# Bioinvasion and Global Environmental Governance: The Transnational Policy Network on Invasive Alien Species

## South Korea's Actions on IAS

# **Description**<sup>2</sup>

The Republic of Korea gained its independence from Japanese rule after the latter's defeat in World War II on the 15<sup>th</sup> of August, 1945. Since then, this country of nearly 50 million people has experienced phenomenal growth, raising living standards to 14 times that of its Northern neighbor, and making it one of the early Asian economic success stories. The southern half of the large Korean Peninsula, the ROK spans 98,480 square kms, with a coastline that measures 2,400 kms. The ROK shares a border with North Korea, while Japan is located across the Sea of Japan to the East, while China is situated to the west, across the Yellow Sea.

The Government of South Korea is divided into three branches: executive, judicial, and legislative. The executive and judicial branches operate primarily at the national level, although various ministries in the executive branch also carry out local functions. Local governments are semi-autonomous, and contain executive and legislative bodies of their own. The judicial branch operates at both the national and local levels.

Korea's economic growth, driven primarily by its exports, today amounts to over 1.2 trillion dollars in GDP. Its main exports are semiconducters, wireless telecommunications equipment, motor vehicles, computers, steel, ships, and petrochemicals. Its imports include machinery, electronics, oil, steel, transport equipment, organic chemicals, and plastics. Its main trading partners are China, Japan, the U.S., Saudi Arabia and Hong Kong. The ROK is also a member of ASEAN, OECD, and APEC.

#### **Overview of Biodiversity**

The ecosystems in Korea include forests, mountains, freshwater ecosystems, coastal and marine areas and agricultural ecosystems. The forests in Korea are mainly coniferous, deciduous and mixed forests. A total of 29,916 species are reported including: 18,117animals; 8,271 plants; 1,625 fungi; 736 protista and 1,167 prokaryotes.

• CBD Country Profile

## Legislation relating to IAS

- Animal Protection Law (revised 2007)
- Plant Ouarantine Act
- Wildlife Protection Act
- Veterinary Law
- Korean Customs Act

## Government Agencies/Departments/Ministries dealing with IAS

• Ministry of the Environment

- o National Institute of Biological Resources
- o National Institute for Environmental Research
- Ministry of Food, Agriculture, Forestry and Fisheries
  - Korea Forest Service
- Korean Coast Guard/National Maritime Policy Agency
- Korean Customs Service (KCS)

Major Invasive Alien Species (see Annex I for species descriptions)

Cyprinus carpio nudus (fish)

Rana catesbeiana (amphibian)

# Table 1 Actions to prevent, detect and manage IAS categorized into three themes: biodiversity, human health, and economic

Note: Actions (such as projects, publications and programs) are classified according to the most obvious theme but may also fit into the dimensions of another.

Theme	Action
Biodiversity	<ul> <li>Wildlife Protection and Management requires the protection of native ecosystems from alien species.</li> <li>In a vision statement for the national biological sovereignty, at the National Institute of Biological Resources, Korea announced a threefold objective: to identify all IAS by 2020, to monitor their changes to ecosystem, and to establish an eco-community with inter-Korean cooperation.</li> <li>Ministry of Environment conducted a survey on Dok-do's ecosystem and found that of the 49 types of plants in Dok-do, 19 are not indigenous but introduced or planted.</li> <li>Alien Plants in Korea is a database of IAS, operated by the National Institute for Environmental Research, which allows the general public to participate in the proper management of alien plants and to facilitate international cooperation in the management of IAS. In Korea there are estimated to be about 300 species, which account for some 6% of total 4,500 plant species known in Korean Peninsula. Up to now, severe harmful effects caused by the alien plants on indigenous ecosystems have not yet been reported as can be witnessed in foreign countries.</li> </ul>
Human health	The Animal Health Division of the Ministry of Food, Agriculture,     Forestry and Fisheries operates the Animal Protection Law and other relevant policies during the quarantining processes of livestock and the Plant Quarantine Act where plants are concerned.
Economic	All goods imported into Korea for general consumption must be declared and accepted by the Korean Customs Service (KCS) in order to be released for domestic consumption. The general customs procedures involved are as follows: <sup>3</sup> 1. Goods are stored in a bonded area upon arrival until customs

	cleared
	2. Electronic or manual filing of the <b>Import Declaration</b> by broker or
	importer
	3. Document review of Import Declaration and cargo inspection
	4. Assessment and payment of duty
	5. Issuance of a <b>Customs Importation Certificate</b> upon Customs
	clearance
•	A Phytosanitary Certificate from the country of origin is required with
	the Import Declaration. Phytosanitary <u>requirements</u> of Korea.

Table 2 Action on IAS in cooperation with other countries

Table 2 Action on IAS  Agreement/	Countries/	Action
Organization	Member	
ASEAN-Korean	Members of	Cooperation Project has the following five
Environmental	ASEAN countries	objectives:
Cooperation Project	and Republic of	1. to provide ASEAN countries with opportunity to
	Korea	share Korea's practical knowledge and experiences
		on how to deal with environmental problems
		including deforestation;
		2. to establish partnership between Korea and
		ASEAN countries by conducting basic and applied
		science researches on biodiversity, sustainable
		forest management, and agroforestry techniques in
		the tropical regions;
		3. to develop and implement technologies for
		restoration of degraded forest ecosystem and
		sustainable forest management in selected areas of
		the ASEAN member countries;
		4. to make available the university resources for
		educating and training researchers and students
		from the member countries of ASEAN and to
		upgrade their capacity to undertake research into
		key environmental problems;
		5. to provide Korean scientists with more in-depth
		knowledge on tropical forest ecosystems and to enhance their capacity to conduct field researches
		in the Southeast Asian regions.
		[does not specifically mention IAS]
Northeast Asian	China, Japan,	This conference has been held annually since 1992
Conference on	Mongolia, Russia,	to exchange views and policy dialogue among
Environmental	South Korea	environment experts and for deeper discussions on
Cooperation	along with	environmental cooperation in the region. In the
<u>F</u>	experts from	13th NEAC, held in Seoul, Korea in December
	UNEP, UNDP,	2004, a symposium on Air Quality Management
	and UNESCAP	Policy in Metropolitan Area was held, and

	participating as	discussions covered three subjects: Species
	observers.	Restoration, Ecological Restoration in Local
		Government, and Sustainable Management of
		Industrial Complexes.
		[does not specifically mention IAS]
The Tripartite	China, Japan and	In order to exchange views on regional and global
<b>Environmental</b>	the Republic of	environmental issues and to strengthen mutual
Ministers Meeting	Korea	cooperation, these three countries have conducted
		Tripartite Environment Ministers Meetings every
		year since 1999.
		[IAS has not been on the agenda so far]

#### References

- 1. Global Invasive Species Database. 2009. Retrieved Jan. 16, 2009, from <a href="http://www.invasivespecies.net/database/species/List.asp">http://www.invasivespecies.net/database/species/List.asp</a>
- 2. Country descriptions are compiled from the Central Intelligence Agency's World FactBook, available at <a href="https://www.cia.gov/library/publications/the-world-factbook/">https://www.cia.gov/library/publications/the-world-factbook/</a>, and Wikipedia: The Free Encyclopaedia, available at <a href="http://en.wikipedia.org/wiki/Main\_Page">http://en.wikipedia.org/wiki/Main\_Page</a>.
- 3. Europa. (no date) "Country Dossier: Republic of Korea." Retrieved Jan. 16, 2009, from <a href="http://ec.europa.eu/agriculture/markets/export\_refunds/forms/kr.pdf">http://ec.europa.eu/agriculture/markets/export\_refunds/forms/kr.pdf</a>

## **Annex I Species Descriptions**

Cyprinus carpio nudus (fish)

The common carp (*Cyprinus carpio*) has been introduced as a food and ornamental fish into temperate freshwaters throughout the world. It is considered a pest because of its abundance and its tendency to reduce water clarity and destroy and uproot the aquatic vegetation used as habitat by a variety of species.

#### Rana catesbeiana (amphibian)

Rana catesbeiana (the North American bullfrog), has been widely distributed via aquaculture and the aquarium trade. It is one of the most frequently cultivated edible frogs world-wide. Primary concerns are competition with, and predation upon, native herpetofauna.