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Special Issue "Local- to Global-Scale Environmental Issues"

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SUSTAINABILITY Special Issue

"Local- to Global-Scale Environmental Issues"

A special issue of *Sustainability* (ISSN 2071-1050). This special issue belongs to the section "[Environmental Sustainability and Applications](#)".

Special Issue Editor



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[Website www.ess.siu.edu/Duram](http://www.ess.siu.edu/Duram) *Guest Editor*

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Interests: environmental geography; sustainability education;
endangered places; local food systems

Special Issue Information

Geography is inextricably linked to sustainability. From local communities to national citizens to global agreements, there is a complex interplay between natural and social processes. In unison, these interacting forces determine our future sustainability.

Addressing global issues of climate change, biodiversity loss, ocean pollution, or systemic environmental injustice feels overwhelming, so people frequently decide to take local actions to promote sustainability. Indeed, these individual or community activities, when multiplied across the globe, are often the most feasible way to affect change, particularly when national or international politics halt progress toward sustainability.

This Special Issue will explore the complex interplay between sustainability actions at the local-to-global scale. From this geographic perspective, these articles will provide interdisciplinary examples of how people take local and regional action to address national and global sustainability issues.

Authors are invited to submit high-quality original manuscripts that explore these topics through case studies, current research reviews, evidence-based experiences, or applied analysis of relevant local-to-global sustainability actions.

Keywords

- Local-to-Global Action
- Grassroots Environmentalism
- Geographic-scale and Sustainability
- Environmental Education
- Community Sustainability
- Climate Action
- Geography and Sustainability
- Regional Resiliency

Published Papers (11 papers)

Open Access **Article**

Taking Stock of Social Sustainability and the U.S. Beef Industry

by

Hannah Gosnell, Kelsey Emard, and Elizabeth Hyde

Sustainability 2021, 13(21), 11860; <https://doi.org/10.3390/su132111860> - 27 Oct 2021

Abstract

This paper presents the results of a study of social sustainability in the U.S. beef industry with a focus on the pre-harvest, cattle ranching portion of the industry. Using an integrative literature review and interviews with fifteen thought leaders in the field, we [\[...\]](#)

Read more.

(This article belongs to the Special Issue [Local- to Global-Scale Environmental Issues](#))

Open Access **Article**

Indigenous Knowledge Systems in Ecological Pest Control and Post-Harvest Rice Conservation Techniques: Sustainability Lessons from Baduy Communities

by

Alexis Habiyaemye and Leeja Korina

Sustainability 2021, 13(16), 9148; <https://doi.org/10.3390/su13169148> - 16 Aug 2021

Abstract

With the impending threat of global climate change, the past decades have witnessed an increasing recognition of the potential contribution of indigenous knowledge to tackling global challenges of environmental sustainability. In this study, we used a qualitative analysis of data collected in September [\[...\]](#) **Read more.**

(This article belongs to the Special Issue [Local- to Global-Scale Environmental Issues](#))

Open Access **Article**

Intrinsic and Spiritual Dimensions of Water at the Local Scale, and the Disconnect with International Institutions

by

Erica Lynn Porta and Aaron T. Wolf

Sustainability 2021, 13(16), 8948; <https://doi.org/10.3390/su13168948> - 10 Aug 2021

Abstract

Local and indigenous populations the world over ascribe deeply and explicitly spiritual attributes to water. Springs, wells, and rivers are the homes of deities, have divine healing powers, and enhance processes of spiritual transformation. These attributes are rarely expressed in global declarations related [\[...\]](#) **Read more.**

(This article belongs to the Special Issue [Local- to Global-Scale Environmental Issues](#))

Open Access **Article**

Human Appropriation of Net Primary Production: From a Planet to a Pixel

by

Suman Paudel

Gustavo A. Ovando-Montejo and Christopher L. Lant

Sustainability 2021, 13(15), 8606; <https://doi.org/10.3390/su13158606> - 02 Aug 2021

Abstract

Human appropriation of net primary production (HANPP) is a substantial improvement upon 20th century attempts at developing an ecological footprint indicator because of its measurability in relation to net primary production, its close relationship to other key footprint measures, such as carbon and [\[...\]](#) **Read more.**

(This article belongs to the Special Issue [Local- to Global-Scale Environmental Issues](#))

Open Access **Article**

Uncovering Stakeholder Participation in Payment for Hydrological Services (PHS) Program Decision Making in Mexico and Colombia

by

Andres M. Urcuqui-Bustamante, Theresa L. Selfa, Paul Hirsch, and Catherine M. Ashcraft

Sustainability 2021, 13(15), 8562; <https://doi.org/10.3390/su13158562> - 31 Jul 2021

Abstract

Payment for ecosystem services (PES) is a market-based policy approach intended to foster land use practices, such as forest conservation or restoration, that protect and improve the benefits from healthy, functioning ecosystems. While PES programs are used globally, they are an especially prominent [\[...\]](#) **Read more.**

(This article belongs to the Special Issue [Local- to Global-Scale Environmental Issues](#))

Open Access **Article**

District Drinking Water Planning for Sustainability in Maharashtra: Between Local and Global Scales

by

James L. Wescoat Jr. and **Jonnalagadda V. R. Murty**

Sustainability 2021, 13(15), 8288; <https://doi.org/10.3390/su13158288> - 24 Jul 2021

Abstract

Sustainable rural drinking water is a widespread aim in India, and globally, from the household to district, state, and national scales. Sustainability issues in the rural drinking water sector range from increasing water demand to declining groundwater levels, premature deterioration of village schemes [\[...\] Read more.](#)

(This article belongs to the Special Issue [Local- to Global-Scale Environmental Issues](#))

Open Access **Article**

Linking Personal Experience to Global Concern: How Zoo Visits Affect Sustainability Behavior and Views of Climate Change

by

Josie A. Taylor and **Leslie A. Duram**

Sustainability 2021, 13(13), 7117; <https://doi.org/10.3390/su13137117> - 24 Jun 2021

Abstract

Globally, many species are threatened by habitat loss and are impacted by climate change due to human activities. According to the IUCN Red List, nearly 9000 animal species are now endangered or critically endangered. Yet, humans are largely ignorant to the impact they [\[...\] Read more.](#)

(This article belongs to the Special Issue [Local- to Global-Scale Environmental Issues](#))

Open Access **Article**

Spatiotemporal Variations of Landscape Ecological Risks in a Resource-Based City under Transformation

by

Dong Wang, **Xiang Ji**, **Cheng Li**, and **Yaxi Gong**

Sustainability 2021, 13(9), 5297; <https://doi.org/10.3390/su13095297> - 10 May 2021

Abstract

The development of traditional resource-based cities requires drastic changes owing to the exhaustion of resources. During this transformation, the ecological environment of resource-based cities is threatened because of resource exploitation, in addition to the ecological risks caused by urban expansion. However, there is [\[...\] Read more.](#)

(This article belongs to the Special Issue [Local- to Global-Scale Environmental Issues](#))

Open Access **Article**

Integrating Ecosystem Function and Structure to Assess Landscape Ecological Risk in Traditional Village Clustering Areas

by

Sheng Liu, **Ming Bai** and **Min Yao**

Sustainability 2021, 13(9), 4860; <https://doi.org/10.3390/su13094860> - 26 Apr 2021

Viewed by 552

Abstract

Land use in traditional village clustering areas often exhibits slight dynamic changes; however, significant hidden ecological hazards may be present in local settlements. There is still a lack of dynamic ecological risk assessments for the corresponding classification-based prevention strategies and landscape ecosystem attributes' [\[...\] Read more.](#)

(This article belongs to the Special Issue [Local- to Global-Scale Environmental Issues](#))

Open Access **Article**

Balancing Socio-Ecological Risks, Politics, and Identity: Sustainability in Minnesota's Copper-Nickel-Precious Metal Mining Debate

by

Ryan D. Bergstrom and **Afton Clarke-Sather**

Sustainability 2020, 12(24), 10286; <https://doi.org/10.3390/su122410286> - 09 Dec 2020

Abstract

In the northeastern corner of Minnesota, two of the state's most iconic symbols, mining and pristine wilderness, are on a collision course. The Duluth Complex, considered by many to be the world's largest undeveloped deposit of copper-nickel and precious metals, is the site [\[...\] Read more.](#)

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Open Access **Review**

Climate Change along the Silk Road and Its Influence on Scythian Cultural Expansion and Rise of the Mongol Empire

by

Ping Che and **Jianghu Lan**

Sustainability **2021**, *13*(5), 2530; <https://doi.org/10.3390/su13052530> - 26 Feb 2021

Abstract

Climate change and cultural exchange both influenced cultural development along the continental Silk Road during the late Holocene, but climate change and its influence on nomadic civilizations during that time has yet to be systematically assessed. In this study, we analyzed records of [\[...\] Read more.](#)

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