



Ministry of Land and Environment Protection, DPRK

Wetland Conservation in the Democratic People's Republic of Korea



RAMSAR COP 13, DUBAI

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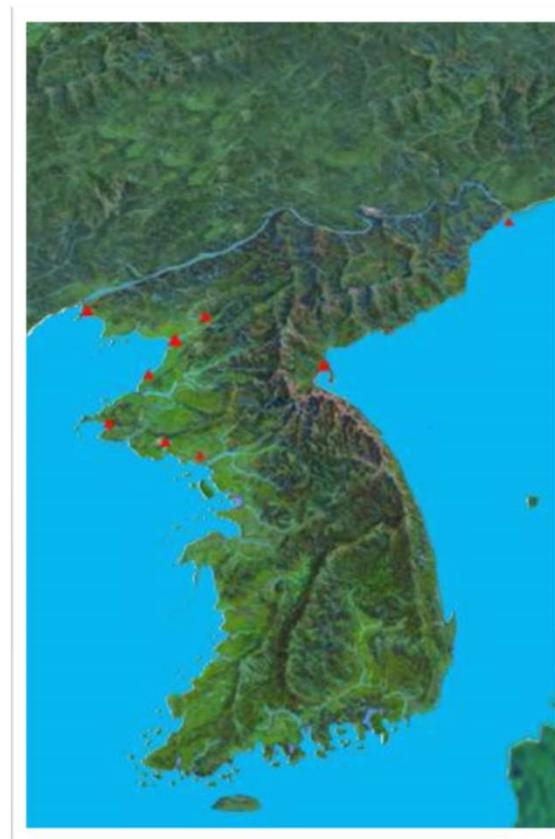
Geographic Condition, Wetland Types and their distribution in DPRK





Geographic Condition of the DPRK

- The DPRK is located in the eastern part of North-East Asia.
- Topographical feature is that the country is consisting large part of mountainous area and rivers and stream while it has long shoreline.
- The country is in the temperate zone and has four distinctive seasons-spring, summer, autumn and winter. The annual mean temperature is 8~12°C and the climate differs from region to region.
- Annual mean precipitation is about 1 000~1 200 mm, which is quite adequate.





Important Stopover site of East Asian Australasian Flyway (EAAFP)

- West Sea of Korea is located on the East Asian- Australasian Flyway and plays as an important stopover site of the migratory birds.
- In May, during the migration period, more than 2 millions of migrant shorebirds accounting for 40 % of total migrant shorebirds stage in intertidal flats in West Sea of Korea and fly to their final destination.
- 180 species of migratory birds including 26 rare and endangered species such as Spoon-billed sandpiper, oystercatcher, and Saunder's Gull were recorded in the West Sea .



Types of wetlands in DPR Korea

- Coastal wetlands

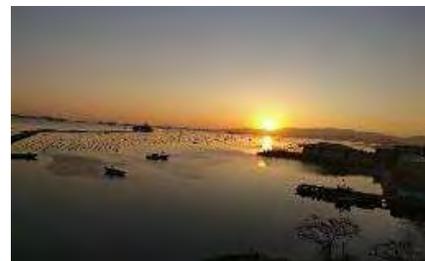
Intertidal flats, marine waters (less than 6 m deep at the low tide), estuary, rocky marine shores, sand shores, lagoon

- Inland wetlands

Rivers, streams, lake, subterranean hydrological system (hot-spring), marshes, inland delta, peatland

- Artificial wetlands

Paddy fields, reservoir, irrigation system, salt pans, fish farms



Code	Wetland Types	Representative wetlands
Marine/Coastal Wetlands		
A	Permanent shallow marine waters	Water area around Is. Al, Hamhung bay, Estuary of River Nam
B	Coral reefs	Some areas on east and west coastal area
D	Rocky marine shores	Castal area of estuary of Nam River, Is. Al, Is.Rab
E	Sand, shingle or pebble shores	sand bars in Lake Sijung, Lagoon Chona
F	Estuarine waters;	Estuaries of Amnok. River, Tuman River and Chongchon River and etc.
G	Intertidal mud, sand or salt flats.	Is.Maan Tideland, Taedong Bay, Ongjin Bay
H	Intertidal marshes;	Is. Yo at the estuary of Chongchon River, Is.So at the estuary of Amnok River and etc.
J	Coastal brackish/saline lagoons;	Lagoon Kwang, Lake Tongjong, Lake Sijung and etc.
K	Coastal freshwater lagoons	Lake Jangyon, Lake Mugye and etc.
Zk(a)	Karst and other subterranean hydrological systems, marine/coastal	Kumran Cave

Inland Wetlands

L	Permanent inland deltas.	Rungra Islet, Ryanggak Islet and Ssuk Islet in Taedong river
M	Permanent rivers/streams/creeks	Amnok River, Tuman River, Taedong River, Chongchon River, Kumya River and etc.
N	Seasonal/intermittent/irregular rivers/streams/creeks.	common
O	Permanent freshwater lakes (over 8 ha)	Lake Chon, Lake Samji and etc.
P	Seasonal/intermittent freshwater lakes (over 8 ha);	some
Sp	Permanent saline/brackish/alkaline marshes/pools.	some
U	Non-forested peatlands	Paegam Peatland
Xp	Forested peatlands	Distributed in some areas of North Hamgyong Province and Ryanggang Province
Y	Freshwater springs; oases.	common
Zg	Geothermal wetlands	Hot springs in Kyongsong, Songhung, Sechon, Jongdal, Sinchon, Unchon, Sektang and etc.
Zk(b)	Karst and other subterranean hydrological systems, inland	Ryongmun Cavern and Paekryong Cavern

Human-made wetlands

1	Aquaculture (e.g., fish/shrimp) ponds	Fishing ponds in Is.Tasa Tideland and Poman-ri
2	Ponds	farm ponds, stock ponds, salt pans
3	Irrigated land	Pyongyang Plain, Yoldusamchonri Plain, Yonbaek Plain., Jaeryong Plain and etc.
4	Seasonally flooded agricultural land	Distributed in small size around the river basin
5	Salt exploitation sites;	salt pans in Namyang, Yonan, Ongjin Bay, etc
6	Water storage areas;	Mayang Reservoirs,lake Unpha, Lake Sohung, Lake Yonphung
7	Excavations;	Mining pools in Mundok County
8	Wastewater treatment areas;	sewage farms in some places
9	Canals and drainage channels, ditches.	some

Wetland types and their distribution in the DPR Korea

No	Region	Types of wetlands
1	Coastal Area in East Sea of Korea	Lagoon, bays, rocky marine shores, estuary, etc.
2	Coastal Area in West Sea of Korea	Intertidal flat, estuary, islands, etc.
3	Inland Area	Lake, reservoirs, rivers, streams, paddy field, salt pan, fish farm, Karst



Wetland Conservation in the DPRK



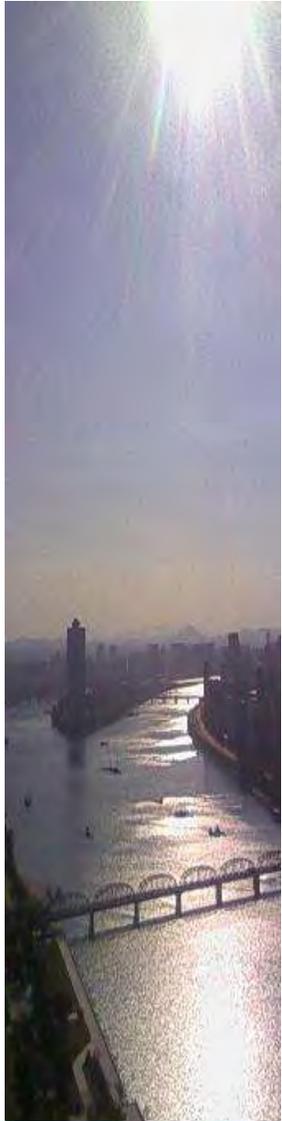
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Legal Framework on Wetland Conservation

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Constitutional Framework for Wetland Conservation

Laws	Contents related to the wetland conservation
Law on Environment Protection , DPRK	It stipulates the establishment of natural parks and protected areas for natural, animal, plants and marine resources conservation; and MoLEP regularly surveys the environmental status and take appropriate measures to prevent the pollution in the protected areas.
Law on rivers and streams, DPRK	It stipulates the improvement of rivers and streams; increase of national investment in river management; sustainable management of rivers and streams in prospective way; and improvement of the national economy and people's livelihood by establishing the integrated water resources management plan.



Constitutional Framework for Wetland Conservation

Laws	Contents related to the wetland conservation
Law on prevention of marine pollution	It stipulates to develop the rules and regulations for prevention of marine pollution, thus improving the water quality and marine resources.
Law on Water Resources, DPRK	It stipulates that the national government establishes the systematic, integrated and sustainable approach for the use of water resources and develop scientific research while building treatment facilities of sewage water and sediments for water environment protection.
Law on Land, DPRK	National authority for land management decides the establishment of protection structures such as embankment in rivers, streams, lakes and reservoirs; and to protect them from toxic and contaminated waters as well as sewage waters.
Law on Fishery, DPRK	It stipulates the conservation of sea, rivers, reservoirs, lakes and marshes from the discharges of mining wastes, mistreated sewage water, toxic and radioactive waters that exert adverse impacts on marine resources.



Constitutional Framework for Wetland Conservation

Laws	Contents related to the wetland conservation
Law on scenic spots and natural monuments protection, DPRK	It stipulates the protection in the protected sites with beautiful landscape such as mountains, seaside, lakes, waterfalls; and geographically unique places; or those with scientific and educational values. It also mentions about improving scientific research and introducing advanced technologies.
Law on Conservation of Useful Animals, DPRK	It stipulates that MoLEP conducts the regular survey and registration of the distribution of useful animals and other natural resources while forbidding illegal hunting, grazing and resource collection.
Law on Aquaculture, DPRK	It stipulates that the national authority for fishery, MoLEP and its sub-entities at different levels should divide their responsible field for fishery and manage fishery in a sustainable manner.



National policy for wetland conservation

- Preventing the wetland ecosystem damages caused by the economic developments through the establishment of the national impact assessment system
- Establishment of protected areas and conservation and management
- Developing and implementing the wetland reserve management plan
- Regular surveys on biodiversity



Wetland conservation

Establishment of reserves and their management

Establishment of reserves that are important for the migratory bird conservation

No.	Name of the reserves	No.	Name of the reserves
1	Mundok Migratory Bird (Wetland)Reserve	9	Kwangpho Migratory Bird (Wetland)Reserve
2	Rason Migratory Bird (Wetland)Reserve	10	Orangchon Migratory Bird (Wetland)Reserve
3	Ongjin Migratory Bird (Wetland)Reserve	11	Sindo Migratory Bird (Wetland)Reserve
4	Kangryong Migratory Bird (Wetland)Reserve	12	Taegamdo Seabird Protected Area
5	September 18 th Migratory Bird (Wetland)Reserve	13	Unmudo Seabird Protected Area
6	Paechon Yokkudo Migratory Bird (Wetland)Reserve	14	Rapdo Seabird Protected Area
7	Tongjong Lake Migratory Bird (Wetland)Reserve	15	Mugido Seabird Protected Area
8	Kumya Migratory Bird (Wetland)Reserve	16	Rason Alsom Seabird Protected Area

Scientific research studies for wetland conservation and management

Surveys on ecosystem, compiling data base, research on wetland conservation

- Surveys on ecological characteristics of important wetlands
- Regular surveys on migratory birds
- Update the National Wetland Inventory
- Research on conservation methods on wetland reserve management planning
- Wise use of wetlands

National Activities for Wetland Ecosystem Conservation

Improving public awareness on importance of the wetlands

- Communicating and introducing importance of wetlands through mass-media on the occasion of the environmental days
- 1st National Workshop on Wetlands
- 2nd and 3rd National Workshops on the occasions of “World Migratory Day” and “International Biological Diversity Day”
- Field training and surveys in Mt. Kumgang
- National Workshop on Conservation of West Sea on the occasion of “World Environment Day”
- Improving local communities’ awareness on importance of wetlands through publication of training materials



International cooperation for wetland conservation



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International Cooperation for Wetland Ecosystem Conservation in DPRK

- Joint survey for the migratory birds and wetland ecosystem conservation with international organizations and other countries
- Capacity-building for experts through oversea trainings at Ramsar sites in other countries
 - Study tour to Mai Po Ramsar Site in Hong Kong
- Participating in the international workshops for wetland and migratory bird conservation
 - COP , international workshop in Cambodia, international workshop in Yancheng



DPRK's Accession to the Ramsar Convention



Ramsar Convention

- Adding Mundok and Rason Migratory Bird Reserves to the Ramsar List (2018.1)
- Convention enters into force from May 16, 2018 (170th Contracting Party)



Wetland Inventory of DPRK (2 edition)

- Update of Wetland Inventory

- Listing 56 important coastal, inland and artificial wetlands
- Contribution to the national policy-making for the wetland conservation and management
- Baseline data for achieving SDG 15.1, 15.9

- Geographic conditions of DPRK
- General information on wetlands in DPRK
- Important wetlands in DPRK
 - ✓ summary
 - ✓ Fauna and flora
 - ✓ Justification of Ramsar Criteria
 - ✓ Conservation and management status
 - ✓ Ecosystem services



Way forwards for Wetland Ecosystem Conservation

- Improving the public awareness and technical expertise on wetland conservation
- Increase capacity of relevant officials and experts for wetland conservation and wise use
- Improving the national management system for wetland conservation and its wise use
- Improving and strengthening legal framework for wetland conservation
- Conducting regular survey and scientific research related to wetland ecosystem and migratory bird conservation
- Creating model site of best practices in wise use of wetland and widespread them
- Designating more Ramsar Sites





The DPRK will make continuous efforts for the wetland conservation, contributing to the people's welfare and sustainable development.





Thank you!

