

– Development and application of the Finnish multi-source forest inventory –

- Forest resource data for smaller area units than what is possible using field data only
 - municipality level statistics for forestry and for forest industries planning
 - annual allowable cut (AAC)
- Accurately localised information, maps
 - forest industries timber procurement
 - ecological studies
- The entire country covered 4 times since 1990
- Remote sensing increases the efficiency a forest inventory with small additional costs compared to an inventory using field data only

– Examples of the current and recent studies –

- Method development for forest MS-NFI
 - ik-nn, use of ancillary data (large area predictions)
 - genetic algorithm for feature weighting
 - Tomppo & Halme. 2004. RSE 92.
 - Tomppo, Haakana, Katila, Peräsaari. 2008. Springer.
 - Tomppo, Haakana, Katila, Mäkisara, Peräsaari, 2009. Metla WP 111
 - error estimation for small areas and predictions
 - computational updating of field data
 - new data sources: laser scanning, airborne imaging spectrometry (finished)
- Methods for area change and carbon stock change estimation for UNFCCC LULUCF and Kyoto reporting

More: <http://www.metla.fi/hanke/3428/index-en.htm>