Shape and further geometric characteristics of agricultural parcels are main factors with respect to machinability, working time requirement, and arising costs for cultivating agricultural acreages. Due to missing comprehensive statistical information on existing agricultural field structures regarding shape and ergonomically relevant geometric properties, most ergonomic simulations are based on simplified assumptions and therefore admit only limited information about real conditions. In this context this research project focuses on the development of methods for a comprehensive classification, characterization, and statistical description of ergonomically relevant geometrical properties of existing agricultural parcels on a large scale. Results gained provide basic information for continuative research in the fields of ergonomic simulations and agricultural engineering.

Stichworte:
Parcel geometry; Agricultural parcel; Ergonomics; Geoinformatics; GIS; Shape analysis; Germany

Dewey Dezimalklassifikation (Liste):
630 Landwirtschaft