



Assessment of managed grasland for livestock production and water consumption estimates

Susanne Rolinski, Isabell Weindl, and Hermann Lotze-Campen

Potsdam Institute for Climate Impact Research, Potsdam, Germany (rolinski@pik-potsdam.de)

Uncertainties in the data base on grasland are reflected in the difficulty of determining the area covered by this land use. Here, an attempt of balancing the potential productivity of pasture land with the actual livestock products via feed demands is presented. Even though the diversity of conversion factors in different regions with different livestock systems is high, the balance is welcome in the framework of modelling grasland dynamics in a global vegetation and hydrological model that includes the development of agriculturally used land (LPJmL). The aim is to reduce uncertainties in the current land use pattern for grasland in order to enable studies under changing management and climatic conditions. Especially, changing water availability is expected to affect potential grasland patterns.