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to Assess Options for the Siting of Short Rotation Coppice in Agricultural Landscapes: Tool Development and Case Study Results from the Gottingen District*; 4.1 Introduction; 4.2 Study Area and Methods; 4.2.1 Study Area; 4.2.2 Field Geometries, Administrative Units and Ecological Units as Spatial Reference; 4.2.3 The BEAST Assessment Approach; 4.2.4 Spatial Selection and Multi-Criteria Evaluation Procedure; 4.2.4.1 Step 1: Setting the Objectives; 4.2.4.2 Step 2: Defining Restricted and Preference Areas; 4.2.4.3 Step 3: Scaling the Evaluation Criteria; 4.2.4.4 Step 4: Weighting the Evaluation Criteria and Executing the MCE Calculation; 4.2.5 Production Criteria; 4.2.5.1 Crop Yield Modelling; 4.2.5.2 Short Rotation Coppice Yield Modelling; 4.2.5.3 Application in the Gottingen District; 4.2.5.4 Production Criteria Setting for the Case Study; 4.2.6 Economic Criteria; 4.2.6.1 Cost Calculation; 4.2.6.2 Price Calculation; 4.2.6.3 Economic Criteria Setting for the Case Study; 4.3 Results; 4.3.1 Identification of Economically Competitive Short Rotation Coppice Sites; 4.3.2 Shift in Yield Levels Due to Site Selection; 4.3.3 Erosion Protection as Ecological Synergy; 4.4 Discussion and Conclusions; References; Chapter 5 The Influence of More Widespread Cultivation of Short Rotation Coppice on the Water Balance: From the Site to the Regional Scale*; 5.1 Introduction; 5.2 Evidence from Field Measurements and Results of the Plot-Level Modelling; 5.2.1 Research Plots and Model Concept; 5.2.2 Results at Plot Level; 5.3 Regional-Scale Modelling; 5.3.1 SWAT Model; 5.3.2 Incorporation of Short Rotation Coppice in SWAT

Sommario/riassunto

Based on the results of two bioenergy research initiatives in Germany, this reference examines the sustainable management of wood biomass in rural areas. The large number of participating organizations and research institutes ensures a balanced and unbiased view on the potentials and risks is presented, taking into account economic, ecological, and social aspects. Most of the results reported are available here for the first time in English and have been collated in central Europe, but are equally applicable to other temperate regions. They highlight best practices for enhancing dendromass po
