

LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU *PEER REVIEW*
KARYA ILMIAH : JURNAL ILMIAH

Judul karya ilmiah (artikel) : Urbanization and Increasing Flood Risk in the Northern Coast of Central Java-Indonesia: An Assessment Towards Better Land Use Policy and Flood Management

Jumlah Penulis : 4 penulis

Status Pengusul : Wiwandari Handayani, Uchendu Eugene Chigbu, **Iwan Rudiarto**, Intan Hapsari Surya Putri

Identitas Jurnal Ilmiah :

- a. Nama Jurnal : Journal Land
- b. Nomor ISSN : 2073-445x
- c. Vol.,no.,bulan,tahun : Vol. 9 Issue 10, 343, September 2020
- d. Penerbit : MDPI
- e. DOI artikel (jika ada): 10.3390/land9100343
- f. Alamat web jurnal : <https://www.mdpi.com/2073-445X/9/10/343>
- g. Terindeks di SJR 0,717 (2019) dan SNIP 1.148 (2019)

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(beri ✓ pada kategori yang tepat) ☐ Jurnal Ilmiah Nasional Terakreditasi
☐ Jurnal Ilmiah Nasional /Nasional di DOAJ,CABI, COPERNICUS

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Komponen Yang Dinilai	Nilai Maksimal Jurnal Ilmiah			Nilai Akhir Yang Diperoleh
	Internasional/ internasional bereputasi <div>40</div>	Nasional Terakreditasi <div></div>	Nasional <div></div>	
a. Kelengkapan unsur isi artikel (10%)	4			4
b. Ruang lingkup dan kedalaman pembahasan (30%)	12			11
c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	12			11
d. Kelengkapan unsur dan kualitas terbitan/jurnal (30%)	12			11
Total = (100%)	40			37
Nilai = (20% x 37 : 2)				3,7

Catatan Penilaian artikel oleh Reviewer :

- a. Unsur isi artikel lengkap sesuai dengan petunjuk penulisan yang disediakan yang terdiri dari; *title, authors-affiliations, abstract-keywords, introduction, description of study area, material and methods, results, discussion, conclusion, acknowledgement, dan references*. Komponen artikel dibahas sesuai dengan judul yaitu mengenai urbanisasi dan meningkatnya risikonya banjir di wilayah pantai utara Pulau Jawa.
- b. Pembahasan cukup mendalam, dielaborasi dengan jelas kejadian-kejadian banjir di wilayah studi yang kemudian dikaitkan dengan fenomena urbanisasi yang terjadi (yang diindikasikan dari perubahan guna lahan), didukung oleh 63 pustaka dan 39 diantaranya (62%) bersumber dari artikel jurnal (pustaka primer). Artikel jurnal sesuai dengan bidang penulis terutama dalam konteks perencanaan dan pengembangan wilayah pesisir.

- c. Dengan dukungan 63 pustaka dan 89% merupakan artikel terbitan ≤ 10 tahun terakhir, artikel memiliki kebaharuan yang baik. Data dan analisis yang digunakan juga cukup mutakhir dengan sumber data yang dengan detail diuraikan. Analisis menggunakan analisis citra satelit dengan metode supervised classification.
- d. Jurnal terindeks *Scopus* Q2 dengan SJR 0.72 yang diterbitkan oleh MDPI. Jurnal tersedia online (*open access*). ISSN dan tautan DOI tersedia, dan di dukung editorial board yang relevan dan cukup beragam.

Semarang, 29-11-2020

Reviewer 1,



Prof. Dr.rer.nat. Imam Buchori, ST

NIP. 197011231995121001

Departemen PWK, FT. Undip

LEMBAR
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Hasil Penilaian *Peer Review* :

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	Internasional/ internasional bereputasi	Nasional Terakreditasi	Nasional	
	40	<input type="text"/>	<input type="text"/>	
a. Kelengkapan unsur isi artikel (10%)	4			4
b. Ruang lingkup dan kedalaman pembahasan (30%)	12			11
c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	12			12
d. Kelengkapan unsur dan kualitas terbitan/jurnal (30%)	12			12
Total = (100%)	40			39
Nilai = (20% x 39 : 2)				3,9

Catatan Penilaian artikel oleh Reviewer :

- a. Tulisan lengkap, sesuai bidang ilmu penulis. Terdiri dari: *title, authors-affiliations, abstract-keywords, introduction, description of study area, material and methods, results, discussion, conclusion, acknowledgement, dan references*. Komponen-komponen didalamnya dijabarkan sesuai dengan judul, yaitu mengenai fenomena urbanisasi yang diidentifikasi berdasarkan perubahan guna lahan terkait dengan peningkatan risiko banjir.
- b. Isi artikel berkaitan dengan analisis spasial perubahan guna lahan dan kejadian banjir di beberapa kota di Pantura Jawa telah dibahas dengan data yang cukup lengkap. Artikel jurnal sesuai dengan bidang penulis terutama dalam konteks perencanaan dan ketahanan wilayah pesisir.

- c. Artikel memiliki kebaruan yang baik. Kebaruan tidak hanya dari sisi substansi analisis dan diskusi, tetapi juga metode analisis spasial yang digunakan. Ada 63 referensi dan 89% merupakan artikel terbitan ≤ 10 tahun terakhir. Turnitin Similarity Index 2%.
- d. Jurnal "Land" terindeks Scopus Q2. SNIP 1,15 dan SJR 0,72 (2019). Diterbitkan oleh *MDPI*. Jurnal tersedia online. Dilengkapi dengan ISSN dan tautan DOI, dengan editorial board yang bervariasi dari berbagai universitas/institusi riset di beberapa negara.

Semarang, 09-11-2020
Reviewer 2,



Prof. Dr. Ir. Nany Yulastuti, MSP
NIP. 195407171982032001
Departemen PWK, FT. Undip

LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU *PEER REVIEW*
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Hasil Penilaian *Peer Review* :

Komponen Yang Dinilai	Nilai Reviewer		
	Reviewer I	Reviewer II	Nilai Rata-rata
a.Kelengkapan unsur isi artikel (10%)	4	4	4
b.Ruang lingkup dan kedalaman pembahasan (30%)	11	11	11
c.Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	11	12	11,5
d.Kelengkapan unsur dan kualitas terbitan/jurnal (30%)	11	12	11,5
Total = (100%)	37	39	38
Nilai = (20% x 38 : 2)			3,8

Reviewer 1,



Prof. Dr. rer. nat. Imam Buchori, ST
 NIP. 197011231995121001
 Departemen PWK FT.Undip

Semarang, 08-12-2020
 Reviewer 2,



Prof. Dr. Ir. Nany Yulastuti, MSP
 NIP. 195407171982032001
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Volume 9, Issue 10, October 2020, Article number 343

Urbanization and increasing flood risk in the Northern Coast of Central Java-Indonesia: An assessment towards better land use policy and flood management (Article) [\(Open Access\)](#)

Handayani, W.^a ✉️, Chigbu, U.E.^b ✉️, **Rudiarto, I.**^a ✉️, Surya Putri, I.H.^a ✉️ 👤

^aDepartment of Urban and Regional Planning, Diponegoro University, Semarang, 50275, Indonesia

^bChair of Land Management, Faculty of Aerospace and Geodesy, Technical University of Munich (TUM), Munich, 80333, Germany

Abstract

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This study explores urbanization and flood events in the northern coast of Central Java with river basin as its unit of analysis. Two types of analysis were applied (i.e., spatial data and non-spatial data analysis) at four river basin areas in Central Java-Indonesia. The spatial analysis is focused on the assessment of LULC change in 2009-2018 based on Landsat Imagery. The non-spatial data (i.e., rural-urban classification and flood events) were overlaid with results of spatial data analyses. Our findings show that urbanization, as indicated by the growth rate of built-up areas, is very significant. Notable exposure to flood has taken place in the urban and potentially urban areas. The emerging discussion indicates that river basins possess dual spatial identity in the urban system (policy- and land-use-related). Proper land use planning and control is an essential instrument to safeguard urban areas (such as the case study area) and the entire island of Java in Indonesia. More attention should be put upon the river basin areas in designing eco-based approach to tackle the urban flood crises. In this case, the role of governance in flood management is crucial. © 2020 by the authors.

SciVal Topic Prominence ⓘ

Topic: Climate Change Adaptation | Urban Climate | Adaptive Capacity

Prominence percentile: 99.877 ⓘ

Author keywords

Central java Flood Flood management Indonesia Land policy Land use Land-use change Urbanization

Funding details

Funding sponsor	Funding number	Acronym
Universitas Diponegoro		UNDIP
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Technische Universität München		TUM

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Community empowerment and utilization of renewable energy: Entrepreneurial perspective for community resilience based on sustainable management of slum settlements in Makassar city, Indonesia

Surya, B. , Suriani, S. , Menne, F. (2021) *Sustainability (Switzerland)*

Predicting future urban flood risk using land change and hydraulic modeling in a river watershed in the central province of Vietnam

Nguyen, H.D. , Fox, D. , Dang, D.K. (2021) *Remote Sensing*

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Volume 9 • Issue 10 | October 2020



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Prof. Dr. Andrew Millington

Website (<http://www.flinders.edu.au/people/andrew.millington>)

Editor-in-Chief

College of Science and Engineering, Flinders University, GPO Box 2100, **Adelaide, SA 5001, Australia**

Interests: land use dynamics and potential impacts around increased foreign ownership of farmland in Australia; the coca/cocaine trade as a driver of land use

dynamics in humid tropical forests; analysis of landscape fragmentation patterns in tropical and sub-tropical landscapes

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[Website \(https://www2.le.ac.uk/departments/geography/people/hb91\)](https://www2.le.ac.uk/departments/geography/people/hb91)

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NERC National Centre for Earth Observation, Leicester Institute for Space and Earth Observation, School of Geography, Geology and Environment, University of Leicester, University Road, **Leicester LE1 7RH, UK**

Interests: landscape and climate research; land surface modelling; terrestrial remote sensing; synthetic aperture radar (SAR); light detection and ranging (LIDAR); forest monitoring; carbon cycle and climate change

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Prof. Dr. Dagmar Haase *

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Humboldt University of Berlin, Alfred-Rühl-Haus, Rudower Chaussee 16, 12489 **Berlin, Germany**

Interests: land-use change modelling; ecosystem services; socio-environmental justice; urban land teleconnections; urban ecology; GIS and remote sensing

* Section "Urban Contexts and Urban-Rural Interactions"

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Dr. Ward Anseeuw

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Section Editor-in-Chief

CIRAD (International Centre for Agricultural Research and Development) and International Land Coalition, Via Paolo di Dono 44, 00142 **Rome, Italy**

Interests: Africa; agrarian and land reform; agricultural and land policies; large-scale land acquisitions; rural development; farming systems; livelihoods and poverty; institutional and policy analysis



Dr. Saskia Keesstra

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Section Editor-in-Chief

Team Soil, Water and Land Use, Wageningen Environmental Research, Wageningen University and Research, P.O. Box 47, 6700 AA Wageningen, The Netherlands
Conjoint Associate Professor at the University of Newcastle, Australia

Interests: water and sediment connectivity; catchment processes; nature based solutions; forest fire; sustainable land management

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Prof. Dr. Audrey L. Mayer

[Website \(https://www.mtu.edu/forest/about/faculty-staff/faculty/mayer/\)](https://www.mtu.edu/forest/about/faculty-staff/faculty/mayer/)

Section Editor-in-Chief

College of Forest Resources and Environmental Science, Michigan Technological University, Houghton, MI 49931, USA

Interests: landscape ecology; biodiversity conservation; sustainability science; environmental policy

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Prof. Dr. Christine Fürst

[Website \(http://www.geo.uni-halle.de/nala/mitarbeiter/2211802_2976895/\)](http://www.geo.uni-halle.de/nala/mitarbeiter/2211802_2976895/) [SciProfiles \(https://sciprofiles.com/profile/355779\)](https://sciprofiles.com/profile/355779)

Section Editor-in-Chief

Institute for Geosciences and Geography, Dept. Sustainable Landscape Development, University of Halle, Von-Seckendorff-Platz 4, 06120 Halle (Saale), Germany

Interests: social–ecological system models; ecosystem services; impact assessment; participatory planning processes

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Prof. Dr. Erle C. Ellis

★ (<https://recognition.webofsciencegroup.com/awards/highly-cited/2020/>) **Website1** (<http://ecotope.org/people/ellis>) **Website2** (<http://ges.umbc.edu/ellis/>) **SciProfiles** (<https://sciprofiles.com/profile/130969>)

Section Editor-in-Chief

Geography and Environmental Systems, University of Maryland, Baltimore County, 211 Sondheim Hall, 1000 Hilltop Circle, Baltimore, MD 21250, USA

Interests: global ecology; land use change; landscape ecology; anthropocene

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Prof. Dr. Richard Aspinall

Website (<https://www.hutton.ac.uk/staff/honorary-fellows>)

Honorary Research Fellow, James Hutton Institute, Aberdeen, AB15 8QH, Scotland, UK

Interests: land systems science; land use; GIS; sustainability; environmental change; landscape ecology

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Dr. Ian Baird

Website (<http://www.geography.wisc.edu/faculty/profile.php?p=11>)

Department of Geography, University of Wisconsin-Madison, Room 455 Science Hall, 550 North Park Street, Madison, Wisconsin 53706, USA

Interests: Laos; Cambodia; Thailand; Vietnam; common property; land grabbing; land tenure; REDD; swidden agriculture; economic land concession; rubber; contract farming



Prof. Dr. Christian Brannstrom

Website (<https://geography.tamu.edu/people/profiles/faculty/brannstromchristian.html>)

Department of Geography, Texas A&M University, 3147 TAMU, College Station, 77843 TX, USA

Interests: Land Use Economics; wind power; energy; political ecology; governance

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Prof. Dr. Xiangzheng Deng

Website (<http://peopleucas.ac.cn/~dengxz?language=en>)

Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, Beijing, China

Interests: land use economics; land use and climate change; dynamics and consequences of land system change; urban energy balance; energy; environmental and climate policies

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Prof. Dr. Harini Nagendra

Website (<https://azimpremjiuniversity.edu.in/SitePages/harini-nagendra.aspx>)

Azim Premji University, PES Institute of Technology Campus, Pixel Park, B Block, Electronics City, Hosur Road, Bangalore 560100, India

Interests: land cover change; commons; urbanization; conservation biology; remote sensing

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Prof. Dr. Jeff Sayer

Website (<https://profiles.forestry.ubc.ca/person/jeff-sayer/>)

Department of Forest and Conservation Sciences, The University of British Columbia, Vancouver V6T 1Z4, Canada

Interests: biodiversity, communities and livelihoods, forest policy, land-use change, sustainability, tropical landscapes and livelihoods

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Prof. Dr. B. L. Turner II

Website (<https://sustainability.asu.edu/person/billie-turner-ii/>)

Gilbert F. White Professor of Environment and Society School of the Geographical Sciences and Urban Planning & School of Sustainability PO Box 87014, Arizona State University Tempe, AZ 85287, USA

Interests: Archaeology; deforestation; Geography; human-environment; land change; anthropology; smallholder agriculture; sustainability

Special Issues and Collections in MDPI journals:

Special Issue in **Remote Sensing: Human-Induced Global Change** (/journal/remotesensing/special_issues/human_global_change)

Prof. Dr. Teiji Watanabe

Website (<http://www.teiwatanabe.com/index-e.html>) **SciProfiles** (<https://sciprofiles.com/profile/590183>)

Faculty of Environmental Earth Science, Hokkaido University, Hokkaido 060-0808, Japan

Interests: conservation and sustainable use of natural resources; protected-area management; terrestrial environment; land use and land cover change; geodiversity analysis and geoconservation; mountain geography; South Asia; Central Asia; Southwest Asia

Special Issues and Collections in MDPI journals:

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Website1 (<http://naasindia.org/detail.php?id=645>) **Website2** (<https://glp.earth/user/912>) **SciProfiles** (<https://sciprofiles.com/profile/204869>)

Institute of Environment & Sustainable Development, Banaras Hindu University, Varanasi, **Uttar Pradesh 221005, India**

Interests: climate-resilient agriculture; food security; sustainable agriculture; agrobiodiversity; agricultural sustainability; indigenous and local knowledge (ILK); wild crops

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Special Issue in **Agronomy: New Plant Sources of Healthy Oil** (/journal/agronomy/special_issues/plant_oil)



Dr. Oren Ackermann *

Website (https://www.researchgate.net/profile/Oren_Ackermann)

Institute of Archaeology, Department of Land of Israel Studies and Archaeology Ariel University, P.O.B. 3, Ariel 4070000, Israel

Interests: geoarchaeology; portable OSL; paleoanthropocene; cultural landscape; anthropogenic soils, landscape archaeology, climate change and ancient societies; geomorphology, ecogeomorphology

* Section "Soil-Sediment-Water Systems"



Dr. Massimiliano Alvioli

Website (<http://www.fisgeo.unipg.it/~massimiliano.alvioli/EngDef.htm>)

Istituto di Ricerca per la Protezione Idrogeologica, Consiglio Nazionale delle Ricerche, via Madonna Alta 126, I-06128 Perugia, Italy

Interests: landslides; slope stability; landslide susceptibility; slope units; parallel computing; physically based models; deterministic models; geomorphometry

Prof. Dr. Paul Aplin

Website (<https://www.edgehill.ac.uk/geography/staff/professor-paul-aplin/>)

Department of Geography, Edge Hill University, Ormskirk, Lancashire, L39 4QP, UK

Interests: remote sensing; land cover classification; scales of observation; environmental applications

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Dr. Hossein Azadi

Website (<https://scholar.google.com/citations?user=sEToXkcAAAAJ&hl=en>)

Department of Geography, Ghent University, Krijgslaan 281 S8, 9000 Gent, Belgium

Interests: land and food policies; land governance; food security; agrarian change; resilient agriculture; sustainable livelihood; vulnerability

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Dr. Christopher Bacon

Website (<https://www.scu.edu/cas/ess/faculty-and-staff/christopher-bacon/>)

Department of Environmental Studies and Sciences, Santa Clara University, 500 El Camino Real, Santa Clara, CA 95053, USA

Interests: political ecology; food security; agroecology; environmental justice, participatory research



Dr. Sofia Bajocco

Website (<http://crea.gov.it>) **SciProfiles** (<https://sciprofiles.com/profile/78080>)

Council for Agricultural Research and Economics (CREA), Research Centre for Engineering and Agro-Food Processing (CREA-IT), Rome 00186, Italy

Interests: vegetation phenology dynamics; landscape disturbance; fire spatio-temporal behavior; land cover change processes; remotely sensed data analysis; geoprocessing techniques; multivariate statistical methods

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Prof. Dr. Robert Baldwin *

Website (https://www.clemson.edu/cafls/faculty_staff/profiles/baldwi6)


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




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Abstract Land surface models (LSMs) predict how terrestrial fluxes of carbon, water, and energy change with abiotic drivers to inform the other components of Earth system models. Here, we focus on a single human-dominated watershed in southwestern Michigan, USA. We compare multiple processes in [\[...\]](#) [Read more](#).

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



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Abstract In the past decades, sugarcane production in Brazil has expanded rapidly to meet increasing ethanol demand. The large majority of this expansion occurred in Sao Paulo state. We used an integrated approach considering location-specific biophysical characteristics to determine the environmental impacts of sugarcane [\[...\]](#) [Read more](#).

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Abstract Innovation is an inevitable way to enhance regional competitiveness, promote urbanization and achieve sustainable development. The sci-tech park is one of the main land use types in the construction of a new town and the critical space carriers of urbanization. This study focuses [\[...\]](#) [Read more](#).

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by [Wubante Fetene Admasu](#) (<https://sciprofiles.com/profile/995124>),

[Annelies Boerema](#) (<https://sciprofiles.com/profile/author/VDhONXVDV0N5cFRLdXFsRkIMjI5M0tJZU5LOXFSTs9UcXQyZC9vQWJHcz0=>),

[Jan Nyssen](#) (<https://sciprofiles.com/profile/497594>), [Amare Sewnet Minale](#) (<https://sciprofiles.com/profile/1047860>),

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Land **2020**, *9*(10), 395; <https://doi.org/10.3390/land9100395> (<https://doi.org/10.3390/land9100395>) - 19 Oct 2020

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Abstract In Ethiopia, urban expansion happens at high rates and results in land expropriations often at the cost of agriculture and forests. The process of urban expansion does not include assessment of ecosystem services (ES). This has been causing unintended environmental problems. This study [...] [Read more](#).

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Impacts of Future Crop Tree Release Treatments on Forest Carbon as REDD+ Mitigation Benefits [\(/2073-445X/9/10/394\)](#)

by [Sebastian Gräfe](#) (<https://sciprofiles.com/profile/955903>) and [Michael Köhl](#) (<https://sciprofiles.com/profile/237719>)

Land **2020**, *9*(10), 394; <https://doi.org/10.3390/land9100394> (<https://doi.org/10.3390/land9100394>) - 18 Oct 2020

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Abstract Sustainable forest management activities, such as future crop tree (FCT) release treatments, became part of the REDD+ strategy to avoid carbon emissions from forests. FCT release treatments are intended to achieve increased growth of FCTs by removing competitor trees. This initially leads to [...] [Read more](#).

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Landscapes and Services in Peri-Urban Areas and Choice of Housing Location: An Application of Discrete Choice Experiments [\(/2073-445X/9/10/393\)](#)

by [Biancamaria Torquati](#) (<https://sciprofiles.com/profile/81578>), [Giulia Giacchè](#) (<https://sciprofiles.com/profile/1300460>) and

[Tiziano Tempesta](#) (<https://sciprofiles.com/profile/748550>)

Land **2020**, *9*(10), 393; <https://doi.org/10.3390/land9100393> (<https://doi.org/10.3390/land9100393>) - 17 Oct 2020

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Abstract The recent decades have witnessed a significant increase in the population in peri-urban areas which led to a progressive transformation of peri-urban landscapes, and the reduced ability of agriculture to provide ecosystem services. In order to understand the complex relationships established in peri-urban [...] [Read more](#).

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Assessment Method and Scale of Observation Influence Ecosystem Service Bundles [\(/2073-445X/9/10/392\)](#)

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Land **2020**, *9*(10), 392; <https://doi.org/10.3390/land9100392> (<https://doi.org/10.3390/land9100392>) - 16 Oct 2020

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Abstract The understanding of relationships between ecosystem services and the appropriate spatial scales for their analysis and characterization represent opportunities for sustainable land management. Bundles have appeared as an integrated method to assess and visualize consistent associations among multiple ecosystem services. Most of the [...] [Read more](#).

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A Guide to Public Green Space Planning for Urban Ecosystem Services [\(/2073-445X/9/10/391\)](#)

by [Evan Elderbrock](#) (<https://sciprofiles.com/profile/1271645>),

[Chris Enright](#) (<https://sciprofiles.com/profile/author/MWNGbHk0ZWpUOC9FcnR1aHZHR0NKa0VKSVJaVGJpNmtpSkFXWURueHF1RT0=>),

[Kathryn A. Lynch](#) (<https://sciprofiles.com/profile/author/eVQ0VHIKTHZEQ3FPbGZ1aFZCcnFFd3NuSIRuckZPL2FhSWxjb1hYQ3RiZiZ0=>) and

[Alexandra R. Rempel](#) (<https://sciprofiles.com/profile/38772>)

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Abstract Street trees, native plantings, bioswales, and other forms of green infrastructure alleviate urban air and water pollution, diminish flooding vulnerability, support

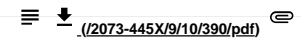
pollinators, and provide other benefits critical to human well-being. Urban planners increasingly value such urban ecosystem services (ES), and effective methods for [...] [Read more](#)

(This article belongs to the Special Issue [Urban Ecosystem Services \(/journal/land/special_issues/Urban_Ecosystem_Services/\)](#))

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Open Access Article



[Social Valuation of Mediterranean Cultural Landscapes: Exploring Landscape Preferences and Ecosystem Services Perceptions through a Visual Approach \(/2073-445X/9/10/390\)](#)

by [Íñigo Bidegain \(https://sciprofiles.com/profile/1281009\)](#), [César A. López-Santiago \(https://sciprofiles.com/profile/121601\)](#), [José A. González \(https://sciprofiles.com/profile/1144115\)](#), [Rodrigo Martínez-Sastre \(https://sciprofiles.com/profile/author/S3FDdVM1cS96RTJZTjNhOHFESXZiOTJTeHpMbnZaTTFPZUgrM0w5eIBWdz0=\)](#), [Federica Ravera \(https://sciprofiles.com/profile/author/WU5BR0pXakNMRGtWQTVIUTFVVDhpNHIYWWU0ThpzSGEwOGxvRXUxQW5PRT0=\)](#) and [Claudia Cerda \(https://sciprofiles.com/profile/author/a1VHZU90YkRrMno1RkRVT2l4Zy9sb2hTWJhBaTJsNHIXbFIPcjJBdnZuMD0=\)](#)

Land **2020**, *9*(10), 390; <https://doi.org/10.3390/land9100390> (<https://doi.org/10.3390/land9100390>) - 14 Oct 2020

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Abstract Mediterranean cultural landscapes have been recognized as multifunctional landscapes that are currently threatened by two opposing trends: rural abandonment and agricultural intensification. Uncovering people's perceptions of different landscape configurations, and how inhabitants value the contributions of nature to human wellbeing, is essential to [...] [Read more](#).

(This article belongs to the Special Issue [Landscape Transformation and Changes in Land Use Intensity \(/journal/land/special_issues/landscape_transformation/\)](#))

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[Effects of Agroforestry and Other Sustainable Practices in the Kenya Agricultural Carbon Project \(KACP\) \(/2073-445X/9/10/389\)](#)

by [Ylva Nyberg \(https://sciprofiles.com/profile/1261985\)](#), [Caroline Musee \(https://sciprofiles.com/profile/author/WHR4VjhXbVUycC9VY2kxdEIFSDBIMUV1Yjg5ZWtpdUxjTINvWDd2aStvRFRHM0xVY2Njd2Z0UGRoS2ZOUmJwMw==\)](#), [Emmanuel Wachiye \(https://sciprofiles.com/profile/1280194\)](#), [Mattias Jonsson \(https://sciprofiles.com/profile/author/Qm1KK3hyemE1OGpzMHJqUzU1NVUzbCtHaVMzRHQzbmJyUVNSdVU5MkUvUT0=\)](#), [Johanna Wetterlind \(https://sciprofiles.com/profile/312158\)](#) and [Ingrid Öborn \(https://sciprofiles.com/profile/1333599\)](#)

Land **2020**, *9*(10), 389; <https://doi.org/10.3390/land9100389> (<https://doi.org/10.3390/land9100389>) - 13 Oct 2020

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Abstract With growing global demand for food, unsustainable farming practices and large greenhouse gas emissions, farming systems need to sequester more carbon than they emit, while also increasing productivity and food production. The Kenya Agricultural Carbon Project (KACP) recruited farmer groups committed to more [...] [Read more](#).

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[A Trend Analysis of Leaf Area Index and Land Surface Temperature and Their Relationship from Global to Local Scale \(/2073-445X/9/10/388\)](#)

by [Azad Rasul \(https://sciprofiles.com/profile/882460\)](#), [Sa'ad Ibrahim \(https://sciprofiles.com/profile/122790\)](#), [Ajoke R. Onojeghuo \(https://sciprofiles.com/profile/517676\)](#) and [Heiko Balzter \(https://sciprofiles.com/profile/145355\)](#)

Land **2020**, *9*(10), 388; <https://doi.org/10.3390/land9100388> (<https://doi.org/10.3390/land9100388>) - 12 Oct 2020

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Abstract Although the way in which vegetation phenology mediates the feedback of vegetation to climate systems is now well understood, the magnitude of these changes is still unknown. A thorough understanding of how the recent shift in phenology may impact on, for example, land [...] [Read more](#).

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Open Access Article



[Urban Planning and Design for Building Neighborhood Resilience to Climate Change \(/2073-445X/9/10/387\)](#)

by [Katarzyna R. dzi ska \(https://sciprofiles.com/profile/609253\)](#) and [Monika Piotrkowska \(https://sciprofiles.com/profile/1237323\)](#)

Land **2020**, *9*(10), 387; <https://doi.org/10.3390/land9100387> (<https://doi.org/10.3390/land9100387>) - 12 Oct 2020

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Abstract The aim of the paper was to present the procedure of building neighborhood resilience to climate threats, embedded in planning (from the strategic to local level) and design process and focused on usage of natural adaptive potential. The presented approach encompasses: (1) the [...] [Read more](#).

(This article belongs to the Special Issue [Urban Ecosystem Services \(/journal/land/special_issues/Urban_Ecosystem_Services/\)](#))

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Open Access Article

Potential Impacts of Soil Tillage System on Isoflavone Concentration of Soybean as Functional Food Ingredients (I/2073-445X/9/10/386)

by [Liliana Murean](https://sciprofiles.com/profile/1182684) (<https://sciprofiles.com/profile/1182684>), [Doina Clapa](https://sciprofiles.com/profile/922169) (<https://sciprofiles.com/profile/922169>),
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[Thomas T. Y. Wang](https://sciprofiles.com/profile/982518) (<https://sciprofiles.com/profile/982518>) and [Jae B. Park](https://sciprofiles.com/profile/45195) (<https://sciprofiles.com/profile/45195>)

Land **2020**, *9*(10), 386; <https://doi.org/10.3390/land9100386> (<https://doi.org/10.3390/land9100386>) - 12 Oct 2020

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Abstract Soybean is an important natural source of isoflavones, but their concentration is likely to be influenced by external factors, such as climatic conditions and soil tillage systems. However, there is minimal information about the effects of such external factors on the isoflavone concentration [..] [Read more.](#)




(This article belongs to the Special Issue **Soil Tillage Systems and Conservative Agriculture (/journal/land/special_issues/Soil_Agriculture)**)

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Open Access Article

Where Do Ecosystem Services Come From? Assessing and Mapping Stakeholder Perceptions on Water Ecosystem Services in the Muga River Basin (Catalonia, Spain) (I2073-445X/9/10/385)

by  **Enrica Garau** (<https://sciprofiles.com/profile/1246976>),  **Josep Vila-Subiros** (<https://sciprofiles.com/profile/743364>),  **Josep Pueyo-Ros** (<https://sciprofiles.com/profile/507704>) and **Anna Ribas Palom** (<https://sciprofiles.com/profile/396313>)

Land **2020**, *9*(10), 385; <https://doi.org/10.3390/land9100385> (<https://doi.org/10.3390/land9100385>) - 12 Oct 2020

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Abstract Reductions in water availability and increasing rainfall variability are generating a narrative of growing competition for water in the Mediterranean basin. In this article, we explore the distribution and importance of water resources in the Muga River Basin (Catalonia, Spain) based on key [...]. [Read more.](#)

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Inventory and Distribution of Rock Glaciers in Northeastern Yakutia (I/2073-445X/9/10/384)

by **Vasyl'ii Lytkin** (<https://sciprofiles.com/profile/977559>)

Land **2020**, *9*(10), 384; <https://doi.org/10.3390/land9100384> (<https://doi.org/10.3390/land9100384>) - 10 Oct 2020

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Abstract Rock glaciers are common forms of relief of the periglacial belt of many mountain structures in the world. They are potential sources of water in arid and semi-arid regions, and therefore their analysis is important in assessing water reserves. Mountain structures in the [...] [Read more.](#)

(This article belongs to the Special Issue **Permafrost Landscape** ([/journal/land/special_issues/permafrost_landscape](#)))

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Open Access Feature Paper Article

Resident or Present? Population Census Data Tell You More about Suburbanization (/2073-445X/9/10/383)

by  **Kostas Rontos** (<https://sciprofiles.com/profile/595436>),  **Andrea Colantoni** (<https://sciprofiles.com/profile/42838>),
 **Luca Salvati** (<https://sciprofiles.com/profile/408818>),  **Enrico Maria Mosconi** (<https://sciprofiles.com/profile/318690>) and
 **Antonio Giménez Morera** (<https://sciprofiles.com/profile/1090805>)

Land **2020**, *9*(10), 383; <https://doi.org/10.3390/land9100383> (<https://doi.org/10.3390/land9100383>) - 09 Oct 2020

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Abstract The present study analyzes population redistribution across metropolitan regions considering together changes over time in the spatial distribution of resident and present population from census data. Considering population dynamics in Athens, Greece, between 1991 and 2011, the results of this study evidenced how [...] [Read more.](#)




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Open Access Editor's Choice Article

Four Decades of Land-Cover Change on the Kenai Peninsula, Alaska: Detecting Disturbance-Influenced Vegetation Shifts Using Landsat Legacy Data (2073-445X/9/10/382)

by  Carson A. Baughman (<https://sciprofiles.com/profile/123072>),  Rachel A. Loehman (<https://sciprofiles.com/profile/390809>)

 Dawn R. Magness (<https://sciprofiles.com/profile/571373>),  Lisa B. Saperstein (<https://sciprofiles.com/profile/822673>) and  Rosemary L. Sherriff (<https://sciprofiles.com/profile/author/a3A4MjZmNkVHOXV6b0xjd1haQTE1aDU2a295UnZGNVICSVZXS1FFT1VxVT0=>)

Land **2020**, *9*(10), 382; <https://doi.org/10.3390/land9100382> (<https://doi.org/10.3390/land9100382>) - 09 Oct 2020

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Abstract Across Alaska's Kenai Peninsula, disturbance events have removed large areas of forest over the last half century. Simultaneously, succession and landscape evolution have facilitated forest regrowth and expansion. Detecting forest loss within known pulse disturbance events is often straightforward given that reduction in [...] [Read more.](#)




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Aboveground Biomass Distribution in a Multi-Use Savannah Landscape in Southeastern Kenya: Impact of Land Use and Fences (/2073-445X/9/10/381)

by  Edward Amara (<https://sciprofiles.com/profile/253095>),  Hari Adhikari (<https://sciprofiles.com/profile/285184>),  Janne Heiskanen (<https://sciprofiles.com/profile/161182>),  Mika Siljander (<https://sciprofiles.com/profile/290834>),  Martha Munyao (<https://sciprofiles.com/profile/author/eXhXZW1PQjZodmsrcnNiZEozbHJ1cEtmemVYS0VVdlNiMmd3TzJmUDZOST0=>),  Patrick Omondi (<https://sciprofiles.com/profile/author/SjB2ZjE5S0tMeXpYUFE3VjJVeE9kcHp3L2dVeI9pWmc0dDg2SW5zRGEzaz0=>) and  Petri Pellikka (<https://sciprofiles.com/profile/378205>)

Land **2020**, *9*(10), 381; <https://doi.org/10.3390/land9100381> (<https://doi.org/10.3390/land9100381>) - 09 Oct 2020

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Abstract Savannahs provide valuable ecosystem services and contribute to continental and global carbon budgets. In addition, savannahs exhibit multiple land uses, e.g., wildlife conservation, pastoralism, and crop farming. Despite their importance, the effect of land use on woody aboveground biomass (AGB) in savannahs is [...] [Read more.](#) (This article belongs to the Special Issue [Land Use and Land Cover Change Mapping for Transformational Change \(/journal/land/special_issues/land_use_land_cover_change/\)](#))





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The Sustainable Management of Land and Fisheries Resources Using Multicriteria Techniques: A Meta-Analysis (/2073-445X/9/10/380)

by  Luis Diaz-Balteiro (<https://sciprofiles.com/profile/68827>),  Carlos Iglesias-Merchan (<https://sciprofiles.com/profile/920564>),  Carlos Romero (<https://sciprofiles.com/profile/615234>) and  Silvestre García de Jalón (<https://sciprofiles.com/profile/335099>)

Land **2020**, *9*(10), 380; <https://doi.org/10.3390/land9100380> (<https://doi.org/10.3390/land9100380>) - 08 Oct 2020

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Abstract In recent years modern societies have attached a multifunctional requirement to the use of renewable resources, making their optimal sustainable management more complex. In the last decades, in many cases, this complexity is addressed by formulating management models with the help of the [...] [Read more.](#)

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Integrating Ecosystem Services into Land-Use Modeling to Assess the Effects of Future Land-Use Strategies in Northern Ghana (/2073-445X/9/10/379)

by  Hongmi Koo (<https://sciprofiles.com/profile/1120681>),  Janina Kleemann (<https://sciprofiles.com/profile/434760>) and  Christine Fürst (<https://sciprofiles.com/profile/355779>)

Land **2020**, *9*(10), 379; <https://doi.org/10.3390/land9100379> (<https://doi.org/10.3390/land9100379>) - 08 Oct 2020

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Abstract In West Africa, where the majority of the population relies on natural resources and rain-fed agriculture, regionally adapted agricultural land-use planning is increasingly important to cope with growing demand for land-use products and intensifying climate variability. As an approach to identify effective future [...] [Read more.](#)






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Detection of City Integration Processes in Rapidly Urbanizing Areas Based on Remote Sensing Imagery (/2073-445X/9/10/378)

by  Zihao Zheng (<https://sciprofiles.com/profile/493371>),  Zhifeng Wu (<https://sciprofiles.com/profile/703504>),  Yingbiao Chen (<https://sciprofiles.com/profile/author/ODAxU29lV1ZmM3hwWXItUFizV1owRUtrbmbpZVS9YT2VEN2liYUtkKcUZXOD0=>),  Zhiwei Yang (<https://sciprofiles.com/profile/1388746>) and  Francesco Marinello (<https://sciprofiles.com/profile/356481>)

Land **2020**, *9*(10), 378; <https://doi.org/10.3390/land9100378> (<https://doi.org/10.3390/land9100378>) - 08 Oct 2020

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Abstract Since China's reform and development commenced, in the context of rapid urbanization and coordinated regional development, Chinese cities with a close geographic proximity and social ties have gradually formed an integrated city development model. As a new phenomenon in China's urbanization process, existing [...] [Read more.](#) (This article belongs to the Special Issue [Rural–Urban Gradients: Landscape and Nature Conservation \(/journal/land/special_issues/rural_urban/\)](#))

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Land 2020, 9(10), 373; <https://doi.org/10.3390/land9100373> (<https://doi.org/10.3390/land9100373>) - 05 Oct 2020
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Abstract. Drastic growth of urban populations has caused expansion of peri-urban areas—the transitional zone between a city and its hinterland. Although urbanisation may create economic opportunities and improve infrastructure in an area, uncontrolled urban expansion towards peri-urban areas will negatively impact the environment and [...] [Read more.](#) (This article belongs to the Section [Urban Contexts and Urban-Rural Interactions](#) ([/journal/land/sections/urban_contexts](#)))




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Land Use/Land Cover Changes and the Relationship with Land Surface Temperature Using Landsat and MODIS Imageries in Cameron Highlands, Malaysia (2073-445X/9/10/372)

by  [Darren How Jin Aik](https://sciprofiles.com/profile/1207065) (<https://sciprofiles.com/profile/1207065>),  [Mohd Hasmadi Ismail](https://sciprofiles.com/profile/122901) (<https://sciprofiles.com/profile/122901>) and  [Farrah Melissa Muharam](https://sciprofiles.com/profile/106801) (<https://sciprofiles.com/profile/106801>)

Land 2020, 9(10), 372; <https://doi.org/10.3390/land9100372> (<https://doi.org/10.3390/land9100372>) - 05 Oct 2020
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Abstract. Mountainous regions are more sensitive to climatic condition changes and are susceptible to recent increases in temperature. Due to urbanization and land use/land cover (LULC) issues, Cameron Highlands has been impacted by rising land surface temperature (LST) variation. Thus, this study was carried [...] [Read more.](#)




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Transformation of Industrial Land in Urban Renewal in Shenzhen, China (2073-445X/9/10/371)

by  [Yani Lai](https://sciprofiles.com/profile/264377) (<https://sciprofiles.com/profile/264377>),  [Ke Chen](https://sciprofiles.com/profile/1223086) (<https://sciprofiles.com/profile/1223086>),  [Jinming Zhang](https://sciprofiles.com/profile/author/UjQ2cmtQNW1jcUNhVFpkY0I4azhJNFNHNjg0NEh4cVFWZm80dTF6V0hmTT0=) (<https://sciprofiles.com/profile/author/UjQ2cmtQNW1jcUNhVFpkY0I4azhJNFNHNjg0NEh4cVFWZm80dTF6V0hmTT0=>) and  [Feihu Liu](https://sciprofiles.com/profile/author/Y2NjcSt1cG5lb3ZiZkhubjJlL0FUZkFVc2pqVW1UNkIONmU5TnRnTnR5Yz0=) (<https://sciprofiles.com/profile/author/Y2NjcSt1cG5lb3ZiZkhubjJlL0FUZkFVc2pqVW1UNkIONmU5TnRnTnR5Yz0=>)


Land 2020, 9(10), 371; <https://doi.org/10.3390/land9100371> (<https://doi.org/10.3390/land9100371>) - 04 Oct 2020
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Abstract. The redevelopment and transformation of industrial land has become an important part of urban renewal in China. This study adopts a spatial perspective to investigate the transformation of industrial land in Shenzhen based on a set of reliable data of all urban redevelopment [...] [Read more.](#)





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Promoted Urbanization of the Countryside: The Case of Santiago's Periphery, Chile (1980–2017) (2073-445X/9/10/370)

by  [Victor Jiménez Barrado](https://sciprofiles.com/profile/519273) (<https://sciprofiles.com/profile/519273>),  [Javier Larraín Suckel](https://sciprofiles.com/profile/1210018) (<https://sciprofiles.com/profile/1210018>),  [Bárbara Trincado Olhabé](https://sciprofiles.com/profile/1209693) (<https://sciprofiles.com/profile/1209693>) and  [Francisco Cabrera Cona](https://sciprofiles.com/profile/author/WGfYK2tJSUVacTJyUUVyWUxEogIzQT09) (<https://sciprofiles.com/profile/author/WGfYK2tJSUVacTJyUUVyWUxEogIzQT09>)

Land 2020, 9(10), 370; <https://doi.org/10.3390/land9100370> (<https://doi.org/10.3390/land9100370>) - 03 Oct 2020
Viewed by 393

Abstract. Urbanization of the countryside affects rural areas, especially in the immediate surroundings of large cities. Normally, this occurs as an unpromoted process, but in Chile, it is driven by the legal framework. This research focuses on rural residential plots (RRPs) around the capital [...] [Read more.](#)





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Mapping Flood-Based Farming Systems with Bayesian Networks (2073-445X/9/10/369)

by  [Issoufou Liman Harou](https://sciprofiles.com/profile/1209637) (<https://sciprofiles.com/profile/1209637>),  [Cory Whitney](https://sciprofiles.com/profile/571964) (<https://sciprofiles.com/profile/571964>),  [James Kung'u](https://sciprofiles.com/profile/author/dEVyQW9IOE1wNVM0dnZHSVJXTUJXN1k1U3U1VUFFdmpNNFFvL3JoSW0rUT0=) (<https://sciprofiles.com/profile/author/dEVyQW9IOE1wNVM0dnZHSVJXTUJXN1k1U3U1VUFFdmpNNFFvL3JoSW0rUT0=>) and  [Eike Luedeling](https://sciprofiles.com/profile/624514) (<https://sciprofiles.com/profile/624514>)

Land 2020, 9(10), 369; <https://doi.org/10.3390/land9100369> (<https://doi.org/10.3390/land9100369>) - 02 Oct 2020
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Abstract. Many actors in agricultural research, development, and policy arenas require accurate information on the spatial extents of cropping and farming practices. While remote sensing provides ways for obtaining such information, it is often difficult to distinguish between different types of agricultural practices or [...] [Read more.](#)

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Soil Erosion Susceptibility Mapping in Kozetoprachi Catchment, Iran: A Mixed Approach Using Rainfall Simulator and Data Mining Techniques (2073-445X/9/10/368)

by  [Abazar Esmali Ouri \(https://sciprofiles.com/profile/1279840\)](#),

 [Mohammad Golshan \(https://sciprofiles.com/profile/author/ZUw4U09ZY0ILWnJCWDRxcmRBNmpsNFoyb0xEMDBYtnZ5YTNVQllyL1IOaz0=\)](#),

 [Saeid Janizadeh \(https://sciprofiles.com/profile/1201023\)](#),  [Artemi Cerdà \(https://sciprofiles.com/profile/289235\)](#) and

 [Assefa M. Melesse \(https://sciprofiles.com/profile/90204\)](#)

Land **2020**, *9*(10), 368; <https://doi.org/10.3390/land9100368> (<https://doi.org/10.3390/land9100368>) - 02 Oct 2020

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Abstract Soil erosion determines landforms, soil formation and distribution, soil fertility, and land degradation processes. In arid and semiarid ecosystems, soil erosion is a key process to understand, foresee, and prevent desertification. Addressing soil erosion throughout watersheds scales requires basic information to develop soil [...] [Read more.](#) (This article belongs to the Section [Soil-Sediment-Water Systems \(/journal/land/sections/Soil-Sediment-Water-System\)](#))

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 [\(2073-445X/9/10/367/pdf\)](#)

Implementation and Advancement of a Rural Residential Concentration Strategy in the Suburbs of Shanghai (2073-445X/9/10/367)

by  [Yishao Shi \(https://sciprofiles.com/profile/252663\)](#),

 [Haoran Ren \(https://sciprofiles.com/profile/author/Q1phT29ZQU1YIE4Sk1XZTdZMFk5dkJtQmtDaGtXOUx2cmdMQUhtT2V4RT0=\)](#),

 [Xiatong Guo \(https://sciprofiles.com/profile/author/WkdvSTRwTtHnFhR0k1Q2l4VXNYeFRXRFlpSIF1Z2txR0NOMkZaYmh5OD0=\)](#) and

 [Tianhui Tao \(https://sciprofiles.com/profile/870593\)](#)

Land **2020**, *9*(10), 367; <https://doi.org/10.3390/land9100367> (<https://doi.org/10.3390/land9100367>) - 01 Oct 2020

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Abstract Rural residential concentration was one of the important tasks of the “Three Concentrations” strategy implemented in the suburbs of Shanghai in the mid-1990s. The aims of this paper are to comprehensively evaluate the process, pattern and effects of residential concentration in the suburbs [...] [Read more.](#)

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Evaluation of the Objectives and Concerns of Farmers to Apply Different Agricultural Managements in Olive Groves: The Case of Estepa Region (Southern, Spain) (2073-445X/9/10/366)

by  [Antonio Alberto Rodríguez Sousa \(https://sciprofiles.com/profile/742411\)](#),  [Carlos Parra-López \(https://sciprofiles.com/profile/1237362\)](#),

 [Samir Sayadi-Gmada \(https://sciprofiles.com/profile/523216\)](#),  [Jesús M. Barandica \(https://sciprofiles.com/profile/853143\)](#) and

 [Alejandro J. Rescia \(https://sciprofiles.com/profile/259515\)](#)

Land **2020**, *9*(10), 366; <https://doi.org/10.3390/land9100366> (<https://doi.org/10.3390/land9100366>) - 01 Oct 2020

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Abstract Olive groves are representative of the landscape and culture of Spain. They occupy 2.5 M ha (1.5 M ha in Andalusia) and are characterised by their multifunctionality. In recent years, socio-economic and environmental factors (i.e., erosion) have compromised their sustainability, leading farmers to [...] [Read more.](#) (This article belongs to the Special Issue [Land, Innovation, and Social Good \(/journal/land/special_issues/land_innovation\)](#))


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The Effect of Grazing on the Temperature Regime of the Alas Soils of Central Yakutia (2073-445X/9/10/365)

by  [Victor Makarov \(https://sciprofiles.com/profile/1144229\)](#),

 [Grigory Savvinov \(https://sciprofiles.com/profile/author/cW9UZWJKTnRKVkyYUvhYRUs1TEtzV3NBUXVoYTN5blpBcFdlaEJxR0hNZz0=\)](#),

 [Lyudmila Gavrilieva \(https://sciprofiles.com/profile/author/TUZZYVjPlzFCWtdtZGwrTUZwcnNCUT09\)](#) and

 [Anna Gololobova \(https://sciprofiles.com/profile/1271708\)](#)

Land **2020**, *9*(10), 365; <https://doi.org/10.3390/land9100365> (<https://doi.org/10.3390/land9100365>) - 01 Oct 2020

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Abstract There are numerous studies on the effect of grazing on the physical and chemical parameters of soils. However, the impact of grazing on the temperature regime of the alas soils in Central Yakutia is still poorly understood. This paper presents the results of [...] [Read more.](#) (This article belongs to the Special Issue [Permafrost Landscape \(/journal/land/special_issues/permafrost_landscape\)](#))

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Does Social Capital Help to Reduce Farmland Abandonment? Evidence from Big Survey Data in Rural China ([/2073-445X/9/10/360](#))

by  [Xin Deng](#) (<https://sciprofiles.com/profile/698071>),  [Miao Zeng](#) (<https://sciprofiles.com/profile/879149>),  [Dingde Xu](#) (<https://sciprofiles.com/profile/496138>) and [Yanbin Qi](#) (<https://sciprofiles.com/profile/677419>)

Land **2020**, *9*(10), 360; <https://doi.org/10.3390/land9100360> (<https://doi.org/10.3390/land9100360>) - 29 Sep 2020

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Abstract At a time when COVID-19 is sweeping the world, farmland abandonment is obviously not conducive to solving food security problems. Since the formal institutions of local government in China have not been effective in the reduction of farmland abandonment, this study aims to [...] [Read more](#).

(This article belongs to the Special Issue [Landscape Transformation and Changes in Land Use Intensity](#) ([/journal/land/special_issues/landscape_transformation](#)))




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Gatekeeping Access: Shea Land Formalization and the Distribution of Market-Based Conservation Benefits in Ghana's CREMA ([/2073-445X/9/10/359](#))

by  [Mengina Gilli](#) (<https://sciprofiles.com/profile/author/UVc1dmF0NWFFYnRtZFNrQn1eXpDSDM5N3BIY2FBMGtleTRMcGRQVXBuND0=>),  [Muriel Côte](#) (<https://sciprofiles.com/profile/1251400>) and  [Gretchen Walters](#) (<https://sciprofiles.com/profile/1091444>)

Land **2020**, *9*(10), 359; <https://doi.org/10.3390/land9100359> (<https://doi.org/10.3390/land9100359>) - 29 Sep 2020

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Abstract Community Resource Management Areas (CREMAs) in Ghana combine conservation and development objectives and were introduced in the year 2000. In some cases, they have connected collectors of shea (*Vitellaria paradoxa*) nuts with certified organic world markets, which can be understood as [...] [Read more](#).

(This article belongs to the Section [Socio-Economic and Political Aspects of Contemporary and Historical Land Issues](#) ([/journal/land/sections/Socio-Economic](#)))



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Water Erosion Reduction Using Different Soil Tillage Approaches for Maize (*Zea mays* L.) in the Czech Republic ([/2073-445X/9/10/358](#))

by  [Ladislav Menšík](#) (<https://sciprofiles.com/profile/1091043>),  [David Kincl](#) (<https://sciprofiles.com/profile/1270413>),  [Pavel Nerušil](#) (<https://sciprofiles.com/profile/author/SIUvQkVmnUQxSWgwZHp0M3V2WDhJQT09>),  [Jan Srbek](#) (<https://sciprofiles.com/profile/author/NGROWDBYakZqakpwR0Jac29MNUl6eEJWWIA3QzZGSENNbG9RVHRqWkpOTT0=>),  [Lukáš Hliseníkovský](#) (<https://sciprofiles.com/profile/722216>) and  [Vladimír Smutný](#) (<https://sciprofiles.com/profile/author/Z1Q3c25LWWF1a3J3bjZsMzdKRDf0RzdrSXU3OEJtYkx4cjJMc2tWeGZkc20=>)

Land **2020**, *9*(10), 358; <https://doi.org/10.3390/land9100358> (<https://doi.org/10.3390/land9100358>) - 28 Sep 2020

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Abstract In today's agriculture, maize is considered to be one of the major feed, food and industrial crops. Cultivation of maize by inappropriate agricultural practices and on unsuitable sites is connected with specific risks of soil degradation, mainly due to water erosion of the [...] [Read more](#).

(This article belongs to the Special Issue [Soil Tillage Systems and Conservative Agriculture](#) ([/journal/land/special_issues/Soil_Agriculture](#)))

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Urban Cadastral Situation in Ecuador: Analysis to Determine the Degree of Proximity of the Cadastral Systems to the 3D Cadastral Model ([/2073-445X/9/10/357](#))

by  [Julia Velastegui-Cáceres](#) (<https://sciprofiles.com/profile/1190812>),  [Victor M. Rodríguez-Espinosa](#) (<https://sciprofiles.com/profile/1146335>) and  [Oswaldo Padilla-Almeida](#) (<https://sciprofiles.com/profile/1269644>)

Land **2020**, *9*(10), 357; <https://doi.org/10.3390/land9100357> (<https://doi.org/10.3390/land9100357>) - 27 Sep 2020

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Abstract As 3D cadastres offer advantages in several areas by providing information with greater accuracy and a high level of detail, a diagnosis of the cadastral situation is required prior to the implementation of a 3D cadastral model. Therefore, this study focuses on diagnosing [...] [Read more](#).

(This article belongs to the Special Issue [3D Cadastre](#) ([/journal/land/special_issues/3D_Cadastre](#)))

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Spatial and Ecological Farmer Knowledge and Decision-Making about Ecosystem Services and Biodiversity ([/2073-445X/9/10/356](#))

by  [Daniel Kpienbaareh](#) (<https://sciprofiles.com/profile/1222085>),  [Rachel Bezner Kerr](#) (<https://sciprofiles.com/profile/author/bG1VWkhvFRCRDV3dUY3OWF2Z1Zha3B2eGEyNzhQRktFVXRaelRqSjINVt0=>),  [Isaac Luginaah](#) (<https://sciprofiles.com/profile/1022750>),  [Jinfei Wang](#) (<https://sciprofiles.com/profile/620574>),  [Esther Lupafya](#) (<https://sciprofiles.com/profile/author/YzB0ZmhRdnnpdnJ6L1JxeFhYbC9vY1QzUmRFQnpjUjBvZkgxUndHUHARt0=>),  [Laifolo Dakishoni](#) (<https://sciprofiles.com/profile/author/dE8rVzJlc1ZGVZGMGxodZyxVUFpNEs4TDV2b3lPOFZHV1lyVVBjRnV4VT0=>) and  [Lizzie Shumba](#) (<https://sciprofiles.com/profile/author/c2ZreXERlyS5S9ERG16UTdpcEFicHJuQlpDNm05NE0yeXZISEM3YIRhTT0=>)

Land **2020**, *9*(10), 356; <https://doi.org/10.3390/land9100356> (<https://doi.org/10.3390/land9100356>) - 27 Sep 2020

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Abstract Amid climate change, biodiversity loss and food insecurity, there is the growing need to draw synergies between micro-scale environmental processes and practices,

and macro-level ecosystem dynamics to facilitate conservation decision-making. Adopting this synergistic approach can improve crop yields and profitability more sustainably, enhance [...] [Read more.](#)

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Quantifying Climate-Wise Connectivity across a Topographically Diverse Landscape (</2073-445X/9/10/355>)

by  Morgan Gray (<https://sciprofiles.com/profile/1210239>),

 Elisabeth Micheli (<https://sciprofiles.com/profile/author/aEJscWZQSXlxa0M4aVRVaEhTL2txYndkVm9uVSstVZ2tVdGRxdG9hckFkUT0=>),

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 Adina Merenlender (<https://sciprofiles.com/profile/author/K1RVcVZuUitOUQ1T1haSGNtYWZKRjdjWURFYVJWQzh3UnhuNVdBNEJoMD0=>)

Land **2020**, *9*(10), 355; <https://doi.org/10.3390/land9100355> (<https://doi.org/10.3390/land9100355>) - 26 Sep 2020

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Abstract. Climate-wise connectivity is essential to provide species access to suitable habitats in the future, yet we lack a consistent means of quantifying climate adaptation benefits of habitat linkages. Species range shifts to cooler climates have been widely observed, suggesting we should protect pathways [...] [Read more.](#)

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The Grain for Green Project May Enrich the Mercury Concentration in a Small Karst Catchment, Southwest China (</2073-445X/9/10/354>)

by  Rui Qu (<https://sciprofiles.com/profile/837557>) and  Guilin Han (<https://sciprofiles.com/profile/530014>)

Land **2020**, *9*(10), 354; <https://doi.org/10.3390/land9100354> (<https://doi.org/10.3390/land9100354>) - 25 Sep 2020


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Abstract. The Chinese project, better known as the Grain for Green Project (GGP), has changed the land-use type in the karst area of Puding county, Guizhou province, southwest China, and this study is aimed at evaluating the Hg distribution and determining factors in soils [...] [Read more.](#)

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A Discounted Cash Flow and Capital Budgeting Analysis of Silvopastoral Systems in the Amazonas Region of Peru (</2073-445X/9/10/353>)



by  Stephanie Chizmar (<https://sciprofiles.com/profile/1228897>),  Miguel Castillo (<https://sciprofiles.com/profile/1269172>),

 Dante Pizarro (<https://sciprofiles.com/profile/1236935>),

 Hector Vasquez (<https://sciprofiles.com/profile/author/UJXNJRDFVQ1NYemJKcTdEU2xiQ0piZnZvZHN6TWJ2Q2ZJ3ZLeW9SR3NsUT0=>),

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 Erin Sills (<https://sciprofiles.com/profile/27829>),  Robert Abt (<https://sciprofiles.com/profile/author/dWZJQ3dybzErOGxHTXRLvNmxcHVwUT09>),

 Rajan Parajuli (<https://sciprofiles.com/profile/403941>) and  Frederick Cubbage (<https://sciprofiles.com/profile/977159>)

Land **2020**, *9*(10), 353; <https://doi.org/10.3390/land9100353> (<https://doi.org/10.3390/land9100353>) - 25 Sep 2020

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Abstract. Silvopasture is a type of agroforestry that could deliver ecosystem services and support local livelihoods by integrating trees into pasture-based livestock systems. This study modeled the financial returns from silvopastures, planted forests, and conventional cattle-pasture systems in Amazonas, Peru using capital budgeting techniques. [...] [Read more.](#)

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‘Mind the Gap’: Reconnecting Local Actions and Multi-Level Policies to Bridge the Governance Gap. An Example of Soil Erosion Action from East Africa (</2073-445X/9/10/352>)

by  Claire Kelly (<https://sciprofiles.com/profile/890644>),  Maarten Wynants (<https://sciprofiles.com/profile/1265526>),


 Linus K. Munishi (<https://sciprofiles.com/profile/739242>),


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 Patrick A. Ndakidemi (<https://sciprofiles.com/profile/698639>)

Land 2020, 9(10), 352; <https://doi.org/10.3390/land9100352> (<https://doi.org/10.3390/land9100352>) - 25 Sep 2020

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Abstract Achieving change to address soil erosion has been a global yet elusive goal for decades. Efforts to implement effective solutions have often fallen short due to a lack of context-appropriate and multi-disciplinary engagement with the problem. Issues include prevalence of short-term funding [...]. [Read more.](#)



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Typology of Climate Change Adaptation Measures in Polish Cities up to 2030 ((2073-445X/9/10/351)

by  Eliza Kalbarczyk (<https://sciprofiles.com/profile/1401524>) and  Robert Kalbarczyk (<https://sciprofiles.com/profile/423851>)

Land 2020, 9(10), 351; <https://doi.org/10.3390/land9100351> (<https://doi.org/10.3390/land9100351>) - 24 Sep 2020

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Abstract Poland, like other countries in the world, increasingly experiences the ongoing climate change. However, the level of preparation of the country and its society for climate change in the second decade of the 21st century can be evaluated as low. The Municipal Adaptation [...]. [Read more.](#)

(This article belongs to the Special Issue [Climate Adaptation and Biodiversity Conservation \(/journal/land/special_issues/Climate_Adaptation_Biodiversity_Conservation.\)](#))


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Conflict over the Use of Hagia Sophia: The Legal Case ((2073-445X/9/10/350)

by  Yakup Emre Coruhlu (<https://sciprofiles.com/profile/1110711>),

 Bayram Uzun (<https://sciprofiles.com/profile/author/cDNEQytvc0Z5aGhlcE4vYWV1ueE1tRk9LQ3orYlpvTkQ2ZEIDaFY1Q1lqOD0=>) and

 Okan Yildiz (<https://sciprofiles.com/profile/1109726>)

Land 2020, 9(10), 350; <https://doi.org/10.3390/land9100350> (<https://doi.org/10.3390/land9100350>) - 24 Sep 2020

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Abstract The historical progress of Hagia Sophia encompasses four different periods. Dating back to 360 AD, this unique structure was the largest church built in Istanbul during the Roman Period. In the second period, Fatih Sultan Mehmet conquered Istanbul in 1453 and personally dedicated [...]. [Read more.](#)

(This article belongs to the Section [Land Use Planning/Land Planning \(/journal/land/sections/land_use_planning\)](#))

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Predicted Maps for Soil Organic Matter Evaluation: The Case of Abruzzo Region (Italy) ((2073-445X/9/10/349)

by  Chiara Piccini (<https://sciprofiles.com/profile/998520>),  Rosa Francaviglia (<https://sciprofiles.com/profile/409351>) and

 Alessandro Marchetti (<https://sciprofiles.com/profile/author/RWJQL21QT0ZMV1VsQ0lzZUVvQbTZndUtFWT11R0NJOG94MnIVT1ZIMmdGOWVmZDN5d1pzbmRDT3FweDBNeV!>)

Land 2020, 9(10), 349; <https://doi.org/10.3390/land9100349> (<https://doi.org/10.3390/land9100349>) - 24 Sep 2020

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Abstract Organic matter, an important component of healthy soils, may be used as an indicator in sustainability assessments. Managing soil carbon storage can foster agricultural productivity and environmental quality, reducing the severity and costs of natural phenomena. Thus, accurately estimating the spatial variability of [...]. [Read more.](#)

(This article belongs to the Special Issue [Soil Management for Sustainability \(/journal/land/special_issues/sus_Soil_Management.\)](#))



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  (</2073-445X/9/10/348/pdf>) 

Refining the Tiered Approach for Mapping and Assessing Ecosystem Services at the Local Scale: A Case Study in a Rural Landscape in Northern Germany. ((2073-445X/9/10/348)

by  Marie Perennes (<https://sciprofiles.com/profile/1212072>),  C. Sylvie Campagne (<https://sciprofiles.com/profile/1149102>),

 Felix Müller (<https://sciprofiles.com/profile/author/STQ2aS92bStWUNaTEpsQS90eEFRdDE5SiHadUlySCtFWFBsRmE1akZGTT0=>),

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 Benjamin Burkhard (<https://sciprofiles.com/profile/author/YU9OWIVEMXBManlyU0pJaVBaWVONTILU0rc3pnOGlvEWxekIVbWxqaz0=>)

Land 2020, 9(10), 348; <https://doi.org/10.3390/land9100348> (<https://doi.org/10.3390/land9100348>) - 24 Sep 2020

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Abstract Spatially explicit assessments of ecosystem services (ES) potentials are a key component in supporting a sustainable land use management. The ES matrix method is a commonly used approach as it allows for a comparably fast, comprehensible and accessible ES assessment. As it is [...]. [Read more.](#)

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Global and Local Modeling of Land Use Change in the Border Cities of Laredo, Texas, USA and Nuevo Laredo, Tamaulipas, Mexico: A Comparative Analysis [\(./2073-445X/9/10/347\)](#)

by [Chunhong Zhao](https://sciprofiles.com/profile/1264891) (<https://sciprofiles.com/profile/1264891>), [Jennifer L.R. Jensen](https://sciprofiles.com/profile/48226) (<https://sciprofiles.com/profile/48226>) and [Russell Weaver](https://sciprofiles.com/profile/author/TUpGRmdZRIvYLQVvaTYrb29YUEXRSjVCbWFCa2FuZE1oN2UxVm0zL1ZiST0=) (<https://sciprofiles.com/profile/author/TUpGRmdZRIvYLQVvaTYrb29YUEXRSjVCbWFCa2FuZE1oN2UxVm0zL1ZiST0=>)

Land **2020**, *9*(10), 347; <https://doi.org/10.3390/land9100347> (<https://doi.org/10.3390/land9100347>) - 24 Sep 2020

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Abstract This paper estimates global logistic regression and logistic geographically weighted regression (GWR) models of urban growth in the adjacent border cities of Laredo, Texas in the United States and Nuevo Laredo, Tamaulipas in Mexico, for two time periods from 1985 to 2014. Historical [\[...\]](#) [Read more.](#)

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Evaluating the Efficiency of Different Regression, Decision Tree, and Bayesian Machine Learning Algorithms in Spatial Piping Erosion Susceptibility Using ALOS/PALSAR Data [\(./2073-445X/9/10/346\)](#)

by [Shahab S. Band](https://sciprofiles.com/profile/316438) (<https://sciprofiles.com/profile/316438>), [Saeid Janizadeh](https://sciprofiles.com/profile/1201023) (<https://sciprofiles.com/profile/1201023>),

[Sunil Saha](https://sciprofiles.com/profile/209599) (<https://sciprofiles.com/profile/209599>),

[Kastuv Mukherjee](https://sciprofiles.com/profile/author/dk13bTlaakNNMHlwbWZ5eGRidU1JZThibnc3bk9wRGxPY2VVK1VzRkgzaVRLSjVJTU8rZ2x3UEQzdGEmpRTQ=) (<https://sciprofiles.com/profile/author/dk13bTlaakNNMHlwbWZ5eGRidU1JZThibnc3bk9wRGxPY2VVK1VzRkgzaVRLSjVJTU8rZ2x3UEQzdGEmpRTQ=>)

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[Amirhosein Mosavi](https://sciprofiles.com/profile/414895) (<https://sciprofiles.com/profile/414895>)

Land **2020**, *9*(10), 346; <https://doi.org/10.3390/land9100346> (<https://doi.org/10.3390/land9100346>) - 23 Sep 2020

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Abstract Piping erosion is one form of water erosion that leads to significant changes in the landscape and environmental degradation. In the present study, we evaluated piping erosion modeling in the Zandieh watershed of Markazi province in Iran based on random forest (RF), support [\[...\]](#) [Read more.](#)

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Accessing and Mobilizing “New” Data to Evaluate Emerging Environmental Impacts on Semi-Aquatic Mammals [\(./2073-445X/9/10/345\)](#)

by [Glynnis A. Hood](https://sciprofiles.com/profile/1192021) (<https://sciprofiles.com/profile/1192021>)

Land **2020**, *9*(10), 345; <https://doi.org/10.3390/land9100345> (<https://doi.org/10.3390/land9100345>) - 23 Sep 2020

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Abstract This paper describes how knowledge mobilization evolved during a study that assessed a proposed increase in industrial water withdrawals from the Athabasca River in northern Alberta, Canada, and potential impacts on a suite of freshwater semi-aquatic mammals in the broader ecosystem. The oil [\[...\]](#) [Read more.](#)

(This article belongs to the Special Issue [Parks and Protected Areas: Mobilizing Knowledge for Effective Decision-Making](#) ([/journal/land/special_issues/parks_MK](#)))

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Could Mapping Initiatives Catalyze the Interpretation of Customary Land Rights in Ways that Secure Women’s Land Rights? [\(./2073-445X/9/10/344\)](#)

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Abstract Although land forms the basis for marginal livelihoods in Sub-Saharan Africa, the asset is more strategic for women as they usually hold derived and dependent rights to land in customary tenure areas. Initiatives to secure women’s land tenure in customary areas are undermined [\[...\]](#) [Read more.](#)

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Abstract This study explores urbanization and flood events in the northern coast of Central Java with river basin as its unit of analysis. Two types of analysis were applied (i.e., spatial data and non-spatial data analysis) at four river basin areas in Central Java—Indonesia. [...] [Read more.](#)

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Land **2020**, *9*(10), 342; <https://doi.org/10.3390/land9100342> (<https://doi.org/10.3390/land9100342>) - 23 Sep 2020

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Abstract Vegetation influences climate by altering water and energy budgets. With intensifying threats from anthropogenic activities, both terrestrial biomes and climate are expected to change, and the need to understand land–atmosphere interactions will become increasingly crucial. We ran a climate model coupled with a [...] [Read more.](#)

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Planning for Dynamic Connectivity: Operationalizing Robust Decision-Making and Prioritization Across Landscapes Experiencing Climate and Land-Use Change (/2073-445X/9/10/341)

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Abstract Preserving landscape connectivity is one of the most frequently recommended strategies to address the synergistic threats of climate change, habitat fragmentation, and intensifying disturbances. Although assessments to develop plans for linked and connected landscapes in response to climate and land-use change have been [...] [Read more.](#)

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Abstract Insects, the most diverse and abundant animal species on the planet, are critical in providing numerous ecosystem services which are significant to the United Nation's Sustainable Development Goals (UN-SDGs). In addition to the UN-SDGs, the UN has declared the period 2021–2030 as the [...] [Read more.](#)

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Article

Challenging a Global Land Surface Model in a Local Socio-Environmental System

Kyla M. Dahlin ^{1,*}, Donald Akanga ¹, Danica L. Lombardozzi ², David E. Reed ^{3,4},
Gabriela Shirkey ^{1,3}, Cheyenne Lei ^{1,3}, Michael Abraha ³ and Jiquan Chen ^{1,3}

¹ Department of Geography, Environment, and Spatial Sciences, Michigan State University (MSU), East Lansing, MI 48824, [USA](#); akangado@msu.edu (D.A.); shirkeyg@msu.edu (G.S.); cheyenne@msu.edu (C.L.); jqchen@msu.edu (J.C.)

² National Center for Atmospheric Research, Boulder, CO 80305, [USA](#); dll@ucar.edu

³ MSU Center for Global Change and Earth Observation, East Lansing, MI 48824, [USA](#); dreed@usao.edu (D.E.R.); abraha@msu.edu (M.A.)

⁴ Environmental Science, University of Science and Arts of Oklahoma, Chickasha, OK 73018, [USA](#)

* Correspondence: kdahlin@msu.edu

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Abstract: Land surface models (LSMs) predict how terrestrial fluxes of carbon, water, and energy change with abiotic drivers to inform the other components of Earth system models. Here, we focus on a single human-dominated watershed in southwestern Michigan, USA. We compare multiple processes in a commonly used LSM, the Community Land Model (CLM), to observational data at the single grid cell scale. For model inputs, we show correlations (Pearson's R) ranging from 0.46 to 0.81 for annual temperature and precipitation, but a substantial mismatch between land cover distributions and their changes over time, with CLM correctly representing total agricultural area, but assuming large areas of natural grasslands where forests grow in reality. For CLM processes (outputs), seasonal changes in leaf area index (LAI; phenology) do not track satellite estimates well, and peak LAI in CLM is nearly double the satellite record (5.1 versus 2.8). Estimates of greenness and productivity, however, are more similar between CLM and observations. Summer soil moisture tracks in timing but not magnitude. Land surface reflectance (albedo) shows significant positive correlations in the winter, but not in the summer. Looking forward, key areas for model improvement include land cover distribution estimates, phenology algorithms, summertime radiative transfer modelling, and plant stress responses.



Keywords: Community Land Model; carbon cycle; landscape ecology; model benchmarking

1. Introduction

Across much of the world, human impacts are an important component of the land surface [1]. Growth and loss of urban populations [2], changes in certain land areas and habitability [3], and changing agricultural and forestry practices [4,5] have all changed the ways in which energy and matter move through and among landscapes. In an Earth system modeling context, human impacts are mostly represented as changes in the footprint of urban areas and the parameters of those urban areas, changes in the extent and types of agricultural practices, changes in nitrogen deposition, and changes in global atmospheric CO₂ concentration [6]. These changes over time can in turn impact water movement through a landscape [7], albedo and heat distribution [8], and the carbon cycle through agricultural practices (e.g., tilling, irrigation, fertilization; [4]), nitrogen fertilization [9], and land conversion [10]. While much of the focus in the Earth system modeling community continues to be on 'natural' systems (e.g., [11]), more emphasis on human-dominated landscapes would both improve the performance

Article

Spatial Variation in Environmental Impacts of Sugarcane Expansion in Brazil

Ivan Vera , Birka Wicke and Floor van der Hilst 

Group Energy & Resources, Copernicus Institute of Sustainable Development, Utrecht University, Princetonlaan 8a, 3584 CB Utrecht, The Netherlands; B.Wicke@uu.nl (B.W.); F.vanderHilst@uu.nl (F.v.d.H.)

* Correspondence: i.c.veraoncha@uu.nl; Tel.: +31-(0)61-511-6415

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Abstract: In the past decades, sugarcane production in Brazil has expanded rapidly to meet increasing ethanol demand. The large majority of this expansion occurred in Sao Paulo state. We used an integrated approach considering location-specific biophysical characteristics to determine the environmental impacts of sugarcane expansion and their spatial variation in Sao Paulo state (2004–2015). The included environmental impacts are greenhouse gas (GHG) emissions, biodiversity, soil erosion, and water quantity. All impacts were integrated into a single environmental performance index to determine trade-offs between impacts. Our results show a strong spatial variation in environmental impacts and trade-offs between them. The magnitude and direction of these impacts are mostly driven by the type of land use change and by the heterogeneity of the biophysical conditions. Areas where expansion of sugar cane has resulted in mostly negative environmental impacts are located in the center and east of the state (related to the change of shrublands, eucalyptus, and forest), while areas where sugar cane expansion has resulted in positive impacts are located in the center-west and north (related to the change of annual crops). Identifying areas with mainly positive and negative impacts enables the development of strategies to mitigate negative effects and enhance positive ones for future sugarcane expansion.

Keywords: sugarcane; land-use change; environmental impacts; trade-offs; spatially explicit; biofuels

1. Introduction

The use of biomass for energy purposes is recognized as a key pillar for the reduction of greenhouse gas emissions (GHG) and meeting worldwide climate change mitigation targets [1–3]. In the past years, global biofuel production has increased from 37.5 thousand tons of oil equivalents (ktoe) in 2007 to 84.1 ktoe in 2017, and this trend is expected to continue [2]. Ethanol accounts for the largest share of biofuel production, with Brazil positioned as the world's second largest producer after the USA [4,5]. Brazil produces ethanol primarily from sugarcane and has developed an efficient model to produce sugar and ethanol in an integrated manner [6]. This development has led to an increase in sugarcane production and triggered more than 5.2 million hectares of land to be converted at the country level between 2000 and 2018 [7].

The sustainability of the Brazilian ethanol sector has been the object of political and societal debate. Despite the potential social, economic, and environmental benefits [5] associated with biofuel production, there are also major concerns about the sector's sustainability performance [8]. Many of the concerns are related to the environmental impacts of land use change (LUC) directly or indirectly caused by sugarcane expansion, and include, e.g., deforestation, habitat loss, soil erosion, GHG emissions, and impacts on water availability and quality [8–10]. Therefore, in recent years, major attention has been given to monitor and assess the impacts of sugarcane expansion on biodiversity, soil, water, and GHG emissions [8,9,11].