As a consequence of rapid industrialization, forests had been destroyed in a process of various construction works. Today, restoration of these destroyed areas is emerging as a social issue. For instance, in pre-environmental review and environmental impact assessment, the application of environment-friendly restoration plans is requested. Therefore, new attempts to preserve landscape while initiating development and to ecologically restore the soil and vegetation of destroyed environment are being made. In addition, environment-friendly development tends to become a prerequisite in the national land development projects.

Now, local governments, Ministry of Construction and Transportation (MOCT) and Ministry of Environment (MOE) are newly introducing various options that consider preservation as well as development.

The MOCT is revising design criteria for road slopes in consideration of climate and topography. As for such problems in revegetation of slopes and restoration in Korea, the MOCT is requested to develop new design criteria for the revegetation of slopes considering climatic zones and sea-level altitudes of national land and to apply different restoration goals in consideration of soil quality and slope size. For instance, instead of simply covering slopes with foreign herbal plants, a new concept seeking forests in the upper part of slopes while the medium and lower part of slopes are revegetated with herbaceous plants and wild plants may be introduced.

For the efficient use and preservation of national land, environment-friendly construction projects are highly demanded. Accordingly, the necessity of restoration projects utilizing nature-friendly materials and indigenous species are strongly recognized. It is true that some debate is still under way on the impact of foreign species on ecosystems and the effectiveness of woody plants in stabilizing slopes, the necessity of restoration projects seeking early forest creation with a focus on native species is widely shared. In addition, utilizing latent seeds available in surface soil and leveraging lumber naturally generated from construction sites for a revegetation purpose are drawing keen attention.

By revising the Natural Environment Conservation Law, the MOE plans to cultivate natural ecology restoration engineers and natural environment management operators as environment restoration specialists. In other words, the MOE plans to cultivate experts in a field of natural environment who specialize in the area of nature in pre-environmental reviews and environmental impact assessments and who are familiar with space concepts as well as natural plants. The first national qualifying examination to select natural ecology restoration engineers and natural environment management operators will be conducted this year.

As an effort to seek sustainable national land development and to preserve ecosystems, there have been efforts to designate the Baekdu range, which runs south and north along the Korean Peninsula, and the DMZ, which traverses east and west, as the national land ecological axes and preserve them. The Baekdu range has been severely destroyed as large-scale development projects were initiated since the 70’s with a development boom.

Efforts to survey the destruction types found in the Baekdu range and to develop a restoration plan after designating restoration areas are being made. Moreover, the National Assembly passed through “A Law on the Protection of the Baekdu range,” which will facilitate to zone the Baekdu range into core area and buffer area and designate it as a protected area. Also, a plan to purchase land within the protected area or restoring the area to its maximum extent depending on destruction types is being examined. Efforts to designate the DMZ, an east-west green area axis, as an ecosystem preservation area are being made at a national level and a plan to manage by dividing it into core area, buffer area, and transition area is being studied.

The Seoul Metropolitan government plans to promote rooftop revegetation by introducing a program to support rooftop revegetation projects. In case of the
Cheonggye stream restoration project, which is initiated as a part of efforts to restore urban ecosystems, the removal of existing structures is nearing its completion. Once it is finished, a highly diverse urban green corridor biosphere reserve will be created along with rooftop revegetation.

The significance of the Cheonggyecheon Restoration lies in recovering the historical and cultural environment in Seoul and making balanced city development between Gangbuk (Northern part) and Gangnam (Southern part) in Seoul. In the past, Seoul’s 600-year old history as the capital has been disconnected due to the disappearance of the water axis which was well-blended with Bukaksan (Mt.) and Namsan (Mt.). By restoring the covering area in the Cheonggyecheon, the historic relics such as Joseon Dynasty’s stone bridges including Gwanggyo and Supyanggyo could be recovered to their original condition. And, the reborn water axis in downtown Seoul would make a beautiful riverside.

In Korea, today, it is very interesting that a majority of people is familiar with the terminology “restoration” as the National Assembly passed through a legislation on the protection of the Baekdu range, the basis of national land, and the Cheonggyecheon stream restoration project is under way in the capital city Seoul.