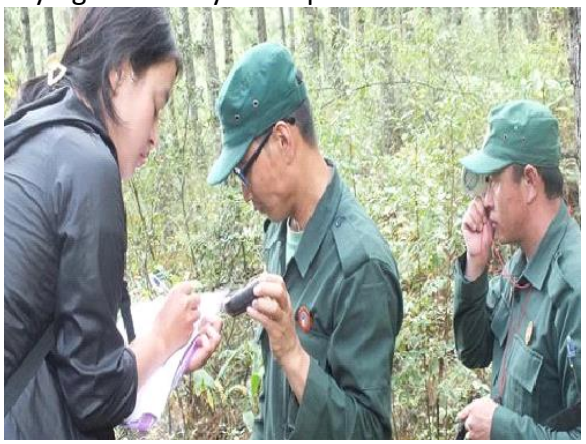
Project Update: January, 2017

The fieldwork for November and December 2016 and mid-January 2017 has been completed as reflected in the time schedule after conducting necessary stakeholder workshop involving Department of Forest and Part Services, National Biodiversity, Royal Society of Protection of Nature (RSPN), Ugyen Wangchuck Institute for Conservation and Environment (UWICE) from Bhutan and Forest Research Institute, India. There are four forest ranges in the Thimphu district. During the first round of fieldwork two ranges were covered namely Thimphu Forest Range and Chamgang Forest Range. The specimens collected are almost all identified.

Laying of 30m by 30m quadrate.

Measuring the DBH of the tree.



Recording the GPS coordinates.

Measuring the aspect and altitude of the study area, Thimphu dzongkhag.

According to the field study two species of mistletoes were discovered, *Arceuthobium minutissimum* and *Taxillus kampferi* affecting coniferous species such as *Pinus wallichiania*, spruce and junipers. Based on the field study, *Pinus wallichiania* was the most common coniferous species affected by the mistletoes.

The field data collection was a complete success as planned and mentioned in the proposal. Mistletoe infection in trees was based on observed symptoms on affected trees (branches, twigs, and stems). An infection assessment of mistletoes was done by 6-class dwarf mistletoes rating method (Hawksworth, 1977). Some of the parameters measured were the DBH and height of the individual trees found within the quadrate so that the mistletoe severity index and incidence can be calculated, and estimate mistletoe impact on economic

value of conifer forest species.


Arceuthobium minutissimum


Taxillus kampferi on spurce


Measuring the DBH of *Pinus wallichiana* infected by *Taxillus kampferi*.

True mistletoes, *Taxillus kampferi* infecting *Pinus wallichiana* in Thimphu district