Ecological Functions and Losses of Traditional Korean Village Groves

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Abstract: There have been groves, in many cases, along with hedgerows and remnant forests around a traditional Korean village. A village grove is very closely connected to the life of residents. Sometimes it was a holy place where important village festivals were held, and became a resting place for farmers, especially in sunny summer. As a matter of fact, it is noted that traditional Korean village groves had been fostered for many purposes as religion, Confucianism, scenery, sanitation, traffic guard, public security, agriculture, hunting, and military and public uses were included in Chosun Governor General (1938).

Village groves were usually located at the outlet of watershed inside which a village was built. In addition, village groves used to be established along part of mountain ranges, streams and streets. A unique type of village grove, called bibosoop, was one of preferential means to complement the weakness of landscape from a perspective of Feng-shui. A typical bibosoop was fostered especially where the outlet of watershed was largely opened. In other cases, it was placed where a part of mountain range was relatively low, or where village residents were likely to see ugly objects such as a huge cliff, stony upland with an unvegetated area and the like (Kim and Jang 1994). In a sense, a shelterbelt is a sort of bibosoop as it is a landscape element to complement places that are exposed to strong winds. However, it is comparable to other typical bibosoop that is situated at a topographically very specific zone of watershed.

In this paper, we will address potential functions of Korean village groves from a perspective of modern landscape ecology and show current status of some remnants, based on preliminary surveys.

A village grove functions as barrier or filter of objects such as water, nutrients, and other elements and habitat of wildlife (Park et al. 2003, Lee 2004). The village grove slows down the flow of water and air, maintains soil moisture and hinders soil erosion, enabling cultivation of crops and bringing up creatures nearby. It contributes to enhancing biodiversity. Birds rest on shrubby and woody trees of the element. Presumably, other organisms may also inhabit the village groves and take advantage of it when those move from a forest patch to others. Emerging insects acclimate themselves in the shade of the green space before they fly to sunny air. Besides the village grove acts as a component of agroforestry system as leaf litter is shed from a grove to an adjacent agricultural area, and transformed into green manure (Lee 2004).

By the way, many of the landscape elements were destroyed or declined in Korea during the past several decades. The losses have been parallel or linked to environmental degradation. Unfortunately, we have a little reliable data as for how many groves have disappeared in Korea until now.

There has been no complete census on the village groves in Korea, and the viewpoints of survey were to a degree different depending on surveyors. So, it is difficult to analyze the temporal and spatial change of village groves.

Currently, national inventory data of Korean village groves are available in three reports. We reviewed the locations of village groves and arranged those according to the present administrative units, DONG. With the limited data, we found that at least 484 of village groves were recorded in South Korea. Among all provinces, village groves were most in Gyeongsanbuk-Do Province and least in Chungcheongbuk-Do Province (Table 1).

This is a preliminary report prepared while some quantitative data regarding functions and losses of the village groves are being collected. More detailed data will be introduced in the near future.

Key Words: Key Words: ecological function, landscape element, village grove

Table 1. Number of village groves reported in three literatures

Province	Α	В	C	Subtotal
Gangwon-Do	16	13	12	35
Gyeonggi-Do	4	11	8	15
Gyeongsangnam-Do	23	30	9	49
Gyeongsangbuk-Do	84	75	27	159
Gwangju City	3	1	-	4
Daegu City	-	-	4	4
Busan City	-	3	-	3
Seoul City	7	-	1	8
Incheon City	1	1	-	1
Jeollanam-Do	8	51	47	74
Jeollabuk-Do	12	50	19	65
Jeju-Do	3	10	9	15
Chungcheongnam-Do	5	29	8	37
Chungcheongbuk-Do	-	14	3	15
Total	166	288	147	484

A: Chosun Governer General (1938); B: Kim and Jang (1994); C: Korea Forest Research Institute (1995).

References

Chosun Governor General. 1938. Imsoos in Chosun. Chosun Governor General, Seoul (in Japanese).

- Kim, H.-B., and D.-S. Jang. 1994. *Maulsoop, the Korean village grove*. Youl Hwa Dang Publisher, Seoul (in Korean with English abstract).
- Korea Forest Research Institute. 1995. Our Village Groves, Traditional Reserved Forests for Public Security in Korea. Korea Forest Service, Seoul (in Korean).
- Lee, D. 2004. Ecological Implications of Landscape Elements in Traditional Korean Villages. Seoul National University Press, Seoul (in press, in Korean with English abstract).
- Lee D. and Park C.R. 2004. Ecological perspectives from bibosoop: a unique Korean type of village grove. (manuscript).
- Park, C.R, Shin, J.H. and D. Lee. 2003. Vegetation structure and patch use of birds at the BIBOSOOP of Korean traditional rural landscapes. Proceeding of joint meeting of IUFRO working groups, Genetics of *Quercus* and Improvements and Silviculture of Oaks. Tsukuba, JAPAN.