Special Issue

Landscape-Scale Modeling of Agricultural Land Use

Message from the Guest Editors

Understanding agricultural land-use change at a landscape scale is critical for addressing pressing global challenges, including food security, biodiversity conservation, and climate change adaptation. This Special Issue aims to collate cutting-edge research on spatially explicit models that simulate the patterns. processes, and outcomes of agricultural land-use change. We seek contributions that advance the methodological frontier and provide actionable insights for sustainable landscape management. We encourage submissions leveraging innovative approaches, such as integrating AI and machine learning with process-based models, coupling ecological and socio-economic drivers, and incorporating remote sensing and big data to achieve high-precision, predictive simulations at large scales. We welcome original research, reviews, and case studies focused on the following: development of novel modeling frameworks; analyses of land-use impacts on ecosystem services; scenario exploration for sustainable intensification; and studies that effectively bridge the science-policy gap for informed decisionmaking.

Guest Editors

Dr. Xiumei Tana

Information Technology Research Center, Beijing Academy of Agriculture and Forestry Sciences, Beijing 100097, China

Dr. 7solt Pinke

Centre for Agricultural Research, Institute for Soil Sciences, 1116 Budapest, Hungary

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Agronomy
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
agronomy@mdpi.com

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Editor-in-Chief

Prof. Dr. Leslie A. Weston

Gulbali Centre for Agriculture, Water and Environment Research, Charles Sturt University, Wagga Wagga, NSW 2678, Australia

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