

# Korean Protected Areas in WDPA



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**Nov. 15<sup>th</sup> 2013**



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한국보호지역포럼  
Korea Protected Areas Forum

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Gyeongju N.P.



# I . The definitions of Protected Areas



# The definitions of Protected Areas

- **According to IUCN(International Union for Conservation of Nature),**

## **A protected area is**

'A clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values'

# The definitions of Protected Areas

- **According to CBD(Convention on Biological Diversity),**

## **A protected area is**

'A geographically defined area which is designated or regulated and managed to achieve specific conservation objectives'



## II. General Info on Korean Protected Areas



Dadohae Haesang N.P.

# Designation Status of Korean Protected Areas

## Total

**1,491 PAs, 24,609.4km<sup>2</sup>**

**Terrestrial and Inland water (100,148km<sup>2</sup>)**

**: 18,588.8km<sup>2</sup> (18.5%)**

**Coastal and Marine (443,838km<sup>2</sup>)**

**: 6,020.6km<sup>2</sup> (1.4%)**

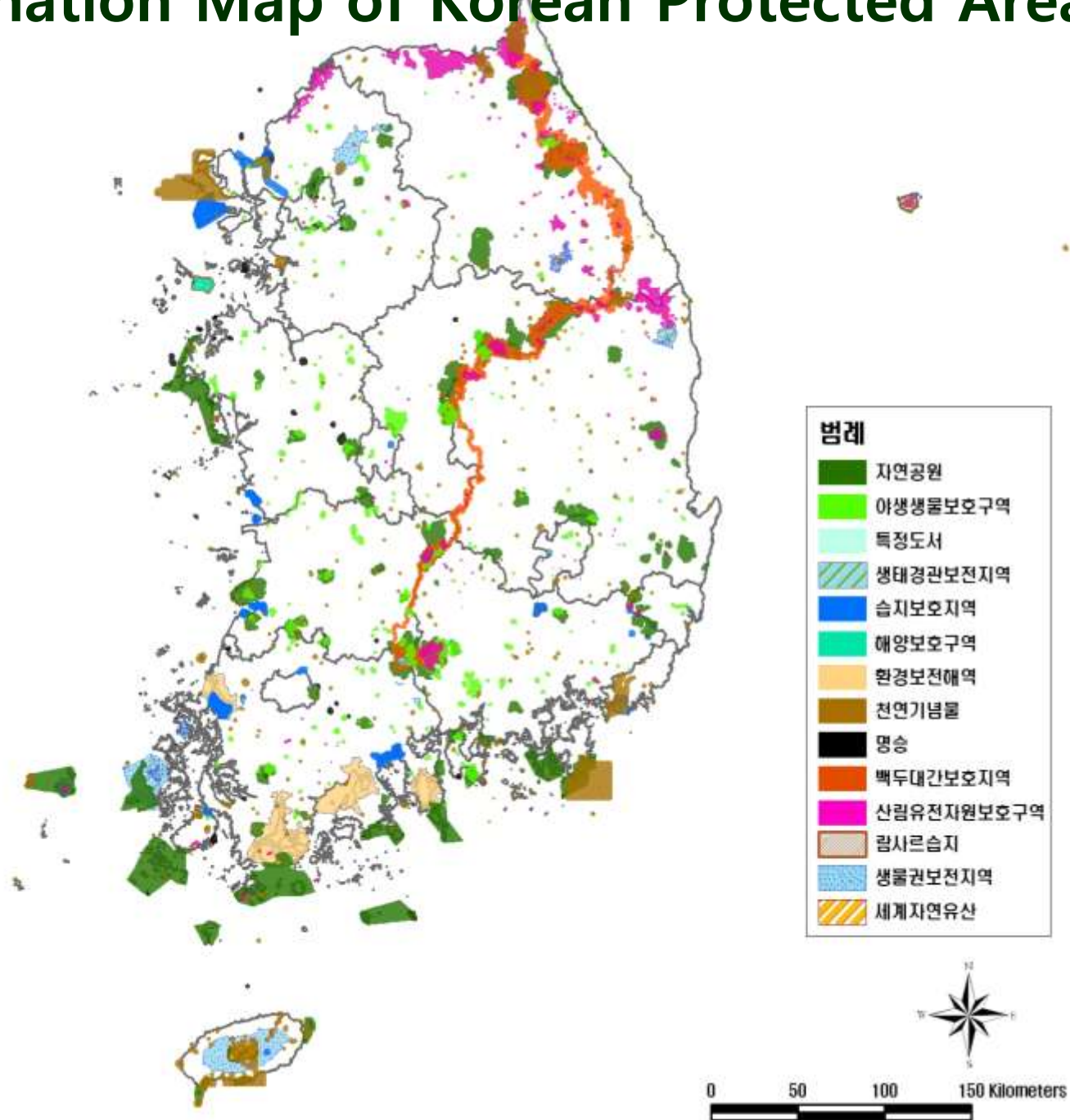
## PAs by Korean Laws

- 10 Laws
- 1,467 Sites
- 20,208.2km<sup>2</sup>

## PAs by International Conventions

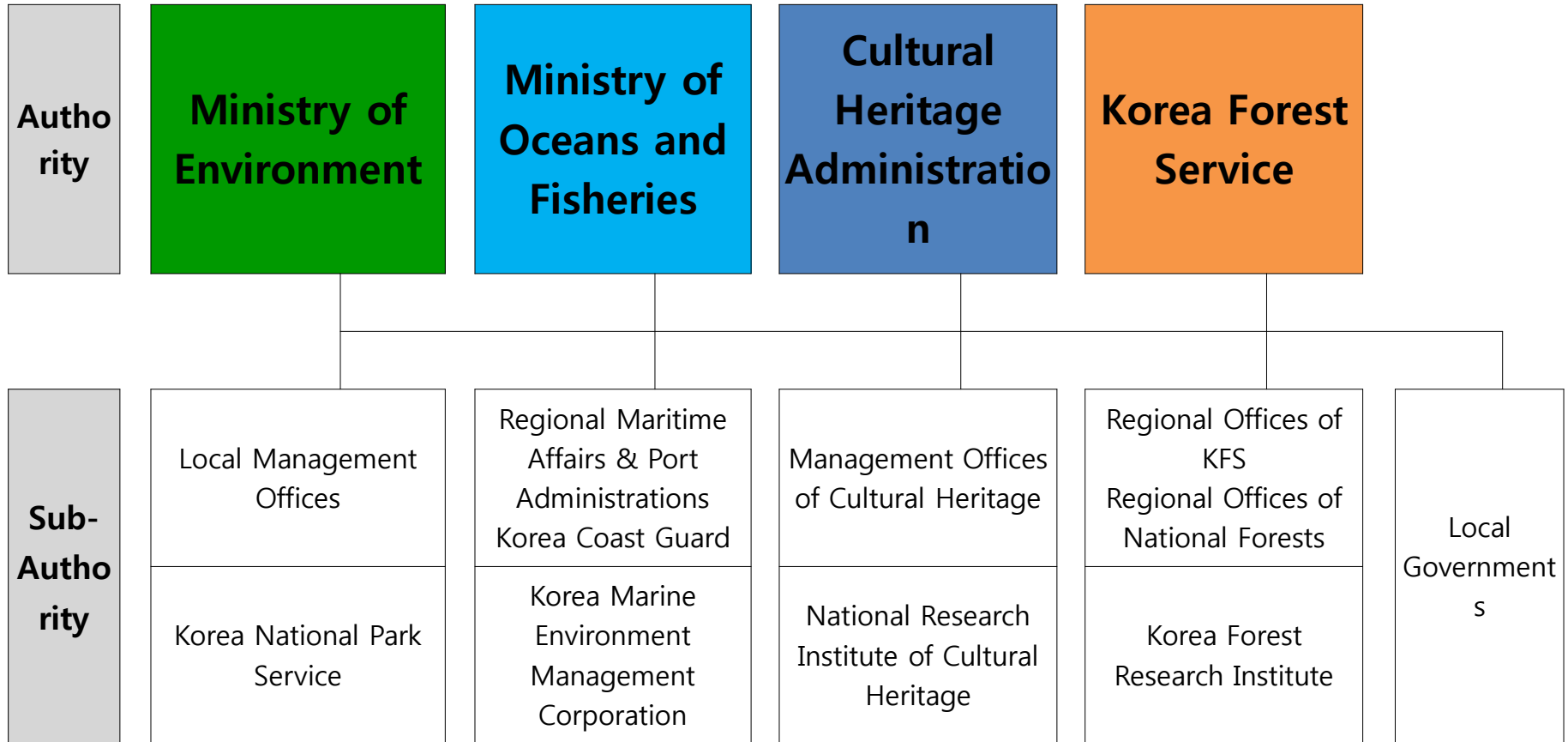
- 4 Types
- 24 Sites
- 4,401.2km<sup>2</sup>

# Designation Map of Korean Protected Areas





# An Organizational Chart of managing Korean Protected Areas



# Designation Status of Korean Protected Areas by Ministries

Authority	# of Sites	Area (km <sup>2</sup> )	Land (km <sup>2</sup> )	Ocean (km <sup>2</sup> )
Ministry of Environment	700	9,504.2	6,238.8	3,265.5
Ministry of Oceans and Fisheries	10	2,023.5	933	1,090.5
Cultural Heritage Administration	294	1,823.9	828.8	995
Korea Forest Service	463	6,856.7	6,856.7	0
<b>total</b>	<b>1,467</b>	<b>20,208.3</b>	<b>14,857.3</b>	<b>5,351</b>

# Designation Status of Korean Protected Areas by International Conventions

International Conventions	# of Sites	Area	Land	Ocean
UNESCO MAB BR	4	2042.2	1591.1	451.1
World Natural Heritage	1	190	190	0
Ramsar Convention	17	176.8	13.3	163.5
Global Geoparks Network	2	1992.3	1937.2	55.1
<b>total</b>	<b>24</b>	<b>4401.3</b>	<b>3731.6</b>	<b>669.7</b>



### Ⅲ. EPI (Environmental Performance Index)



Wolchulsan N.P.

# EPI (Environmental Performance Index)

- The EPI is a method of quantifying and numerically benchmarking the environmental performance of a state's policies.
- It developed by Yale University (Yale Center for Environmental Law and Policy) and Columbia University (Center for International Earth Science Information Network) in collaboration with the World Economic Forum and the Joint Research Centre of the European Commission.

# Contents of EPI (Environmental Performance Index)

OBJECTIVE	ENVIRONMENTAL HEALTH		
POLICY CATEGORIES	Environmental Burden of Disease	Water (effects on humans)	Air Pollution (effects on humans)
INDICATORS	1. Environmental Burden of Disease	2. Adequate Sanitation	4. <a href="#">Indoor Air Pollution</a>
		3. Drinking Water	5. Urban Particulates
			6. Local Ozone
OBJECTIVE	ECOSYSTEM VITALITY		
POLICY CATEGORIES	Air Pollution (effects on ecosystems)	Water	Biodiversity and Habitat
INDICATORS	7. Regional Ozone	9. Water Quality Index	11. Conservation Risk Index
	8. <a href="#">Sulfur Dioxide Emissions</a>	10. Water Stress	12. Effective Conservation
			13. Critical Habitat Protection
			14. Marine Protected Areas
POLICY CATEGORIES	Productive Natural Resources	Productive Natural Resources	Productive Natural Resources
POLICY SUB-CATEGORY	Forestry	Fisheries	Agriculture
INDICATORS	15. Growing Stock	16. Marine Trophic Index	18. Irrigation Stress
		17. Trawling Intensity	19. Agricultural Subsidies
			20. Intensive Cropland
			21. Burnt Land Area
			22. Pesticide Regulation
POLICY CATEGORIES	Climate Change		
INDICATORS	23. Emissions per capita		
	24. Emissions per electricity generated		
	25. Industrial carbon intensity		



# EPI (Environmental Performance Index)

- EPI Status of South Korea

item	2010	2012
Environmental Performance Index	94	43
biodiversity and habitat	119	58

※ The ratio of PA to EPI was increased.  
4.2% in 2010 → 17.5% in 2012

# EPI (Environmental Performance Index)



South Korea

EPI Rank: **43**  
 Pilot Trend EPI Rank: **13**  
 Population: 48,875,000  
 Land Area (sq. km.): 100,152  
 GDP Per Capita: \$27,028

Countries with similar levels of performance:

- Japan
- Taiwan
- Belgium
- Denmark
- United States of America

Countries with similar trend performance, 2000-2010:

- Côte d'Ivoire
- Thailand
- Ghana
- Yemen
- Algeria

## Country Profile: South Korea

Level of Aggregation	Performance Score	Rank	Performance Score with Trend Shading	Pilot Trend Results Score (-50 to 50)	Rank
<b>Environmental Performance Index</b>	57.2	43		11.3	13
<b>Environmental Health</b>	91.3	32		24.5	15
Air (Effects on Human Health)	89.0	51		10.9	32
PM 2.5	78.0	95		21.8	18
Indoor Air Pollution	100.0	1		0.0	64
Environmental Burden of Disease	94.5	23		31.0	25
Child Mortality	94.5	23		31.0	25
Water (Effects on Human Health)	87.5	38		25.0	19
Sanitation	100.0	1		0.0	64
Drinking Water	74.9	50		30.0	1
<b>Ecosystem Vitality</b>	42.6	87		8.5	50
Agriculture	36.6	104		8.6	50
Agricultural Subsidies	7.2	120		12.9	42
Pesticide Regulation	95.5	1		0.0	29
Air (Ecosystem Effects)	53.7	40		49.8	7
SO2 per Capita	42.3	58		30.0	1
SO2 per GDP	65.0	17		46.5	8
Biodiversity and Habitat	64.8	56		8.5	32
Critical Habitat Protection					
Marine Protected Areas	77.4	42		1.2	40
Biome Protection	34.2	96		26.1	18
Climate Change	22.7	112		-14.5	99
CO2 per Capita	22.4	116		-49.3	106
CO2 per GDP	38.1	91		14.9	57
CO2 per KWH	9.2	77		-14.4	100
Renewable Electricity	1.0	110		-1.8	84
Fisheries	13.7	101		6.7	24
Trawling Intensity	7.0	95		6.6	32
Fish Stocks Overexploited	20.4	71		6.8	25
Forests	83.2	63		8.4	63
Forest Cover	70.1	79		-15.0	79
Growing Stock	100.0	1		0.0	1
Forest Loss	76.7	53		-10.2	53
Water Resources (Ecosystem Effects)	22.8	84		36.6	84
Water Use	22.8	84		-36.6	84

To see the plot of performance versus trend performance, please return to the [aggregate view](#).

# IV. CBD PoWPA

(Convention on Biological Diversity Programme of Work on Protected Areas)





# CBD PoWPA

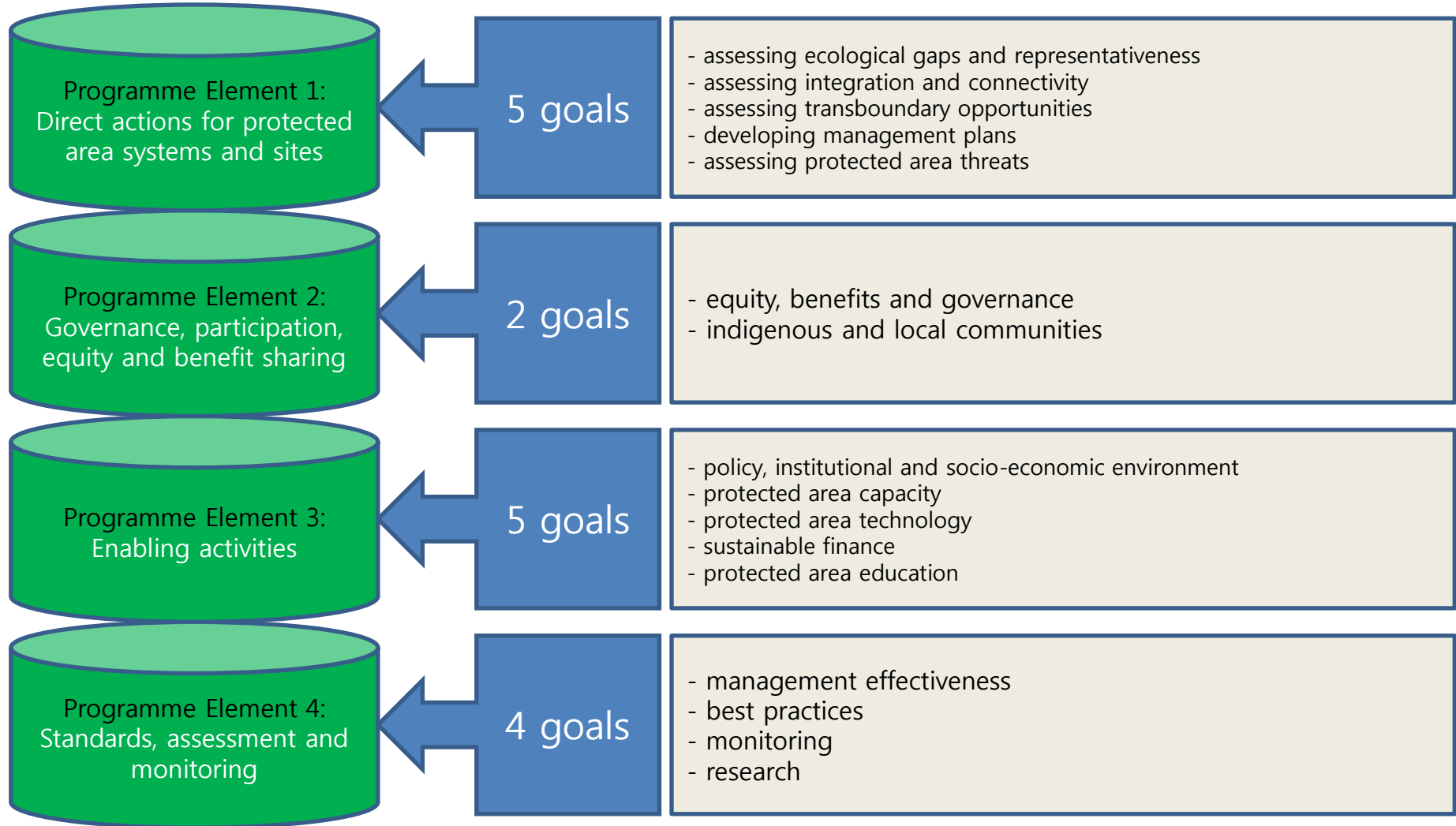
- CBD COP 10 at Nagoya, Japan, on October, 2010, had seventeen cross-cutting programmes.
- One of them was the Programme of Work on Protected Areas (PoWPA).
- Conclusively, the CBD PoWPA has set a conservation target of 17% of terrestrial and inland water areas and 10% of marine and coastal areas by 2020.
- Protected areas are considered as important instruments to reach the Aichi Nagoya biodiversity target by 2020.
- The CBD PoWPA provides a globally-accepted framework for creating comprehensive, effectively managed and sustainably funded national and regional protected area systems around the globe.

# CBD PoWPA

- CBD COP 10 Decision X/2 *Adopted* the Strategic Plan for Biodiversity 2011-2020 with its Aichi Targets.
- The plan has 20 targets under 5 strategic goals.
- Strategic Goal C: Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity
- Target 11: By 2020, **at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas**, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscape and seascapes.

# The Framework of CBD PoWPA

4 programme elements & 16 goals



# CBD PoWPA

- In CBD COP 10 Decision X/31, the Conference of the Parties invites Parties to
  - 1) Develop a long-term action plan or reorient, as appropriate, relevant existing plans, taking into account national circumstances and priorities, involving all relevant stakeholders including indigenous and local communities, for the implementation of the programme of work on protected areas, including appropriate implementation mechanisms, and, where appropriate, detailing list of activities, timelines, budget and responsibilities, based upon the results of key assessments of the programme of work on protected areas, with a view to contributing to the implementation of the Strategic Plan for Biodiversity 2011-2020.
  - 2) *Encourages* Parties to share and update relevant information on their protected areas system with the World Database on Protected Areas, which includes the United Nations List of Protected Areas.



# V. WDPA (World Database on Protected Areas)



# WDPA (World Database on Protected Areas)

- As a joint project of IUCN and UNEP, WDPA is the largest assembly of data on the world's terrestrial and marine protected areas.
- There are over 200,000 sites classified by IUCN PA categories in WDPA
- In South Korea, approximately 300 out of roughly 1,500 sites have been registered (including 20 national parks) in WDPA
- Korea Protected Areas Forum is actively working on collecting, registering, and correcting PA data with governmental and non-governmental organizations

# Status of Korean Protected Areas in WDPA

	# of site(s) registered	PA name
Total	312	
National PA	20	National park
	1	Baekdudaegan Mountains Reserve
	23	Ecosystems and Landscape Conservation Area
	14	Forest Genetic Resources Reserve
	2	Marine Protected Areas
	33	Natural monument
	10	Nature Reserves
	15	Scenic Sites
	152	Special Islands
	12	Wetland Protected Areas
International PA	8	Wetland Protected Areas-Tidal Flat
	17	Wetlands of International Importance, RAMSAR
	4	UNESCO MAB Biosphere Reserve
	1	Natural Heritage

# WDPA Attribute Fields

Requirement	Field Name	Full Name	Attribute Definition
Minimum	WDPAID	WDPA ID	A unique identification number assigned by UNEP-WCMC. If a protected area has already been assigned a WDPA ID it should be included in update submissions. If a protected area is not already listed in the WDPA, UNEP-WCMC will assign new IDs and report those back to the data provider.
Minimum	WDPA_PID	WDPA Parent ID	Parent ID is assigned by UNEP-WCMC to legal zones of a protected area, therefore only records representing zones in the WDPA will have WDPA_PIDs. The WDPA ID of the overarching or 'parent' protected area becomes the WDPA Parent ID of the zone.
Minimum	NAME	Name	The name of the protected area provided in Latin characters (including accents). Numeric strings, addresses, acronyms and abbreviations are not accepted.
Core	ORIG_NAME	Original Name	The name of the protected area in any language supported by UTF 8 encoding.
Minimum	COUNTRY	Country	The country, territory or other administrative unit of geographical interest that a protected area jurisdictionally resides within, as given by its ISO 3166-1 alpha-3 code.
Core	SUB_LOC	Sub-national Location	The principle subdivision that a protected area geographically resides within, given by an ISO 3166-2 sub-national code, e.g. autonomous region, overseas territory, dependency, possession, etc. as long as it does not already have an ISO 3166-1 alpha-3 character code in which case it should be reported as a country.
Minimum	DESIG	Designation	The type of protected area as legally/officially established or recognised (e.g. Parque Nacional, World Heritage Site, etc.) supported by UTF 8 encoding.
Core	DESIG_ENG	English Designation	The type of protected area as legally/officially established or recognized translated into English.
Minimum	DESIG_TYPE	Designation Type	Describes whether a protected area is 'National' or 'International' by designation. International applies to protected areas designated under a convention, commission or regional agreement such as ASEAN Heritage, Barcelona, OSPAR, HELCOM, Natura2000, RAMSAR, UNESCO World Heritage or Man and Biosphere Programme.
Core	IUCN_CAT	IUCN Category	The classification of IUCN Management Category (Ia, Ib, II, III, IV, V or VI) adopted for national protected areas. For reporting on international protected areas the option of listing 'Not Applicable' is accepted. For national protected areas where an IUCN category has not been adopted 'Not Reported' can be listed.
Minimum	MARINE	Marine	Marine protected areas, as defined for the WDPA, encompass any portion of the marine environment in whole or in part according to a protected area's geographic location and management strategy. Either '1' for True or '0' for False. Mixed marine and terrestrial protected areas should be reported as '1'.
Minimum	REP_M_AREA	Reported Marine Area (km <sup>2</sup> )	If Marine is '1' a reported marine area must be given as the total marine extent of the protected area in square kilometres.
Minimum	REP_AREA	Reported Area (km <sup>2</sup> )	Total protected area extent, including both marine (if applicable) and terrestrial areas in square kilometres.
Minimum	STATUS	Status	The current legal or 'official' standing of the protected area. Either 'Proposed' or 'Designated'.
Minimum	STATUS_YR	Status Year	The year in which the current status was officially decreed.
Enhanced	GOV_TYPE	Governance Type	A description of the governance structure of a protected area, written as one of the 11 governance sub-types, described in the IUCN Guidelines on protected areas.
Enhanced	MANG_AUTH	Management Authority	The organisation(s) or agency (ies) responsible for management of the protected area.
Enhanced	MANG_PLAN	Management Plan	Reference to an official management plan for the protected area as a link to the document(s) on-line or a full bibliographic reference.
Enhanced	NO_TAKE	No Take	Listed when part or all of a marine protected area is no take, meaning that the taking of fish or living resources is strictly prohibited in the no take area.
Enhanced	NO_TK_AREA	No Take Area	The total size of the no take area in square kilometres.



# A screenshot of WDPA(World Database on Protected Areas)



# Korean Protected Areas in WDPA





## VI. Introduction of KPAF (Korea Protected Areas Forum)



## **VI. Introduction of KPAF (Korea Protected Areas Forum)**

- **KPAF is a non-profit national-level body consisting of government ministries (Ministry of Environment, Ministry of Oceans and Fisheries, Cultural Heritage Administration, and Korea Forest Service), their sub-organizations, and experts in protected areas.**
- **The objectives of the body are to make partnerships with various parties, both governmental and non-governmental, and help our government make and promote policies about protected areas in South Korea.**



## **VI. Introduction of KPAF (Korea Protected Areas Forum)**

- **It's been doing a variety of projects such as, managing WDPA data, making action plans for implementation of the CBD PoWPA, offering the protected areas academy for youths, publishing translation books on protected areas, and so on.**
- **The KPAF office is currently located at the headquarter of Korea National Park Service in Seoul, South Korea.**

# The WDPA efforts by Korea Protected Areas Forum

- In 2008
  - The 1<sup>st</sup> set of data(including national parks, marine protected area, and so on) was submitted
- In 2009
  - The 2<sup>nd</sup> set of data(including national parks and so on) was sent to WDPA
- In 2010
  - A set of edited data was turned in based on the updated WDPA Data Standards

# The WDPA efforts by Korea Protected Areas Forum

- In 2011
  - About 300 PAs were registered in WDPA  
(National PAs : 278 sites,  
International PAs : 20 sites)
- In 2012
  - 278 PAs already registered in WDPA were edited and corrected
  - A tri-national WDPA Workshop(Korea, China, and Japan) was held at ICC in Jeju on Sep. 2012

**감사합니다!**

**Thank you!**

**Arigato!**