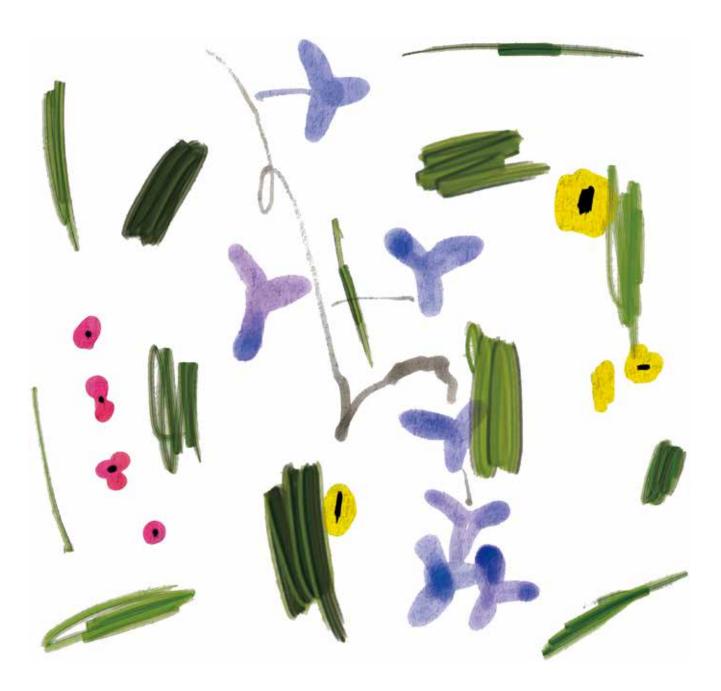
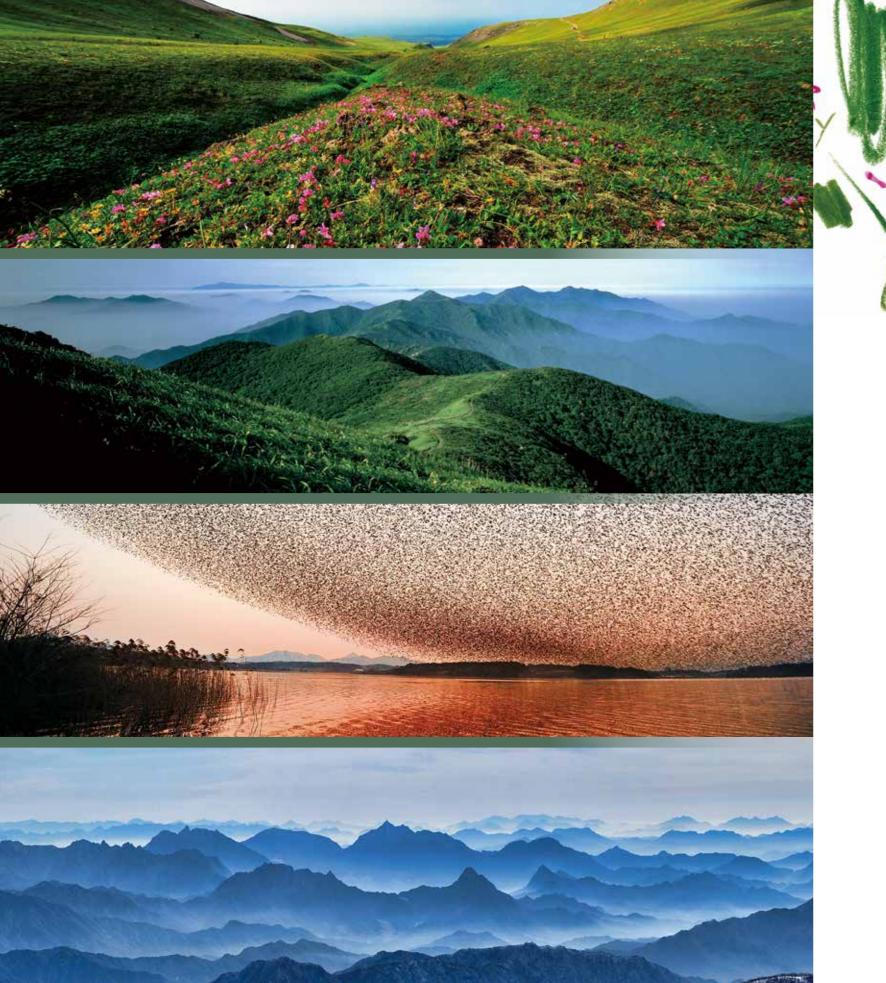
Report on Korea's CBD Presidency of COP 12







Contents

Int	roduction	
1-1.	Overview	
1-2.	Major Outcomes of COP 12	
1-3.	Inter-sessional Activities as President ————————————————————————————————————	
CO	P 12 in Pyeongchang	
	Preparations ————————————————————————————————————	
2-2.	Logo	
	Operations tiatives Proposed by the Republic of Korea	
Ini 3-1.	tiatives Proposed by the Republic of Korea Bio-Bridge Initiative	
Ini 3-1. 3-2.	tiatives Proposed by the Republic of Korea	
Ini 3-1. 3-2. 3-3.	tiatives Proposed by the Republic of Korea Bio-Bridge Initiative Forest Ecosystem Restoration Initiative	
Ini 3-1. 3-2. 3-3. 3-4.	tiatives Proposed by the Republic of Korea Bio-Bridge Initiative Forest Ecosystem Restoration Initiative Funding Sustainable Ocean Initiative	
Ini 3-1. 3-2. 3-3. 3-4. 3-5.	tiatives Proposed by the Republic of Korea Bio-Bridge Initiative Forest Ecosystem Restoration Initiative Funding Sustainable Ocean Initiative Biosafety Capacity Building Initiative Peace and Biodiversity Initiative odiversity Status and Conservation Action	
Ini 3-1. 3-2. 3-3. 3-4. 3-5.	tiatives Proposed by the Republic of Korea Bio-Bridge Initiative Forest Ecosystem Restoration Initiative Funding Sustainable Ocean Initiative Biosafety Capacity Building Initiative Peace and Biodiversity Initiative	

It is a pleasure to present this Report on
the Republic of Korea's CBD Presidency of
the 12th meeting of the Conference
of the Parties to the Convention on
Biological Diversity (COP 12)

"



Clean water, air, food and energy are essential elements for human survival. If the natural environment providing these elements is destroyed, humanity can no longer survive. That is why the conservation of biodiversity is a common task for all humanity.

Ironically, however, the humanity is posing the biggest threat to global biodiversity. Human activities often impose tremendous pressure on the earth beyond what can be sustained by its life-supporting system. The Global Biodiversity Outlook 4 (GBO-4) estimates that biodiversity is expected to deteriorate continuously in coming years despite progress in the global efforts for biodiversity conservation.

GBO-4 also predicts that the current level of implementation falls short of reaching the 'Aichi Targets for 2020,' adopted in 2010. To achieve the Aichi Targets and 2050 Vision for Biodiversity, a concerted effort is required at the

global level. As part of such effort, the Republic of Korea hosted COP 12 in Pyeongchang, Gangwon Province in close collaboration with the CBD Secretariat.

During COP 12, parties reviewed the implementation of the Strategic Plan for Biodiversity 2011–2020 and discussed ways to accelerate the implementation progress. As a result of the discussion, parties made major decisions including mobilizing financial resources and facilitating technical and scientific cooperation. The decisions were incorporated into 'Pyeongchang Roadmap,' adopted and declared during COP 12. In addition, the Nagoya Protocol entered into force to achieve the three objectives of the CBD, namely, the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits arising out of the use of genetic resources.

Gangwon Declaration, adopted by the high-level segment meeting of COP 12, aims to ensure that biodiversity is integrated into the Sustainable Development Goals (SDGs). As a result, the core message of COP 12, 'Biodiversity for Sustainable Development,' was incorporated into the United Nation's '2030 Sustainable Development Agenda.'

As the president and host country of COP 12, the Republic of Korea will continue to take a leadership role in the conservation and sustainable use of the global biodiversity. In the process of its economic development, the nation was able to turn its bare mountains into dense forests. Based on such experience, Korea will fulfill its bridging role between developed and developing countries in the global efforts to conserve biodiversity.

This Report on the Republic of Korea's CBD Presidency of COP 12 provides the overview of

the major outcomes of COP 12, Korea's role as the President Country, and its activities in biodiversity conservation. I hope this report will be a useful resource for the next COP Presidents as well as other various stakeholders. Thank you.

h/" |

Cho KyeungKyu

Minister of Environment of
the Republic of Korea





1-1

Overview

The Republic of Korea held the CBD COP 12 in Pyeongchang, Gangwon Province, under the theme of 'Biodiversity for Sustainability' from September 27 to October 17, 2014.

The theme is based on the idea to advocate biodiversity issue in setting the Sustainable Development Goals (SDGs). Nearly 25,000 people participated in the meeting, including government representatives from 164 parties and 42 international organizations. COP 12 was held at a critical moment when parties needed to assess and evaluate the progress of the 'Strategic Plan for Biodiversity 2011–2020' and its 20 Aichi Targets. For Korea, the meeting was a crucial opportunity to make a significant contribution

1. Introduction

The attendees of the meeting include: Helen Clark, the Administrator of the United Nations Development Program; Braulio Ferreira de

to the international discussion on biodiversity

Souza Dias, the Executive Secretary of CBD; Achim Steiner, the Executive Director of the United Nations Environment Program; Ishii Naoko, the CEO and Chairperson for the Global Environment Facility; Kan Naoto, the Prime Minister of Japan; Chung Hong-won, the Prime Minister of the Republic of Korea; and Yoon Seong-kyu, the Minister of Environment of the Republic of Korea.

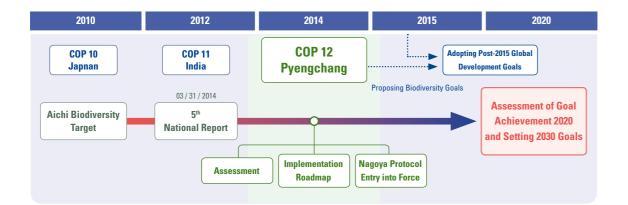
COP 12 consisted of the plenary and the meetings for thematic working groups I and II. On the sideline of COP, the COP-MOP meetings and the high-level segment meeting, chaired by the President, were held. One of the COP-MOP meetings was the First meeting of the Conference of the Parties serving as the Meeting of the Parties to the Nagoya Protocol on Access and Benefit-sharing, which was held after the Protocol's entry into force during the session.

Meetings

for sustainable future.

- 12th meeting of the Conference of the Parties to the Convention on Biological Diversity
 (COP 12) (Plenary, Working Group I & II, Workshop)
 7th meeting of the Conference of the Parties serving as the meeting of the Parties to the
 - September 29-October 3, 2014
- Cartagena Protocol on Biosafety (COP-MOP 7)
- 1st meeting of the Conference of the Parties serving as the meeting of the Parties to the October13-17, 2014
 Nagoya Protocol on Access and Benefit-sharing (COP-MOP 1)
- High-Level Segment Meeting of COP 12 (Opening Session, Plenary, Discussion, Closing October 15-16, 2014
 Ceremony)
- Parallel Events

September 29-October 17, 2014



1-2

Major Outcomes of COP 12

Major Decisions

- Resource Mobilization Target: Discussions have been underway on the level of funding targets to facilitate the implementation of the 'Strategic Plan for Biodiversity 2011–2020.' COP 11 also discussed the funding target, but failed to reach agreement on this issue. During COP 12, parties had a series of sessions to discuss this issue and finally reached agreement on the adoption of the final funding targets, the financial reporting framework and the baseline. As the president country, the Republic of Korea convened several high-level advisory group meetings and one-on-one consultations in order to coordinate different opinions between developed and developing countries. The meetings finally adopted funding targets, including doubling of financial transfers from developed countries to developing countries.
- Mid-term Review of Progress in Implementation of the Strategic Plan for Biodiversity

 2011–2020: COP 12 had the mid-term review of progress in implementation of the Strategic Plan for Biodiversity 2011-2020 on the basis of national reports on implementation, monitoring outcomes and global biodiversity prospects.

 Based on the findings of GBO-4, key actions were identified to enhance the implementation of the Strategic Plan and parties were asked to incorporate the actions into their national policies. Each of the 5 strategic goals under the Strategic Plans has 6-7 key actions.

- Agreements on Implementation Plans for
 Major Issues: Decisions on the following agenda
 were adopted: integrating biodiversity into
 the post-2015 United Nations development
 agenda, biodiversity and climate change,
 invasive alien species, marine and coastal
 biodiversity, implementation of the Global
 Strategy for Plant Conservation, synthetic
 biology, traditional knowledge, mainstreaming
 gender considerations. Korea played a key
 role in reaching agreement among parties on
 implementation strategies and recommendations.
- Multi-year Programme of Work of the Conference of the Parties up to 2020: Parties have agreed to establish a multi-year work programme to set up major agenda for COP 13, 14 and 15. The agenda for COP 13 includes the phrase of 'Pyeongchang Roadmap and Initiative' in the mid-term review of progress in implementation of the Strategic Plan.
- Improving the Efficiency of Structures and Processes of the Convention: Operations of the Convention were improved. COP and COP-MOP meetings, previously held consecutively, will be held in parallel for 2 weeks, and the Subsidiary Body on Implementation will replace the Ad Hoc Open-ended Working Group on Review of Implementation of the Convention.



0

Adoption of Pyeongchang Roadmap

The Republic of Korea proposed the 'Pyeong-chang Roadmap,' which includes key decisions on ways to facilitate the flow of financial and technical assistance to developing countries.

The roadmap aims to promote imple-mentation of the Strategic Plan for Biodiversity 2011–2020. For the adoption of the Pyeongchang Roadmap, Korea coordinated the discussions on its components and directions in a series of meetings such as WGRI-5 and SBSTTA18

leading up to COP 12. Such coordination led parties to reach agreement on the adoption of the Pyeongchang Roadmap.

The Pyeongchang Roadmap includes 8 decisions on technical and scientific cooperation (TSC), capacity building, resource mobilization, biodiversity and sustainable development, etc.

The decisions under the Pyeongchang Roadmap are included in the final report of COP 12.

Major Decisions under Pyeongchang Roadmap

Goals	Major Decisions
Resource Mobilization	Decisions on a set of measures including ODA and domestic plans to mobilize resources required for the establishment and implementation of national biodiversity strategy and action plans (NBSAPs)
Technical and Scientific Cooperation	Decisions on the production and dissemination of scientific and technological information and capacity building required for the establishment and implementation of NBSAPs
Biodiversity and sustainable development	Decisions on supporting measures to incorprate biodiversity into international development targets and to integrate national sustainable development plans (i.e., national development plan, spatial plan, poverty eradication plan) with biodiversity targets.

Adoption of Initiatives led by Korea

The Republic of Korea proposed 5 initiatives to facilitate implementation of the Pyeongchang Roadmap. The initiatives include the Bio-Bridge Initiative (BBI) proposed by the Ministry of Environment; Forest Ecosystem Restoration Initiative by the Korea Forest Service; Capacity Building for Sustainable Ocean Initiative by the Ministry of Maritime Affairs and Fisheries; and Biosafety Capacity Building Initiative

the Ministry of Trade, Industry, and Energy.

Parties decided to adopt all of the 5 initiatives.

In particular, the BBI was proposed to promote technical and scientific cooperation. Parties recognized the BBI as a measure to promote resource mobilization and capacity building in developing countries. As a result, the initiative has played a key role in reaching agreement on resource mobilization among parties.

1st meeting of the Conference of the Parties serving as the meeting of the Parties to the Nagoya Protocol on Access and Benefit-sharing

The 1st meeting of the Conference of the Parties serving as the meeting of the Parties to the Nagoya Protocol (COP-MOP 1) was held on October 13 – 17, 2014. Nearly 4,000 people, both from parties and non-party states discussed a total of 11 agenda and adopted several decisions. During COP-MOP 1, parties agreed on a basic framework to implement the protocol. With this framework, the establishment of

Compliance Committee for Dispute Conciliation and the Subsidiary Body for Implementation (SBI) was agreed. Parties also agreed on how to operate 'Access and Benefit-Sharing (ABS) to genetic resources Clearing-House', and prepared the interim national report on parties' implementation. Ways to strengthen developing countries' capacity building were also deeply explored among parties.



7th meeting of the
Conference of the
Parties serving as the
meeting of the Parties to
the Cartagena Protocol
on Biosafety

The 7th meeting of the Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol on Biosafety (COP-MOP 7) was held from September 29 to October 3, 2014. The meeting was attended by about 2,300 participants from 168 parties, non-party states, and international organizations and nongovernmental organizations. In COP-MOP 7, the agenda of 14 major items, including

handling, transport, packaging, identification, risk assessment and management, and socio-economic consideration, was discussed and the outcomes were incorporated into decisions. Specifically, a special session for implementing the Biosafety Protocol was held to share experiences in the implementation of the Protocol and to facilitate the efficient implementation of the Protocol.

High-Level Segment Meeting and Adoption of Gangwon Declaration



On October 15-16, Korea hosted the High-Level Segment Meeting with 500 participants, including 150 government representatives, 83 of whom were ministers/deputy ministers, and 47 representatives from international organizations. South Korean Prime Minister Chung Hongwon delivered a keynote speech on his vision for biodiversity. The meeting discussed 5 major agenda, i.e., SDGs, implementation of NBSAPs, climate change, creative economy and peace. After such wideranging discussions, a declaration was adopted

by the high-level segment meeting, which was unprecedented in more than 10 years since COP 7 in 2004. This declaration, entitled 'Gangwon Declaration on Biodiversity for Sustainable Development,' presented ways to incorporate biodiversity goals into the discussion of the United Nations Sustainable Development Agenda. The declaration expresses parties' support for the Pyeongchang Roadmap and welcomes the major outcomes from COP 12 and the initiatives proposed by Korea.





Biodiversity Summit for Cities and Subnational Governments

The Biodiversity Summit for Cities and Subnational Governments has been held on the sidelines of CBD COP since COP 9 in 2006. The 4th Summit was hosted by Gangwon Province and was jointly organized by the International Council for Local Environmental Initiatives (ICLEI) and the CBD Secretariat. The 2-day summit was attended by approximately 500 people from 47 countries and 86 local governments, including 27 representatives of local governments. The summit program included sessions on multiple themes such as SDGs, global partnership, linking science and policy, biodiversity plans, stakeholder participation, green/creative economy, and urban and rural nexus. The 'Gangwon/Pyeongchang Resolution for Biodiversity,' which summarized the outcomes of the Summit, emphasized local governments'

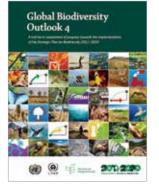
commitments to support implementation of biodiversity actions and stipulated the urgent task of achieving the Aichi Targets. The 5th Summit, to be held during COP 13, will continue the discussion on the role of local governments under the theme of 'Mainstreaming Biodiversity Where Nature Matters Most.'





Translation of GBO-4

The CBD Secretariat published GBO-4 as a mid-term review of the progress and prospects of global biodiversity. GBO-4 assesses the progress towards targets agreed by parties during COP 10 while suggesting a way forward. The report was published in UN official languages. As the host of COP 12, Korea translated GBO-4 in Korean language and distributed copies of the report to ensure that biodiversity knowledge is spread beyond its border.



12

Inter-sessional **Activities as President**

Bureau Meetings

Korea presided over the Bureau meetings to prepare for COP 13 and other inter-sessional meetings. The first Bureau meeting, held on April 27-28, 2015 in Montreal, Canada, was attended by the Bureau members, representatives of the next COP President (Mexico) and representatives from the CBD Secretariat. Korea led a number

of Bureau meetings and shared its experience as COP 12 President. Participants discussed ways of COP 13 operation during Bureau meetings held in Malaysia on February 20-21, 2015 and in Mexico on October 6-7, 2016, respectively.





Ad Hoc Open-ended Intersessional Working Group

The 9th meeting of the Ad Hoc Open-ended Inter-sessional Working Group on Article 8(j) on Traditional Knowledge was held on November 7, 2015, Montreal, Canada. Major agenda included the review of the implementation of certain subjects, such

as indicators related to Article 8(j) and related provisions. The meeting also had a discussion on the 12th and 15th tasks in the multi-year programme of work for the implementation of Article 8(j) and related provisions.





Intergovernmental **Negotiations on the Post-2015 Development Agenda**

At relevant intergovernmental negotiations and discussions, Korea took the lead in integrating biodiversity targets into the SDGs to strengthen connection between SDGs and CBD. Through 8 rounds of meetings in New York (1st meeting on January 19-21, 3rd meeting on March 23-27,

5th meeting on May 18-22, 2015) from January to July 2015, Korea has called on the international community to take measures to conserve biodiversity and ecosystem services, enhance climate change response and promote sustainable use of natural resources.



20th meeting of the **Subsidiary Body on** Scientific, Technical and **Technological Advice** (SBSTTA 20)

Representatives from 194 parties and international organizations participated in SBSTTA 20 on April 25-30, 2016 in Montreal. Participants reviewed the progress of implementing Aichi Targets and discussed ecologically significant marine areas, invasive alien species, and synthetic biology to provide scientific assessment of global implementation of CBD.





1st meeting of Subsidiary

The core functions of SBI include: 1) review of implementation progress; 2) strategic actions to enhance implementation; 3) strengthening means of implementation; and 4) operations of the Convention and the Protocols.

SBI-1, presided over by Mr. Choi Jaecheon, the President of National Institute of Ecology of Korea, was held on May 2-6, 2016 in Montreal. During the meeting, issues related to the operation of COP were discussed and national implementation was reviewed. Various tools and systems to support the implementation of the Convention were discussed aside from the scientific and technical advice of SBSTTA.





Implementation of the Nagoya Protocol

Since the historic entry into force of the Nagoya Protocol in October 2016, there has been a steady increase in the number of state parties to the Protocol from 56 countries in COP MOP 1 to 87 countries as of November 2016. Many states are currently in the stage of preparation to ratify the Protocol.

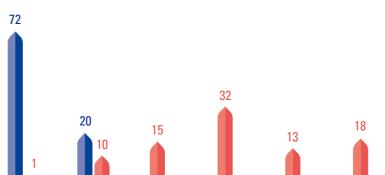
The implementation of the Nagoya Protocol is critical not only for the sake of the biodiversity conservation but also for the global sustainable

development. For the past two years, many countries have been streamlining their laws, institutions and policies for the effective implementation of the Nagoya Protocol. The House, which is the key information sharing mechanism for the implementation of the readily disseminated to stakeholders.



CBD Secretariat has realigned the ABS Clearing Protocol, so that ABS-related information can be 88 Parties ratified the Nagoya protocol until October, 2016





2014

2015

2013

Imminent Entry into Force of the Nagoya – Kuala **Lumpur Supplementary Protocol on Liability and Redress of the Cartagena Protocol on Biosafety**

One of the major issues in the COP-MOP 7 agenda was the additional effort to be undertaken by the Secretariat and state parties to facilitate the entry into force of the Nagoya - Kuala Lumpur Supplementary Protocol on Liability and Redress of the Cartagena Protocol on Biosafety, which was adopted in October

2012

2011

2010. This Supplementary Protocol will enter into force 90 days after the 40th state deposits its instrument of ratification, acceptance, or submission. In the past 2 years, 10 additional countries have become parties, and the Protocol now needs the commitments from 4 more states to come into force.

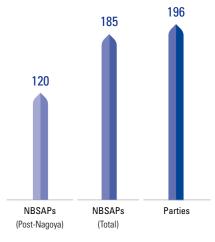
Implementation Efforts of State Parties - Strategic Plan for Biodiversity and **National Reports**

National Biodiversity Strategies and Action Plans (NBSAPs) are the principal instruments for implementing the Convention at the national level (Article 6 of the Convention). Until now, 188 out of 196 state parties (96%) have established NBSAPs, and among these 105 states have newly established NBSAPs based on the Strategic Plan for Biodiversity 2011–2020. 109 countries have submitted their first or revised NBSAPs since 2010, proving the efforts by the parties to implement CBD and achieve the Aichi

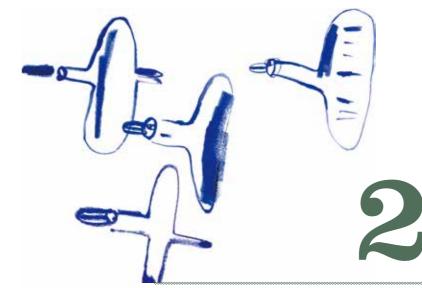
Article 26 of the Convention stipulates that the purpose of national reports is to assess the implementation of the Convention and its effectiveness. COP 10 decided that the 5th national report be submitted by March 31, 2014 (Decision X/10). The submission rate remained low even by the opening of COP 12, well past

the deadline. However, the number of parties submitting reports has steadily increased since COP 12, and a total of 181 countries have submitted their 5th reports as of November 2016.

NBSAP Status







COP 12 in Pyeongchang

- **2-1.** Preparations
- **2-2.** Logo
- **2-3.** Operations

2. COP 12 in Pyeongchang

2-1

Preparations

During the bilateral talk with Lee Man-eui, the Minister of Environment of the Republic of Korea, in August 2010, Ahmed Djoghlaf, the Executive Secretary of CBD, asked Korea to host COP 12, and sent the letter of application for COP in July 2011 to the parties. Korea submitted the application to host COP 12 and was decided as the host country of COP 12 at COP 11 held in Hyderabad, India. Following this decision, the Korean government selected Pyeongchang, Gangwon Province, as the venue for COP 12 through a competitive selection process. Korea's Ministry of Environment and Gangwon Province jointly planned, organized, and financed the meeting under the signed MOU.

The COP 12 Planning Taskforce devised a plan for major achievements to be made from COP 12 and presented the plan to the Bureau meeting (October 2013, Montreal, Canada). Major outcomes include: (1) Pyeongchang Roadmap as a package of decisions for implementing the Strategic Plan for Biodiversity; (2) the Korea Biodiversity Initiative; and (3) the adoption of themes and declarations for high-level segment meetings. Korea also undertook preliminary negotiations through a series of subsidiary meetings (WGRI, SBSTTA, etc.) to promote the Pyeongchang Roadmap to the parties and clarify the details.

The 3rd Intergovernmental Committee for the Nagoya Protocol (ICNP 3) was held in February 2014 in Pyeongchang. In the Committee meeting, the facilities and operational aspects of COP 12 were confirmed. Training sessions were also held for the volunteers selected for COP 12.



2-2

Logo

COP 12 logo symbolizes biodiversity and uses motifs from traditional Korean folk arts, reflecting the Korean respect for harmony between human beings and nature. Animals residing in sky, ocean and land were banded together in harmony with Mother Nature. The logo also symbolizes the harmony and balance needed to attain sustainable development.



Biodiversity Summit for Cities & Subnational Governments 2014



The logo for Biodiversity Summit for Cities and Subnational Governments 2014 was used in promotional materials and souvenirs. The rectangle shape symbolizes city and sophistication, the semicircle part is a combination of alphabet 'B,' which stands for biodiversity, and the tree ring that symbolizes nature. The concentric circle symbolizes the transformation and expansion of biodiversity awareness. The colors symbolize the colors of the nature.



Asian black bear (*Ursus thibetanus*), otter (*Lutra lutra*), white forsythia (*Abeliophyllum distichum*), and king-rainbow butterfly (*Sasakia charonda*) were used as honorary ambassadors of COP 12, and the animal characters were selected from the images of winners from a contest for naming ideas.





2-3

Operations COP Presidency

Mr. Yoon Seong-kyu, the Minister of Environment of Korea, served as the COP President. Replacing him, the president of the National Institute of Ecology, Choe Jae-Chun, served as the Acting President to share the burden of the President throughout 2 weeks of intensive meetings. The COP President presided over

the plenary session and made efforts to solve pending issues, mediating between donor and recipient countries through rounds of unofficial meetings. As the host country of COP, Korean interpretation was provided in addition to official UN languages to facilitate discussions.



Korea's COP 12 Steering Committee and Government Delegation The Korean government organized the COP 12 Planning Taskforce in close consultation with the CBD Secretariat for the operation of COP 12. The Gangwon Province Support Group was in charge of preparing the meeting venue, transportation and accommodation.

As the professional convention organizer, the Convention and Exhibition Center of Korea was chosen to be in charge with logistics, volunteer management and public relations.

The Korean Government Delegation, with the

Minister of Environment as the Chief Delegate, consisted of 80 representatives, which include 65 officials from 11 government offices and 15 experts from both public and private sectors.

The Korean government cooperated with specialized research institutes such as the Korea Environment Institute, National Institute of Biological Resources, and National Institute of Ecology in matters concerning agenda analysis and additional protocols.

Opening Ceremonies

Throughout 3 weeks of COP 12, opening ceremonies for COP-MOP 7, COP 12, and COP-MOP 1 were held on September 29, October 6 and October 13, 2014, respectively. The opening ceremony of COP 12 was attended by renowned high-level figures, including Minister of Environment, Governor of Gangwon Province,

Executive Director of UNEP and members of the National Assembly of Korea. India, the COP 11 President, conferred the gavel to Korea for the Presidency of COP 12. In his congratulatory address, Executive Director of UNEP emphasized the significance of biodiversity and the role of Korea.



Social Events

Social events were planned in accordance with the meeting schedule, characteristics and participants. Major social events included the welcome receptions for COP-MOP 7 on September 29, 2014 and COP 12 on October 6, the banquet for the Biodiversity Summit for Cities and Subnational Governments on October 13, and social event for the high-level segment meeting on October 15-16. Many participants

attended the COP 12 welcoming reception held at Alpensia Resort despite the unusual cold spell. In particular, performances on the ski jumping tower with images projected from a large-scale façade added to the dignified ambience of the banquet. Three Midori Prizes for Biodiversity were awarded during the luncheon in the high-level segment meeting.

Green and Safe Conference Facilities



To make an environment-friendly meeting, 14 out of the 28 meeting rooms were built with assembled tents, and most of the building materials were recycled after the meeting. Paper consumption was drastically cut, using only 625,000 pages of paper and recording 65 percent reduction from COP 11.

service connecting the airport to the meeting venue and stayed in convenient accommodations near the meeting facilities. Close cooperation among the police, fire department and United Nations

Department of Safety and Security (UNDSS) ensured safety throughout COP 12.

Parallel Events,
Awareness-Raising
Activities, and Cultural
Ecotourism

During COP 12, various stakeholders from businesses, NGOs and academia participated in parallel events. The Secretariat organized 230 events and the host country organized 11 events. A total of 71 public relations booths were set up. These parallel events propagated the major messages of the Convention, which were conveyed to COP and high-level segment meetings. The Secretariat organized the "Rio Pavilion," a two-week event to discuss the role of NGOs in facilitating the implementation of the

Rio Conventions. The Ministry of Environment of the Republic of Korea organized DMZ Symposium and exhibitions. Gangwon Province organized the "City and Biodiversity Summit," and the Korea Business Council for Sustainable Development organized the "Business & Biodiversity Summit," proclaiming their efforts to conserve biodiversity. In addition, there were 14 different eco-tourism programs on themes such as temple stay, traditional culture and DMZ trips.

Participants were provided with shuttle bus





3. Initiatives Proposed by the Republic of Korea

3-1

Bio-Bridge Initiative



The Bio-Bridge Initiative (BBI) was adopted on the basis of Article 18 of CBD emphasizing technical and scientific cooperation, and the Aichi Target 19 related to sharing science and technology with a view to promoting the cooperation in science and technology necessary to conserve biodiversity (UNEP/CBD/COP/12/ INF/33). The Ministry of Environment of the Republic of Korea signed a funding agreement with the CBD Secretariat on May 19, 2015, and will be providing financial support for the BBI until 2020.

In the meantime, the Ministry of Environment and CBD Secretariat specified the BBI Action Plan and supported pilot projects (www.cbd. int/biobridge). The Ministry of Environment and CBD Secretariat introduced the BBI Action Plan and consulted expert opinions during international expert workshops in December

2015 in Korea and September 2016 in Hawaii, and a parallel meeting of the Subsidiary Body on Implementation, which was held in May 2016 in Canada. The CBD Secretariat provided the work plan for 2016 and selection criteria for pilot projects. The CBD Secretariat has selected and supported 4 pilot projects: 1) Development of policies for tourist concessions within Southern African national parks systems, 2) Transfer of DNA bar-coding analysis technology for biodiversity monitoring, 3) Sustainable management of ASEAN Heritage Parks through valuing and improving eco-tourism, and 4) Cooperation for the development of Ecosystem - Natural Capital Accounts in Francophone African Developing Countries. Based on these projects, the CBD Secretariat prepared a 2017-2020 Action Plan, the outcomes of which will be reported in COP 13.



3-2

Forest Ecosystem Restoration Initiative



Restoring the world's forests, a key asset for biodiversity being degraded at a rate of 13 million hectares per year, was incorporated as a major objective to the Bonn Challenge and Aichi Target 15 (Restoration of Ecosystem). As a country that successfully restored its forests, the Republic of Korea is expected by the global community to contribute in achieving these goals. Accordingly,

Korea proposed the Forest Ecosystem Restoration Initiative (FERI), which was adopted in COP 12 (UNEP/CBD/COP/12/INF/19). Furthermore, Korea Forest Service and the CBD Secretariat signed an MOU during the Bonn Challenge 2.0 Ministerial Roundtable in March 2015, Germany. The MOU included plans for employment and the 2015-2020 plan of implementation.



To date, 3 capacity-building workshops have been held in October 2015 in Ghana for West African region, in Aril 2016 in Colombia for Latin American region, and in June 2016 in Thailand for Asian region. Progress and plans with regard to FERI were presented to forestrelated international organizations during COP 21 of the United Nations Framework Convention on Climate Change (UNFCCC) in December 2015,

France. In addition, related issues were dealt with during SBSTTA 20 held in April 2016, Canada, where parallel events were also held. Through this process, projects from Chile and Columbia have been selected as the recipient of direct support. Future tasks involve evaluating and elaborating the implementation plans, promoting the progress of FERI in major international conferences, and expanding the number of donor countries.



Funding Sustainable Ocean Initiative



In relation to marine issues, Korea has been supporting developing countries since the 2012 International Exposition hosted in Yeosu, where the 'Yeosu Declaration' was adopted.

The Yeosu Initiative supports various projects related to the conservation and sustainable use of marine environments. Among the projects, recently the construction of the Marine Protected Area Management Facilities was completed in Guimaras, the Philippines. The financial support

plan for Sustainable Ocean Initiative (SOI) was presented during the session on marine biodiversity in the high-level segment meeting of COP 12, in the spirit of the 'Yeosu Declaration.' The purpose of SOI is to provide training sessions for developing country officials so that they contribute to the conservation of marine biodiversity and the sustainable use of marine ecosystems.



The financial support provided from 2015 has helped to operate programs such as instructor training or capacity building workshops. The 5-day instructor training sessions were held in September 2015 and July 2016 in Yeosu and participants were recruited through the CBD Secretariat. The sessions provided participants with opportunities to receive training and share their knowledge on the implementation of Aichi Targets and the management of protected areas. Capacity building workshops were held

in Samoa in September 2015, and Namibia in October 2015. The workshop in Namibia has made a contribution to the nation's progress in establishing an integrated management plan of maritime affairs. The Ministry of Oceans and Fisheries of Korea and the CBD Secretariat organized jointly the SOI Global Forum in September 2016 to promote cooperation among relevant regional organizations. The outcomes of these activities will be presented to COP 13.

3-4

Biosafety Capacity Building Initiative

After COP-MOP 7, the Republic of Korea proposed Biosafety Capacity Building Initiative to contribute to the efficient implementation of the Cartagena Protocol on Biosafety. Details on the operation of Biosafety Clearing-house were included in the final report of COP-MOP 7. Within the framework of this initiative, Korea

and the CBD Secretariat have their respective responsibilities for building capacities in 2 areas. The initiative requires Korea to take the lead in biosafety information sharing and LMO safety management. The CBD Secretariat is assigned with biosafety-related risk assessment and management, and detection and identification.



So far, the Republic of Korea has held the 1st LMO Safety Management Workshop in Daejeon, Korea, April 2015, during which Korea's relevant laws and institutions were introduced to 10 government officials from Bhutan. The 2nd LMO Safety Management Workshop in Daejeon, October 2015, which was a 4-week training program, was held for 2 government officials from the Bhutanese Ministry of Agriculture. Efforts will be continued to build a stronger network of cooperation among Asian countries.

8

00

Peace and Biodiversity Initiative

COP 12 adopted the Peace and Biodiversity Initiative (PBDI) proposed by Korea as a potential solution to global concern on conflict areas. The initiative also aims to gain support for and raise awareness of 'DMZ Ecology and Peace Park,' which is targeted for strengthening international cooperation for protected border areas.

The PBDI aims to: (1) showcase the value of the DMZ Ecology and Peace Park and the benefits of biodiversity conservation, and in particular, how conservation could alleviate conflicts; (2) update the information on transboundary protected areas, including potential sites for peace park; (3) establish more peace parks, enhance existing peace parks and give higher priority to them for UNESCO World Heritage Sites; (4) organize small-scale workshops to explore the possibilities for future transboundary cooperation with 3-4 states; (5) disseminate best practice guidelines and legislations for the TransFrontier Conservation Areas (TFCAs) in order to promote wider acceptance and application; and (6) provide expertise and capacity-building assistance for establishing and implementing the concept of



peace parks in addition to technical support.

To accomplish the above goals, regional workshops need to be used to showcase the benefits of protecting boundary areas. Protection of border areas also has a potential to promote peace, which is related to Aichi Targets 11 and 12. Capacity-building workshops have been held in East Asia and Southeast Asia (September 2015, Yanji, Jilin Province, China) and in Africa (March 2016, in Entebbe, Uganda). Information on transboundary protected areas will be continuously updated along with surveys and case studies on those areas.



Support and Future Directions for the Initiatives

The Republic of Korea has been making continuous efforts to proceed with the 5 initiatives as initially planned. Under the funding agreement signed between Korea and the CBD Secretariat, Korea has made financial contributions and seconded its personnel for administrative affairs. The nation has also presented the progress of the initiatives through various parallel events since COP 12. Among

the 5 initiatives, BBI, FERI, and SOI are related to the implementation of the Strategic Plan for Biodiversity and, in particular, the Pyeongchang Roadmap. Korea will work in close consultation with the CBD Secretariat to maximize the synergy among these initiatives. At COP 13, the nation will pursue to expand the number of donor countries participating in the initiatives.











4. Biodiversity Status and Conservation Action

4-1

Biodiversity Status

Regional Characteristics and Ecosystem

Korean Peninsula has diverse natural environments and various geographical features characterized with the main mountain range extending from Mt. Baekdu to Mt. Jiri.

The Republic of Korea is covered with 64% of mountainous areas and 17% agricultural land. Of this agricultural land, 60% is rice paddies and the remaining 40% is vegetation fields. Korea's freshwater ecosystems are formed along the rivers, most of which flow towards the West and South Seas. The flow rate of Korean rivers is highly inconsistent due

to seasonally concentrated rainfall patterns. Coastal ecosystems are widely dispersed over the Western and Southern coasts, covering approximately 2,489km². The coastline stretches a total of 14,963km, 78% of which is coastline, and there are also coastal wetlands, such as those in Garorim Bay and Soonsheon Bay. Island ecosystems on Jeju Island, Ulleung Island and the Dadohae Archipelago consist of some 3,300 islands with diverse vegetation and geographical features. These are regions rich in biodiversity.



Species

Due to Korea's geographic location at the intersection of the Eurasian landmass and the North Pacific as well as between temperate and subarctic climate regions, Korea shows vibrant biodiversity compared to its land area. As of 2015,

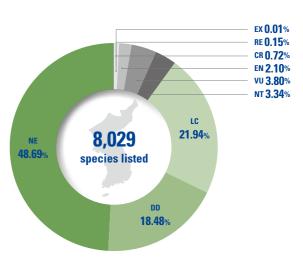
there are a total of 45,295 recorded species, with 5,349 plants, 26,575 animals, 5,058 algae, 4,686 fungi, 1,915 protists, and 1,712 bacteria. Among these, about 5.4 percent, or 2,253 species, are endemic

Total 45,295 Algae **5,058** 26,575 y 5,346 Vertebrate 1,961 1,915 1,712 Vascular plants **Birds** 522 1,262 4,425 Bryophyte **924** Amphibiar 125 32 20

Threats

Changes in land use, increase in invasive alien species, and worsening climate change are major threats to ecosystems in Korea. In terms of land use, urban areas have increased two-fold over the past 20 years from 1989 to 2009, while 10 percent of farmland, 24 percent of grassland, and 61 percent of wetland have disappeared. The number

of introduced alien species grew from 1,109 in 2011 to 2,167 in 2014. Climate change is expected to result in a temperature increase of more than 2° by the year of 2100, even assuming an ambitious level of emission reduction (an RCP 4.5 scenario).



က်

4-2

Biodiversity Conservation Action

Domestic Legislation

For biodiversity conservation enforcement, the Republic of Korea enacted and executed laws on 3 areas: ecosystems, species, and genetic resources. Laws related to ecosystem include the Natural Environment Conservation Act, Conservation and Management of Marine Ecosystems Act, Creation and Management of Forest Resources Act, Natural Parks Act, Wetland Conservation Act, Baekdu-Daegan Protection Act, and Special Act on the Preservation of the Ecosystem in Island Areas including Dokdo.

Laws for species protection include the Wildlife Protection and Management Act. Laws on genetic resources include the Act on the Acquisition, Management and Utilization of Biological Research Resources, and the Transboundary Movement of Living Modified Organisms Act.

To reinforce the linkage between legislation and policies at the cross-ministerial level, the Act on the Conservation and Use of Biological Diversity has been implemented since February 2012.

3rd National Biodiversity Strategy and Action Plan (NBSAPs)

For the implementation of the Strategic Plan for Biodiversity 2011-2020 and the achievement of the Aichi Targets, Korea established and implemented the 3rd Korean National Biodiversity Strategy and Action Plan for 2014-2018.

Under the theme of "Expanding the Future Value of Biodiversity," the 3rd NBSAP has 4 core

objectives: (1) Mainstreaming of biodiversity;

- (2) Conservation and restoration of biodiversity;
- (3) Sustainable use of biological resources; and
- (4) Reinforcing international collaboration on biodiversity.



Progress in implementation of 3rd NBSAP

During the last 2 years since 2014, government ministries and offices achieved the goals at an

estimated 78% on average in the 6 strategic goals under NBSAPs.

Mainstreaming

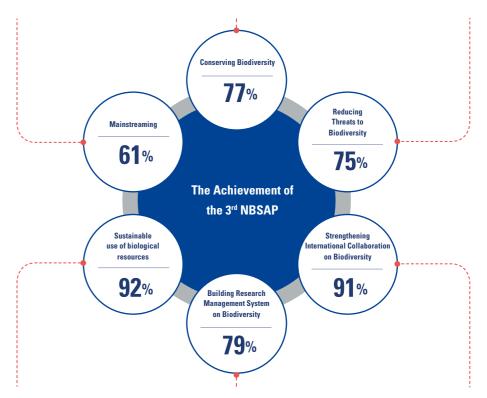
- Establish a ministry-level plan for NBSAPs (2014, 2015)
- · Establish a regional plan for biodiversity
- Prepare and submit a report on biodiversityrelated financial status to the CBD Secretariat

Conserving Biodiversit

- Expand the establishment and management of wildlife rescue and care centers
- Establish the practice of updating the list of endangered species every 5 years
- Expand protected areas and strengthen management framework

Reducing Threats to Biodiversity

- Investigate and monitor the distribution of invasive alien species
- Build LMO management system
- Monitor and evaluate the effects of climate change on ecosystems
- Expand the applications of environmental impact assessment and ecological restoration projects



Sustainable Use of Biological Resources

- Develop organic farming and pest control technologies
- Identify traditional knowledge on biological resources
- Expand ecotourism site designation
- Promote urban biodiversity projects

Building Research Management System on Biodiversity

- Discover 45,295 indigenous species in Korea as of 2015 and collect their specimens
- Establish new research institutes by regions and ministries
- Build efficient information network on access and benefit sharing with business sectors

Strengthening International Collaboration on Biodiversity

- Investigate ecosystems of DMZ area
- Continue policy dialogue among Korea,
 China and Japan
- Host CBD COP 12, operate IPBES TSU, and promote initiatives proposed by Korea

30

.

Local Action

For the purpose of biodiversity conservation and its sustainable use at local level, local government authorities have established Local Biodiversity Strategies Action Plans (LBSAPs). They have also

established and implemented their statutory plans, such as the Natural Environment Conservation Enforcement Plan (NECEP) and Wildlife Protection and Management Plan (WPMP).

Stakeholder Engagement

among businesses, which are the primary consumers of biological resources. In that sense, the Secretariat for the "Biz & Biodiversity Platform' opened in March 2016 to facilitate cooperation between the Ministry of Environment and the business sector. The Ministry of Environment is operating an "Access and Benefit-Sharing Clearing House" to support capacity-building of bio-industries in implementing the Nagoya Protocol. Gangwon Province, the host of COP 12,

organized a forum for local governments celebrating one-year anniversary of COP 12.

Various stakeholders have been participating in

the environmental conservation efforts of Korea.

It is crucial to raise the ecological awareness

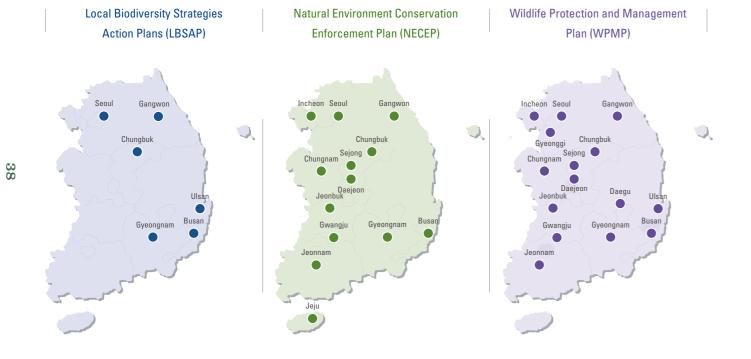
In particular, COP 12 served as a momentum

for the dramatic increase in the role of local

governments, businesses and civil society.

The 2nd forum for local governments was hosted by Gyeonggi Province. Best local practices in biodiversity conservation were introduced during the forum. The forums introduced best practices at the local level in biodiversity conservation.

There was an experts' organized effort to incorporate biodiversity strategies into local governance or to embed local opinions into national strategies. Local think tanks and experts from the Korea Environment Institute meet periodically to plan and put into action the government biodiversity strategies at national and local levels. Since COP 12, numerous civic organizations in the field of environmental protection have organized the "Civil Network for CBD". The network allows participants to share their experiences at domestic level and engage in exchanges with civil organizations in the neighboring countries.







Major Systems and Projects

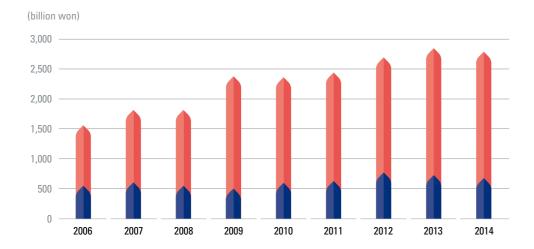
- Designation and Management of Protected Areas: Under 10 applicable domestic laws, Korea has designated almost 20 protected areas covering 12.6 percent of its entire territory and 1.41 percent of its maritime territory as of 2014. Through innovative instruments such as Management Effectiveness Evaluation (MEE), an effective management system is being introduced for the protected areas.
- Designation and Management of Species for **Legal Protection:** In order to prevent natural and human-induced species losses, Korea has designated 246 species as endangered by 2016. Korea also has a list of 4,813 species that are subject to export authorization for the control of indigenous or economically valuable species as of 2016.
- Payment Systems for Biodiversity and **Ecosystem Services:** "Biodiversity Management

Agreements" were extensively used to feed migratory birds and create habitats for them. Water bills paid by urban citizens include the costs for improving water quality and restoring aquatic ecosystems. Korea also is using a biodiversity offset system which is similar to the Payments for Ecosystem Services (PES). Under this system, when mountains, farmland and coastal areas are developed, or forests are exploited, developers need to pay the adequate amount of costs to compensate for their impact on biodiversity.

• Finances: Korea submitted its financial report in accordance with COP 12 decisions XII/3. Korea's domestic biodiversity expenditures are increasing by 9 percent annually, reaching KRW 2.918 trillion in 2013. Korea's baseline for international finance flow was USD 13,283 per year on average in 2007-2010, which is on a sharp

Domestic biodiversity expenditures

■ Local Governments ■ Central Government

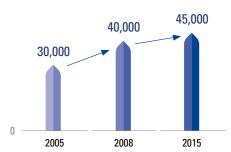


Research Capacitybuilding

Korea has drastically increased investments in biodiversity research in the 2000s. The National Institute of Biological Resources was established in 2007, followed by the successive opening of the National Institute of Ecology in 2013, Nakdonggang National Institute of Biological Resources in 2014, and National Marine Biodiversity Institute of Korea in 2015. More are scheduled to open: the National Endangered Species Restoration Center, Baekdudaegan National Arboretum (Long-term Seed Vault), National Park Migratory Birds Center, and Institute of Wildlife Health are currently under construction. As the outcome of these

investments, the number of species documented in Korea has dramatically increased, from 29,851 in 2005 to 45,295 in 2015. Numerous research findings have been published in scientific literatures.

Domestic Species Recorded



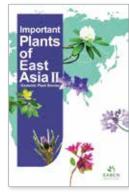


Seed Bank (Symbolic structure for the Marine Biodiversity) National Marine Biodiversity Institute of Korea

National Institute of Ecology, Korea National Institute of Biological Resources, Korea

International Collaboration





The Republic of Korea is promoting international collaboration in various ways to contribute to conservation of global biodiversity. International collaborations are in progress in various fields of biodiversity, such as the management of protected areas, biodiversity surveys, protection of endangered species and migratory birds, climate change monitoring, and preservation of genetic materials and traditional knowledge. Government ministries, including the Ministry of Environment, Ministry of Oceans and Fisheries, and Korea Forest Service, as well as numerous research institutions, are actively involved in international collaborations.

Since opening in 2007, the National Institute of Biological Resources (NIBR) has undertaken joint surveys on biodiversity in the Asian region, published illustrated guides for flora and fauna, and carried out educational programs. Since COP 12, the institute has expanded cooperation with Africa, jointly conducting researches not only on biodiversity conservation but also on developing useful biological resources and sharing the benefits.

Over 2 years since COP 12, the NIBR has

published and distributed 11 illustrated books on biodiversity and applied for 12 patents with its partner institutions. In 2016, the institute initiated an educational project of transferring DNA barcoding technology to developing countries as a part of the Bio-Bridge Initiative. As an institutional member of the Consortium of Scientific Partners on Biodiversity, the NIBR will continue to expand its role as a technology donor to promote technical and scientific cooperation on global biodiversity.

Korea National Arboretum has been engaged in international cooperation focusing on the Global Taxonomy Initiative (GTI) and the Global Strategy for Plant Conservation (GSPC). During COP 12, 6 institutions from 5 countries, including Russia, Japan, China and Mongolia, came together to officially launch the East Asia Biodiversity Conservation Network (EABCN) to promote East Asian cooperation for biodiversity. EABCN is undertaking projects such as developing the standard plant checklist in Northeast Asia, publishing illustrated books on plants, and monitoring climate change. Two volumes of the illustrated book series, Important



Plants of East Asia, have been published.

The National Institute of Ecology (NIE) has invited the knowledge and data technical support unit of Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). The NIE has been working in cooperation with the IPBES Secretariat in accumulating data for assessment indexes, seeking to reduce the knowledge and data gap and creating websites,

with a view to supporting assessment of biodiversity and ecosystem services. It has also been conducting research on Chinese Yellow Dust, long-term ecosystem monitoring of Mt. Baekdu, and protection of Indonesian monkeys. It has been expanding the ground for research collaboration by signing MOUs with the World Conservation Monitoring Centre in UK and the Museum of Comparative Zoology of Harvard University.





The Korea Research Institute of Bioscience and Biotechnology (KRIBB) is undertaking international collaboration with countries around the world. In particular, the International Biological Material Research Center operates 4 local branches in China, Costa Rica, Indonesia, and Vietnam to actively promote joint research on biodiversity and biological resources. Based on these studies, 9 volumes of illustrated books on useful plants and 8 journal articles have been jointly published with partner countries and numerous patents have been applied for since COP 12. In addition, the center oversees researcher exchanges to promote the dissemination of research techniques and is jointly developing useful biological resources with partner countries.

Korea National Park Service, which is in charge of managing Korea's national parks, engage in international collaboration by signing MOUs with authorities overseeing protected

areas in 9 countries. Since 2014, it has been operating the "Korea National Parks Friendship Program," which offers one-month training on Korea's park management and technologies to personnel from partner institutions. It also maintains close cooperation with relevant international organizations to achieve the targets for international protected areas. In 2014, it contributed to the publication of the Protected Planet Report (2014) and Asia Protected Planet Report (2014) of the UNEP-WCMC. It also contributed to the successful launching of the Green List Initiative (November 2014) proposed by the International Union for Conservation of Nature, which certifies excellently managed protected areas around the globe. In 2016, it published "Protected Planet National Technical Report: Republic of Korea," which elaborated on Korea's progress towards targets for protected

Conclusion and Commitments

During COP 12 in Pyeongchang, many important decisions aiming at achieving the Biodiversity Targets for 2020 were adopted including the Pyeongchang Roadmap. As the host country, the Republic of Korea proposed a number of initiatives including the Bio-Bridge Initiative, Forest Ecosystem Restoration Initiative, and funding commitment for Sustainable Ocean Initiative while continuing to make efforts to implement them.

COP 12 was convened successfully with the participation of 25,000 people, including government representatives from 164 countries. As the country holding the COP 12 Presidency, Korea hosted the conference in cooperation with the CBD Secretariat. The Korean government and the Gangwon Province provided safe and environment-friendly meeting facilities and ambience. Various parallel events raised the awareness for biodiversity.

The Republic of Korea will seek to fulfill the objective of CBD and continue its effort to provide necessary assistant for COP with its experience of conserving biodiversity. We hope these efforts will make a significant contribution to achieving the Aichi Targets for 2020.



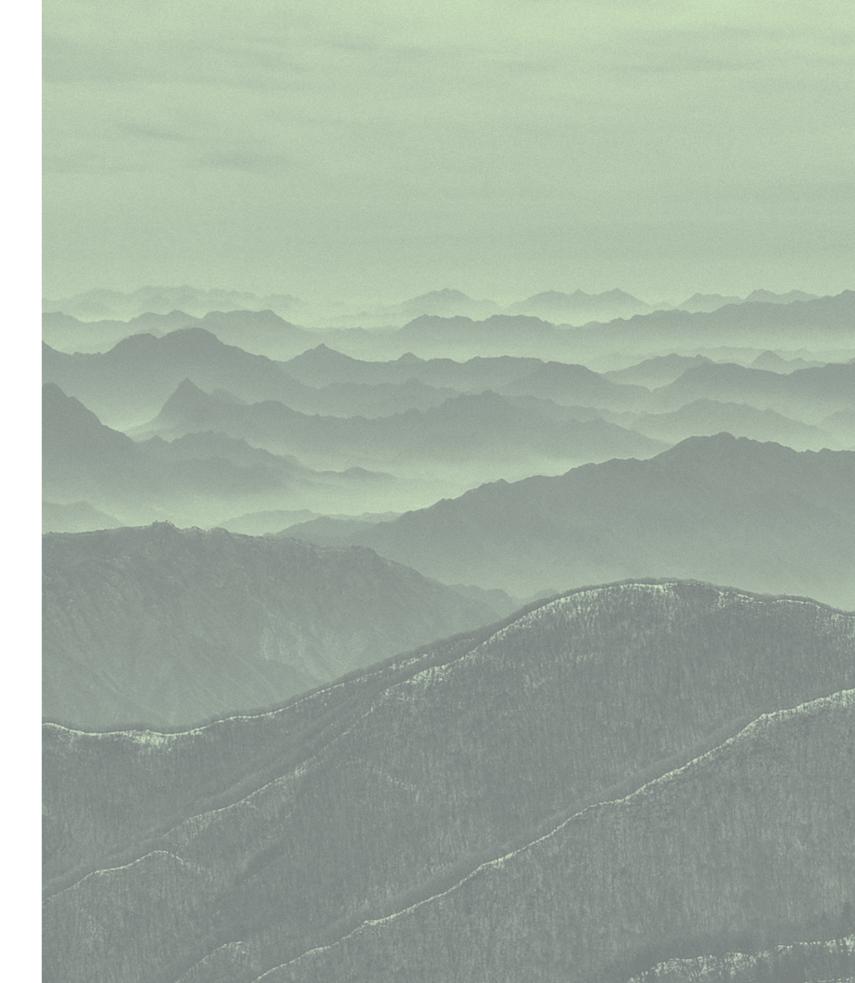
Photos credit

We would like to thank the following people and organizations for their photos contribution:

Inside front cover.

Copyright: Paektu Mountain - National Geographic Korean Edition, Deogyusan Mountain - Korea National Park Service, Birds swarming – National Geographic Korean Edition, Shadow of Deogyusan Mountain - Korea National Park Service

_	
p. 2-3	Copyright: Deogyusan Mountain - Korea National Park Service
p. 4-5	Copyright: Fireflies - Won-Jung Jang
p. 7	Copyright: IISD Reporting Service
p. 9	Copyright: Ministry of Environment (Republic of Korea)
p. 10	Copyright: Ministry of Environment (Republic of Korea), IISD Reporting Service, Butterfly - Korea National Park Service
p. 11	Copyright: Ministry of Environment (Republic of Korea)
p. 12-14	Copyright: IISD Reporting Service
p. 14	Copyright: Mushrooms - Korea National Park Service
p. 16-17	Copyright: Birds swarming - National Geographic Korean Edition
p. 18	Copyright: IISD Reporting Service
p. 19	Copyright: Germination of pine seeds - Korea National Park Service
p. 20-23	Copyright: Copyright: Ministry of Environment (Republic of Korea)
p. 24-25	Copyright: Aquatic plants and tadpoles - National Geographic Korean Edition
p. 26	Copyright: Ministry of Environment (Republic of Korea), Korea Environment Institute
p. 27-28	Copyright: Korea Institute of Ocean Science and Technology
p. 29	Copyright: Korea Research Institute of Bioscience & Biotechnology
p. 30	Copyright: Ministry of Environment (Republic of Korea)
p. 31	Copyright: Korea Institute of Ocean Science and Technology, Korea Research Institute of Bioscience & Biotechnology,
	Ministry of Environment (Republic of Korea)
p. 32-33	Copyright: Germination - Korea National Park Service
p. 34	Copyright: Mountains - Jin-Kyung Choi, Fresh water - Young-Kyu Shin, Farmland, Coastal areas - Tae-Bong Choi,
	Archipelago - Byung-Cheol Jung
p. 36	Copyright: Korean lady's slipper - National Geographic Korean Edition
p. 38	Copyright: Swans - Korea National Park Service
p. 39	Copyright: Ministry of Environment (Republic of Korea)
p. 41	Copyright: National Marine Biodiversity Institute of Korea, National Institute of Ecology (Republic of Korea),
	National Institute of Biological Resources (Republic of Korea)
p. 42-43	Copyright: Books - Korea National Arboretum, Korea Research Institute of Bioscience & Biotechnology
P. 44	Copyright: Pine tree and azaleas - Korea National Park Service



Report on Korea's CBD Presidency of COP 12

Published by

Ministry of Environment, Republic of Korea

Edited by

Korea Environment Institute

Illustrated by

Chun, GapBae

Front cover illustration by Chun, GapBae: The spring of life

Copyright © 2016 Ministry of Environment, Republic of Korea