

High Demand for Forest Landscape Restoration in North Korea

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While the degradation of temperate forests in Europe and North America generally is a historic phenomenon, large scale deforestation has occurred in North Korea over the last few decades. From 6-13 March 2012, IUFRO was represented in an international group of 14 specialists who attended a Seminar on Forest Landscape Restoration (FLR) in Pyongyang, DPR Korea. Although more detailed data on the extent of forest degradation were not available, the seminar clearly indicated the great need for FLR in the country. As agreed with the Korean colleagues, the international group is now trying to expand cooperation with DPR Korea, in order to assist them in this effort.



Photo by Dennis Shoji Ojima

FLR seminar leading to future cooperation

Together with 85 North Korean colleagues from various government organizations, our group attended the Seminar on Forest and Landscape Restoration (FLR) in Pyongyang from 7-9 March, 2012. The information obtained during the seminar and post-seminar field trip revealed a very difficult ecological and socio-economic situation for the country and its people. The seminar attracted considerable attention from the local press and national television station.

Ecosystems under pressure

Approximately 80% of the country's total land area of 120,500 km² is uplands or mountains with elevations of 1,000 m a.s.l. or more. The climate is continental with dry cold winters and warm summers (January avg. – 8°C; July avg. 24°C).

From the field trip it appears that in the lowlands as well as on higher elevation plateau areas each and every square meter is cultivated for food production. This includes even small pieces of land next to roads or between roads and buildings within towns as well as farm fields reaching right down to the rivers and water streams. Erosion and lack of protection of the cultivated land at the lower parts of the hill sides, together with loss of soil fertility, have caused significant problems for sustaining food production at levels high enough to support the estimated population of 25 million people in the country. Nutrients and organic material for fertilising the fields seemed to be an extremely limited resource and people were seen digging sediments and mud out of riverbeds and ditches to be spread onto the fields before sowing the crops.

Magnitude of the FLR-challenge

There was a good understanding among Korean experts of the principles of agroforestry and the forest protective

functions and services they provide for croplands on hillsides. However, it was impossible for us to get solid data on the order and the magnitude of the deforestation problem, though Korean speakers provided some information but lacked a country-wide overview. Some statistics say that the forest land used to cover 75% of the land area before the famine that occurred in the 1990s. A forest cover reduction from 8.2 to 7.6 million hectares was reported with a total of protected forest land covering 2 million ha. However, satellite observations suggest greater losses in recent years.

The way ahead

The FLR-seminar was sponsored by the American Association for the Advancement of Science (AAAS) which is the publisher of Science and organized by the Environmental Education Media Project (EEMP) in Beijing together with PIINTEC (Pyongyang International Information for New Technology and Economy Centre) of DPR Korea. Our group included 14 participants – from the US (5), Canada (2), China (2), Israel (1), Great Britain (1), Holland (1), Germany (1), and Denmark (1).

From the discussions during the seminar and field trip it became clear that our Korean hosts have great interest in establishing collaboration in the field of FLR including e.g. study trips to Europe. Clearly, there is a considerable and very positive interest in future international engagement. Our group is therefore now exploring various ways to continue this cooperation including supporting the participation of North Korean scientists in international