

Environmental Conditions and Environmental Quality Trends in Korea

Key Facts

Area: 100,033km²
Population: 50,220,000
Density: 501/km²
Average Temperature: 12.5°C
Annual Precipitation: 1307.7mm

Note: Population and density (2013),
Average temperature and annual precipitation
(1981-2010 average)

Korea has over 50 million people in about 100 thousand km² territory, resulting in a high population density. Mountains account for approximately 64% of the national territory, leaving only a limited proportion of the land for human residence. The country has the monsoon climate and 1,307.7mm annual average precipitation. However, 50-60% of the rainfall is concentrated during summer season placing the country at a high risk of water stress. Ecological axes across the country were disconnected or damaged during the rapid economic growth since 1960s. Population growth, urbanization and industrialization have accompanied air and water pollution, increasing wastes, destruction of ecosystems. However, Korea has come up with a wide variety of policy measures to overcome the inherent disadvantages and improve environmental quality across the country and made remarkable accomplishments in many areas.

Air Quality

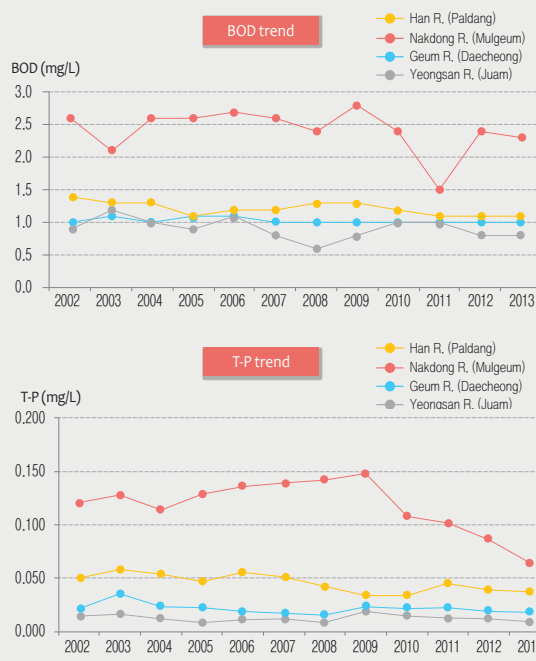
SO₂ and CO concentration in the air have significantly decreased since late 1990s with a slight reduction of PM₁₀. NO₂ and O₃ have been maintained below the standards, although without notable improvement in the figures.

	1998	2000	2005	2010	2013
SO ₂ (ppm)	0.009	0.008	0.006	0.005	0.006
NO ₂ (ppm)	0.020	0.024	0.022	0.025	0.024
O ₃ (ppm)	0.020	0.020	0.022	0.023	0.026
CO (ppm)	1.0	0.9	0.6	0.5	0.5
PM ₁₀ (μg/m ³)	55	53	57	51	49

Trend in Air Pollution Levels

Water Quality, Water Supply and Sewerage

Water quality, including those in the four major rivers has shown steady improvement thanks to continued policy efforts, especially in BOD and T-P level. Water supply and sewerage service have greatly expanded standing at 98.5% and 92.1% respectively. The government is now focusing on further expanding the service to cover rural villages.



Water Pollution Trend in Four Major Rivers

	1980	1990	2000	2010	2013
Water Supply Rate (%)	55.0	78.4	87.1	97.7	98.5
Sewerage Distribution Rate (%)	8.3	32.9	70.5	90.1	92.1

Trends in Waterworks and Sewerage Distribution

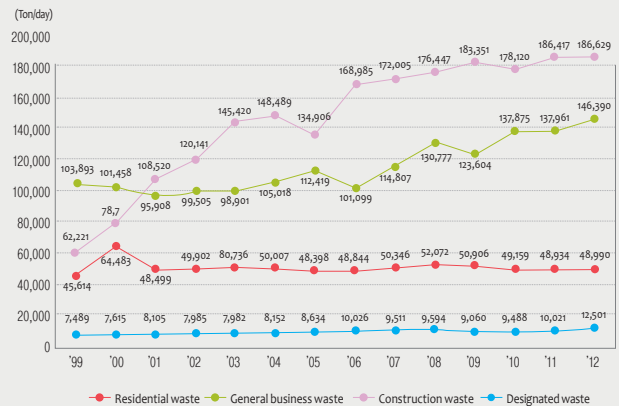
Waste

Generation of domestic wastes has been substantially decreased since the enforcement of volume-based garbage bag system and separate disposal of recyclables and food wastes, staying at a level around 0.95kg/day/person (as of 2012) down from 1.3kg/day/person in 1994. When it comes to waste treatment, recycling rate has been greatly increased with a remarkable decrease in landfilling, while seeing a slight increase in incineration.

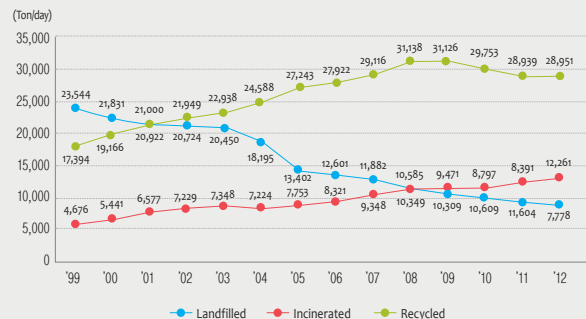
Nature

A total of 42,756 indigenous plant and animal species inhabit Korea, and 2,422 of them are endemic species.¹⁾

For the purpose to conserve natural ecosystems, the government has designated 246 plants and animals as endangered wild species while managing legal protected zones including 84 Natural Parks, 32 Landscape/Ecosystem Protected Areas, and 219 Protected Island Areas.



Trends in Waste Generation



Residential Waste Treatment

1) Number of indigenous species (2014), endemic species (2014)