BIOSECT: Sustainable production of biomass – a sectorial perspective

The BIOSECT network focused on lifting up the current research activities in biomass sector modelling in the Nordic region and laying a basis for future cooperation and common research projects.

The green economy concept calls for an increased use of biomass from agriculture and forestry. National, Nordic as well as EU documents rely on the use of biomass to realize CO_2 emission targets. At the same time, the consequences are subject to intensive debate: What will happen to food production, what are the consequences for biodiversity, and what is the footprint in other regions of the world of increasing the use of feedstock from agriculture and forests in EU?

The Nordic Bioeconomy Initiative highlights the need for accelerating the development of a sustainable bioeconomy in the Nordic countries by enhancing and facilitating cooperation between research and policymaking and between agriculture and forestry. It mentions that only then the Nordic influence on European and global bioeconomy policies will be increased.

The BIOSECT network utilised existing structures and institutions in the Nordic countries to raise method and application issues on forest and agricultural sector models used among the Nordic researchers. Several examples were presented that showed the suitability of biomass sector models to study forest management, biomass availability, industrial production, and forest products market as well as how they interact with each other. One conclusion was that different models have different strengths that could be combined to create more comprehensive biomass models. The BIOSECT project thus laid a basis for searching funding for such activities.

The BIOSECT network organised side events in 3 major conferences: the IUFRO 125th Anniversary Congress in 2017 and the Biennial meeting of the Scandinavian Society of Forest Economics in 2016 and 2018 and held two focused seminars with BIOSECT researchers. It brought together not only economists but also experts in technology, ecology, and carbon flows and stocks. In these events many questions were raised i.e. what effect does the increased use of biomass for bioenergy and biofuels has on harvesting technologies and forest sector analyses? One interesting chain of comments here was that the economics of biomass production will affect where biomass harvesting is attractive, how technologies will develop, and eventually the size of procurement costs that could occur in the future under different scenarios.