

COST ACTION FP 0703

Echoes: Expected Climate Change and Options for European Silviculture

Country Report: Major points

Czech Republic

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Impacts: observations and predictions

Temperature

- Observations: increase evident specifically since 80th
- Prediction: increase by +2.2 (1 to 2.7) \circ by 2050

Precipitation

- Insignificant change in total amount
- Prediction: distribution pattern to change (rain increasing during winter and spring, decreasing during summer: stronger drought conditions)

Impacts: experiments and monitoring

- Experimental station Bílý Kříž, Beskydy Mts
 - ISBE ASCR,v.v.i., a part of European Net of Excellence
 - Involved in EU projects EuroCarbo, CarboMont and national-level projects (CzechCarbo, CzechTerra)
 - Experiments on elevated CO₂ and forest management (in spheres) on physiological parameters/processes incl. *Picea abies, Fagus* silvatica
 - Eddy covariance site ecosystem process studies

Adaptation

- Vulnerability of forests and forestry
 - forest species composition
 (currently spruce 53 %, natural 11 %, during last 10 years decrease by 2 %)
 - high vulnerability
 (storm Kyrill in 2007, ca. 8–10 mill. m³ wood)
- General adaptation strategy
 - NEW National Forestry Program (2008 2013)
 - NEW National Climate Policy program (2009-2020)
 to be launched

Adaptation: key measures

- Increasing species, spatial and genetic diversity of forest ecosystems
- Utilization of fine-scale management approaches and elimination of game pressure
- Limitation of other stressors worsening climate change effects, taking care of
 - hydrological regime
 - chemical and physical properties of soils
 - limiting mechanical damage to forest

Mitigation: carbon accounts

- Emission inventory of LULUCF sector based on
 - Cadastral information on land use
 - Activity data from stand-based inventory (management plans)
 - Statistical inventory to be utilized once repeated cycle is available
- Kyoto protocol activities
 - elected FM (Art. 3.4)
 - voluntary submission on KP activities due in 2009

Mitigation: contribution of forestry



