

# LOCAL ACTION FOR BIODIVERSITY

A SERIES OF LOCAL CASES

## Suwon, Republic of Korea

### Toward a city that history and nature thrive

**Summary:** Suwon is a city located in south central region of Gyeonggi-do, with 40km away from Seoul, the capital of Republic of Korea. It was the first planned city created during the Choseon Dynasty with Mt. Paldal as the center and it boasts the Hwaseong Fortress which was inscribed on the World Heritage List in 1997. But, situated in a basin with high in northeast and low in southwest, the city suffers from air pollution due to sudden urbanization and heavy traffic passing through the metropolitan areas. In response, Suwon is deploying various policies to create a low-carbon and green city with a goal to become an environmental capital. In cooperation with ICLEI, the city is also committed to responding climate change and realizing a sustainable city such as an eco-mobile city and a biodiverse city.

### Suwon's environmental vision: "Suwon as an environmental capital"

There is a growing voice that demands improvement of the city's environment from traffic issues and environmental degradation due to rapid urbanization. In response, in 2011 residents and experts joined their forces to host a public meeting regarding the theme of the environmental capital and decided major agenda items to turn Suwon into an environmental capital. The city went on to declare Suwon as an "environmental capital" after representatives from administrative, corporate and civic realms gathered together and signed a declaration. The following year, it drew up the vision of an environmental capital, three targets and nine strategies. Since then, it has carried forward its project to create the environmental capital till now in 2015.

In this regards, the city has strengthened its policies and systems to manage biodiversity in an attempt to improve the quality of life for its residents and join the global efforts to preserve biodiversity, and many civic groups in the region on their part have engaged in activities in the local level where citizens are actively participating such as monitoring of living organisms.

### Restoration of Suwon Tree Frog, an endangered species, indigenous to South Korea

Suwon tree frogs are a species indigenous to South Korea and the only areas in the world where they can be spotted are Gyeonggi-do and Chungcheongbuk-do. They are the only amphibians whose name contains the word, Suwon. In 2012, they were designated as an endangered species (Grade 1) by the Ministry of Environment thanks to activities mainly by civic environmental groups to save Suwon tree frogs.

In 2014, the city embarked on a project to create rice paddies as the habitat for Suwon tree frogs in Ilwol Reservoir by tapping into the ministry's Ecosystem Conservation Cooperation Funds along with Korea Rural Community Corporation, and will operate restoration and proliferation projects together with environmental groups. In addition, environmental organizations in the region have been engaged in various activities such as the production of PR materials, campaigns, and education regarding Suwon tree frogs while developing the frog's character.

Suwon tree frogs are one of the eight flagship species\* selected as a symbol that represents the region's ecological characteristics in 2012 by the Council for Suwon Agenda 21 to preserve Suwon's endangered species and their ecological habitats.

\* Suwon's eight flagship species: Suwon tree frog, *Luciola lateralis* Motschulsky, White heron, *Atypus suwonensis*, *Odontobutis obscura interrupta*, *Chilbo metanartheicum*, Narrow-mouthed toad, Titmouse



Suwon Hwaseong Fortress (World Heritage) and skyscrapers  
<Picture: Suwon City>



## Restoration of stream with its unique regional characteristics intact through citizen participation: Restoration Project of Suwon Stream

Suwon Stream passing through Suwon Hwaseong Fortress inscribed on the World Cultural Heritage List in 1997 is a so special place which combines the city's nature, history and culture from the past to this date that major structures were built along the stream when the fortress was created during the Choseon Dynasty. In the 1970s and 80s, many streams were covered due to rapid urban development and Suwon Stream was one of them. The public opinion including Suwon Cultural Center and civic groups, however, demanded to restore the urban streams and conserve cultural artifacts. As a campaign to oppose the coverage of Suwon Stream was raised starting from 1995 and the coverage project was aborted.

From 2009 to 2011, a restoration project began with the ecosystem being restored, the sewage system maintained, an eco-park created and the city landscaped; creating a leisure space where the nature is in it, a waterfront space and a cultural space with historical value. A stream management system has been established based on "Civil Network to Save Stream" by building and managing multi-faceted governance joined by research institutes, citizens, environmental groups, schools and companies. This example in which Suwon Stream has been restored has provided an opportunity to change everyone's perception, whether it be from the public or private sector, regarding urban streams.

## Laying groundwork for citizens' capacity building through biodiversity education

In 2014, the city opened Suwon Experience Education Center for Ecological Environment through participation of citizens-led council. Located near Mt. Chibo, the center serves as a function exclusively for environment education where residents can experience and learn activities to preserve Mt. Chilbo's ecological and cultural value. By providing programs specialized in environment education, it has satisfied demands for ecological education.

In addition, the city has produced environmental educational materials, "Suwon Tree Frog's Environmental Story" that contain the name of the frog, which is the most highly recognized by residents out of the eight flagship species, and its story as an effort to raise the awareness among students, and has distributed the materials to third/fourth graders and their teachers in Suwon's elementary schools since 2013. Every year, the books are being used for creative experience activities in 85 schools, contributing to school active environmental education.



Ecological education program in "Frog" rice paddies  
<Picture: Suwon Experience Education Center for Ecological Environment>

## Leading role in the international initiatives for a sustainable city

ICLEI Korea Office was hosted by Suwon in 2012. Since then, it has actively participated in cooperation of local governments around the globe for sustainability. At the summit roundtable of "Biodiversity Summit for Cities and Subnational Governments 2014", Suwon announced its example regarding the mainstreaming of biodiversity. Starting from signing of the Durban Commitment at "2015 ICLEI World Congress", it has pushed ahead with its LAB project.

## City profile & contacts



Located in the south-central basin of Gyeonggi-do, Suwon is the center for the administration, economy and culture of the province as the seat of the provincial government. The total land area of Suwon is 121.05 km<sup>2</sup> or 1.19% of Gyeonggi-do. With 1,209,169 residents, it is one of three cities with a population of more than a million (as of the end of December 2014). Over recent decades, the amount of land area committed to urban use has soared while the area maintained as natural land such as farmland and forests has been reduced. More than 43% of the total land area is densely developed area and the volume of the city's tertiary industry is high. Mt. Gwanggyo in the north and Mt. Chilbo in the west are found on the outskirts of

Suwon in which there are four largest rivers: Hwangguji Stream, Seoho Stream, Suwon Stream and Woncheonri Stream.

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