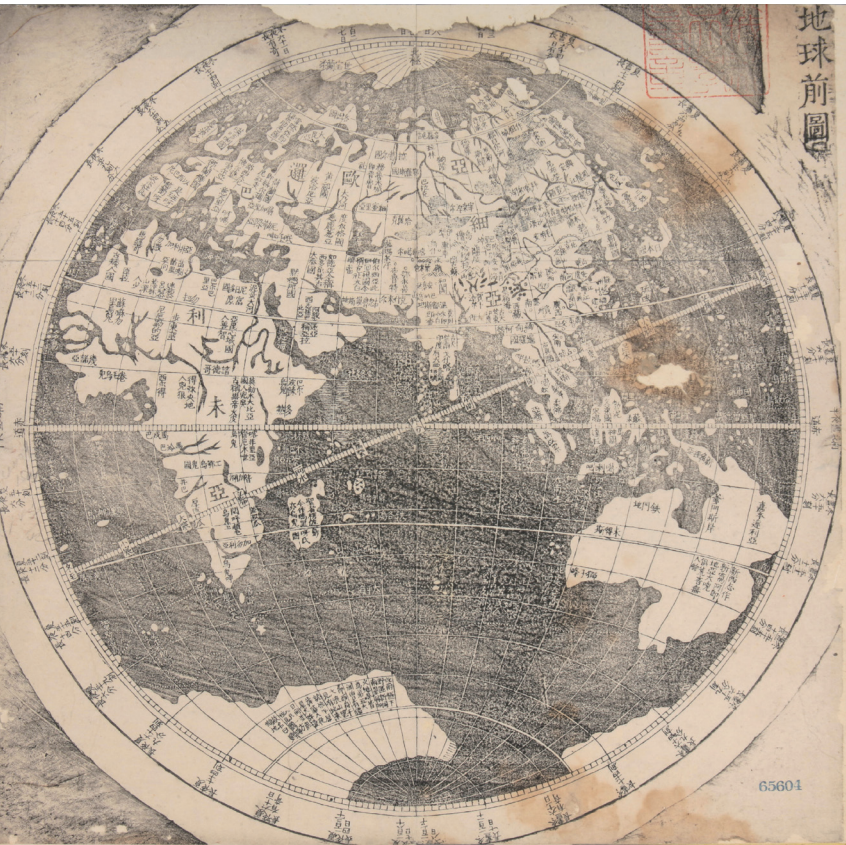
Cheonhado 天下圖  
Map of the World, late 18th century, color manuscript copy, 85.6×61.9 cm, Yeungnam University Museum

The *Cheonhado* is a circular world map highly popular among literati-scholars of the late Joseon dynasty. The map was drawn within a circle. The structure of the map consists of an inner continent surrounded by an inner sea, an outer continent, and an outer sea. The inner continent contains actual countries like China, Joseon, Annam, and India. The inner sea includes both real island countries like Japan and the Ryukyu Kingdom, as well as imaginary states like the Ilmok Kingdom, the Daein Kingdom, and the Samsu Kingdom that appeared in the Chinese *Shanhaijing* (Classic of Mountains and Seas). The outer continent is mostly filled with mythological kingdoms. This circular map is unique, reflecting the traditional ideas of “Tian Yuan Di Fang” (round heaven and square earth), Sino-centrism, and Taoism.



Jigu jeonhudo 地球前後圖  
Map of the World, Choi Han-ki, 1834, woodblock print, 37.0×37.5 cm, Kyujanggak Institute for Korean Studies at SNU

The *Jigu jeonhudo*, made by Choi Han-ki in 1834, is a wood-block atlas of the hemispheres based on Zhang Tingfu’s world map. The bottom left of the *Jigu jeonhudo* is marked with the production date and the nom de plume (pseudonym) of the cartographer, Tae Yeon-jae, which was the Buddhist name of Choi Han-ki. This map is different from the *Kunyu quantu* (Map of the World), an earlier map of the eastern and western hemispheres made by Ferdinand Verbiest, a Western missionary.



While the *Kunyu quantu* has gaps between the lines of longitude that widened toward the edges, the *Jigu jeonhudo* has even gaps between lines of longitude. Also, the 24 seasonal divisions were labeled, something which did not appear in other contemporary maps. The equator, ecliptic latitudes, and the tropics were highlighted. Unlike the *Kunyu quantu*, Oceania and Antarctica were drawn separately, implying that Choi Han-ki knew about the discovery of those regions.

## The National Maps



Joseon bangyeok jido 朝鮮方域之圖  
Map of a Territory of Joseon Dynasty, Jeyonggam (Tribute Management Office), 1557, color manuscript copy, 132.0×61.0 cm, National History Compilation Committee of Korea, National Treasure 248

This is a complete map, which contains both a clear identification of the cartographer and the year of its making. It was created by Jeyonggam (the Tribute Management Office), which was in charge of the supply of royal garments and food. Scientific mapmaking projects were initiated in the early Joseon dynasty during the reign of King Sejong, resulting in the publication of the cumulative geographic knowledge portrayed in the *Dongkuk jido* (Map of Korea) by Jeong Cheok and Yang Seong-ji. The *Joseon bangyeok jido* is supposedly a copy of the *Dongkuk jido*. The name of the map appears at the top, the map itself is at the center, and the list of participating officials is at the bottom. The geographic features of the mid and southern parts of Korea are relatively precise, but those in the north are rather distorted. The drainage patterns are very accurate, except for the Amnokgang River and the Dumangang River; mountain ranges are expressed in the form of mountain chains based on the traditional geomantic understanding of the land.

Resembling the style and design of the *Dongkuk jido* made by Jeong Sang-ki, the *Aguk chongdo* presents the beauty of Korean territory in an exquisite manner. This map is notable for its use of vivid color: green for mountain ranges, blue for rivers, and five distinctive colors for different counties and prefectures. Provincial offices and barracks in eight provinces were circled and marked with respective place names to make them distinguishable. Islands off the coasts of Joseon were drawn in detail, implying the growing national interest in the coastal and insular regions. Dokdo in the East Sea is identified to the east of Ulleungdo under the name Udo, and Tsushima is also portrayed on the map. The marginal spaces were filled with the frontier territory, the respective lengths of east to west and south to north distances to Seoul from the endpoints in all four directions, and the number of counties and prefectures in each province.

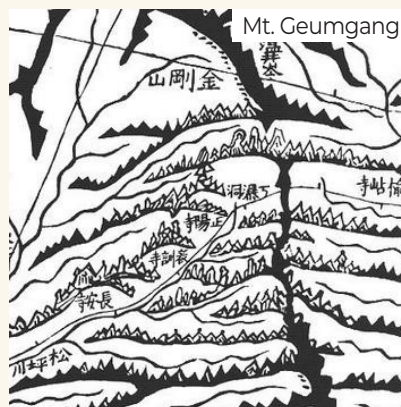
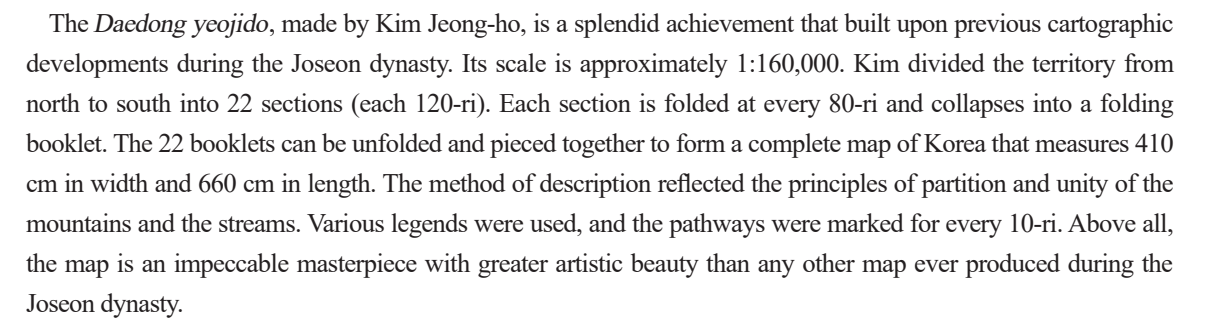
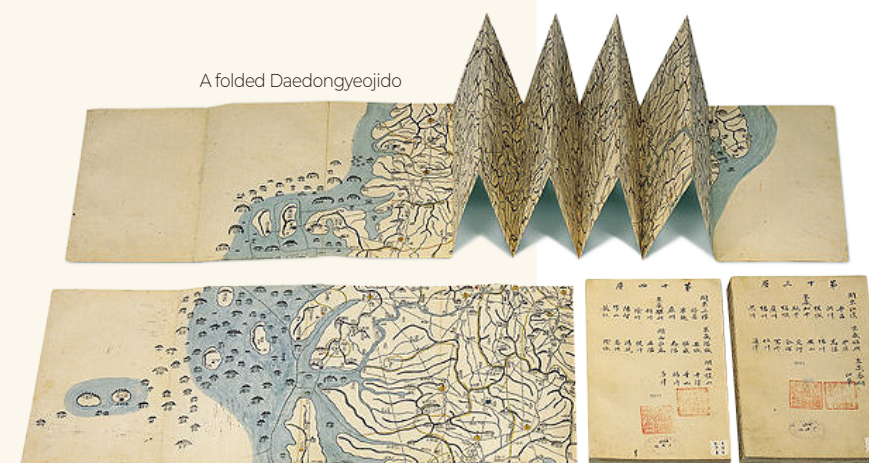


Aguk chongdo 我國總圖  
General Map of Our Country (Joseon), late 18th century, color manuscript copy, 152.5×82.0 cm, Kyujanggak Institute for Korean Studies at SNU





The map shows the area around Hanyang. The mountain ranges are all connected, and the mountains are expressed according to the characteristics of the mountains. Baekdusan Mountain and Hallasan Mountain are expressed as Cheonji and Baeknokdam, Geumgangsan Mountain is expressed as 12,000 peaks, and Samgaksan Mountain is expressed as three peaks. The streams are expressed as curvy lines; whether a ship can travel the stream is represented by double (yes) or single (no) lines. The scale for roads is represented along a straight line, with the space between hatch marks representing 10 ri. The interval of the scale varies depending on the slope of the terrain. Administrative boundaries are expressed in dotted lines, and various symbols are used as in today's maps.

[illegible]

Daedong yeojido 大東輿地圖

The Territorial Map of the Great East [Korea], Kim Jeong-ho, 1861, woodblock print, each section measured at 30.5×171.5 cm (22 sections in total), Kyujanggak Institute for Korean Studies at SNU



Local Map of the Joseon Dynasty



Seobuk pia yanggyeo malli illam jido  
西北彼我兩界萬里一覽之圖

Comprehensive Map for Defense of the West and North Borders,  
mid-18th century, color manuscript copy, 142×192 cm,  
Kyujanggak Institute for Korean Studies at SNU

This Korean frontier map focuses on the northwestern region of Korea and Manchuria during the Joseon dynasty. The word “pia” in “Seobukpia” refers to both the Chinese Qing and Korean Joseon dynasties. As a type of military map, it was designed to defend the country against an invasion from China. The map covers a wide area with Baekdusan Mountain at the center spanning from the Heilongjiang River (Black Dragon River) in Manchuria in the east to Shanhai Pass in the west, delineating post towns and military bases established along the extensive fortress walls and roads. Its map orientation is unique. Instead of aligning the map with a north-south direction, “haejwa sahyang,” the country faces the sa (south-southeast) direction with the direction hae (north-northwest) in the back. Places like Jilin and Ningguta, where the Qing dynasty was founded, are marked in red.



Doseongdo 都城圖  
Map of the National Capital [Seoul], late 18th century, color manuscript copy, 67×92 cm, Kyujanggak Institute for Korean Studies at SNU

With Dobongsan Mountain and Bukhansan Mountain in the background, this map depicts the beautiful natural environment of Seoul in the form of a landscape painting along with the mountains of Baekaksan, Inwangsan, Mokmyeoksan (present-day Namsan), and Taraksan (present-day Naksan), which are collectively called Naesasan. In-town landscapes were drawn vertically and marked with place names. The planar description is intentional to contrast with the surrounding

mountainous terrain. Written on the margin are descriptions of administrative districts, and the size of the city, roads, and streets, with Donhwamun Gate, the main gate of the Changdeokgung Palace, in the center to highlight Changdeokgung Palace as the main working palace of the country. The map was featured with a south-up orientation to reflect that the king would have sat facing south when taking care of state affairs.



Giseong jeondo 箕城全圖

Map of Giseong [Pyeongyang], late 19th century, color manuscript copy, 167×96 cm, Kyujanggak Institute for Korean Studies at SNU

This panoramic map portrays Pyeongyang in a picturesque style as a boat on the Daedonggang River. Giseong is a nickname for Pyeongyang, which originated from a legend in which Gija took care of a field in Pyeongyang. With Yongaksan Mountain identified as a guardian mountain in the background, the map displays government offices, roads, place names, and residential areas of the city in detail. Even the streets that sell cold noodles in small towns and villages are labeled. The white stone walls of the internal fortress and the north fortress, various types of boats docked in Daedonggang River, the long forest spreading 10-ri, the pine forest of Ulmildae, the fields outside the Jungseong Fortress, and the earthen ramparts were all skillfully portrayed. The map vividly shows a panoramic view of Pyeongyang 100 years ago.

Cheorongseong jeondo 鐵盆城全圖  
Complete Map of the Unconquerable Fortress, late 18th century, color manuscript copy, 79×120 cm, Kyujanggak Institute for Korean Studies at SNU

The map describes in detail a wall surrounding Yeongbyeon, which was called an unconquerable fortress. It was the final line of defense in the Gwanseo area. Being surrounded by rugged mountains on all sides meant that it was located in a natural fortress. Even during the Manchu War of 1636, the castle never fell to the Qing army. The castle is comprised of the main fortress, the north fortress, the new fortress, and the west fortress. The south gate was an important gateway that connects Anju and Pyeongyang. The west fortress, also known for Yaksan, is a famously scenic place. Beautiful Yaksan dongdae is well known for “Yaksan Azaleas,” which are mentioned in the poem “Azaleas” by Kim So-wol.





The East Sea and Dokdo



East Sea on Aguk chongdo

The name East Sea refers to the sea to the east of the Korean Peninsula. The name East Sea appears in various references, such as the monument of King Gwanggaeto, old records such as *Sinjeung dongguk yeoji seungnam*, and on old maps. The name East Sea is clearly labeled on the late 18th-century *Aguk chongdo* at the Kyujanggak Institute for Korean Studies at Seoul National University. *Aguk chongdo* was created in the late 18th century. This map is a small-sized map similar to the *Dongguk jido* made by Jeong Sang-ki, and it is notable for its beautiful coloration. The map displays the names of the seas around Korea: the East Sea, the Yellow Sea, and the South Sea. *Yeojido*, which was designated as National Treasure No. 1592, is composed of three volumes of illuminating manuscripts and maps created during the late-Joseon dynasty. The first volume contains six copies of maps including a world map, a map of China, a map of Beijing and Hanyang, and a national map. Among them, *Joseon ilbon ryukyu gukdo*, which depicts Joseon, Japan, and the Ryukyu Kingdom (currently, Okinawa prefecture of Japan) clearly shows the names East Sea and Ulleungdo.

The name East Sea also appears on a Western-style world map entitled

*Cheonhado jido*, which is now preserved in the Kyujanggak Institute for Korean Studies at Seoul National University. It was made during the Joseon dynasty and was based on the *Wanguo quantu* by Giulio Aleni. On this map, the East Sea is referred to as the “Small East Sea,” and the Yellow Sea as the “Small West Sea.” These names were added in the *Cheonha dojido* by the Joseon cartographers as they did not appear in Aleni’s *Wanguo quantu*.

Dokdo appeared on various ancient maps of Korea. It was called “Usando” during the Joseon Period. The island was marked as Korean territory on various *Joseon jeondos* (Maps of Korea) as well as on the Ulleungdo maps included within the maps of counties and prefectures. Dokdo, or Usando, was erroneously marked to the west of Ulleungdo on maps made in the early Joseon Period. However, in the late Joseon Period, the location was corrected, and the island was placed to the east of Ulleungdo as a result of the famous Ahn Yong-bok incident, which facilitated the communication of information about Dokdo. The *Dongguk jido* by Jeong Sang-ki placed Dokdo very close to its actual location. A close-to-accurate placement is also found on the *Haejwa jeondo*.



Ulleungdo and Dokdo on Haejwa jeondo

The *Haejwa jeondo* is assumed to have been made in the middle of the 19th century. “Haejwa” refers to Joseon, which sits to the east of China. Its format and content are similar to the *Dongguk jido* made by Jeong Sang-ki; the mountain chain, the hydrographic pattern, and the transportation network were drawn in the same manner as on the *Dongguk jido*. On this map, Jungbong Peak on Ulleungdo was described as a mountain, and Usando was depicted as a small islet with a mountainous peak and part of Ulleungdo’s insular area. A sea route starting from Uljin appeared on the map. In the margin is a short statement about the history of Ulleungdo and its geographic background, which is the same as the one included in the *Sinjeung dongguk yeoji seungnam*, a geography book.

The *Joseon jido* of the 18th century is an atlas of counties and prefectures, including those of Dokdo. The *Joseon jido* was a product of the national mapmaking



Joseon on Cheonha dojido

project that sought to produce complete maps of Korea, like the *Dongguk jido* created by Jeong Sang-ki during the reign of King Youngjo. This map was drawn with a checkerboard system, and each cell was 4.1–4.2 cm. Its accuracy in distance measurements and direction was a great improvement over the pictorial maps of counties and prefectures. Given the overall structure and content, its description of Ulleungdo seems to have been based on a separate Ulleungdo map that was compiled from previous cumulative research efforts on Ulleungdo. On this map, Usando is located farther to the east of Ulleungdo than on previous pictorial maps. Since one cell equates to 20-ri, the distance between Usando and Ulleungdo is measured to be approximately 40-ri. Because Usando is detached from Ulleungdo, it confirms that the Usando portrayed on that map is, in fact, present-day Dokdo.



Ulleungdo on Joseon jido





Korea on John Senex's Map of Asia

The names East Sea and Dokdo are also found on early maps produced by western cartographers. Joseon first appeared on a European map produced after the 16th century. Initially, the country was described as an island on those maps, and only over time did it take the shape of a peninsula. The name East Sea or the Sea of Korea appeared on maps, and those names refer to the present-day East Sea. A good case in point is a map of Asia made in 1720 by an English cartographer, John Senex. It is an English translation of a map made in 1705 by Delisle, a French mapmaker. Senex's map shows a Korea scaled horizontally wider than its actual width. The country name is marked as the "Kingdom of Korea." The East Sea is marked as "The Eastern Sea" or "Corea Sea."

Joseon had not been mapped in great detail on European maps prior to the early 17th century, and this omission meant that Ulleungdo and Dokdo rarely appeared. Later, in 1735, Joseon was described in detail on *Royaume de Corée* (Complete Map of the Kingdom of Joseon) by Jean Baptiste Bourguignon d'Anville, a French cartographer. D'Anville drew Ulleungdo and Dokdo in the East Sea. *Royaume de Corée*, which was included in *Atlas de la Chine*, showed two islands labeled as "Tchian-chan-tao," referring to Usando (Dokdo), and "Fan-ling-tao," referring to Ulleungdo. This map greatly influenced successive maps, so many subsequent maps in France, the United Kingdom, and Germany were produced with Ulleungdo and Dokdo properly labeled.



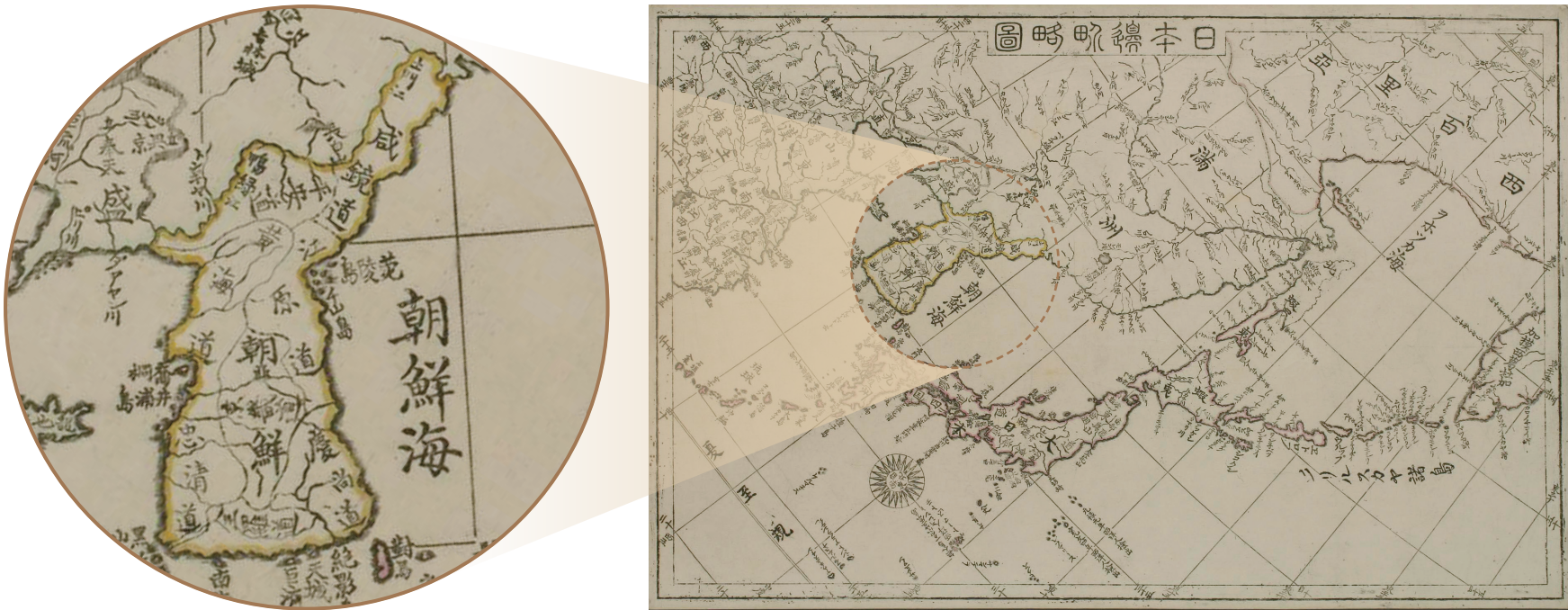
Ulleungdo and Dokdo of Royaume de Corée by d'Anville



Shinsen chosengkoku zenzu (Newly Edited Whole Map of Joseon Dynasty) by Tanaka

The inclusion of Dokdo as Korean territory is also found on maps published in Japan. The map of the boundary between China, Korea, and Japan, created by Hayashi Sihei, clearly represents the two islands in the East Sea, Ulleungdo and Dokdo, in the same color scheme as Joseon, indicating that Dokdo is Joseon territory. Additionally, the words "the territory of Joseon" were written right next to the island. *Shinsen chosengkoku zenzu* (Newly Edited Whole Map of Joseon dynasty) by Tanaka Akiyosi in 1894 labeled Ulleungdo and Dokdo as "Jukdo (Takeshima)" and "Songdo (Matsushima)" in the same color scheme as the Korean Peninsula, which shows that Japan acknowledged Dokdo as Korean territory.

Along with Ulleungdo and Dokdo, the name East Sea also appears on Japanese maps. A good case in point is the *Nihon henkai ryakuzu* (A Simplified Map of Japan's Periphery) produced by Takahashi Kageyasu in 1809. This map was the first official Japanese map on which the Japanese archipelago is placed in the center. Latitude and longitude lines were included on the map, and Japan was described and presented with surveyed measurements that were completed by Ino Tadataka, a Japanese cartographer. Maps of the Qing dynasty of China and the map of Joseon in *Huangyu quan lan tu* (Atlas of the Chinese Empire), as well as other Chinese maps, were assumed to have been referenced for Takahashi's *Nihon henkai ryakuzu*. Again, the East Sea was labeled as the Sea of Joseon, and Ulleungdo and Usando were labeled as Ulleungdo and Cheonsando, respectively, indicating that they belonged to Joseon.



The East Sea of Nihon henkai ryakuzu (A Simplified Map of Japan's Periphery) by Dakahashi



# Accessibility and Potential of Korean Territory

Our territory holds significant potential in terms of accessibility. It is connected to major cities around the world through air routes. Plans are being made to maximize this potential by enhancing accessibility to various regions of Europe and Asia through shipping, rail, and road connections.

The Northern Sea Route refers to the Northeast Passage, a route from Europe along the northern coast of Russia to the Pacific and Asia. The total length from Rotterdam, Europe’s largest trading port, to Busan via the Northern Sea Route is approximately 15,000 km, making it the shortest route between Europe and Korea today. Due to the accelerated reduction of Arctic ice caused by global warming, the navigable period for the Northern Sea Route is expected to expand, increasing its economic viability. The volume of cargo transported via the Northern Sea Route is continuously rising. While traveling from Busan to Rotterdam via the Suez Canal requires a journey of about 22,000 km in 40 days, the Northern Sea Route reduces

this to about 15,000 km in 30 days. It is also possible to reduce logistics and fuel costs from Korea to Europe. Consequently, Korean companies are preparing to utilize the Northern Sea Route, and Busan Port is conducting various studies and collaborations to become the logistics hub of Northeast Asia for this route.

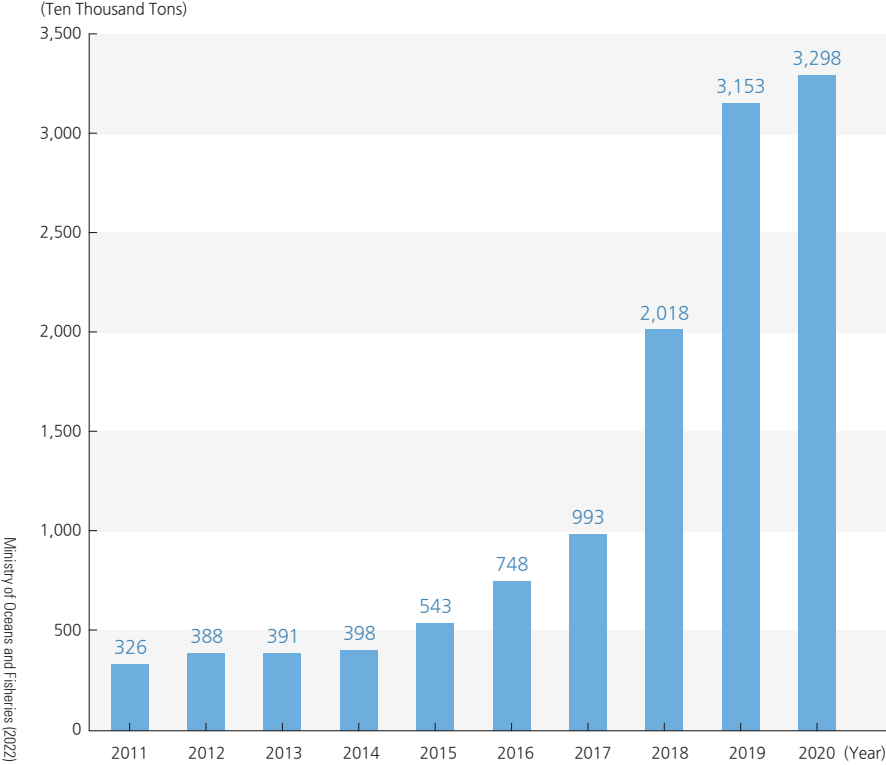
In rail transport, if the Trans-Asian Railway (TAR) is connected through routes such as the Trans-Siberian Railway (TSR), Trans-China Railway (TCR), Trans-Manchurian Railway (TMR), Trans-Mongolian Railway (TMGR), and Trans-Korean Railway (TKR), the Korean Peninsula will serve as an advanced base and gateway in the Eurasian logistics and transportation network. In 2014, Korea Railroad Corporation (KORAIL) made significant progress in its vision for transcontinental railroads by becoming an affiliate member of the Organization for Cooperation between Railways, a coalition of railways from 27 countries, including Russia, China, and North Korea.

## Accessibility and Potential of Korean Territory

Northern Sea Route and Traditional Route



Trends in Cargo Volume on the Northern Sea Route



With the development of maritime and rail transportation, the Asian Highway Network (AH), initiated under the auspices of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), is strengthening exchange and cooperation among Asian countries for road network connectivity. Launched in 2005, the AH encompasses a massive network of 55 routes spanning 140,000 km and connecting 32 countries in Asia. The international trade routes are numbered AH1 to AH9 with routes in Southeast Asia numbered AH11 to AH26, in East

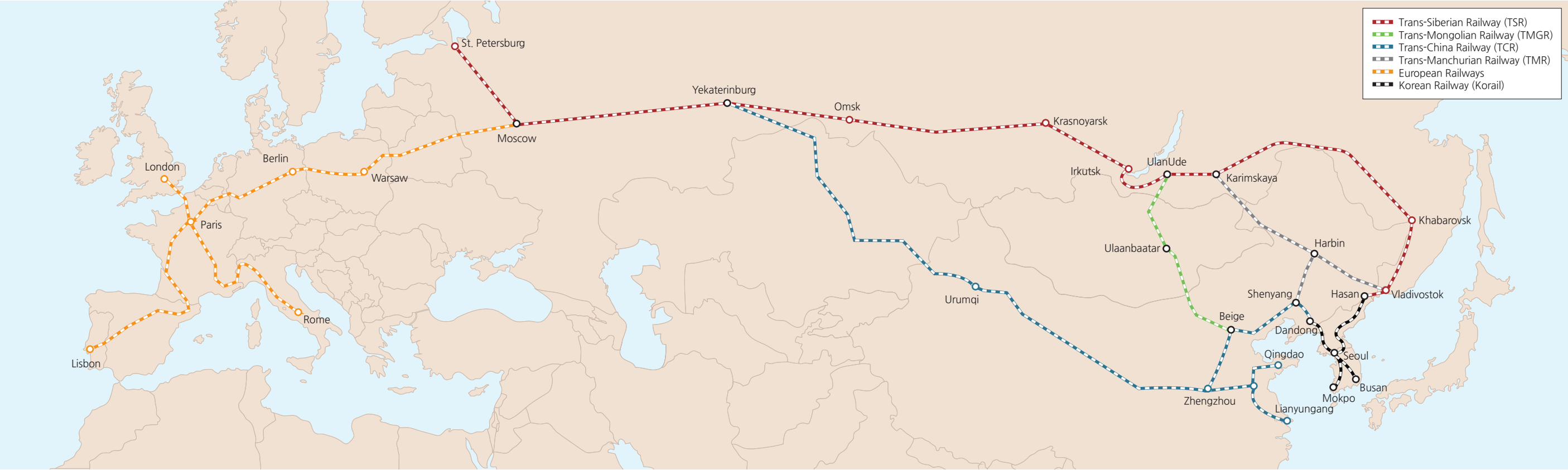
Asia AH30 to AH35, in South Asia AH41 to AH51, and in the North Asia, Central Asia, and West Asia AH60 to AH87. Two routes of the AH are set to pass through the Republic of Korea: AH1, which runs from Japan through the Korean cities of Busan, Seoul, Pyongyang, and Sinuiju, on to China, Vietnam, Thailand, India, Pakistan, Iran, and Türkiye; and Asian Highway 6 (AH6), which extends from Busan through the Korean cities of Gangneung and Wonsan, then to Russia (Khasan), China, Kazakhstan, back into Russia, and Georgia.

Asian Highway Network



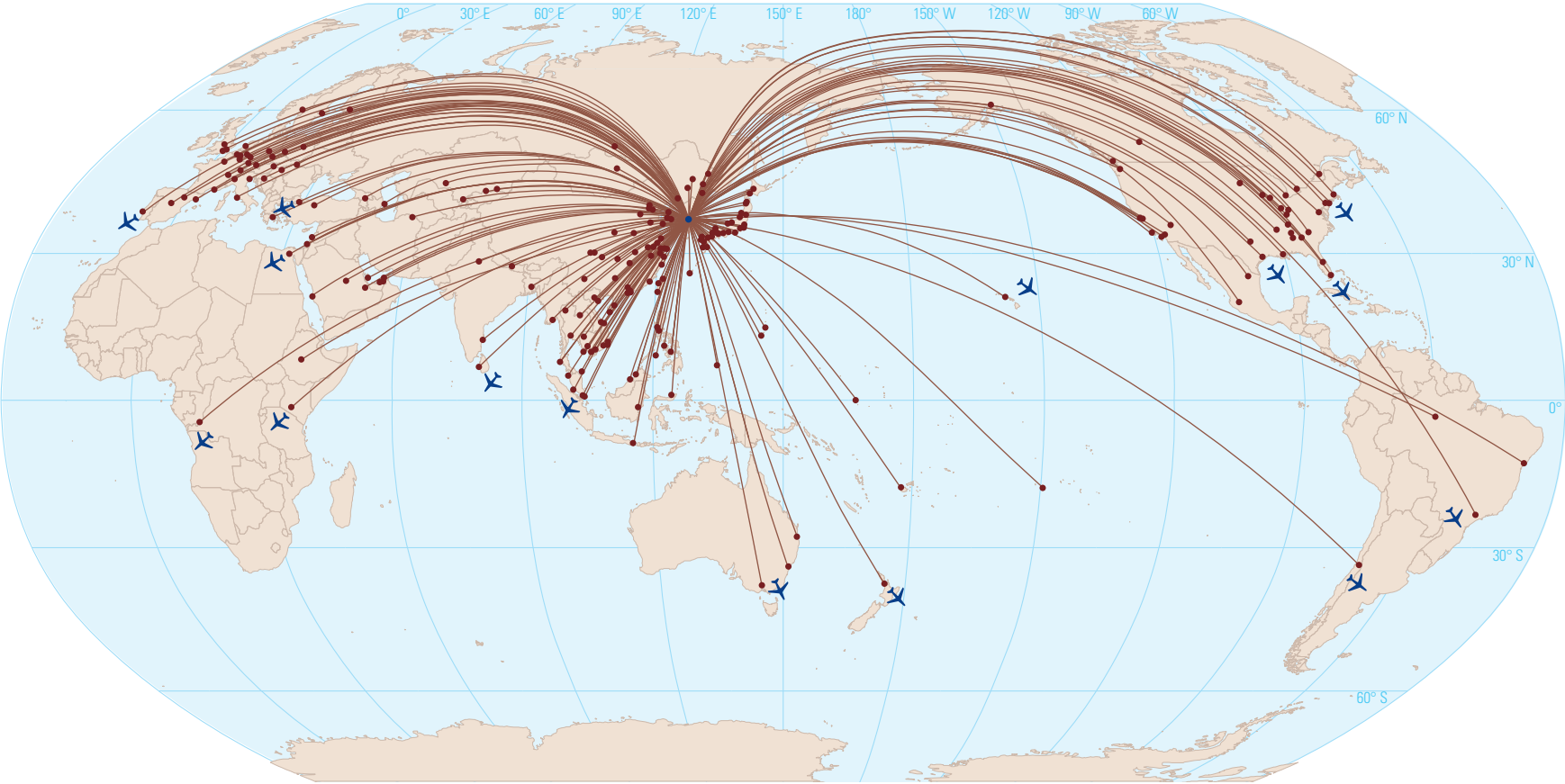


Trans-Eurasian Railway and South Korea

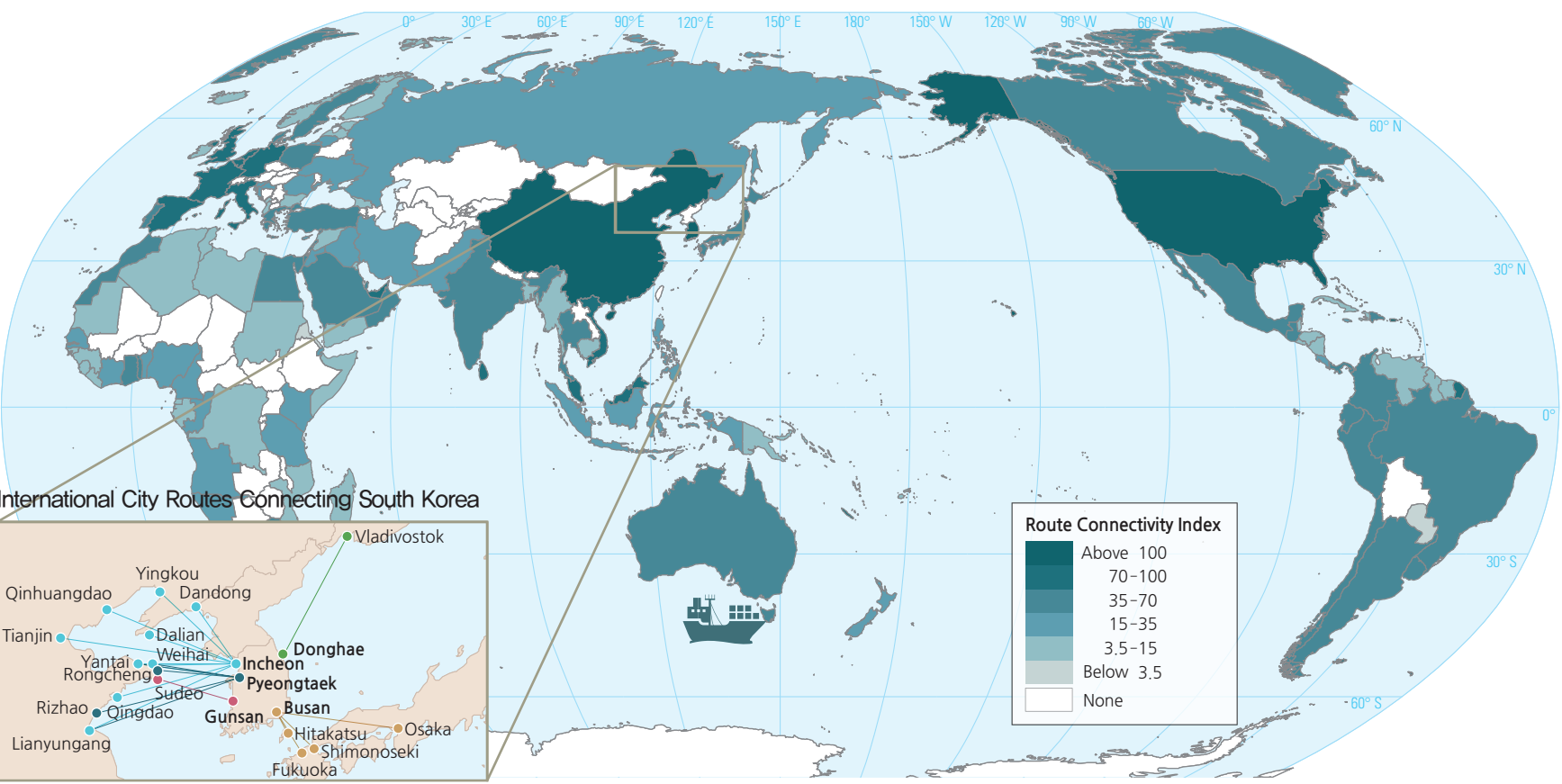


The potential of open territory has significantly contributed to the Republic of Korea's emergence as a leading nation in aviation and maritime transport. As of March 2024, Incheon International Airport has developed into a hub airport representing East Asia, directly connecting to 168 cities worldwide through 91 airlines. Building on this potential and the growth in trade volume, the Republic of Korea has become a major aviation power, ranking seventh in the world for air passenger transport in 2023 and second for air cargo transport in 2022. The air connectivity index, which evaluates the number of destinations served, the frequency of flights, and transfer connections, is a key metric for assessing an airport's hub status. In 2023, Incheon Airport's air connectivity index ranked first in the Asia-Pacific region. The number of air routes connected to domestic airports has steadily increased, excluding the COVID-19 pandemic period. The number of routes, which was 184 in 1998, rapidly increased in the 2000s, expanding to 379 in 2019. Furthermore, the Republic of Korea is at the center of major global shipping networks, including the Northeast Asia-Southeast Asia and Northeast Asia-North America shipping routes. According to the Liner Shipping Connectivity Index, which quantifies a country's position within the global shipping network, the Republic of Korea ranked second in the world in 2021, following China.

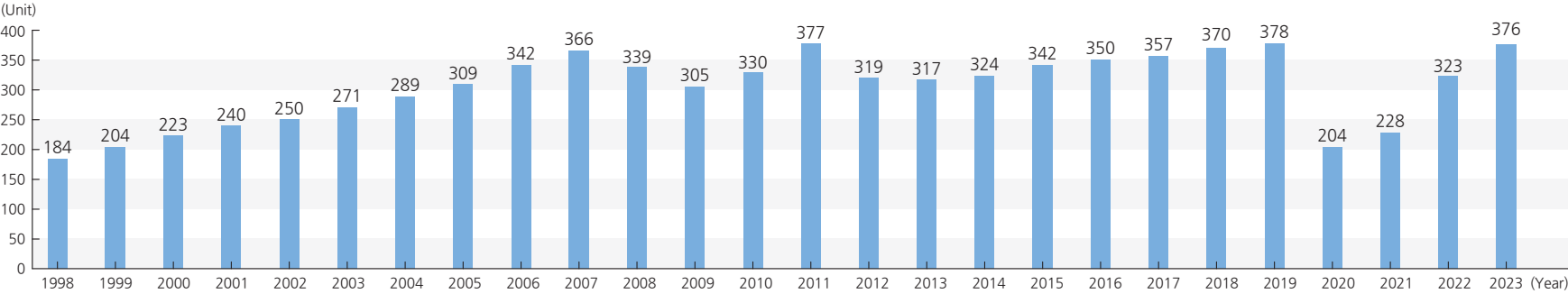
Air Network of the Republic of Korea



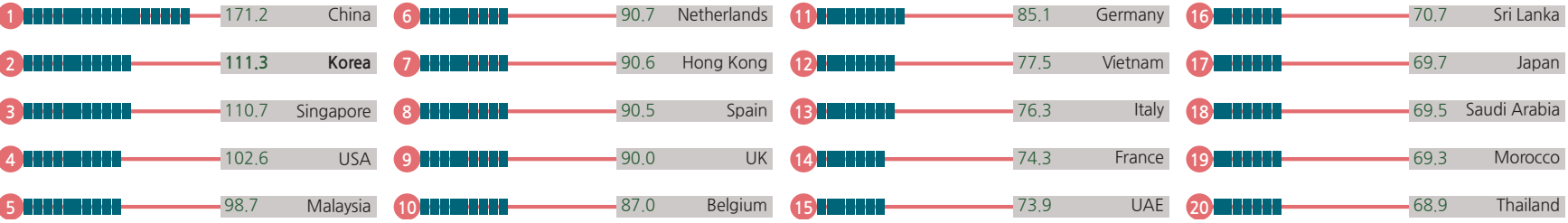
Liner Shipping Connectivity Index and International Passenger Ship Destination connected to the Republic of Korea



Number of International Air Routes Connected to the Republic of Korea



Liner Shipping Connectivity Index



\* Note: The Route Connectivity Index was developed by the United Nations Council for Trade and Development (UNCTAD). It consists of a comprehensive score considering five factors. Factors to be considered include the number of container ships, the capacity of the vessel to ship the container, the size of the largest vessel, the number of regular routes, and the mandate of the container handling company.



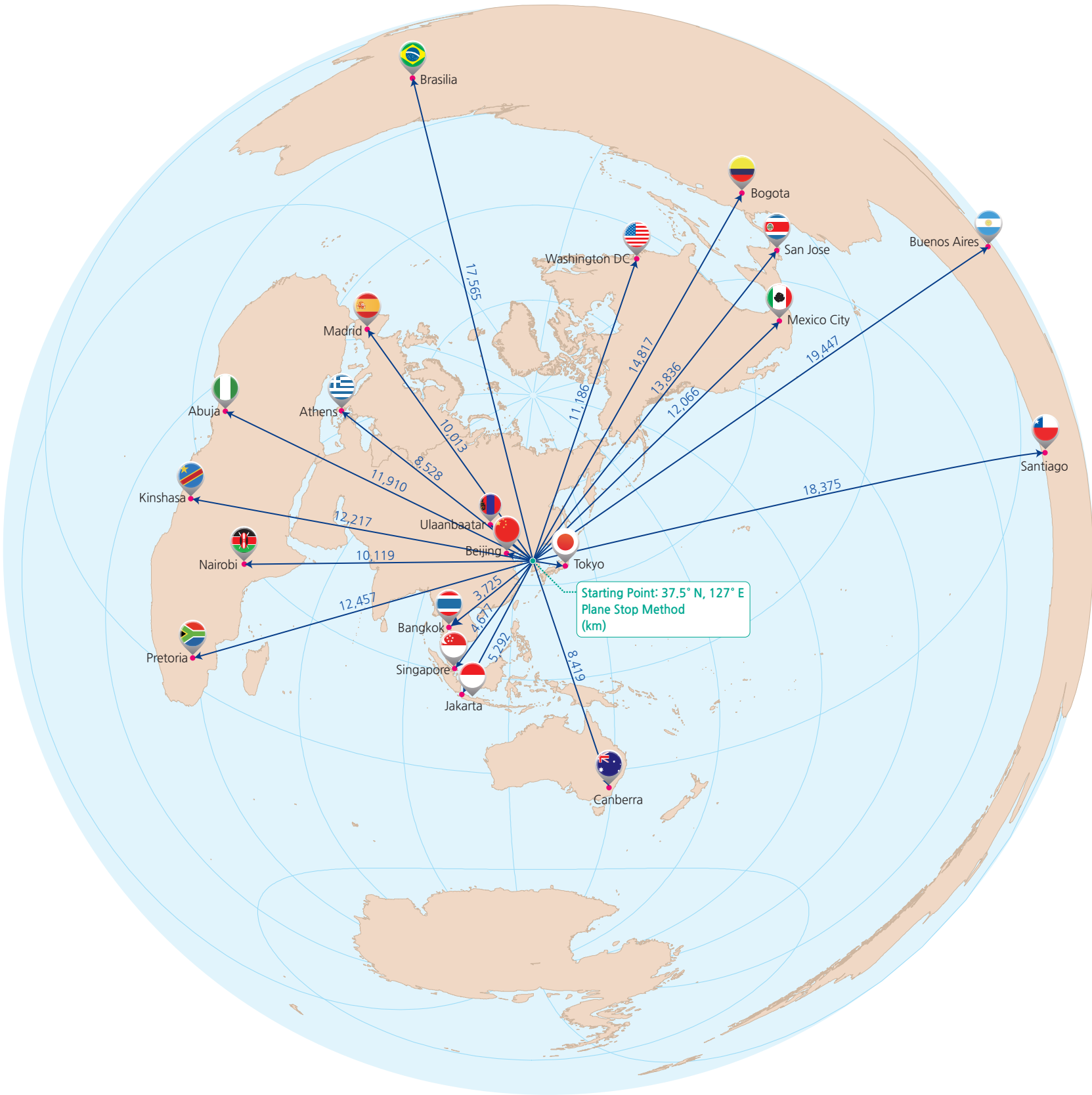
Korea and the World

The Republic of Korea is located between 33 and 44 degrees north latitude and between 124 and 132 degrees east longitude. Our territory shares land borders with China and Russia to the north, and faces Japan across the Strait of Korea, connecting the immense landmass of Eurasia and the Pacific Ocean. Due to its central location in East Asia, most major cities in East Asia are within a 5,000 km radius of the Republic of Korea. Beijing (956 km) and Tokyo (1,157 km) are about two hours away from Seoul by air, providing high accessibility to major cities on the eastern coast of China and in Japan. Southeast Asian cities like Bangkok (3,725 km) and Singapore (4,677 km) are reachable within seven hours, making Incheon International Airport a common transit point for many flights from Southeast Asia to North America. Additionally, Southeast Asia has become a major tourist destination

for Koreans due to its favorable accessibility.

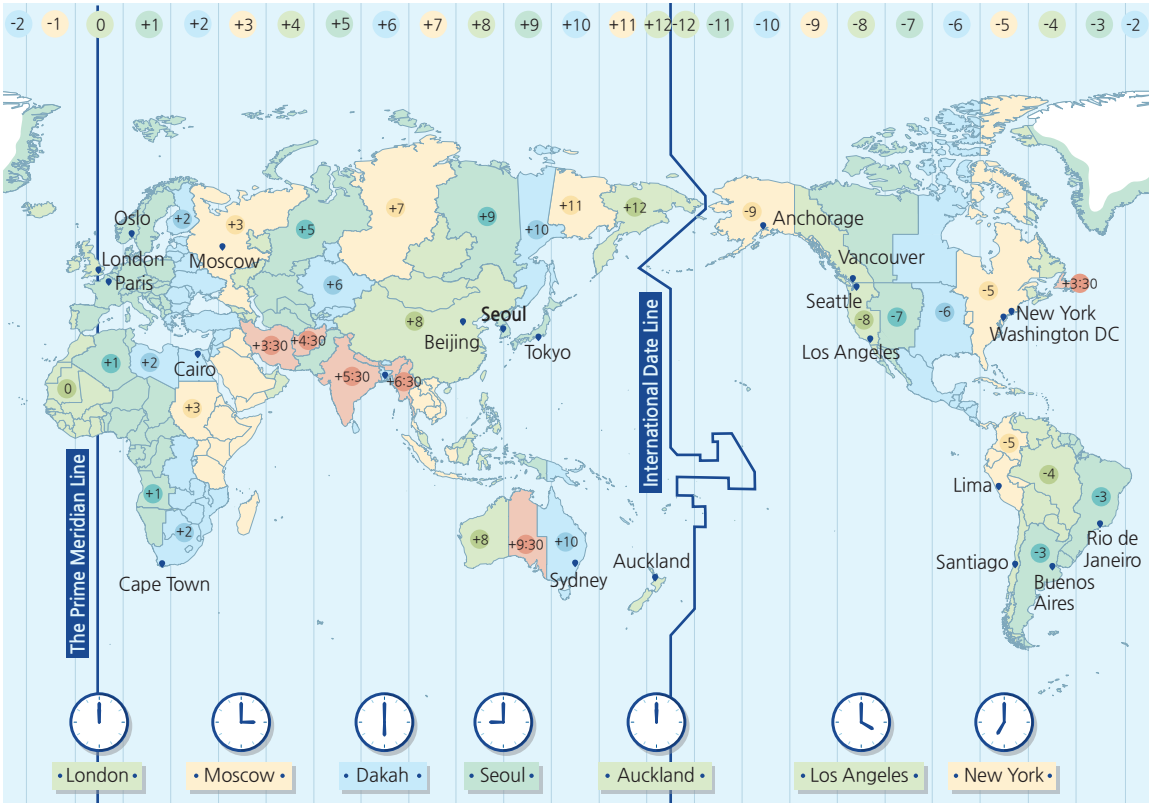
Most European cities, such as Berlin (8,140 km), London (8,875 km), and Paris (8,981 km), are within approximately 10,000 km, allowing travel to all parts of Europe through major hub airports. In North America, the distance to the west coast is about 11,000 km and to the east coast is about 12,000 km. While previously restricted by aircraft range, requiring a stopover in places like Anchorage, there are now direct flights to the eastern coast of North America. Most African cities are over 12,000 km away from Seoul, with direct flights available to Addis Ababa, Ethiopia. South America is the farthest continent from the Republic of Korea, with major cities such as Buenos Aires (19,447 km) and Rio de Janeiro (18,140 km) being over 15,000 km away.

Distances to the Global Capital Cities



The Republic of Korea uses Korean Standard Time (KST). It is appropriate to use a single standard time since the territory stretches primarily from north to south. The standard meridian of the Peninsula is 135° E, which is nine hours ahead of Coordinated Universal Time (UTC). North Korea uses KST, and neither South Korea nor North Korea uses Daylight Saving Time. Korea uses the same UTC offset (+9) as neighboring Japan and is one hour ahead of Beijing, China. The regions that share the same time zone (UTC+9) with Korea, other than Japan, are Eastern Russia, Eastern Indonesia, and East Timor, which are at a similar longitude. The Korean Empire announced the longitude of 127° 30' E as the standard meridian. In 1912, it was changed to 135° E by the Japanese. In 1954, it was reverted back to 127° 30' E and that meridian has remained in use since 1961. Seoul is located at a longitude of 127 degrees, and the sun is due south at 30 minutes past noon. Korea is located in the mid-latitudes of the northern hemisphere. Portugal, Spain, Algeria, Greece, Türkiye, Iran, Iraq, China, Japan, and the United States are at similar latitudes. These countries are all in the middle latitudes and the northern temperate zone, but the amount of precipitation varies depending on the position of both

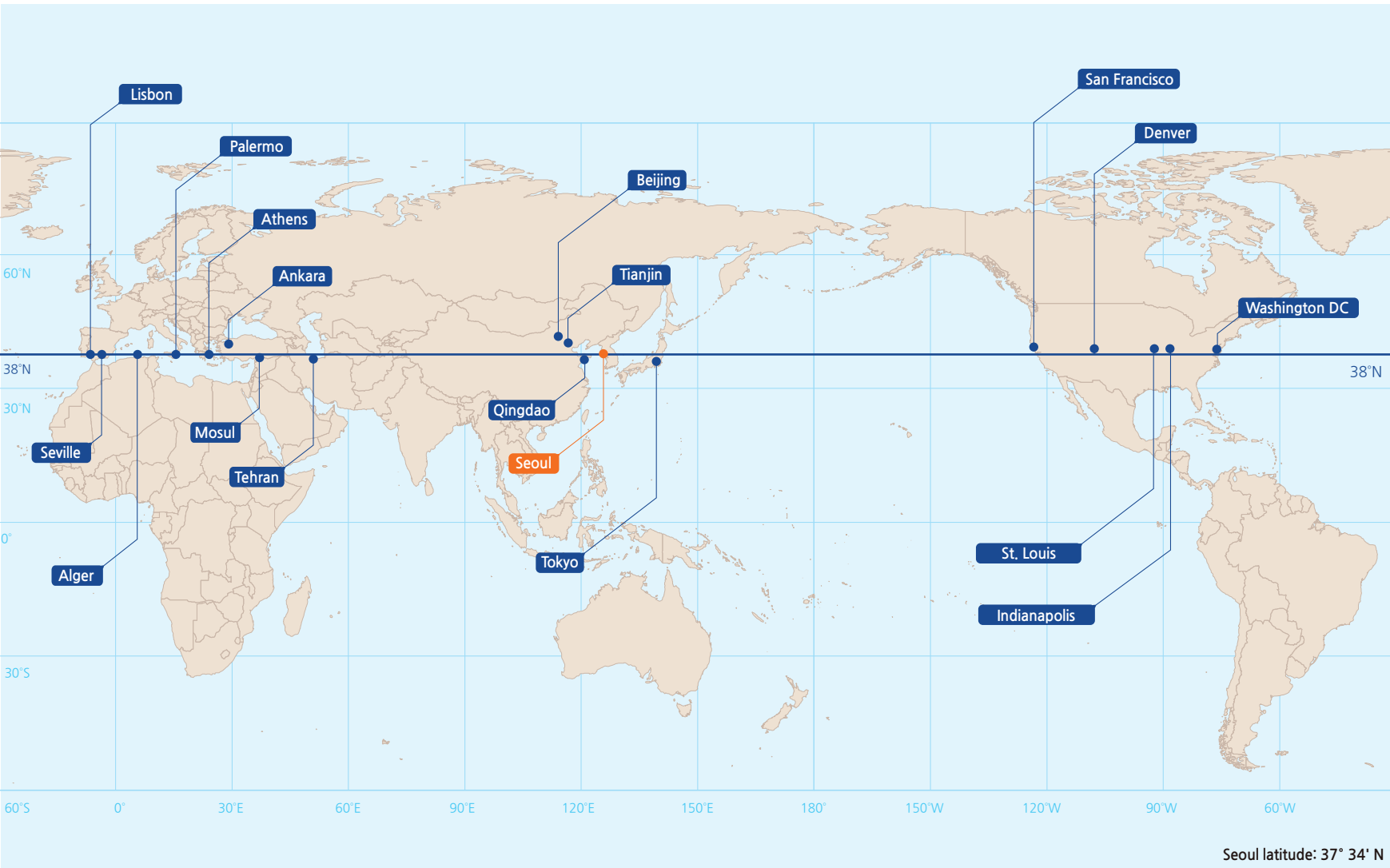
Standard Time



the continents and nearby oceans; thus, the natural landscapes for each country are different. Cities with a latitude similar to Seoul include Washington, D.C., St.

Louis, and San Francisco in the United States; Seville in Spain; Athens in Greece; Palermo in Italy; and Mosul in Iraq.

Cities at the Same Latitude as Seoul



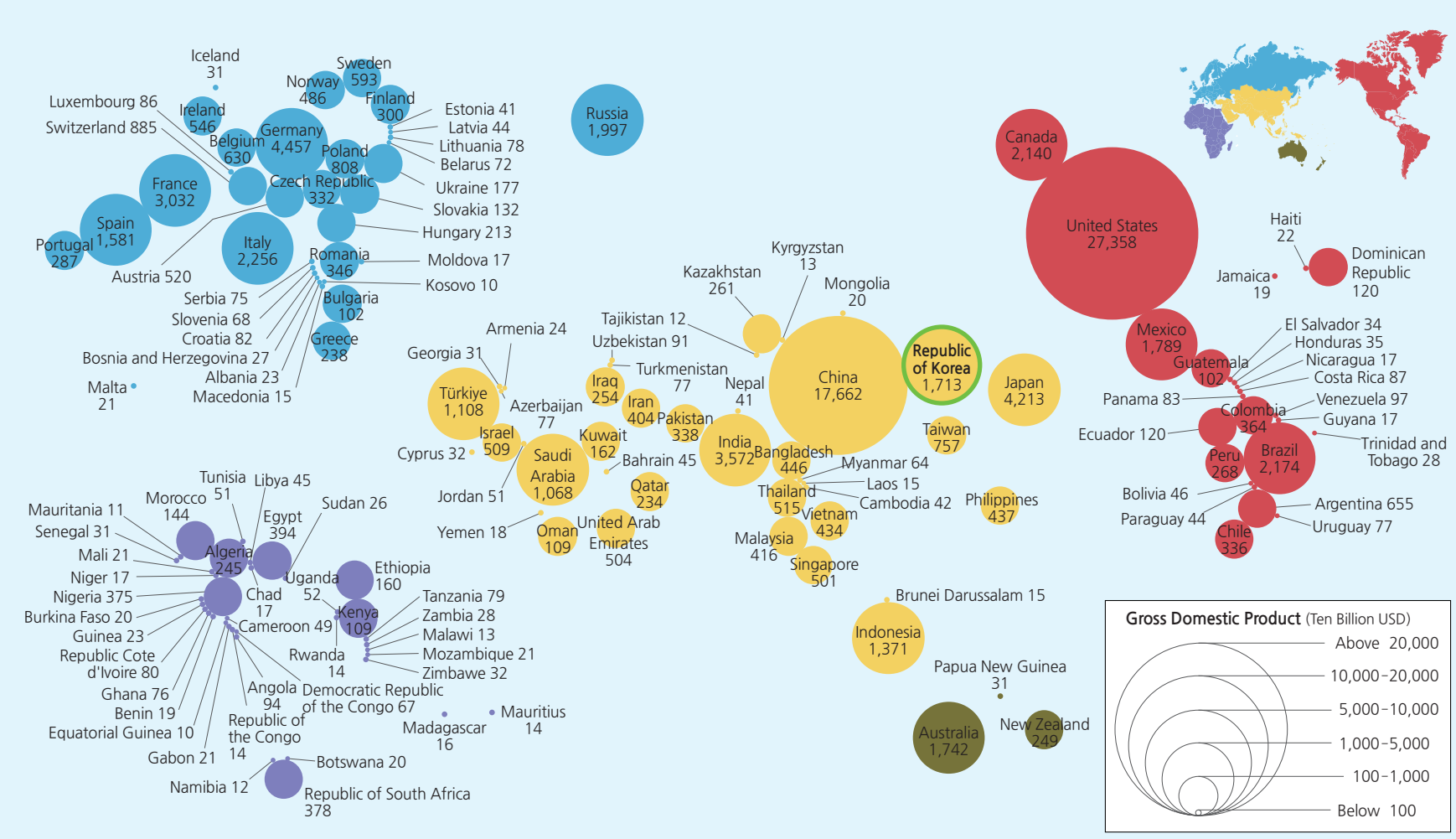


Just as there are various perspectives on the Korean Peninsula, the view of this peninsula located in the northeastern part of the Asian continent has continuously evolved. In the past, the relatively small size of the territory and its geopolitical position as a peninsula led to a negative view, with a perception that it is vulnerable to foreign invasions and domination. However, the current perspective increasingly sees the Peninsula’s location as advantageous, providing an open space with good accessibility for expanding into both the continent and the ocean. This view highlights the economic, cultural, and geographical potential of the region.

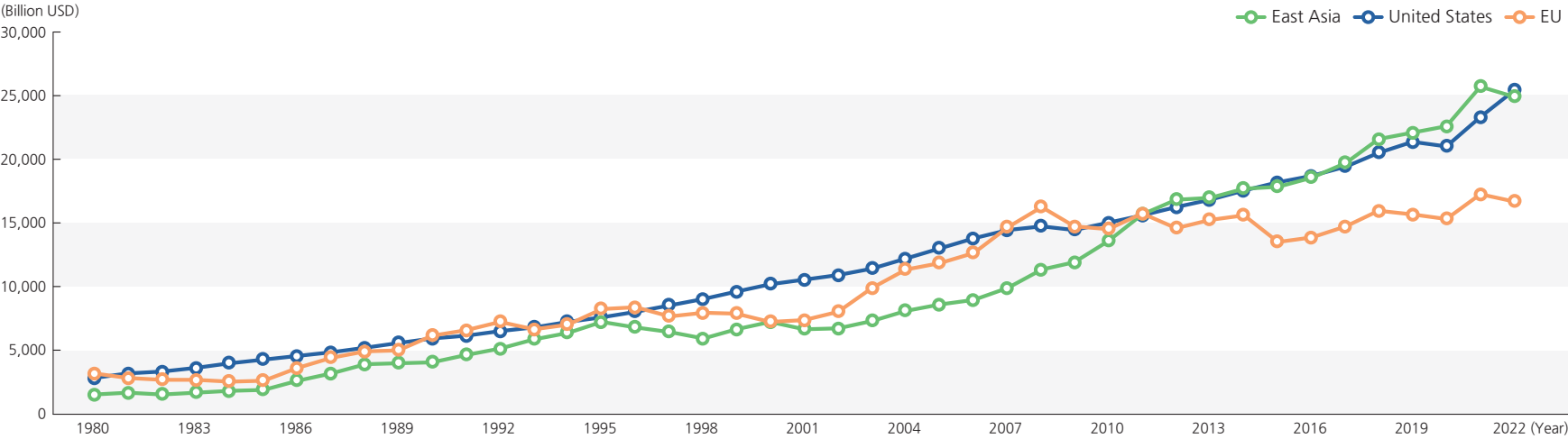
Our territory is located at the junction of the vast Eurasian continent and the immense Pacific Ocean, placing it at the heart of East Asia. Consequently, our nation is recognized as a central hub for trade and logistics, as well as a space where knowledge and information circulate, making it a key region in the local economic

sphere. As East Asia, including the Republic of Korea, Japan, and China, continues to develop rapidly, the global economic focus is shifting to this area. The Gross Domestic Product (GDP) of East Asia, which previously lagged behind that of the United States and the European Union, has surpassed the EU since the 2010s and is now on par with the United States. The trade and economic interdependence within East Asia is steadily increasing. From a continental perspective, there is potential for economic and cultural expansion across the entire Eurasian continent through the North, the enhancement of maritime trade with China and Russia via the East and West Seas, and development through the Northern Sea Route. From a maritime perspective, the Republic of Korea’s status as a Pacific coastal nation enables it to actively engage in economic and cultural exchanges with other countries, exploring further development opportunities

GDP by Country



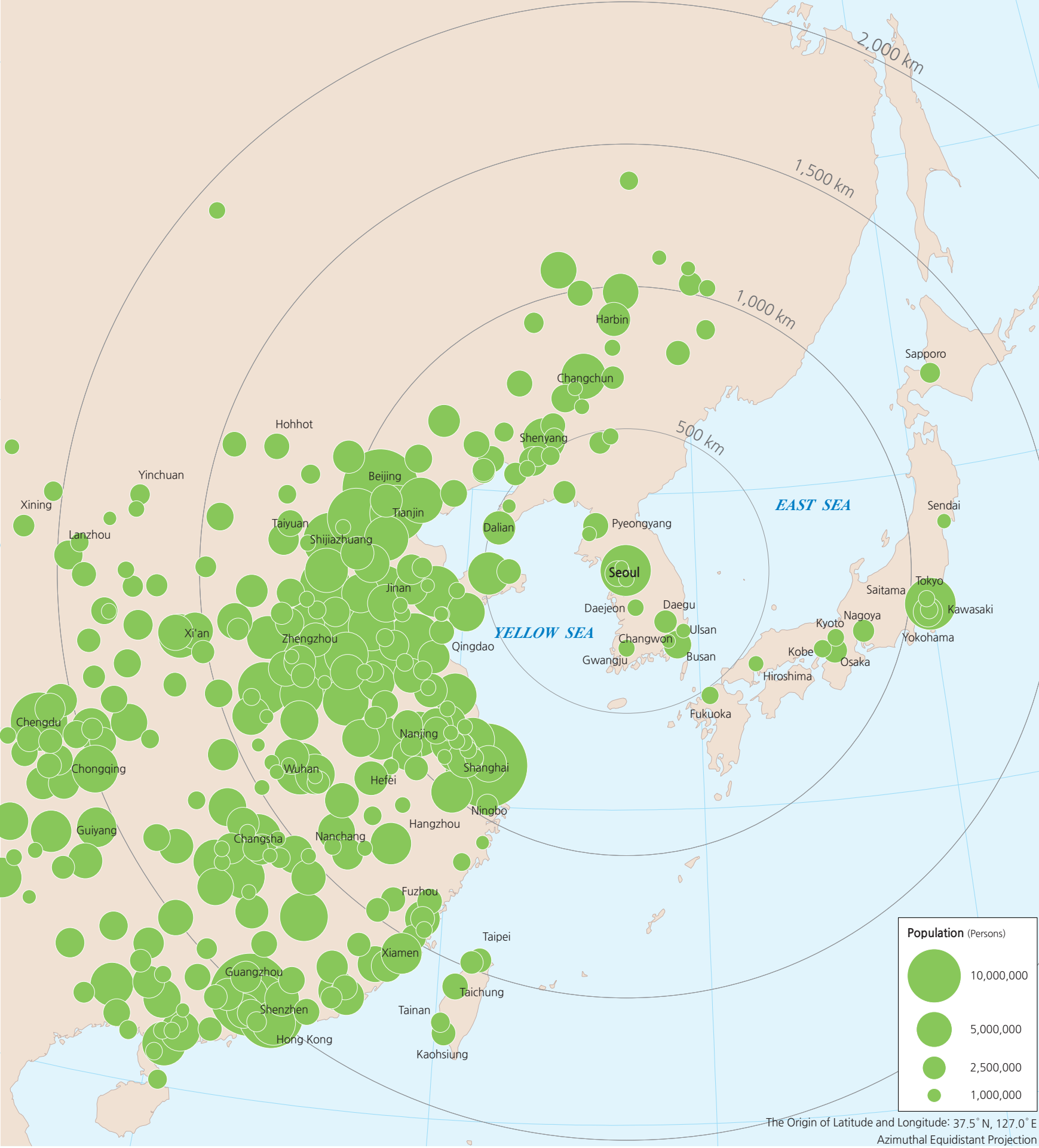
GDP of East Asia, the United States, and the European Union



Within a 2,000 km radius centered on Seoul, there are over 40 major cities with populations exceeding one million. The rapidly growing eastern coastal regions of China and Japan’s major metropolitan areas all fall within this concentric circle

centered on our country. The growth of the East Asian region centered around Seoul continues, with increasing movement of people and goods.

Seoul and Cities with a Population Over 1 Million in East Asia



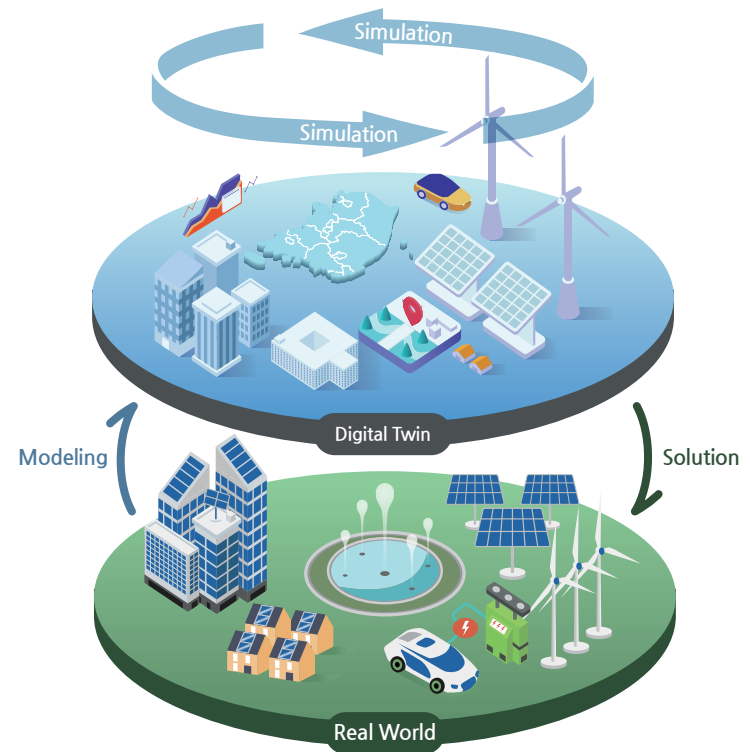
Based on this exchange of people and goods, the Asia-Pacific region accounts for 30% of global aviation demand and is rapidly growing every year. It is projected that over the next 15 years, the Asia-Pacific region will account for 40% of global new aircraft demand. In 2023, Incheon International Airport ranked seventh in the world for international passenger transport and second for international cargo transport, following Hong Kong International Airport. In terms of maritime

logistics, major ports with the highest cargo volumes globally, such as Shanghai, Singapore, and Hong Kong, are located in proximity to the Republic of Korea. Busan Port has emerged as a major maritime logistics hub, ranking seventh globally in container traffic volume. With such active exchanges of people and goods in the East Asian region, the Republic of Korea can continue to expand its connections and significance globally.



## Digital Korea

## Concept of Digital Twin



We are currently living in an era of great digital transformation with the potential to use digital models to simulate real and projected scenarios and solve real-world problems. A digital twin is a digital model of a real-world, physical entity. This digital counterpart to the physical twin (the real-world system, entity, or process) serves as an adaptive model that incorporates data about the physical counterpart in order to model, test, simulate, or monitor the real-world system or entity it is based upon. For example, the digital or virtual model can integrate physical and ecological data with human, social, and economic data based on 3D spatial information of the real world, such as buildings, roads, forests, rivers, and oceans. It faithfully replicates real-world objects like buildings and terrain in the digital realm, allowing for real-time data collection through sensors. The collected data can then be analyzed in various ways, and allow the model to adapt to real changes or to simulate different scenarios. The Republic of Korea is creating a digital twin with the ultimate goal of transforming our national land through the establishment of a smart city system where citizens can directly process and analyze data, enabling more informed decision-making.

In Korea, efforts to build digital twins are being made by the central government, local governments, and the private sector. In particular, the government is developing a high-definition (HD) map as the basic infrastructure for autonomous

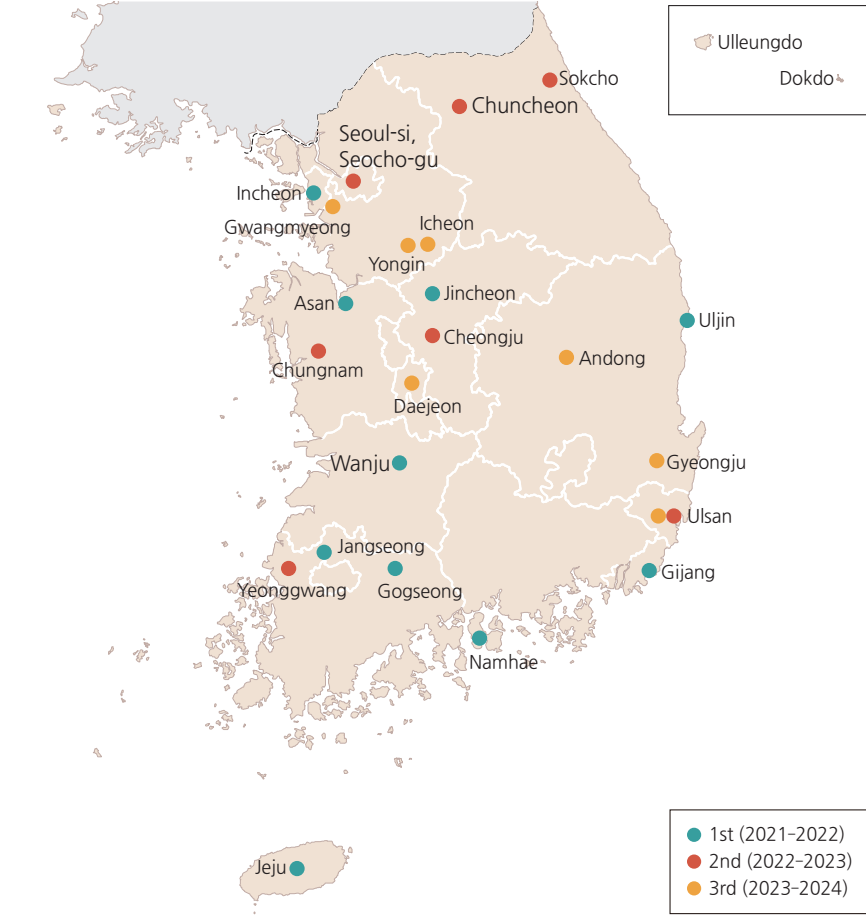
vehicles, enabling them to pre-recognize their location, set and change routes, and comply with road traffic regulations. The plan is to expand the coverage of this map to approximately 33,800 km by 2025, encompassing all national and provincial roads with four or more lanes.

V-World is a national spatial information utilization and support system that integrates and provides spatial information owned by the government, enabling anyone to easily use spatial information across various fields. It offers not only 2D spatial information but also 3D buildings, terrain, and other features of major cities in the country. Users can directly analyze and utilize this information for purposes such as sunlight analysis and landscape reviews. By providing open application program interfaces (APIs), V-World allows more people to develop applications and solve problems using spatial information-based data. Through the open sharing of this information, V-World continuously supports societal development and innovation.

Additionally, local governments are conducting Digital Twin Pilot Projects in collaboration with the central government. This initiative, which started in 2021, aims to discover and pilot innovative ideas that can effectively solve urban issues such as safety and environmental challenges using digital twin technology. For example, Asan City has built a 3D digital twin dataset and 3D spatial information for rivers. By linking rainfall and water level data, they conducted flood damage simulations, identifying areas at risk of flooding. In Chungcheongnam-do, 3D visualization models and base data for cultural heritage sites and surrounding areas were created, resulting in systems for cultural heritage management databases and visibility analysis. In Ulsan, digital twin technology was used for the efficient management of greenhouse gas emissions. A 3D database was constructed for the Nam-gu area of Ulsan, and algorithms were developed to predict carbon emissions and absorption for buildings and vegetation. This allows for visual confirmation of carbon amounts based on the placement and selection of buildings and trees.

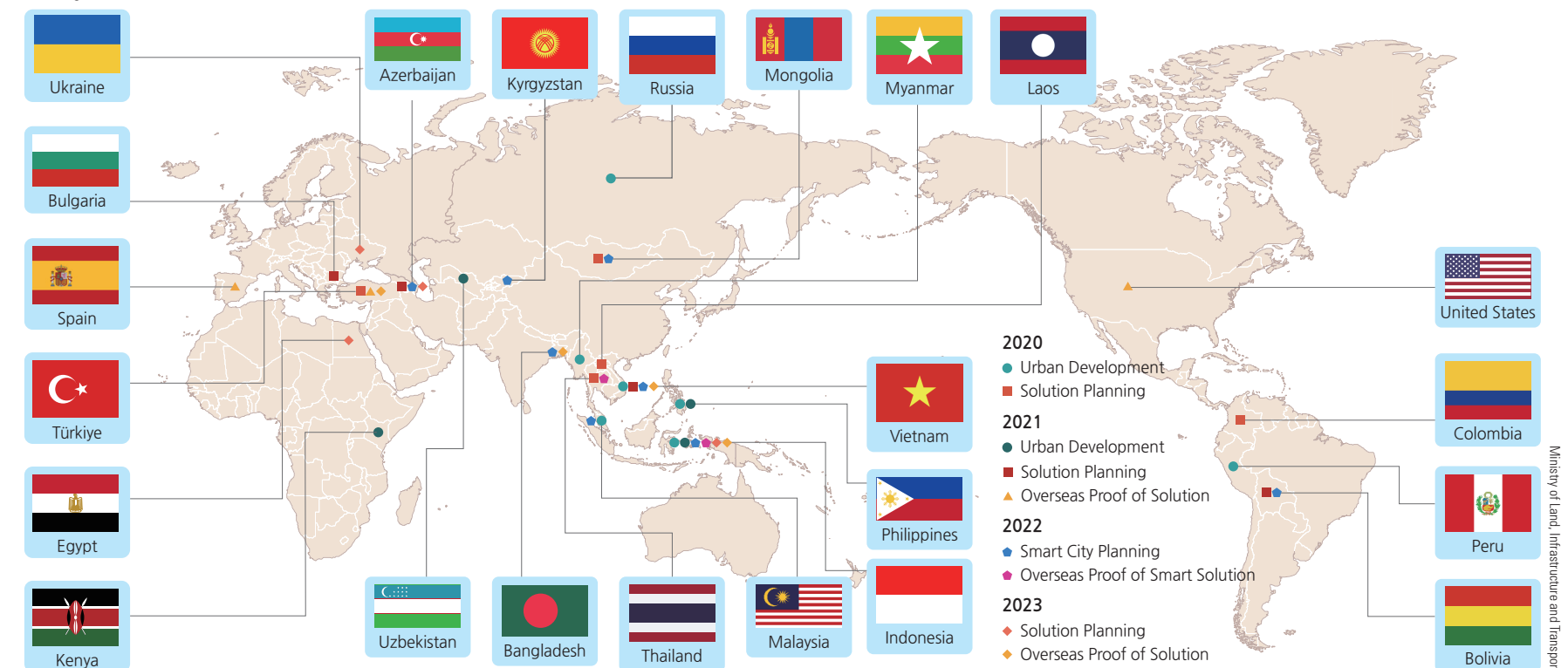
S-Map (Virtual Seoul) is a digital 3D representation of the entire Seoul metropolitan area. It includes not only above-ground facilities but also underground infrastructure, with detailed representations of the interior spaces of major buildings. This platform enables the integration, analysis, and simulation of administrative, environmental, and other types of information within a virtual space. Specifically, it can enhance citizen safety support systems through fire safety management and address urban environmental issues such as fine dust, odors, and heat islands through detailed analysis. Additionally, by utilizing spatial data, S-Map fosters citizen participation and the development of customized services, encouraging citizens to engage directly in policymaking, share their opinions online, and use the platform as a communication channel to share information and interact with the government.

## Location of Digital Twin Pilot Projects

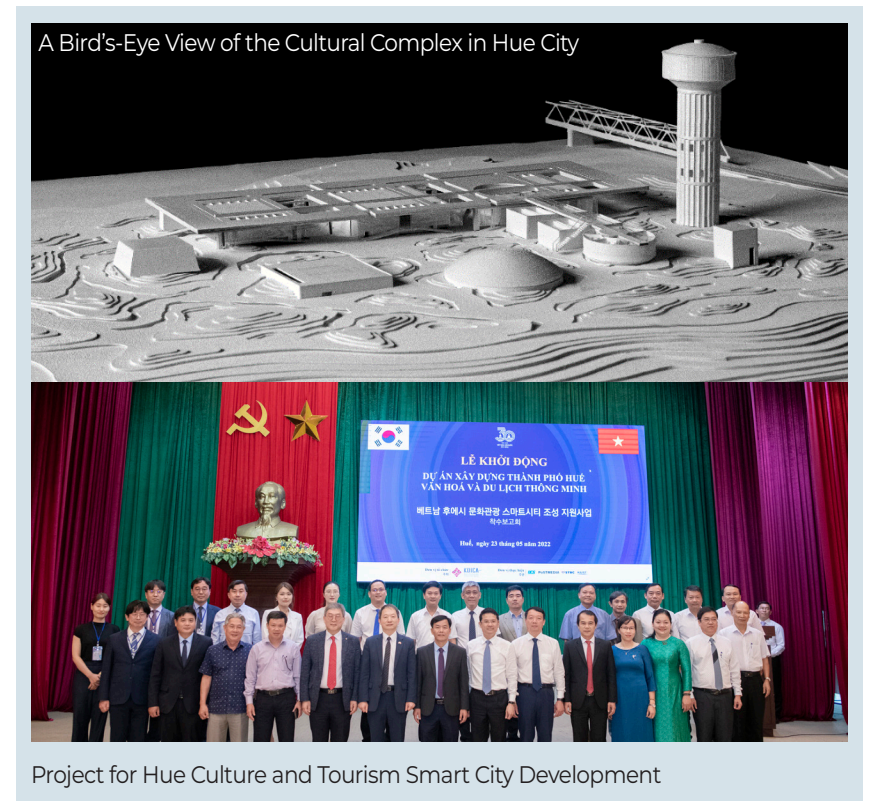


South Korea is also participating in overseas smart city construction using digital twin technology. In 2023, the K-City Network project solicited applications from nations around the globe to support the development of smart cities and expand international cooperation. A total of eight cities were selected for two different kinds of support projects. Ukraine (Uman), Indonesia (New Capital), Egypt (Badr City), and Azerbaijan (Agdam) were selected for planning support projects that aim to establish basic plans related to smart city development. Bangladesh (Rangpur), Vietnam (Haiphong), Türkiye (Sakarya), and Indonesia (Banyumas) were selected for demonstration support projects to facilitate the testing and validation of Korean smart city technologies and products in overseas cities.

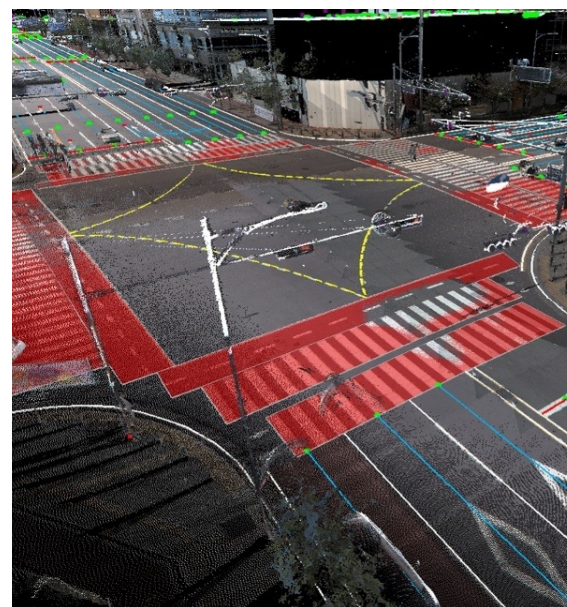
## K-City Network



South Korea has also contributed to various smart city projects abroad through Official Development Assistance (ODA). One notable example is the Project for Hue Culture and Tourism Smart City Development in Vietnam. This initiative focuses on constructing a database for cultural and tourism resources in Hue, analyzing these resources, and providing information to tourists. Additionally, it aims to create digital, integrated cultural spaces and smart streets, where public Wi-Fi and smart lighting systems will be installed.



The application of digital twin technology to Korean national territory enables the analysis and simulation of complex land issues that are difficult to perceive or resolve in the real world. This technology allows these issues to be tackled in a virtual environment, providing insights and simulations that aid decision-making processes. Furthermore, South Korea is constructing digital twins to facilitate easier public awareness and direct citizen participation in analyzing data related to national land issues.



HD Map



Seoul Metropolitan S-Map, Seoul City Hall



Indoor S-Map of Seoul City Hall