

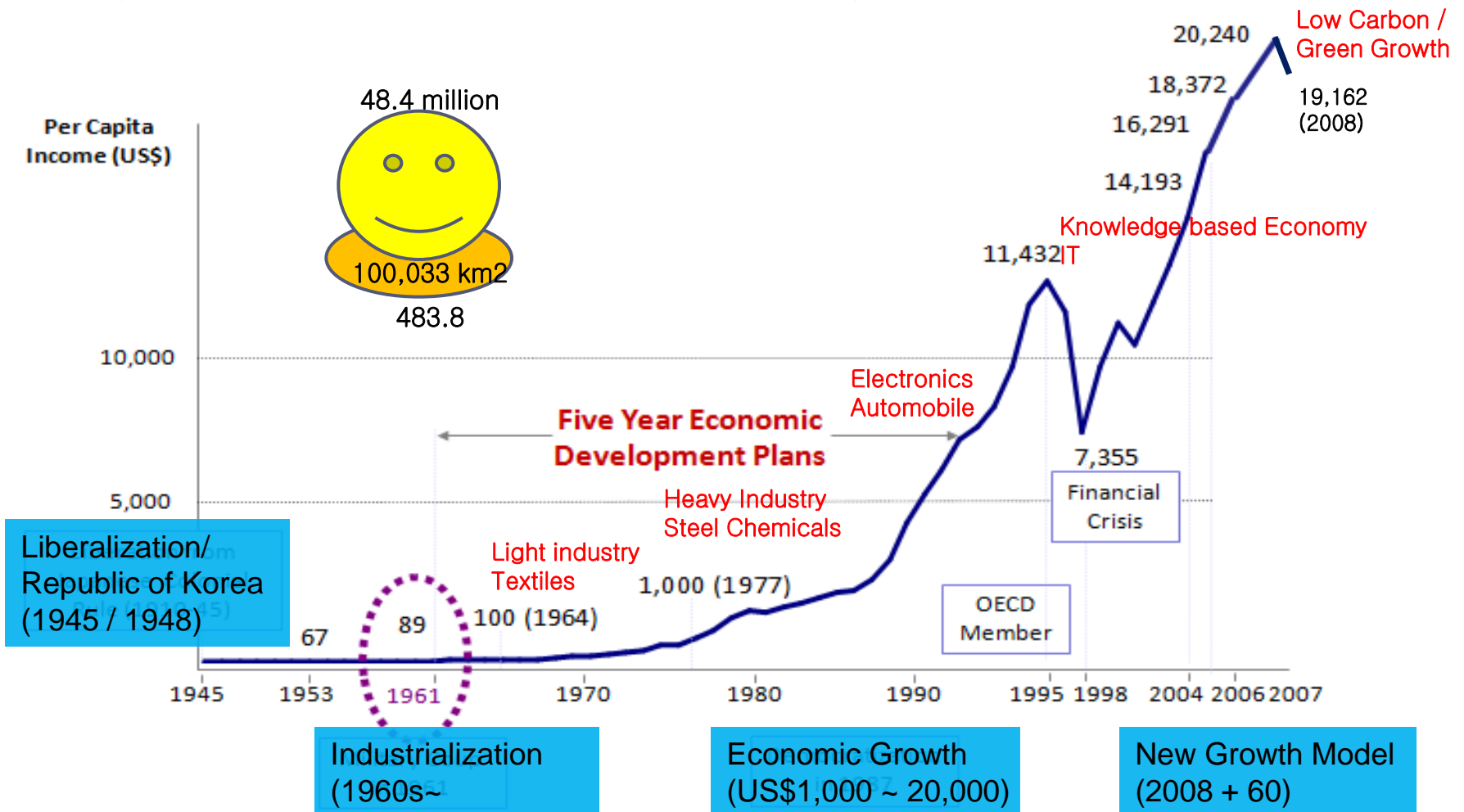
Integrated Planning for Sustainable Ecotourism in Republic of Korea

UN Symposium 14-16 October Tehran
“Mainstreaming Sector Policies into INSDP”

sikang@kei.re.kr

Republic of Korea (1960-2009)

GDP(15th, 1.16 Trillions US\$, 1.60% of World GDP), GDP/Per.(34th, 23,679 US\$)



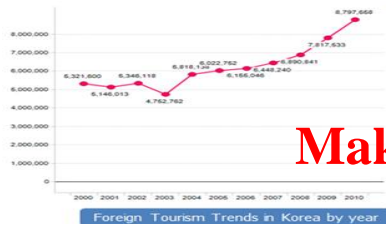
Source : KDI School of Public Policy and Management

Sustainability challenges in 2000's and Creative Economy

- ▶ Persistent Loss of Growth Momentum since 1990s
 - ▶ Annual average GDP growth (%)
 - ▶ (1971~1980)**7.1** (1981~1990)**9.0** (1991~2000)**5.2** (2001~2010)**4.6**
- ▶ High Energy Dependency and GHGs Emission
 - ▶ Energy Intensity (TOE/1,000(US\$), 2008)
 - ▶ **0.30**(Korea) > **0.19**(US) > **0.18**(OECD Average) > **0.10**(Japan)
 - ▶ Energy consumption grows faster than GDP (% , 2009~2010)
 - ▶ **6.7**(Energy consumption) > **6.1**(GDP)
 - ▶ **9th** in Volume of GHG Emission, **1st** in GHG Emission Increase(1990~2007)
- ▶ Heavy Impacts from Local Climate Change
 - ▶ Annual mean temperature increase for the past 100 years (1906~2005)
 - ▶ **2.4°C**(Seoul, Korea), three times higher than **0.74°C**(World Average)
 - ▶ Annual average damage from extreme weather events (US\$, 1,000Won/Dollar)
 - ▶ **1.8 billion**(2000s), 3.6 times higher than **0.5 billion**(1990s)

Increased Tourism and Major Challenges

Prior Environment Review for Policy-Plan-Programme and Environment Impact Assessment for Project



Make Tourism Development Green

10 Millions Foreign Tourists in 2012

Tourism

Ecotourism

3.8 Millions Demand for Ecotourism in 2010

Develop Sustainable Ecotourism

Integrated (Participatory) Planning for Ecotourism



Tourism Ecotourism

EIA, PER and PER(SEA) coverage

	EIA (1977~)	PERS (1993~2006)	PERS(SEA) (From June 1st, 2006~)
Law	Act on Environment, Traffic and Disaster Impacts Assessment	Framework Act on Environmental Policy(FAEP) and other Acts	Framework Act on Environmental Policy
Subjects	17 areas 63 unit projects : road, railroad, land developments, power plants, etc.	48 plans and programs , 22 development projects - 17 P&P under FAEP - 31 P&P under other Acts - 22 Projects under FAEP	88 P&P and 22 projects related to the projects subject to EIA - 16 high level plans - 72 low level plans - 22 development projects
Preparation of EA report	developer	responsible authority or developer	responsible authority or developer in consultation of PERS committee
Consultation	Experts and expert groups, residents and stakeholders	relevant government agencies, experts and expert groups	relevant government agencies, expert and expert groups, residents and stakeholders
Time	before approval	before approval	at the start of PPP preparation
Assessment points	23 criteria (socio-economic, environmental)	Objective and content of PPP Environmental Baseline, etc	PERS+ scope, environmental effects, mitigation measures, etc.

Make Tourism Development Green through SEA

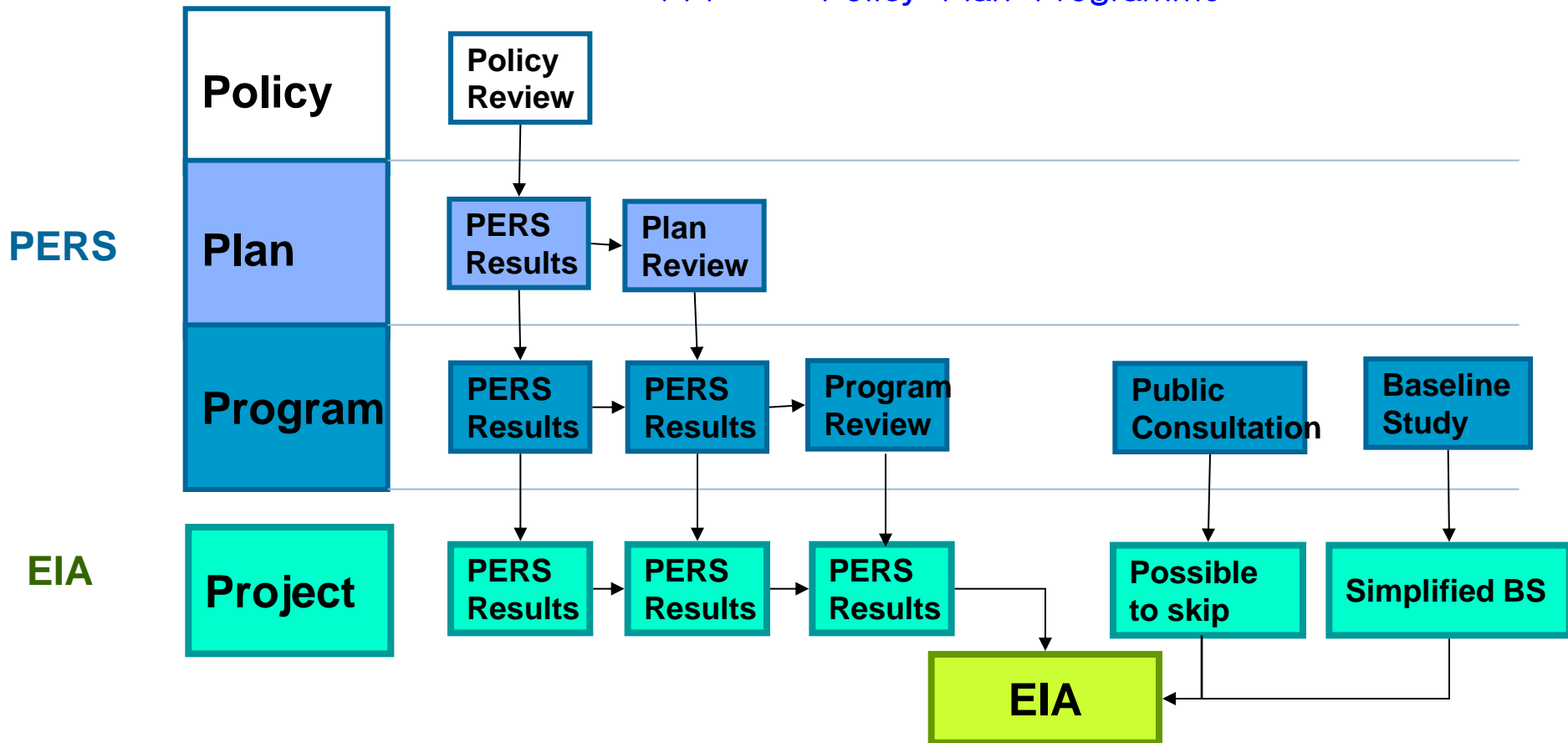
Strategic Environmental Assessment on Tourism Development

Korean (E)IA system on Policy, Plan, Program and Project level

KOREAN CASE

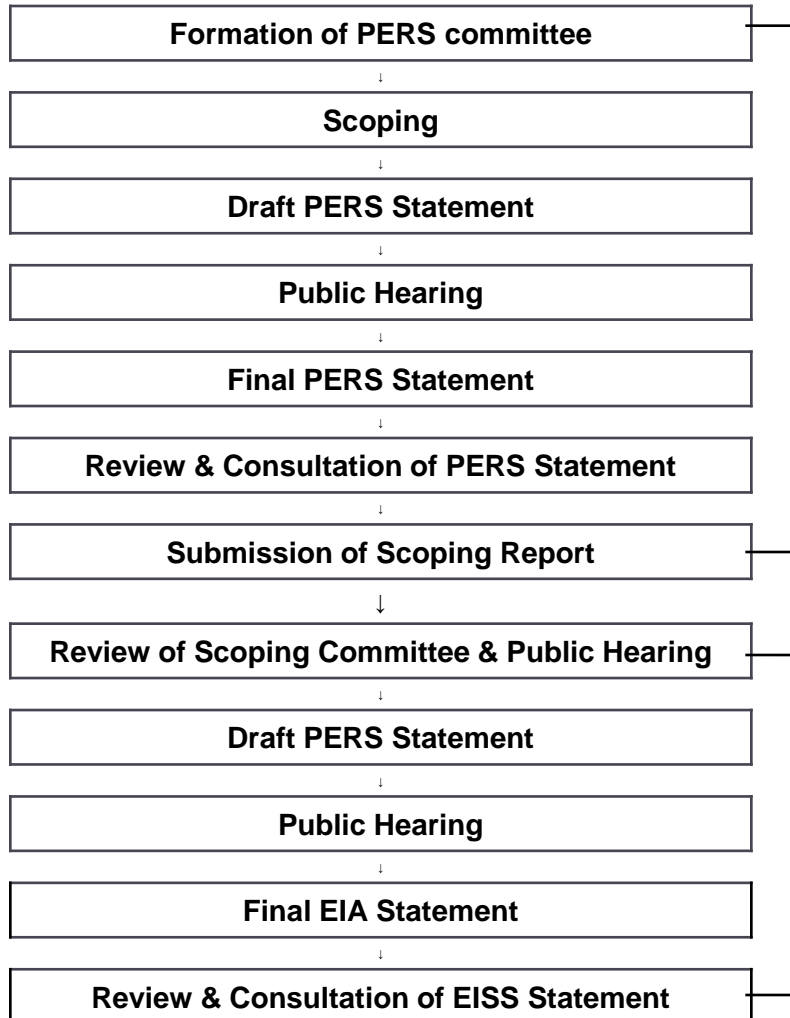
EIA, PERS Structure for PPP & Project

EIA: Environment Impact Assessment
PERS: Prior Environment Review System
PPP: Policy-Plan-Programme



KOREAN CASE

Procedural Hierarchy of PERS and EIA



PERS on Tourism
Development **Plan and
Programme**

EIA on Tourism
Development **Project**

Coverage of PERS and EIA on Tourism Development Assessment

KOREAN CASE

Tourism Development in EIA Project Assessment Groups

GROUP		PROJECTS
Airport Construction	1 projects	Airport
River	1 projects	River Maintenance
Reclamation and Land Filling	2 projects	Filling-up, Reclamation
Development of Resort	6 projects	Tourist Industry, Resort, Hot Spring Development, City Park, Natural Park
Development of Forest	3 projects	Public Cemetery, Grassland
Construction of Sports Facilities	5 projects	Youth Discipline Facilities, Discipline District, Physical Training Facilities, Velodrome, Racecourse
Construction of Wastes Facilities	2 projects	Night-soil Treatment, Waste Landfill
Construction of Military Facilities	3 projects	National Defense Facilities, Military Installations, Military Air Base
Excavation Work	4 projects	River and Coast, Forest, Coastal Quartz Sand, Coastal Sand

KOREAN CASE

Tourism Development in EIA Project Assessment Groups

GROUP		PROJECTS
Urban Planning	11 projects	Urban Development, Land Organization, Housing Development, Urban Renewal, Distribution Complex, Wastewater Treatment, Terminal, Educational Institution
Industrial Site Development	7 projects	National Industrial Complex, Local Industrial Complex, Industrial Complex of Rural Area, Small and Medium Industry Area, Free Export Zone
Energy	6 projects	Power Plant, Electricity Facilities, Mining Industry, Submarine Mining Industry, Facilities of Storing Oil
Harbor and Port Development	4 projects	Fishing Port, Harbor Facilities, Submarine dredge
Road Construction	1 projects	Road
Development of Water Resources	2 projects	Dam, Reservoir
Rail Road	4 projects	Railroad, City Railroad, High-Speed Railroad, Cable Railway

KOREAN CASE

Legal Basis of EIA & PERS on Tourism Development

❖ Legal Basis

	EIA	PERS
Time of Introduction	• 1977	• 1993
Legal Basis	▪ Act on the Assessment of impacts of works on Environment, Traffic, Disasters, etc.	• Frame work Act on Environmental Policy
Subjects to be Assessment	• 17 Fields 74 Projects	• 48 Administrative Plans
Time of Execution	• Before approval or confirmation of the project	• Before approval or confirmation of the plan or program
Assessment Criteria	<ul style="list-style-type: none">▪ Natural Environment<ul style="list-style-type: none">- Geology, Flora & Fauna, Hydrology• Living (ambient) Environment<ul style="list-style-type: none">- Land use, Air & water Quality, Soil, Solid waste, etc.• Socio-Economic Environment<ul style="list-style-type: none">- Population, Residence, Traffic, Cultural Asset, etc.	<ul style="list-style-type: none">▪ Natural Environment<ul style="list-style-type: none">- Geology, Flora & Fauna, Hydrology• Living (ambient) Environment<ul style="list-style-type: none">- Land use, Air & water Quality, Soil, Solid waste, etc.• Socio-Economic Environment<ul style="list-style-type: none">- Population, Residence, Traffic, Cultural Asset, etc.

Assessment Criteria & Indicators in practice

Items	PERS	EIA
<p>Geology, topography</p>	<ul style="list-style-type: none"> o Description of geology & topography necessary to preserve o Characterization of geology & topography o Affected area and measures 	<ul style="list-style-type: none"> o Loss prevention and use of surficial soil or fertile soil o Restoration or use plan of borrow pit o Estimation & measures due to soil loss and sedimentation o Conservation of excessively slant area
<p>Flora, Fauna</p>	<ul style="list-style-type: none"> o Identification of species distribution, species diversity, and designation of conservation sites o Establishment of conservation measures 8th grade of degree of green naturality o Establishment of conservation measures in 1st grade of ecological degree of naturality 	<ul style="list-style-type: none"> o Change estimation and measures of flora and fauna o Estimation and measures due to hot water discharge o Consideration of breeding season, habitat of migrant birds and so on o Effects and estimation due to habitat destruction of flora and fauna o Measures of natural vegetation conservation and share of green zone
<p>Hydrology</p>	<ul style="list-style-type: none"> o Status of water resource use and water supply plan o Effect and measure of quantity on river network 	<ul style="list-style-type: none"> o Effects and measures of river bed and watershed o Estimation and measures of river maintenance flow

KOREAN CASE

Assessment Criteria & Indicators in practice

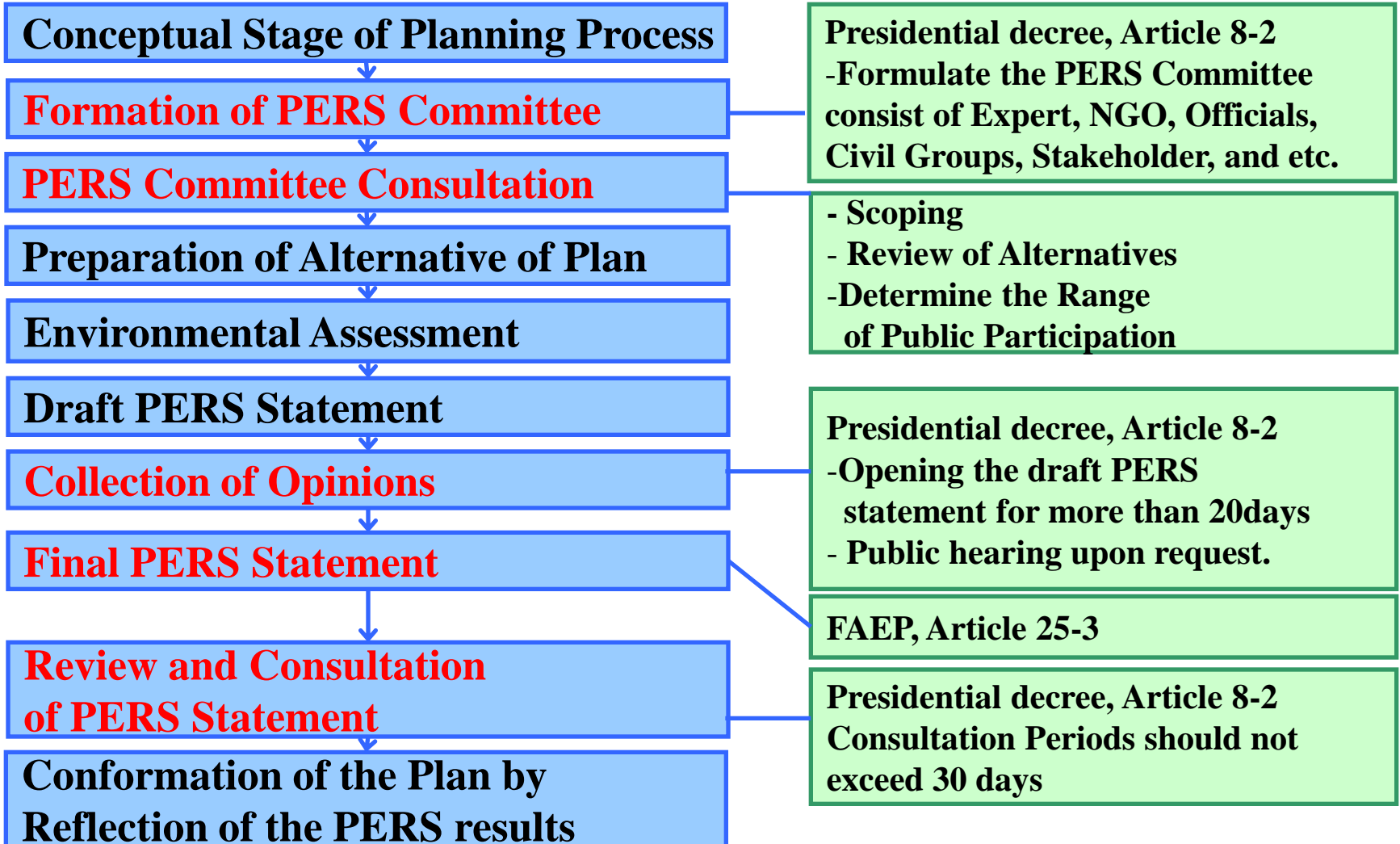
Items	PERS	EIA
Land use	<ul style="list-style-type: none">o Analysis & evaluation of site selection considering near land use	
Air Quality	<ul style="list-style-type: none">o Investigation for sufficient distance from the project site to the impact area, and formation of buffer zoneo Identification the relationship between wind velocity and pollutant dispersion	<ul style="list-style-type: none">o Identification emission sourceo Comparison of emission source and emission rate with national ambient levelso Identification of mitigation measureso Estimation effects of scattering dust at construction or operationo Review of fuel plan and heat supply process
Water	<ul style="list-style-type: none">o Analysis of relationship between water supply plan and water consumptiono Relationship between master plan of sewer and wastewater treatment plano Analysis & measures of determining to meet the total water pollution load management standard	<ul style="list-style-type: none">o Measure of wastewater treatmento Estimation of water quality and measure of water quality conservationo Mitigation measures of non-point source pollutiono Measure of leachate treatmento Conservation measures of ground water quality and quantity
Noise, Vibration	<ul style="list-style-type: none">o Estimation & measures of mobile source (traffic, airplane and so on) noise levels	<ul style="list-style-type: none">o Identification & measures of Noise sourceo Estimation & mitigation measures of noise and vibration due to explosive use and so ono Layout plan on fixed source pollution (Factory, facilities and so on)
Landscape	<ul style="list-style-type: none">o Use of the existing landscape and making plan considering the characteristics of land use are	<ul style="list-style-type: none">o Quantitative review and measures of effects due to change in main view points

KOREAN CASE

Assessment Criteria & Indicators in practice

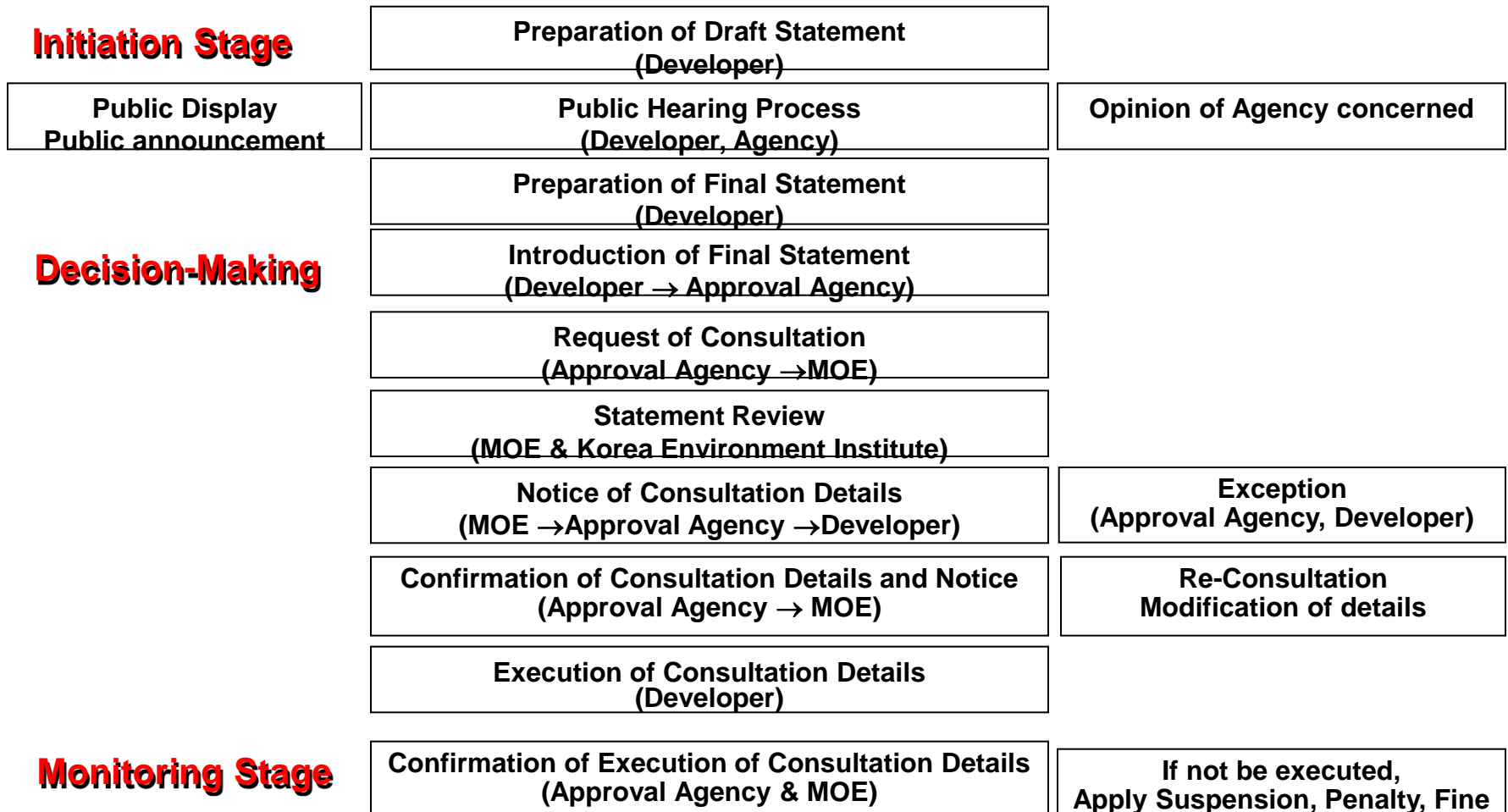
Items	PERS	EIA
Population	<ul style="list-style-type: none">o Measures to densely in habitual districto Environmental effects & measures to densely in habitual district	
Housing	<ul style="list-style-type: none">o Connection plan of road network in residential area	<ul style="list-style-type: none">o Environmental effects estimation & measures of residential area
Industry	<ul style="list-style-type: none">o Estimate the change in industrial structure	<ul style="list-style-type: none">o Estimation & measures to fishing right, farms, crop and so on
Public Facilities		<ul style="list-style-type: none">o Effects & measures of capacity to public facilities
Education		<ul style="list-style-type: none">o Effects & measures of capacity to education facilities
Traffic	<ul style="list-style-type: none">o Analysis & measure of relationship between change of traffic volume and transportation plan	<ul style="list-style-type: none">o Review of the suitability of site, and capacity for parking lots and transfero Selection and adequate lay out of line of trees
Cultural properties	<ul style="list-style-type: none">o Effects & measures of cultural or historic sites in relation to the project	<ul style="list-style-type: none">o Identification of surficial geology in historic siteso Protection measure of any historical or cultural resources etc.

PERS Procedure in detail



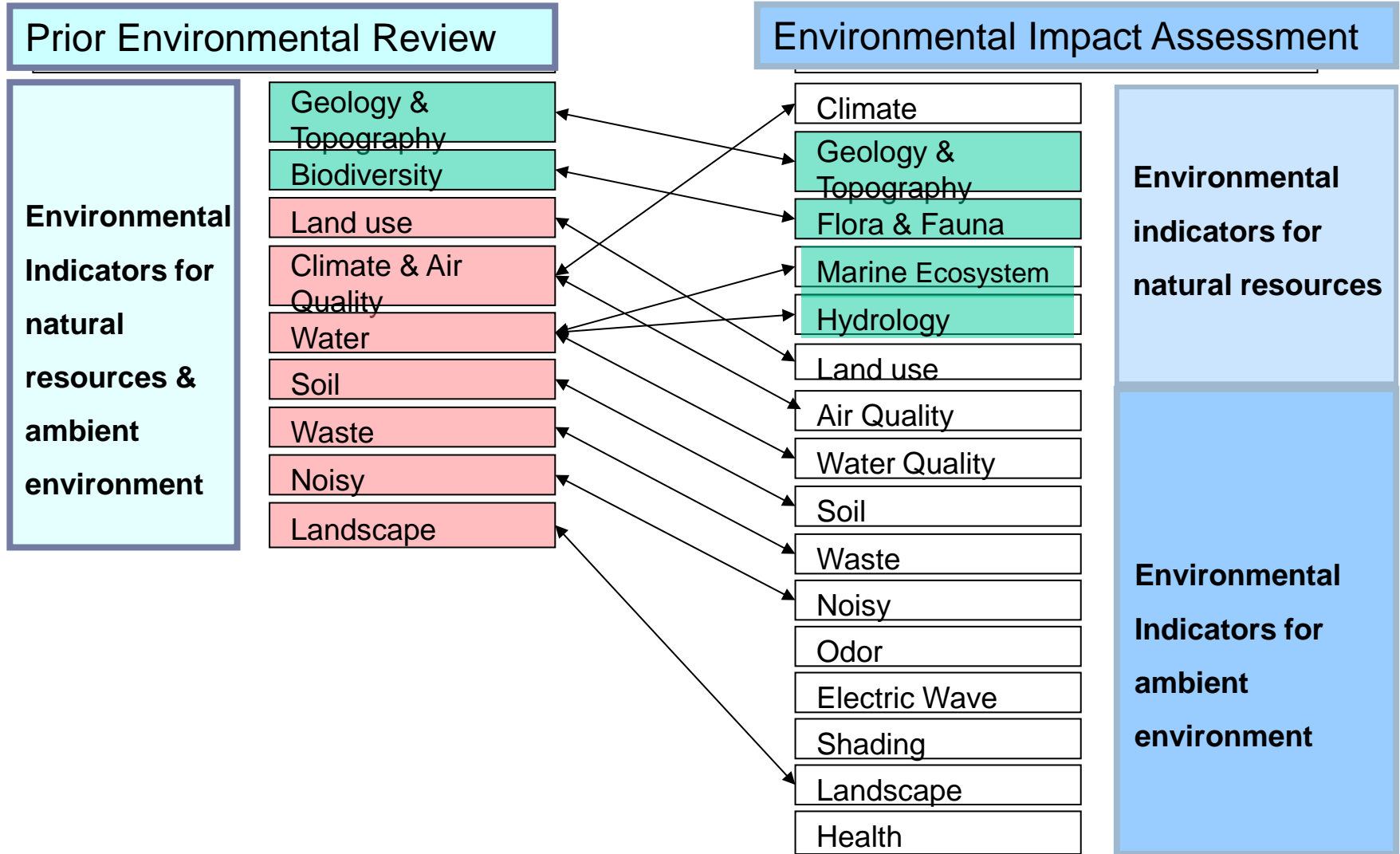
KOREAN CASE

EIA Procedure in detail



KOREAN CASE

Linkage of EIA & PERS Assessment Criteria



Develop Sustainable Eco-tourism

Incentivize ecotourism development with policy mix

Policy Development since 2002

- ▶ Ecotourism Guidelines in 2002
 - ▶ WSSD
- ▶ Ecotourism Promotion Plan in 2008
 - ▶ Ramsar COP 10 held in Korea
- ▶ Pilot Project on the 10 selected sites in 2010
 - ▶ Research on ST Assessment
- ▶ UNEP_GPST Membership in 2011
 - ▶ Global Partnership for Sustainable Tourism
- ▶ ST site designation system & National Ecotourism Organization (NEO) in 2013
 - ▶ 3 year supporting scheme, Target of 30 ST site designations by 2017

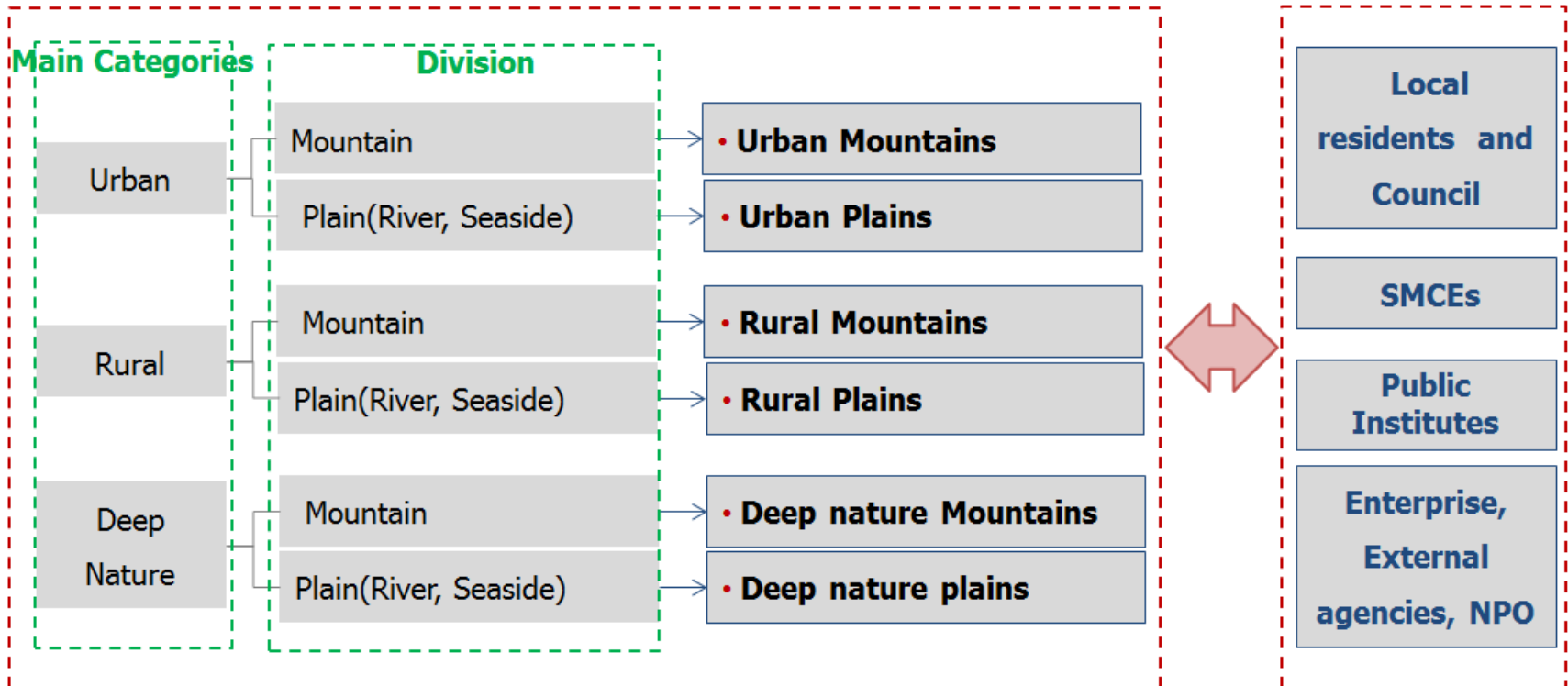
Typology of Ecotourism Site and Operational Entity

Typology of ecotourism areas and Representative cases (Hee-Sun CHOI, KEI, 2013)

Typology of ecotourism

Types of resource-based

Operational entities



Eco-tourism Strategy



Eco-tourism Strategy

Governance

- Government provides sustained support for natural environment conservation, ecotourism infrastructure, and experts inputs and consulting.

Network Building

- A collaborative network aims to ensure that ecotourism contribute to improving well-being of locals.

Education and Meetings

- Encourage locals
 - to take pride in their engagement in ecotourism and nature conservation
 - to have a strong will to make their neighborhood more eco-friendly
 - to build capacity to create ecotourism programmes by themselves

Programme Development

- Dongbaekdongsan ecotourism programme with engagement from locals
- Local natural environment-based approach to generate economic benefits (local products and local dishes)

KOREAN CASE

Eco-tourism Policy Mix

Support for representative ecotourism destinations

- Designation Scheme for Ecotourism Destination (Article 41 of the Natural Environment Conservation Act)
- Myeongpum Maeul in National Parks



Infrastructure

- Eco-village, Eco tour and experience facilities,
- Eco-trekking trails



Natural Environment Interpreter Training Programme (Article 59 of NEC Act)
Natural Environment Interpretation Service Programme in National Parks and nature reserves



Promotion and Sharing Programmes

- Ecotourism story-telling contest
- Korean Green-passport
- Eco-sharing Programme



KOREAN CASE

12 Ecotourism Destinations in 2013



Cheonsuman Bay,
Seosan



Demilitarized
Zone, Yanggu



The high moor
Yongneup, Inje



Estuary of the Geumgang
River and Yubudo Island,
Seocheon



Baekryung Cave
Pyeongchang



Wangpicheon
Valley, Uljin

KOREAN CASE

12 Ecotourism Destinations in 2013



Suncheon Bay, Suncheon



Upo Wetland, Changnyeong



The Taehwa River,
Ulsan



Dongbaekdongsan
(Camellia Hill) Wetland,
Jeju



Anggang Bay,
Namhae



Estuary of the Nakdong
River, Busan

KOREAN CASE

Community Based Governance Mechanism

Organizing Committee consisting of Gwanmae Island residents

Chairman

Vice Chairman

Composition of Village Management Consulting Group

Marketers, Cooks and etc (5 people or less)

Implementation Member

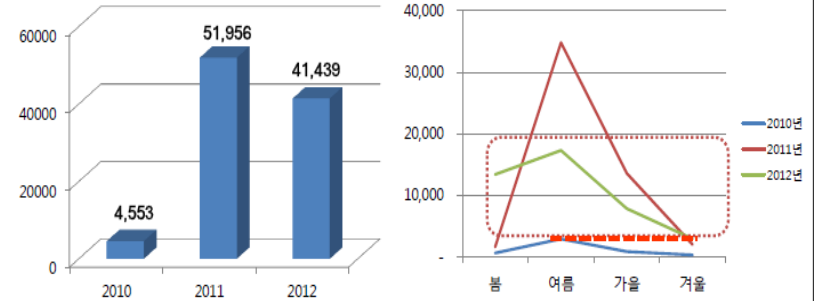
Village Environment Improvement Sector

Resident Income Improvement Sector

Neighborhood Life and Education Sector



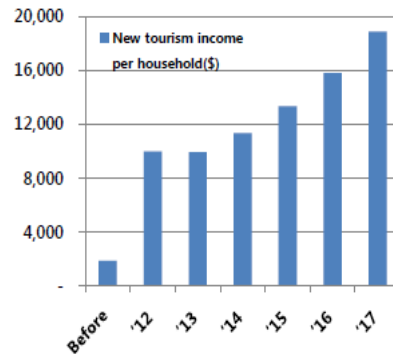
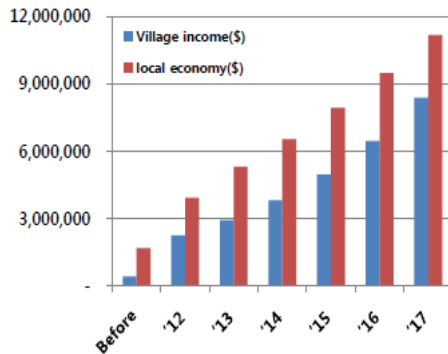
The number of visitors increased by 155% during off-peak travel seasons (3,500 visitors per month)



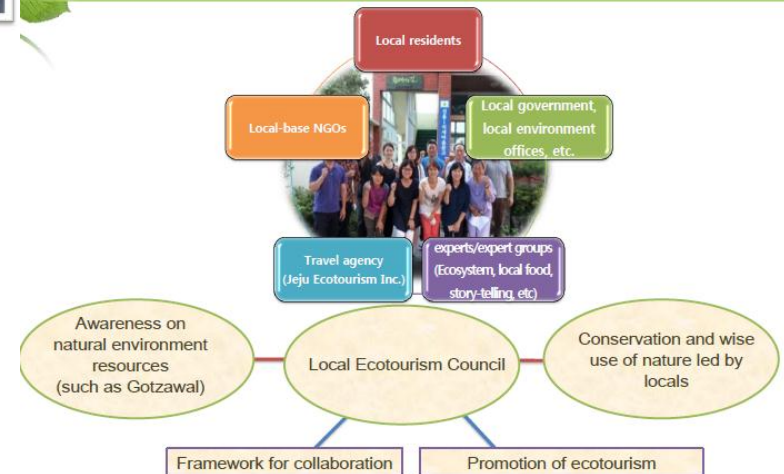
the number of annual visitors

the number of seasonal visitors

Forecasted economic value



Sunheul 1-ri Ecotourism Council



KOREAN CASE

Increased Internal and External Social Cohesions



- ▶ Return of sustainable/traditional value systems



- ▶ Enhanced integrity of rural and urban communities
- ▶ Improved quality of life for local residents

Improve policy mix through Sustainability Evaluation*

* Lee Jae-Hyuck & Lee Hee Yeon, “A Study on the Development of the Indicator Sets for Evaluating the Sustainable Ecotourism and It’s Application” Graduate School of Environmental Studies, Seoul National University, Korea, 2012.

OVERVIEW

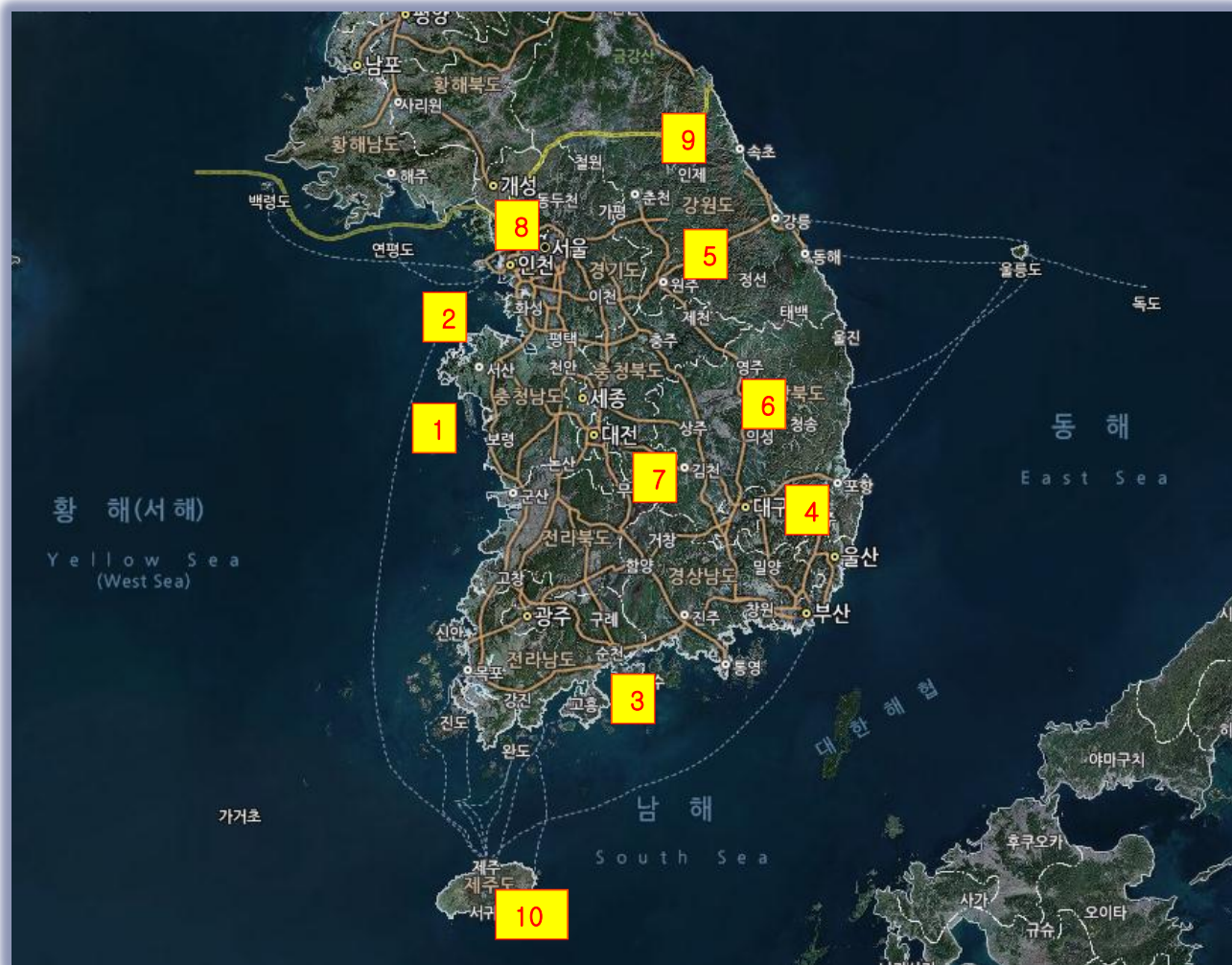
10 Pilot Sites (2010)

Type of resources	Site	Description
Coastal resource	1. Taean sand dune named 'shin-du'	Taean has the Korea's only sand dune called shindu. It functions as buffer zone connecting inland ecosystem and shore ecosystem.
Habitat for migratory species	2. Seosan habitat for migratory named 'Cheonsu bay'	Seosan has the habitat for 300 kinds of and 4 million migratory birds, including endangered species such as spectacled teals and spoonbills.
Coastal wetland	3. Suncheon wetland named 'Suncheon bay'	Suncheon bay is one of 5 main wetlands in the world.
Inland wetland	4. Changnyeong wetland named 'Upo'	'Upo' is formed 140 million years ago, and it is shrouded in ancient mystery.
Fossil/caves	5. Pyeongchang Baekryong caves and Dong river	There are the Dong river and Baekryong cave which was formed by surface movement and corrosion action of underground water and limewater.
Mountain/river	6. Yeongju 'Jarak' path in 'Soback mountain'(source of 'Nackdong' river)	Graceful figure and inherit culture is preserved well.
	7. Jinan 'Mashil' path(source of 'Seomjin river')	There are the 'demi' spring, the source of 'Seonjin' rivers, and beautiful mountains and streams.
DMZ(De-Militarized Zone)	8. Paju 'Chopyung island'	'Chopyung island' called the last 'Galapagos islands' on earth, is in the process of being selected as UNESCO biosphere reserves.
	9. Hwacheon	Hwacheon is the Tourist development area named 'Peace & Life Zone'.
Island	10. Jeju parasitic volcano and 'seogwi' dock biosphere reserves	This area is selected to UNESCO biosphere reserves.

Source: <http://www.eco-tour.kr>.

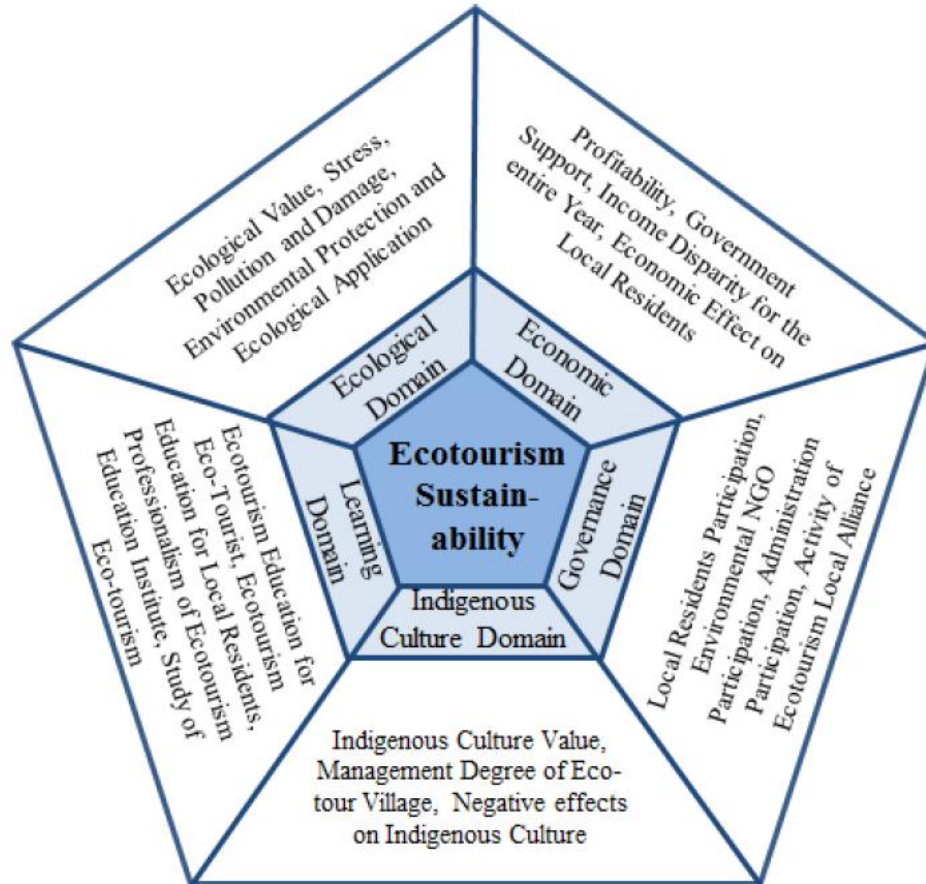
OVERVIEW

10 Ecotourism sites in Korea (2010)



MEASURES

36 Variables for 19 Indicators in 5 Domains



. The framework for the indicator sets of evaluating the sustainable ecotourism.

Source : Lee Jae-Hyuck & Lee Hee Yeon (2012)

KOREAN CASE

Ecological Domain

Domain	Indicator	Details	Measurement Variables
Ecological Domain	Ecological Value	Diversity of Species	Whole Species Rare and Indigenous Species
		Vegetable Group	Floristic Score Number of Colony Vegetable Evaluation Grade Age of Stand Degree of Green Naturality Topographic Assessment
		Ecological Nature Status	Ecological Nature Status Grade
	Stress	Eco-tourist on Peak Season	Density of Tourist Year on Year Rate of Tourist
	Pollution and Damage	Water Pollution Level	BOD(Biochemical Oxygen Demand)
	Environmental Protection & Ecological Application	Designation for Reservation for Natural Resources	Designation Grade of Domestic and Overseas Country
		Environmental Effects Evaluation	Number of Pre-Environmental Appraisals

Source : Lee Jae-Hyuck & Lee Hee Yeon (2012)

KOREAN CASE

Learning & Culture Domains

Domain	Indicator	Details	Measurement Variables
Learning Domain	Eco-tourism Education for Eco-Tourist		Facility Infra Score of Ecotourism Education and Experience Score of Ecotourism Program
	Eco-tourism Education for Local Residents		Number of Ecotourism Education Program to Local Residents
			Number of Local Residents Participate in Ecotourism Education
			Score of Manpower Excavation and Training
	Professionalism of Eco-tourism Education Institute		Number of Education Institute Number of Employees in Education Institute
Study of Eco-tourism		Number of Studies about Each Eco-tour Sites in the National Assembly Library	
Culture Domain	Indigenous Culture Value		Reservation Designation Level of Cultural Properties
	Management Degree of Eco-tour Village		Number of Eco-tour Village Designated by Ministry of Environment
	Negative effects on Indigenous Culture		Civil Complaint Number of Eco-tourism in Each Local Government

Source : Lee Jae-Hyuck & Lee Hee Yeon (2012)

KOREAN CASE

Governance & Economic Domains

Domain	Indicator	Details	Measurement Variables	
Governance Domain	Local Residents Participation		Local Residents Participation Grade to Eco-tourism	
	Environmental NGO Participation		Number of Local Environmental NGO in Each Eco-tour Site	
	Administration Participation			Official Grade of Eco-tourism in Each Eco-tour Site
				Propel Will Grade of Eco-tourism Official in Each Eco-tour Site
				Number of Regulation and Ordinance in Each Eco-tour Site
				Meeting Number of Council for Eco-tourism in Each Eco-tour Sites
	Activity of Eco-tourism Local Alliance		Grade of Eco-tourism Negotiation System	
Economic Domain	Profitability		Eco-tour Sites Entrance Fee of Year Round in 2009	
	Government Support		Ministry of Environment and Culture and Tourism and Local Government Support Amount	
	Income Disparity of Year Round		Ratio of Tourist Number between Peak Season & Off Season	
	Economic Effect to Local Residents		Budget of Eco-tourism Local Gabber Wage and Support	

Source : Lee Jae-Hyuck & Lee Hee Yeon (2012)

KOREAN CASE

Data Sources and Standardization

- ▶ DB: 5 domains, 19 indicators and 36 variables for 10 Sites
- ▶ Source: Ministry of Environment, Ministry of Culture, Sports and Tourism
 - ▶ National Survey Report on Environmental GIS
 - ▶ Environmental Statistical Information System, etc.
 - ▶ Tourism Information System, etc.
- ▶ Source: NSO, Local Government, Survey Data, etc.
 - ▶ Annual Statistics
 - ▶ Budget Survey
- ▶ Standardization $S_i = \frac{I_i - MIN_i}{MAX_i - MIN_i}$
 - ▶ Maximum Score Linear Scale Transformation [0~1]

Source : Lee Jae-Hyuck & Lee Hee Yeon (2012)



United Nations Office for
Sustainable Development
Incheon - ROK

Evaluation Results

KOREAN CASE

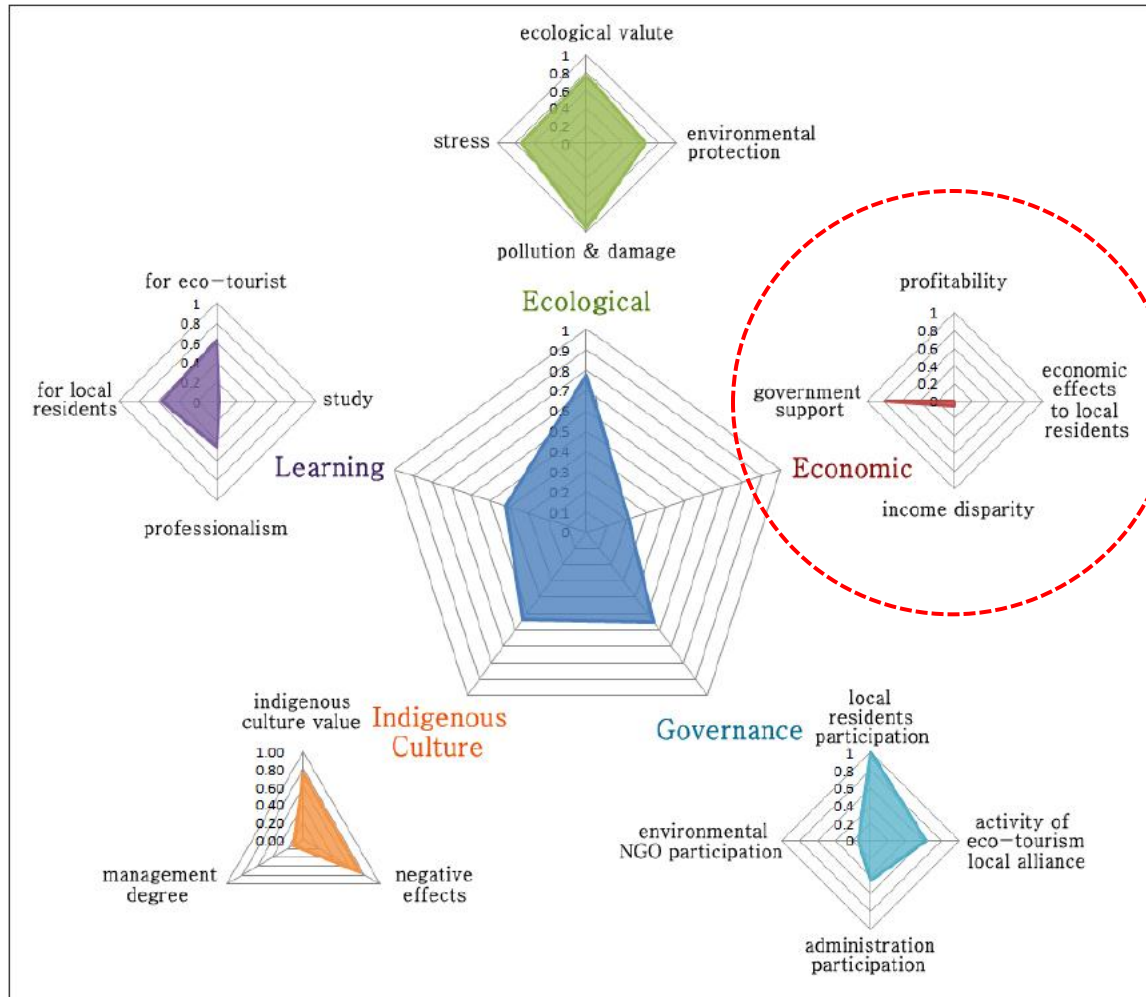
Result for the Site 9 “Hwacheon”

Domain	Score	Indicator	Score	Detail Indicator	Score
Ecological	0.78	Ecological value	0.77	Diversity of Species	0.62
				Vegetable Group	0.69
				Ecological Nature Status	1.00
		Stress	0.73	Eco-tourist on Peak Season	0.73
		Pollution & Damage	0.97	Water Pollution Level	0.97
Environmental Protection & Ecological Application	0.65			Designation of Reservation for Natural Resources	0.50
				Environmental Effects Evaluation	0.80
Learning	0.42			Eco-tourism Education for Eco-tourist	0.63
				Eco-tourism Education for Local Residents	0.57
				Professionalism of Eco-tourism Education Institute	0.46
				Study of Eco-Tourism	0.02
Indigenous Culture	0.54			Indigenous Culture Value	0.75
				Management Degree of Eco-tour Village	0.13
				Negative Effects on Indigenous Culture	0.73
Governance	0.55			Local Residents Participation	1.00
				Environmental NGO Participation	0.13
				Administration Participation	0.45
				Activity of Eco-tourism Local Alliance	0.63
Economic	0.21			Profitability	0.00
				Government Support	0.77
				Income Disparity of Year Round	0.05
				Economic Effect to Local Residents	0.00

Source : Lee Jae-Hyuck & Lee Hee Yeon (2012)

KOREAN CASE

Sustainability Diagram of the Site 9 “Hwacheon”



Source : Lee Jae-Hyuck & Lee Hee Yeon (2012)

Hwacheon Site

- ❖ **Weakness in Economic Domain**
- ✓ **Near the DMZ**
- ✓ **Strong regulation on development project**
- ❖ **Protest from Local Residents**
- ✓ **lack of local economic benefit from the site**
- ✓ **low profitability**



KOREAN CASE

Evaluated Composite Scores of the 10 Sites **Sites**

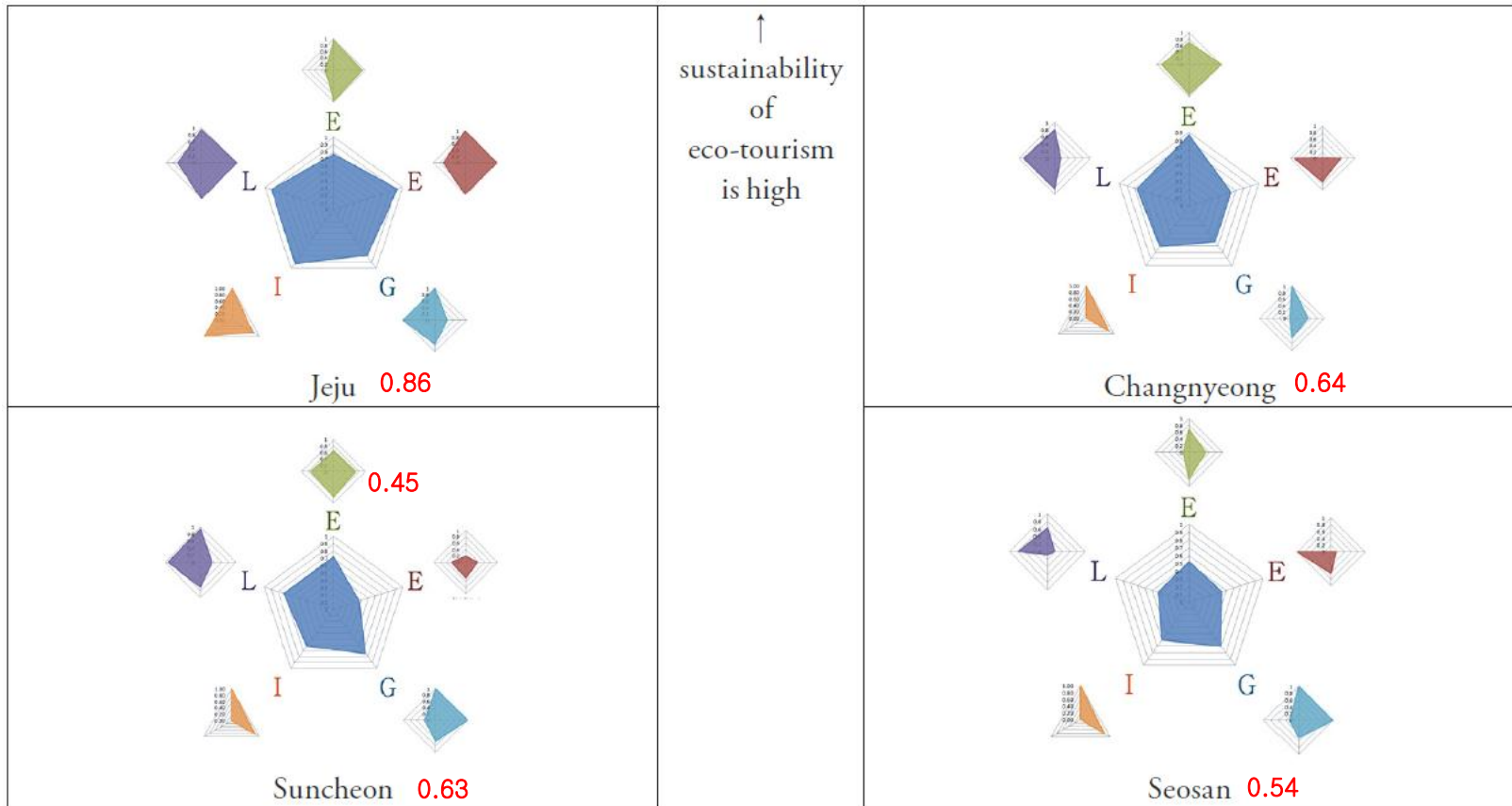
order	site	composite score	domain				
			ecological	learning	indigenous culture	goverance	economic
1	Jeju	0.86	0.77	0.90	0.91	0.78	0.92
2	Changnyeong	0.64	0.86	0.67	0.61	0.54	0.54
3	Suncheon	0.63	0.72	0.72	0.62	0.75	0.37
4	Seosan	0.54	0.52	0.42	0.60	0.69	0.44
5	Hwacheon	0.50	0.78	0.42	0.54	0.55	0.21
6	Pyeongchang	0.49	0.72	0.53	0.48	0.53	0.22
7	Jinan	0.45	0.56	0.45	0.62	0.62	0.09
8	Taeon	0.41	0.63	0.42	0.33	0.50	0.15
9	Yeongju	0.40	0.63	0.27	0.40	0.55	0.15
10	Paju	0.36	0.57	0.24	0.39	0.46	0.14

Source : Lee Jae-Hyuck & Lee Hee Yeon (2012)

* A rank sensitivity test based on AHP (Analytic Hierarchy Process) have shown that the rankings of the sites are quite stable.

KOREAN CASE

High Sustainability Sites: 10, 4, 3, 2

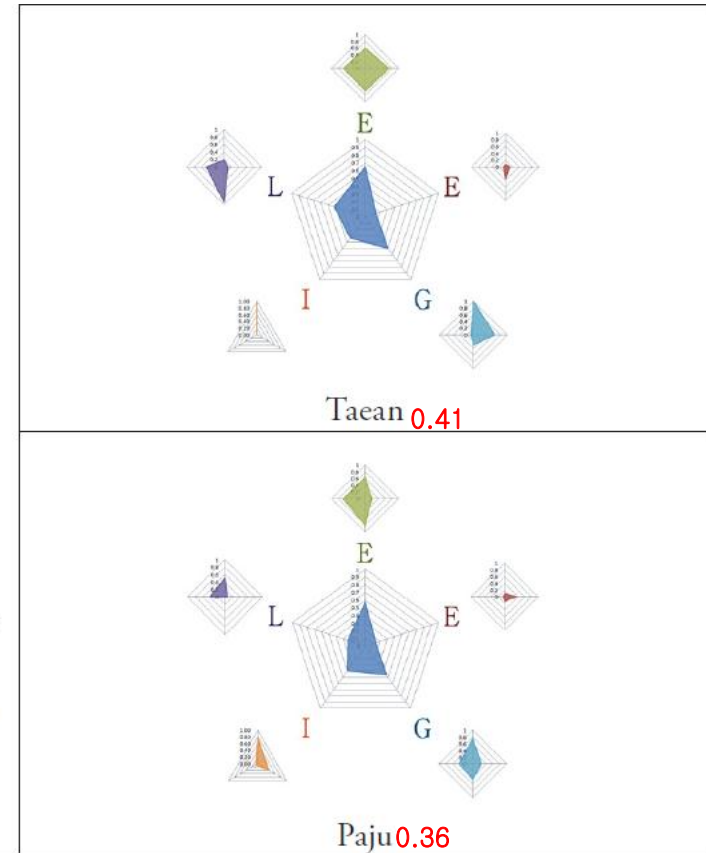
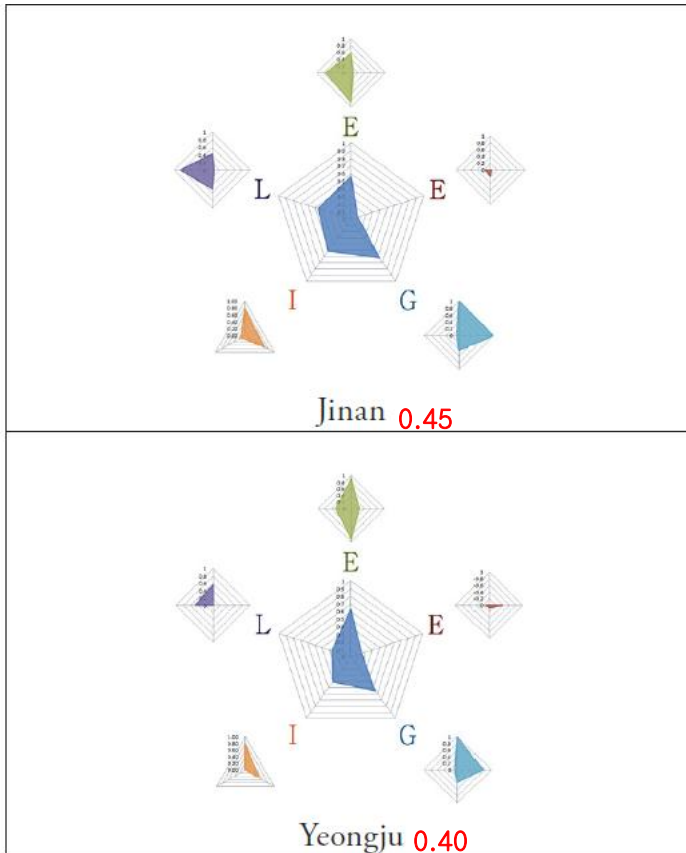


Source : Lee Jae-Hyuck & Lee Hee Yeon (2012)

▶ Coastal sites show higher sustainability.

KOREAN CASE

Low Sustainability Sites: 7, 1, 6, 8



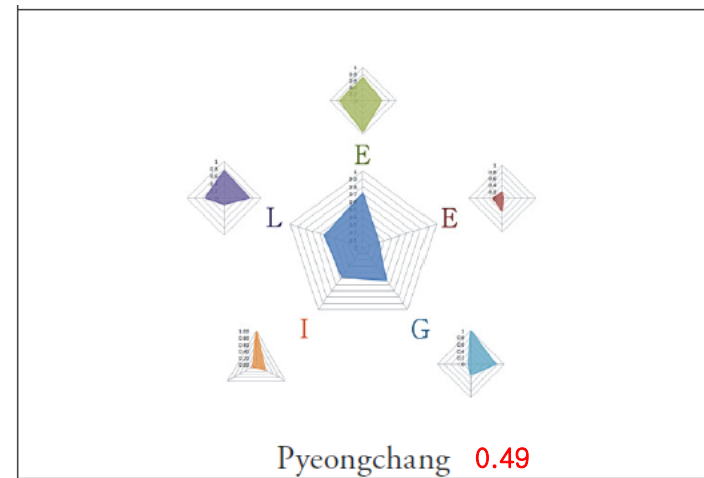
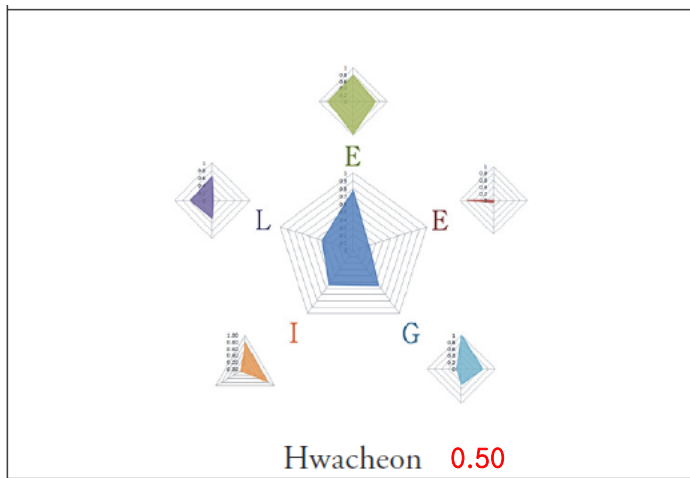
sustainability
of
eco-tourism
is low
↓

Source : Lee Jae-Hyuck & Lee Hee Yeon (2012)

▶ Inland mountainous sites show lower sustainability.

KOREAN CASE

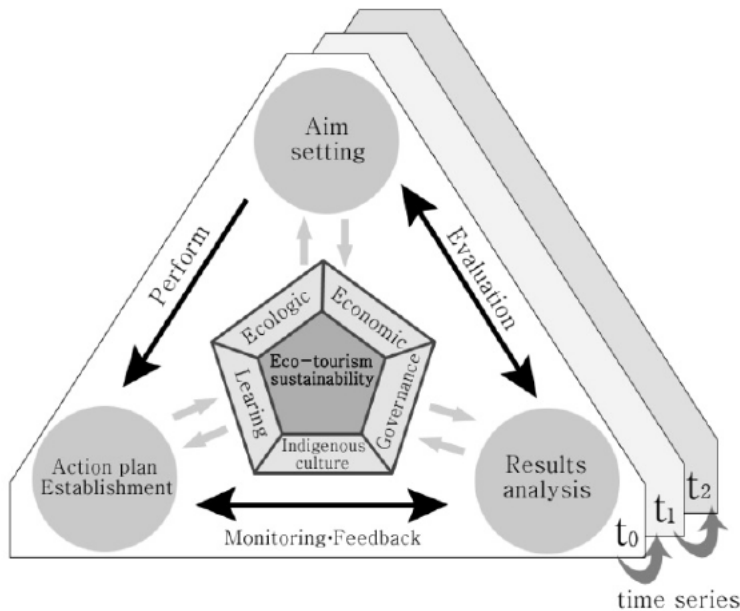
Medium Sustainability Sites: 9, 5



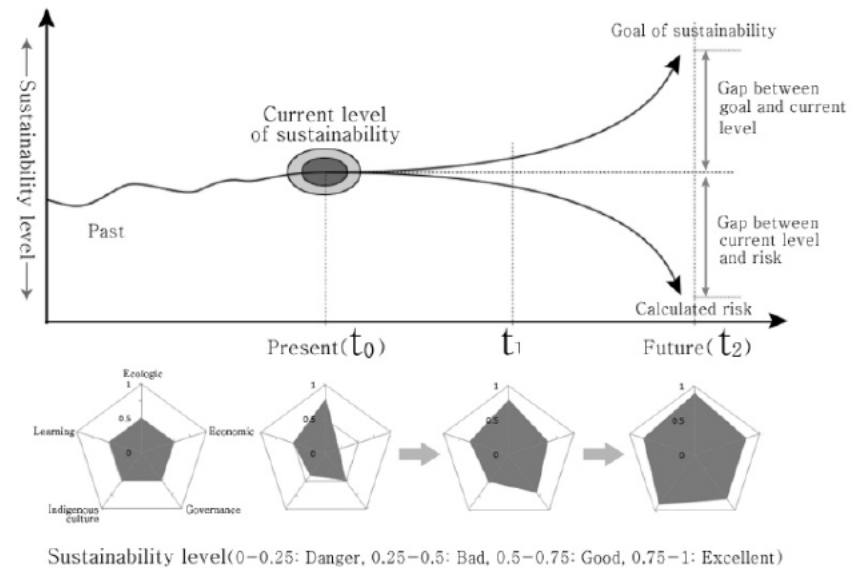
Source : Lee Jae-Hyuck & Lee Hee Yeon (2012)

- ▶ Most ecotourism sites suffer from low economic viability of the project.
- ▶ Ecological consideration, Governance and Cultural dimensions are more prominent factors of sustainability.
- ▶ **Average of Domains: 0.68**(Ecological) > **0.60**(Governance) > **0.55**(Cultural) > **0.50**(Learning) > **0.32**(Economic)

ACTION to be taken: Introduce an evidence based decision making system on tourism **Benefit of Sustainability Evaluation System**



Source : Lee Jae-Hyuck & Lee Hee Yeon (2012)



- ▶ **Institutionalization of SES** is essential for greening tourism development and increasing sustainability of ecotourism, as it helps **evidence based policy decision making** by providing **integrated comparative analysis on different impacts of tourism**.

End of Document