TA-9233 MON: CONSERVATION OF FOREST GENETIC RESOURCES

Joint international projects (2017-2018)

The project was implemented by the cooperation between Institute of Geography and Geoecology, Mongolia Center for Forest Biodiversity NGO and MonConsult Ltd in 2017-2018. The Technical Assistance (TA) project has three main outputs:

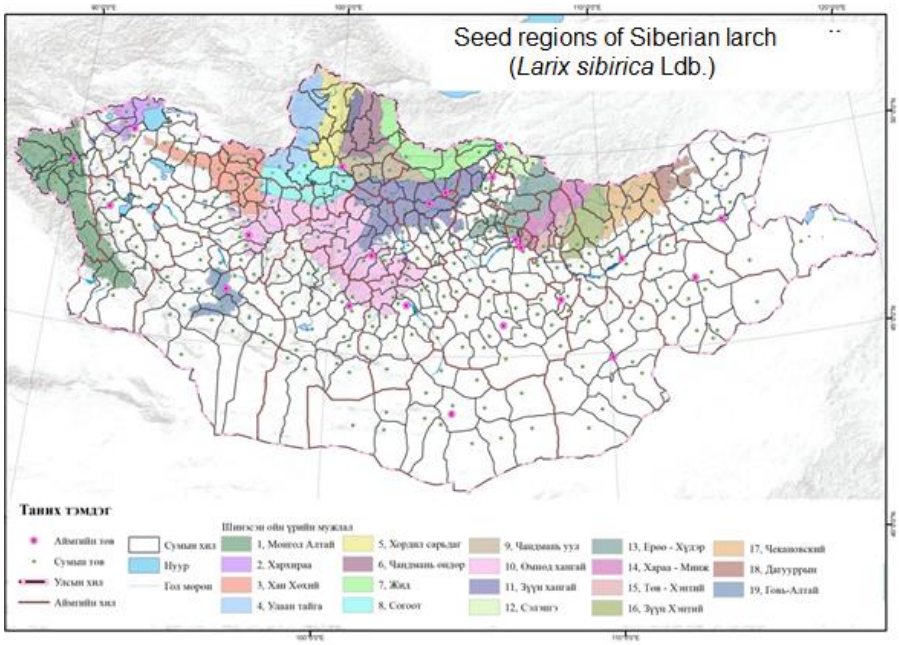
- Identification of forest seed stands within forest regions of Mongolia,
- Development of national registry on forest seed stands, and
- Establishment and strengthening of educational and research capacities on Forest Genetic Resources

Conservation and sustainable management of forest genetic resources is a long-term investment to increase the quality and productivity of forest plantations and enriched natural forests. Using the best available seed sources is the first step in silvicultural treatment to increase the productivity of forests. Low qualified seeds not adapted to a specific site result in plantation failures or considerable losses of production. Once a forest is established, it is difficult or impossible to remedy these problems.

Forest seed management covers a set of steps like selection and establishment of seed stands, seed collection, seed transport, seed processing, seed storage, and preparation of seeds for sowing. Most countries have a legal and administrative framework for the conservation and use of forest seed and reproductive materials. Based on this framework, the national forest administrations develop a certification scheme for seeds and seedlings and guidelines for the production of high-value seeds and the whole process from the planning of seed collection via seed handling and processing to seed sowing.

During the field survey and investigations, in total, 26 (twenty-six) permanent seed stands in three provinces were subjected to assessment and evaluation; 14 stands in Khuvsgul province, six stands in Selenge province, and six stands in Khentii province, respectively.

We have developed 19 seed regions for Siberian larch (*Larix sibirica* Ldb.), Dahurian larch (*Larix dahurica* Turcz.), Chekanowskii larch (*Larix Chekanowskii* Szaf.); 12 regions for Scots pine (*Pinus sylvestris* L.); 9 regions for Siberian pine (*Pinus sibirica* Du Tour.); 6 regions for Siberian fir (*Abies sibirica* Ldb.); and 9 seed regions for Siberian spruce forests (*Picea obovata* Ldb.), and developed a map on a scale of 1:1 000 000 which will serve as a basic material for further seed management efforts with an emphasis on conservation of forest genetic resources and tree breeding in coniferous forests in Mongolia.



In total, five (5) Capacity Building pieces of training were organized for different stakeholders and target groups in three provinces, and a total of over 200 participants participated in the parts of training.

The TA team developed three handbooks, and they are have been used by the participants as a professional guideline. After completion of training, the TA team had a questionnaire survey that determines future training needs and training evaluation by participants.