

IUCN Green List : Case Study of Republic of Korea

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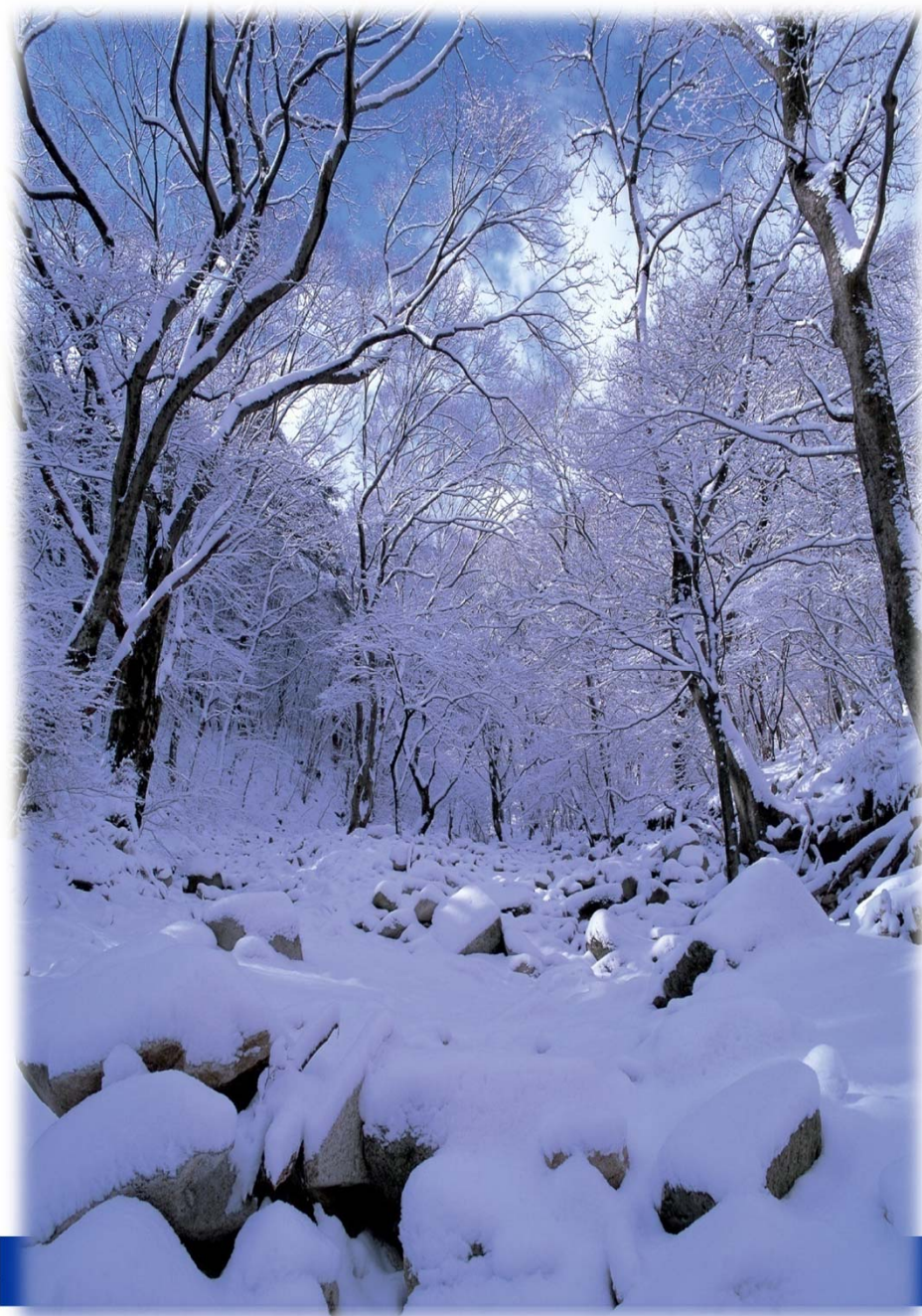
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**IUCN Green List
Protected Areas
in ROK**

National Parks in Korea

◆ National Parks

- Nationally Representative Ecosystems, natural and cultural landscapes
- Aim to soundly conserve and sustainable Use
- for Benefits and Enjoyment for Current and Future Generations



National Parks in Korea

ID	Park	Designated Date	Area(km ²)	Type
1	Jirisan	1967.12.29	483.022	Mountainous
2	Hallyeohaesang	1968.12.31	535.676	Marine & Coastal
3	Gyeongju	1968.12.31	136.550	Historical
4	Gyeryongsan	1968.12.31	65.335	Mountainous
5	Seoraksan	1970.03.24	398.237	Mountainous
6	Hallasan	1970.03.24	153.332	Mountainous
7	Songnisan	1970.03.24	274.766	Mountainous
8	Naejangsan	1971.11.17	80.708	Mountainous
9	Gayasan	1972.10.13	76.256	Mountainous
10	Deogyusan	1975.02.01	229.430	Mountainous
11	Odaesan	1975.02.01	326.348	Mountainous
12	Juwangsan	1976.03.30	105.595	Mountainous
13	Taeanhaean	1978.10.20	377.019	Marine & Coastal
14	Dadohaehaesang	1981.12.23	2,266.221	Marine & Coastal
15	Bukhansan	1983.04.02	76.922	Mountainous
16	Chiaksan	1984.12.31	175.668	Mountainous
17	Woraksan	1984.12.31	287.571	Mountainous
18	Sobaeksan	1987.12.14	322.011	Mountainous
19	Byeonsanbando	1988.06.11	153.934	Marine & Coastal
20	Wolchulsan	1988.06.11	56.220	Mountainous
21	Mudeungsan	2013.03.04	75.425	Mountainous
22	Taebaeksan	2016.08.22	70.100	Mountainous
계			6,726.346	



National Parks in Korea

◆ Korea National Park Service

- Conservation and Sustainable Use of Nature
- Effective and Professional Park Management
- Established in 1987

- Primary Duties

- ☞ Investigation/Research for Park Resources
- ☞ Management and Maintenance of Park Environment and Facilities
- ☞ Visitor Management(Service), Community and International Cooperation

◆ Act for KNPS (enacted in 2016)



IUCN Green List National Parks in Korea



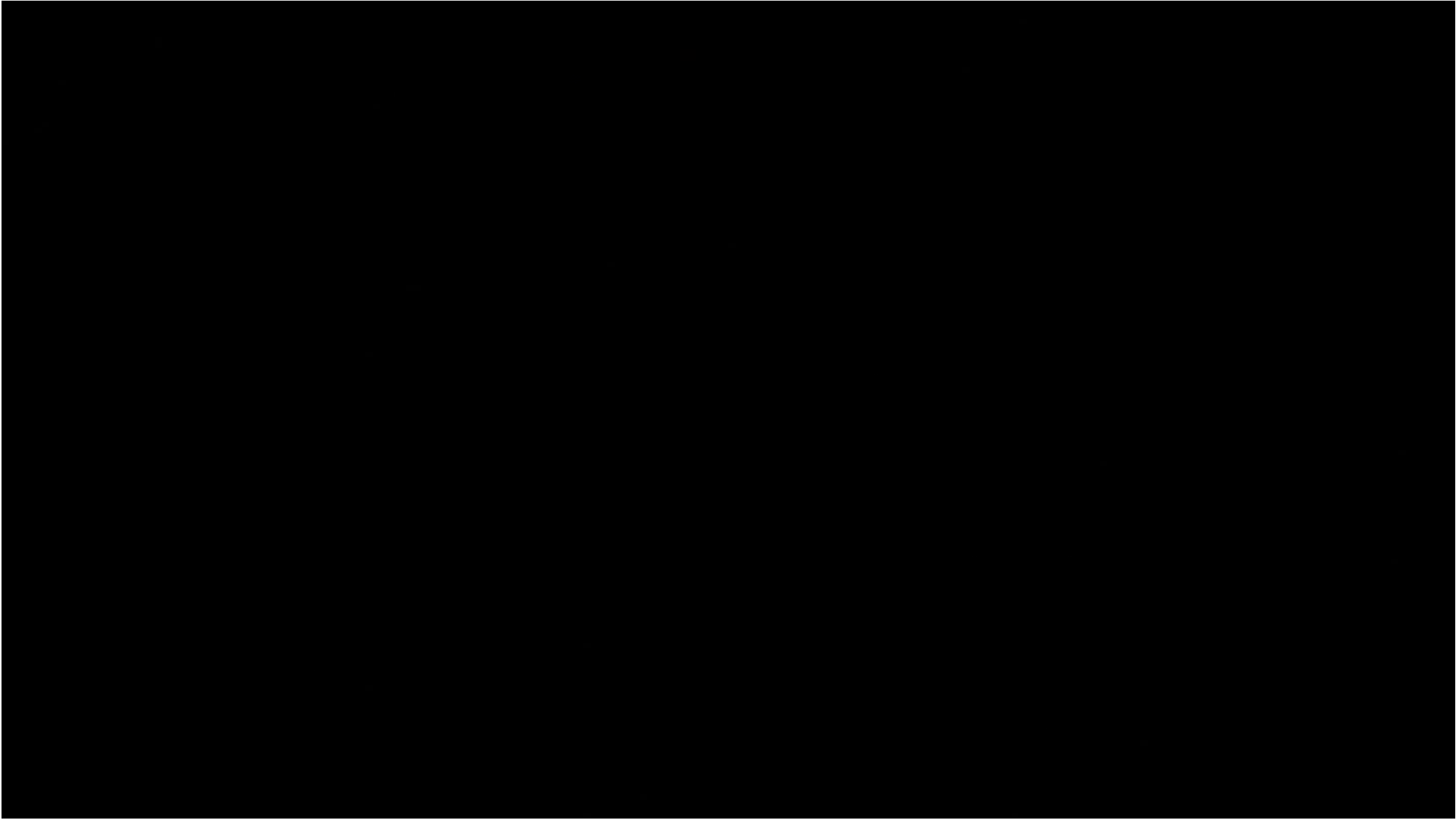
Jirisan National Park



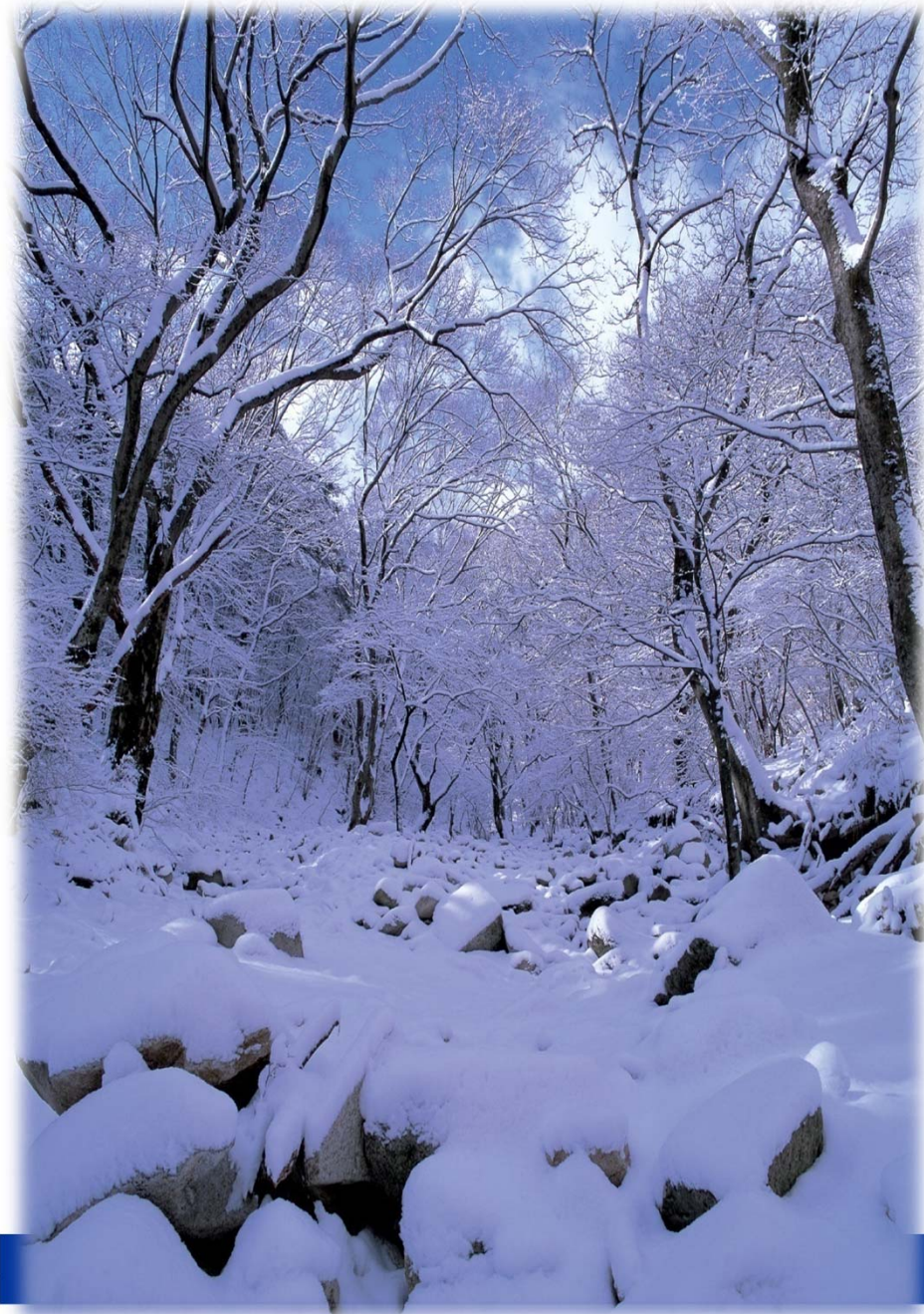
Seoraksan National Park



Odaesan National Park



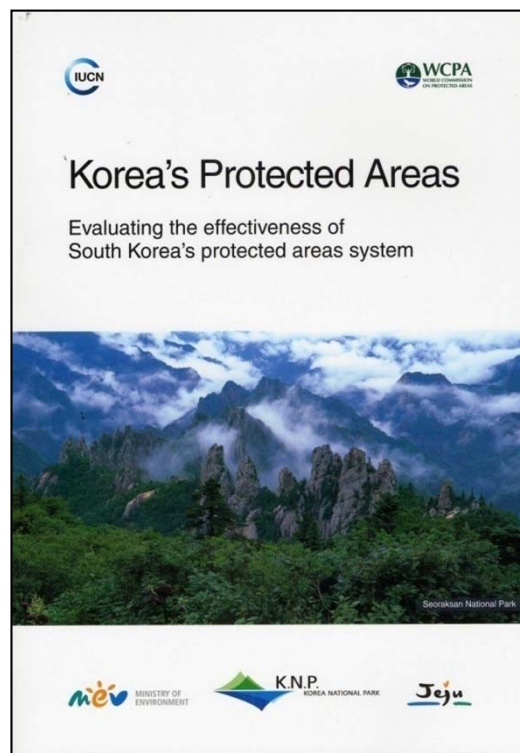
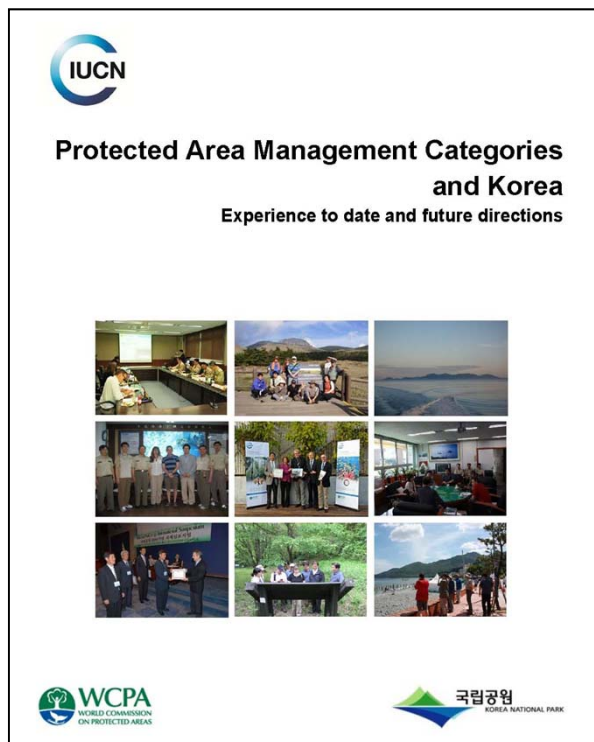
Odaesan National Park



Korea's Experience of Adopting the IUCN GL

Why did you decide to adopt the IUCN GL ?

- Direction Point for National Parks Management
- Better way to prove the Performance of KNPS
- More attention from stakeholders and public



What were the steps for adopting IUCN GL?

Journey to reach the IUCN GL as pilot phrase

- Concluded the MOU with IUCN regarding GL initiative ('12. 9.)
- Organized National Expert Assessment Group ('13. 6.)
- International Orientation Workshop on IUCN GL ('13. 10. Seoul)
- Derived Adapted Indicators from Global Standard of IUCN GL through EAGL meetings ('13. 8.~'14. 7.).
- Finalized the Adapted Indicators in cooperation with Reviewer and EAGL ('14. 7. ~ '14. 9.)
- Selected 3 candidate sites and developed application prospectus and narrative documents ('14. 3. ~ '14. 9.)
- EAGL meeting for nomination voting ('14.10. 2.)
- IUCN GL Global Steering Committee Meeting ('14.10.27.)





IUCN GREEN LIST OF PROTECTED AREAS

By decision of the IUCN Green List of Protected Areas Committee

Jirisan National Park

has been designated for inclusion in the IUCN Green List of Protected Areas.

Sydney, Australia
14 November 2014
Valid for two years from the date of issue


Dr. Julia Marton-Lefevre
IUCN Director General


Dr. Ernesto Enkerlin Hoeflich
Chair, IUCN World Commission on Protected Areas



Organizing and Operating National EAGL

- University
- Research Institute
- IUCN Commission Member
- NGOs



Adaptation: Indicators / Verification methods

- Reflected national context through EAGL meetings
- Drafted consideration notes regarding verification methods
- Effectively use the evidence information from MEE ('08., '13.)
- Utilized the outcome indexes of KNPS developed:
Ecosystem Health Index, Stress Index, Visitor Satisfaction, Local community Satisfaction, etc

4 Pillar/20 Criteria/64 Indicators based on GS

Made consideration notes ...

Criteria [↕]	Description [↕]	Standards [↕]	Notes [↕]	KMEE [↕]	Other evidence [↕]
1. VALUES STATED, OBJECTIVES DECLARED AND BEING MET[↕]					
1a. Value and significance [↕]	Clear identification of values [↕]	<ul style="list-style-type: none"> Natural values: Biodiversity values sufficiently documented[↕] 	세분화? [↕]	D1 [↕] B3 [↕] ↕	Management plan [↕]
		<ul style="list-style-type: none"> Cultural values: Cultural, historical, social, recreation and economic values are sufficiently well documented to support planning and management[↕] 	세분화 필요할 듯...(가치의 특성 반영) [↕]	D1 [↕] B3 [↕]	Management plan [↕]
		<ul style="list-style-type: none"> Design: The site contains key habitats and is large enough and well enough connected to other suitable habitat to conserve the nominated values[↕] 	-접근성의 정도 고려 [↕] -가치에 영향을 주기 때문에 규모, 연결성 측면에서 중요 [↕] -평가기준이 다를 수 있으며, 평가가 매우 어려울 듯...(위협과 관련해서 검토해야..., EOH p.43) [↕]	A1i [↕] A1j [↕]	Management plan [↕] Statement in relation to key values identified in MEE under B-3 [↕]
1b. Management planning [↕]	Planning and clear objectives to guide management [↕]	<ul style="list-style-type: none"> Site should have an up-to-date management plan.[↕] 	↕	B1 [↕] B2 [↕] D2 [↕] ↕	Review of plan [↕]
		<ul style="list-style-type: none"> Management plan clearly identifies the values and objectives of management for the area and provides an adequate decision making framework and policy environment for the site (i.e. clearly specifies desired outcomes of management). Management plan addresses key threats and issues impacting on park values and achievement of objectives.[↕] 	-보유하고 있는 가치에 적합한 목적을 설정하고 있는가? [↕]	D1 [↕] D2a [↕]	Review of plan [↕]
		<ul style="list-style-type: none"> There is a process for monitoring, review and adjustment during the life of the plan.[↕] 	-측정 가능한 목표 제시 여부 [↕]	D2a-1 [↕] D3 [↕] ↕	Review of plan [↕]
		<ul style="list-style-type: none"> Management plan is actively used to guide management of the site.[↕] 	↕	D2a-1 [↕] D3 [↕]	↕

		<ul style="list-style-type: none"> Permit systems are fairly implemented and compliance monitored and enforced[↗] 	<ul style="list-style-type: none"> - 인근지역을 함께 고려해야.↗ - 사전환경성 질적 검토 여부↗ - 시스템 자원의 정보 활용 가능↗ 	C2m [↗]	허가전수
		<ul style="list-style-type: none"> Boundaries clearly marked or fenced as necessary to conserve values.↗ 	<ul style="list-style-type: none"> - 지역주민의 경계 인지 여부 중요한 이슈인가(as necessary..)↗ - 경계 표시 방법↗ 	A1i [↗]	Map(Zoning)↗ ↗
		<ul style="list-style-type: none"> Minimum encroachment on boundaries; no new or accelerating encroachment[↗] 	<ul style="list-style-type: none"> - 경계 설정의 적합성(지표), ↗ 	A1j [↗] A2f [↗]	Monitoring results [↗] Google earth image(시계열)↗ 생태자연도 국토환경성평가 자료 참고↗
3. MANAGEMENT CAPACITY, POLICIES AND ACTIONS TO ACHIEVE OBJECTIVES[↗]					
3a. Management resources and operations [↗]	Adequate and appropriate equipment, infrastructure and practices to manage the PA [↗]	<ul style="list-style-type: none"> Adequate equipment and infrastructure is available and accessible to staff as appropriate to manage the protected area[↗] 	↗	D25 [↗] System-level (4e) [↗]	State report of equipment and infrastructure [↗]
		<ul style="list-style-type: none"> Equipment and infrastructure is well maintained and regularly replaced as necessary so that the functioning and safety of management assets remains high[↗] 	<ul style="list-style-type: none"> 시설의 경관과의 조화↗ 시설 입지 및 시설주변 식재의 적합성(평가는 어려울 듯...)↗ 	D25 [↗]	Maintenance report [↗]
		<ul style="list-style-type: none"> Management systems and activities are planned the natural and cultural values of the protected area, minimise environmental and social impacts, and promote sustainability[↗] 	<ul style="list-style-type: none"> - 친환경에너지 이용↗ - 워딩...↗ 	D25 [↗] System-level report(4-e) [↗]	Relevant plan [↗]
3b. Staffing [↗]	Adequate and capable staff to manage the PA with appropriate support staff [↗]	<ul style="list-style-type: none"> Adequate staff capacity/numbers are working to manage the PA, with appropriate support staff[↗] 	<ul style="list-style-type: none"> - 시스템 자원의 정보 활용 가능↗ 	C1, 2 [↗]	- 직원역량자료(전문성)↗
		<ul style="list-style-type: none"> Staff have the necessary capability and training to conduct essential management activities including community relations and biodiversity conservation[↗] 	<ul style="list-style-type: none"> - 시스템 자원의 정보 활용 가능↗ 	System-level report(3-a, 4-g) [↗]	Training program [↗]

Global Standard (pilot phase)

Pillars	Criteria (should be read in conjunction with Guidance Notes)	Draft Generic Indicators	Generic means of verification	RG Proposed Indicators	RG Proposed Method of Veffication
Pillar 1: Sound Planning	Green				
	Criterion 1.1: Highlighting core conservation values: The core nature conservation, ecosystem services and cultural values that the designated area is intended to protect are clearly articulated and listed.	<p>1.1.1 The Protected Area meets the IUCN definition of a Protected Area (see Glossary).</p> <p>1.1.2 The core values that the Protected Area is intended to protect are clearly articulated and listed in the Protected Area's foundational documents, long-term management plan, or equivalent.</p> <p>1.1.3 The Protected Area has been listed and assigned correctly to one of the six IUCN Protected Area management categories and one of the four Governance Types in the UNEP-WCMC World Database on Protected Areas (WDPA).</p>	<ul style="list-style-type: none"> Protected Area foundational documents Consultation with Protected Area management Reference to IUCN Protected Area definition (see glossary) <ul style="list-style-type: none"> Protected Area foundational documents Long-term management plan (or equivalent) <ul style="list-style-type: none"> UNEP-WCMC World Database on Protected Areas Reference to Dudley, N (Editor) 2008). Guidelines for Applying Protected Area Management Categories, Gland, Switzerland: IUCN. WITH Stolton, S., Shadie, P., and Dudley, N. (2013) IUCN WCPA Best Practice Guidance on Recognising Protected Areas and Assigning Management Categories and Governance Types, Best Practice Protected Area Guidelines Series No.21, Gland, Switzerland. 	<p>1.1.1 The Protected Area meets the IUCN definition of a Protected Area</p> <p>1.1.2 The core values are clearly articulated and listed</p> <p>1.1.3 Implementation of IUCN PA management categories</p>	<ul style="list-style-type: none"> Definition of relevant Law Protected Area foundational documents Reference to Protected Area definition of IUCN and CBD <ul style="list-style-type: none"> Protected Area foundational documents Long-term management plan Reference to KMEE(Korean Management Effectiveness Evaluation) results in 2008 and 2013 <ul style="list-style-type: none"> UNEP-WCMC World Database on Protected Areas Refer to http://www.protectedplanet.net/ Certification Documents by IUCN WCPA or UNEP-WCMC Reference to relevant guidelines and case studies
	Criterion 1.2: Designed to protect core values for the long term The designated area contains suitable core areas, and is large enough and/or well enough connected to other suitable areas to protect the nominated values in the long term.	<p>1.2.1 For each nominated value:</p> <ul style="list-style-type: none"> There are maps showing the areas within the Protected Area, as well as any areas outside the Protected Area, where specific measures are needed in order to ensure the protection of the nominated value in the long term. There is a clear description of the conditions that must be maintained in the different areas in order to ensure the protection of the nominated value in the long term. The maps identify any different levels of protection that are applicable to different parts of the overall area (e.g. to core protected areas, buffer zones, conservation corridors, etc.) The overall area shown is in principle 	<ul style="list-style-type: none"> Maps of Protected Area and surrounding area Management planning documentation Consultation with Protected Area management References to scientific research justifying conclusions Consultation with relevant experts 	<p>1.2.1 Zoning System in place, taking account of the full range of requirements necessary to protect the nominated values in the long term.</p>	<ul style="list-style-type: none"> Maps of Protected Area and surrounding area Management planning documentation References to scientific research justifying conclusions Reference to KMEE results in 2008 and 2013 Reference to National Environmental Conservation Value Assessment Map

Adapted Indicators and verification methods

Evidence submitted by Protected Area managers (with hyperlinks to documents)



Adapted Indicators	Adapted Means of Verification	Evidence submitted by Protected Area manager (with hyperlinks to documents)	At outset, and annually, Protect Area Manager completes self assessment based on documents compiled in support of evolving application			Reviewer comment (Reviewer should help and/or when Coach has completed process and serious flaws. Should)	
			Compliance with standard (Exceeds/Meets/Does Not Yet Meet)	Means of verification	Date	Compliance with standard (Exceeds/Meets/Does Not Yet Meet)	Comment on
1.1.1 The Protected Area meets the IUCN definition of a Protected Area	<ul style="list-style-type: none"> Definition of relevant Law Protected Area foundational documents Reference to Protected Area definition of IUCN and CBD 	<ul style="list-style-type: none"> The Jirisan National Park was designated by the Natural Parks Act, which stipulates national parks, defining "a national park is the area which can represent natural ecosystems or natural and cultural landscapes, and the national park is designated for the purpose of conserving the natural ecosystem and the natural and cultural landscape and of sustainable use" WDPA record 	Meets	<ul style="list-style-type: none"> Natural Parks Act(Eng): http://elaw.klri.re.kr/kor_service/lawView.do?hseq=22598&lang=ENG WDPA : http://www.protectedplanet.net/sites/Jirisan_National_Park refer to §1101 of JirisanNP nomination prospectus 	25.Sep.2014	Meets	
1.1.2 The core values are clearly articulated and listed	<ul style="list-style-type: none"> Protected Area foundational documents Long-term management plan Reference to KMEE(Korean Management Effectiveness Evaluation) results in 2008 and 2013 	<ul style="list-style-type: none"> Core values of the Jirisan National Park: As the habitats of 1,522 flora and 4,794 fauna, the Jirisan National Park is a treasure of nature. Various vegetations populate in the Jirisan mountain, covering the wide range from warm-temperate forests to temperate central forests and to cold forests. Section 4.4 of the Conservation and Management Plan(CMP) of Jirisan National Park (2013-2022) describes the values in detail. KMEE results pointed out the values of Jirisan NP 	Meets	<ul style="list-style-type: none"> In terms of the list and description of core values, please refer to §1102 and §1103 of JirisanNP nomination prospectus CMP of Jirisan National Park (2013-2022)(Kor): http://www.knps.or.kr/front/portal/research/researchDtl.do?menuNo=7070023&refId=REFM000071&page=1&searchAllValue= KMEE Report(eng): http://www.knps.or.kr/portal/main/contentsDownload.do?filepath=%2Fupload&filename=20140923044312651.pdf&filename2=MainReport_KoreaMEE.pdf 	25.Sep.2014	Meets	
1.1.3 Implementation of IUCN PA management categories	<ul style="list-style-type: none"> UNEP-WCMC World Database on Protected Areas Refer to http://www.protectedplanet.net/ Certification Documents by IUCN WCPA or UNEP-WCMC Reference to relevant guidelines and case studies 	<ul style="list-style-type: none"> In 2006, Jirisan National Park was reckoned as a National Park satisfying the definitions of IUCN Category II by IUCN and UNEP-WCMC. As a Category II National Park in accordance with IUCN category of protected areas, the Jirisan National Park is declared as Type A of IUCN Governance (Governance by government with the sub-type Federal or national ministry or agency in charge). CMP of Jirisan National Park (2013-2022) describes relations between IUCN category II and National Park management(CMP p.67-60) 	Meets	<ul style="list-style-type: none"> Certification of IUCN PA category (refer to §1104 and §1105 of JirisanNP nomination prospectus) WDPA : http://www.protectedplanet.net/sites/Jirisan_National_Park CMP of Jirisan National Park (2013-2022)(Kor): http://www.knps.or.kr/front/portal/research/researchDtl.do?menuNo=7070023&refId=REFM000071&page=1&searchAllValue= 	25.Sep.2014	Meets	
1.2.1 Zoning System in place, taking account of the full range of requirements necessary to protect the nominated values in the long term.	<ul style="list-style-type: none"> Maps of Protected Area and surrounding area Management planning documentation References to scientific research justifying conclusions Reference to KMEE results in 2008 and 2013 Reference to National Environmental Conservation Value Assessment Map 	<ul style="list-style-type: none"> CMP of Jirisan National Park (2013-2022) describes zoning system with map, current status and management directions in detail. (p.55-56, 61-91) Coupled with proper conservation of core areas, zoning systems are introduced to conserve, manage, and use the national park more effectively in line with the Article 15 of Natural Parks Act: Nature Preservation Zone (NPZ), Nature Environment Zone (NEZ), Village Zone, and Cultural Heritage Zone. Settled in the area of 483.022㎢, the Jirisan mountain is the largest national park in Korea. Nature preservation zone (157.211㎢), natural environment zone (322.606㎢), and viilage zone (0.311㎢) account for 32.5%, 66.8% and 0.1% of the park respectively. Cultural heritage zone (2.895㎢) was added in 2012, which 	Meets	<ul style="list-style-type: none"> CMP of Jirisan National Park (2013-2022)(Kor): http://www.knps.or.kr/front/portal/research/researchDtl.do?menuNo=7070023&refId=REFM000071&page=1&searchAllValue= Natural Parks Act(Eng) : http://elaw.klri.re.kr/kor_service/lawView.do?hseq=22598&lang=ENG refer to §1201 ~ §1205 of JirisanNP nomination prospectus 	25.Sep.2014	Meets	
		<ul style="list-style-type: none"> Jirisan NP is the largest mountain National Park in Korea with 483㎢ Implement the principle to put priority on conservation Article 23.3 of Natural Parks 	Meets	<ul style="list-style-type: none"> CMP of Jirisan National Park (2013-2022)(Kor): http://www.knps.or.kr/front/portal/research/researchDtl.do?menuNo=7070023&refId=REFM000071&page=1&searchAllValue= Natural Parks Act(Eng) : http://elaw.klri.re.kr/kor_service/lawView.do?hseq=22598&lang=ENG Act on the Protection of Baekdu-Jiri Grand Mountain Ranges(Kor): http://www.law.go.kr/lsSc.do?menuId=0&subMenu=1&query=%EB%B0%B1%EB%91%90%EB%8C%80%EA%B0%84#lBgc0color 	25.Sep.2014	Meets?	No scientific research the Adapted Means of provided here support size and design to protect that was what they provided sufficient not provided

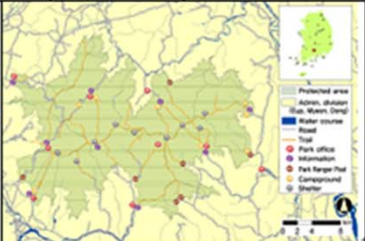


Means of verification

Jirisan National Park

I. Overview

- Three park offices based on the provincial border manage the park (Total area: 471,758km²)
- More than 20 peaks which are higher than 1,500m are spread out like a folding screen. This mountain is largest mountainous national park in Korea and spiritual one with Hallasan in Jeju island and Geumgangsan in North Korea.

Year of Designation	1967(National Park)	IUCN Category	II. National Park
Visitor Number	2,823,556 ⁺ (increasing)	Resident in PA	1,131 ⁺
<p>- With 4,989 flora and fauna inhabiting its ground, Jirisan is a treasure chest of nature. Jirisan's flagship species are the Asiatic black bear and Korea winter hazel. The restoration efforts for the Asiatic black bear have been made since 2002.</p>			

■ Status of the Property Ownership and Land Use Type

- Local roads traversing the mountain can easily carry the visitors to the top of the mountain and may result in the reckless use of the resources and habitat isolation.
- 31.7%(149,839km²) of the park area along the main ridge around the alpine area are strictly managed as a nature preservation area and 67.9%(320,155km²) are designated as nature environment area.
- A high portion of the private land (25%) causes conflicts between the park offices and local community since the land owner try to act their property rights which are against natural park act.
- The local residents earn money by selling forest products, running restaurants and lodges. The civil appeals for easing the regulations related to those activities are increased. The temples' request to expand their buildings becomes another issue.
- The adjacent area to the park is mostly farm villages running the lodging business during peak season. Currently, external people run the pension and restaurants in the national park.

Total(Unit: km ²)	Government-owned land	State-owned land	Privately-owned land
471,758 ⁺	100.0%	332,239 ⁺	70.4%
		17,201 ⁺	3.6%
		122,318 ⁺	25.9%

2. Management Condition

■ Management Plan

- Jirisan National Park management plan 2006-2010
- A long term plan for each work and annual implementation plan (ex. Resource monitoring, improvement of environmental friendly structures, operation of wildlife protection unit, invasive species management, etc.)

■ Principal Value

- Jirisan office

Category	Principal value
Natural/ecological	*Core habitat of threatened species (Asiatic black bear, otter, Korean winter hazel, Nannophya pygmaea Ramber) and 10 Natural monuments (Flying squirrel, hawk, etc.) *Rich biodiversity (1,517 plant species, 2,911 animal species, 243 micro flora of higher fungi)
Recreation	*20 official trails with Chonwangbong-Nogodan(25.5km) ridges
Landscape	*21 peaks(Chonwangbong, Toekjibong), 10 unique rocks, 15 gorges, 17 falls, 17 ponds, 2 wide plains in alpine area
Geological/topographical	*Alpine wetland(Wangdeungjae, Waegok, Deokpyoungbong)
Cultural/historic	*7 national treasures, 34 treasures, 20 tangible culture assets

- North Jirisan office

Category	Principal value
Landscape	*Korean azalea community at Barabong
Natural/ecological	*Yew tree community at Yeonhacheon, Baemsagol valley, threatened species(Asiatic black bear) management
Cultural/historic	*Silsangsa(temple)

- South Jirisan office

Category	Principal value
Natural/ecological	*Threatened species management(Asiatic black bear), function as wildlife habitat
Landscape	*Great landscape with subalpine ecosystem in Nogodan and local legend based on the Nogodan
Cultural/historic	*Temples with national treasures and treasures(Hwaumsa, Cheoneunsa, Yeongoksa)

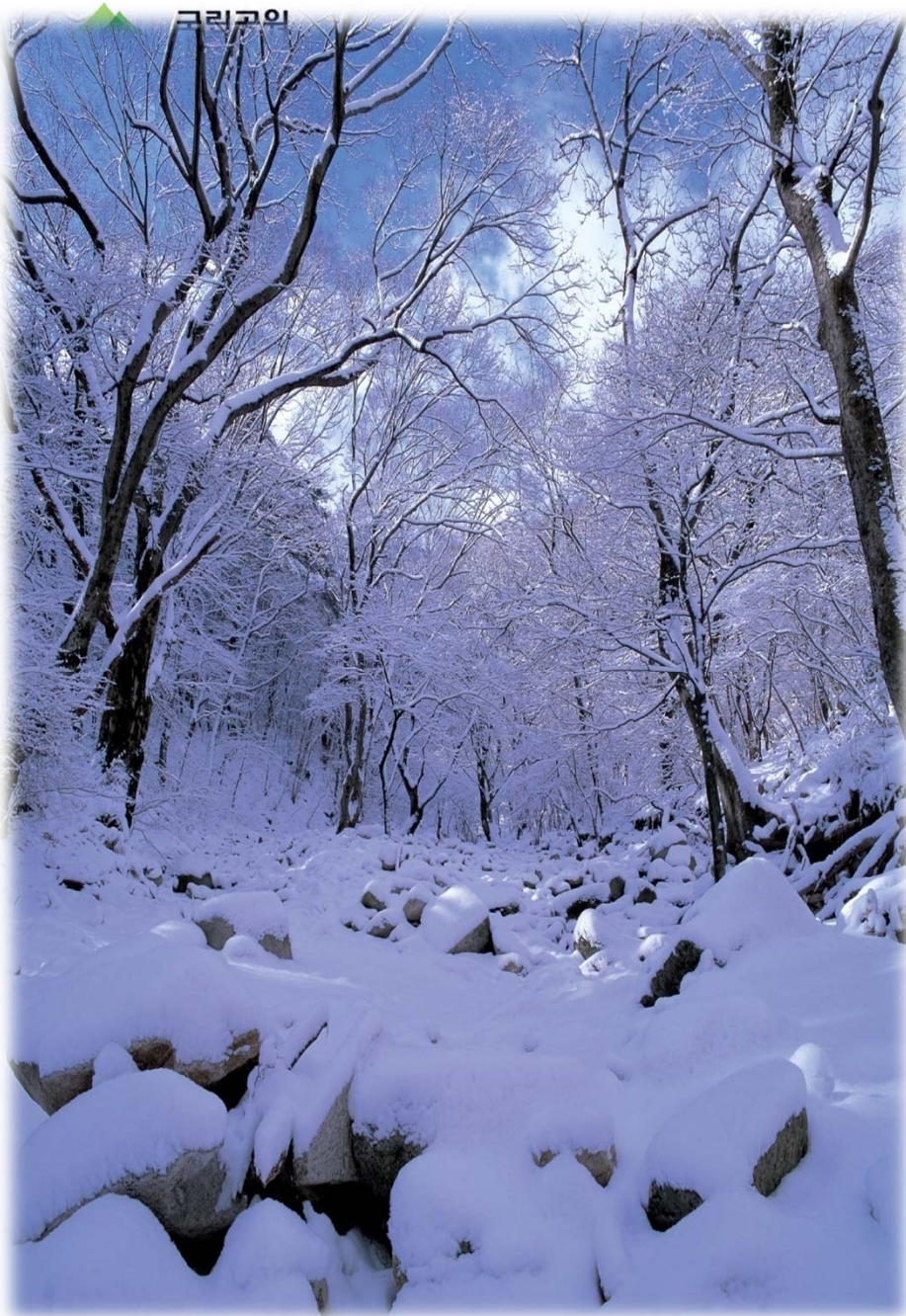
■ Current Threat

- Jirisan office

Current threat	Issue	Impact	Extent
Visitor impact-inappropriate use level	Trail damage due to the overuse of official trails along the ridge	Severe	Widespread
Illegal harvesting	Illegal harvesting by visitor group, disturbance of wildlife habitat by poaching, overextracton of fluid from painted maple trees for commercial use, exhaustion of natural resources	Severe	Widespread
Visitor impact-inappropriate visitor behavior	Natural environment damage by unofficial trail walk, trail walk at night, camping in undesignated area, cooking	Moderate	Throughout
Invasive species	Ecosystem disturbance by invasive species and abandoned pet, negative impact to the vegetation by goat grazing	Low	Widespread
Habitat/species isolation	Difficulty to maintain population of Asiatic black bear due to Asiatic black bears' low rate of adaptation to the nature, natural habitat isolation of Asiatic black bear	Low	Throughout

- North Jirisan office

Current threat	Issue	Impact	Extent
Illegal harvesting	Poaching for threatened species(Asiatic black bear, etc.) and wild greens picking	Moderate	Widespread



Challenges & Future Plan

Major challenges and considerations

- Organizing EAGL available to cover various fields
- Lack of common understanding on the GL standards
- Inadequate information and documents to verify the results
- Proper communication with reviewer
- Harmonize the roles of EAGL and Reviewer
- Extra workload to PAs managers to verify their efforts

Future Plan ...

- Re-organize the EAGL enable to cover various fields flexibly
- Up-date the Green List Korea Standards
- Review case studies of pilot phase
- Re-listing the current GL sites
- Prepare the implementation plan of IUCN GL in Korea
- Register and Nominate New Protected Areas

Thank you for your attention

National Park Research Institute

<http://www.knps.or.kr/research>

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