



Proceeding Paper

Preliminary Research on Carbon-Neutral Sustainable Development Strategies in Community Development Education [†]

Jiin-Chyuan Mark Lai 1, Chiung-Ling Wang 2 and Ming-Yuan Hsieh 3,*

- Department of Applied Foreign Languages, Trans World University, Douliu 64063, Taiwan; marklai07@gmail.com
- Department of Industrial Education, National Taiwan Normal University, Taipei City 106010, Taiwan; lin8332317@mail.edu.tw
- Department of International Business, National Taichung University of Education, Taichung City 40306, Taiwan
- * Correspondence: cpawisely@mail.ntcu.edu.tw; Tel.: +886-975-118-922
- † Presented at the 3rd IEEE International Conference on Electronic Communications, Internet of Things and Big Data Conference 2023, Taichung, Taiwan, 14–16 April 2023.

Abstract: Owing to the severe development and progression of climate change and the greenhouse effect, carbon neutrality has attracted much research interest in environment-related social research. Specifically, in Article 12 of the Regulations on Community Development Work (RCDW) for more than 25,000 Taiwanese community development associations, carbon neutrality is the main purpose of environmental education, environmental protection and infrastructures, and social responsibilities. Carbon neutrality has to be instituted into efficient governance and operations to provide effective and diversified services for residents' lives. Thus, sustainable strategies (environmental, social, and governance, ESG) need to induce effective and efficient carbon-neutral sustainable development in order to improve environmental conditions for the community's residents without long-term government compensation and resources. Environmentally sustainable strategies focus on environmental protection and education for the whole community. Social strategies need to be associated with social responsibility and public services, while governance needs to be concentrated on sustainable operation and management. In this study, effective and efficient carbon-neutral sustainable development strategies were proposed for the community sustainability of community development associations.

Keywords: carbon neutral sustainable development strategy; community development education; carbon-neutral sustainable development strategy; ESG (environmental, social and governance)



Citation: Lai, J.-C.M.; Wang, C.-L.; Hsieh, M.-Y. Preliminary Research on Carbon-Neutral Sustainable Development Strategies in Community Development Education. *Eng. Proc.* **2023**, *38*, 53. https:// doi.org/10.3390/engproc2023038053

Academic Editors: Teen-Hang Meen, Hsin-Hung Lin and Cheng-Fu Yang

Published: 27 June 2023



Copyright: © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

1. Introduction

With rapid economic development and social evolution, people pursue financial and economic success as well as mental and spiritual accomplishment for self-satisfaction in harmonious co-existence between humans and nature. As an essential foundational goal of Taiwanese society, the advancement of lifestyles of health and sustainability (LOHAS) is regarded as important. LOHAS originated from the LOHAS doctrine (LOHASism) for sustainable happiness, health, and self-sufficiency. Health, happiness, protection, environmental protection, and sustainability are core principles in environmental issues. Organic foods, natural cotton and linen, secondhand houseware, bicycle riding, regular sports and fitness, mind-soothing music, a friendly personality, and a sustainable lifestyle have been the focused of human lives following these principles. LOHAS is important to support environmental protection in consumption. The three essential principles of "do good, feel good, and look good" are also emphasized [1–4].

Eng. Proc. 2023, 38, 53

Taiwan has a land area of 36,000 km² and is located near the southeastern coast of China, bordering the Taiwan Strait and facing the Pacific Ocean. Taiwan is near Okinawa and the Philippines with an annual average temperature of 22–25 °C. There are 268 mountains on Taiwan island, among which the highest one is Yushan Mountain, at 3952 m. The population is approximately 23 million, and the official languages are Mandarin, Taiwanese, and Hakka. Buddhism and Taoism are the dominant religions. Taiwan has rich natural resources, and so eco-tourism including Taiwanese aboriginal tribe culture trips, local agricultural products tours, and local art tours is very popular. Therefore, LOHAS is involved in the diverse communities and associations in Taiwan.

There have been systematic surveys on regional development and urban–rural disparities due to the different levels of economic and industrial development in Taiwan [5–12]. Such disparities are believed to create a gap between rich and poor communities. The concept of utilitarianism has been introduced for the purposes of attain the maximum happiness among the most people. Most communities propose that economic outcomes from various industries need to be shared through government grants, subsidies, and incentives. Therefore, most urban and rural community development associations commit themselves to local industrial and economic development through local product development and the tourism industry. Some have claimed that the profits of local development need to be invested into minority groups, including local enterprises. However, most communities focus only on tourism. Hence, issues have been raised regarding pollution, contamination, transportation problems, and noise [6–12].

Therefore, LOHAS must be implemented for the development of communities to advance life quality from the perspective of environmental, social, and governance (ESG) perspectives. ESG policies support environmental protection in communities under mutualism and strengthen social responsibility and government performance. These policies also pay attention to environmental issues, including climate change, scarcity of natural resources, pollution prevention and control, and waste disposal. Social benefits such as human rights and interests, product duty, public information security, and life risks are also emphasized in ESG [13]. In governance, the issues of administrative performance, managerial effectiveness, and efficiency, developmental sustainability, and administrative executive leadership are considered in ESG. ESG policies are also required to diminish the disparities between urban and rural communities.

2. Literature Review

LOHAS reflects the rise of sustainable development, focusing on healthy, self-sufficient, environmentally protected, organic, natural, cultural, and creative lives. In modernization and globalization, people can experience emptiness, estrangement, and resource shortages. LOHAS has corresponded to social development since being popularized in Europe and America in the 2000s. The concrete statement of LOHAS was proposed in the 2008 Young Chinese Fashion Culture Forum in Ningbo City, China, which was hosted by the Party Central Committee, All-China Youth Federation, Ningbo City Hall, and Ningbo Municipal Party Committee. The statement embodied twelve notions for self-improvement, including a happy life, free creation, a strong body, sustainable food, simple consumption, contented peace, good treatment, a closeness with nature close, environment protection, a public spirit, and proactive sharing. In the definition, the concise concept of LOHAS is defined as a "happy, pleasurable, and sustainable lifestyle". Approximately one-fourth of Americans have embraced the LOHAS lifestyle, while one-third of Europeans have adopted the LOHAS lifestyle. LOHAS is not only a lifestyle, but also a cultural habit and creation. The natural, healthy, harmonious, and environmentally protected lifestyle in LOHAS is related to dieting, clothing, accommodation, transportation, education, and recreation [14,15].

Unfortunately, rapid economic development has caused a series of environmental problems such as pollution in the air, water, and land, with climate anomalies, food contamination, deracination, global warming, and deforestation. As a result, people have realized the importance of environmental protection and reduced their consumption to advocate

Eng. Proc. 2023, 38, 53

for eco-consumerism including green products, carbon reduction, green delivery, and so on. Considerably more consumers have begun to implement the LOHAS concept in their lives. They seek green, carbon-reduced, recyclable, and sustainable packaging for products and recycle wastes actively. Therefore, the essential concept and philosophies of LOHAS have been applied to consumer psychology, art theory, material science, manufacturing technology, fabrication technology, product logistics, and customer services. LOHAS helps to create impressive economic outputs, too. To diminish the disparities between urban and rural communities in Taiwan through LOHAS, the unilateral development of the economy and the industry with LOHAS ideas and activities is required for a better quality of life.

3. Conclusions and Future Direction

To mitigate the urban-rural disparities in Taiwan, attention must be paid to regional economic and industrial development by developing local products and boosting the local economy. However, Taiwanese communities should also consider environmental issues seriously to achieve cultural, educational, and social benefits in order to enhance the quality of life of community residents. Under Article 12 of the Regulations on Community Development Work, there are over 25,000 Taiwanese community development associations. In consideration of their concepts, purposes, and functions, environmental protection and education, social responsibility and services, and efficient governance and operations are required for them to provide more effective and diversified public services. Hence, it is necessary to focus on the advanced role of the associations from the perspective of ESG to maintain fundamental operations and offer their services even without long-term government compensation. For sustainable development and operations, considerations of the "environment" need to focus on the preservation and development of local natural resources and culture, "social" policies need to involve social responsibility and public services, "governance" needs to foster efficiency and sustainability. Creative research is required to deeply and comprehensively help the community develop and strengthen the sustainability of community development under ESG.

Author Contributions: Conceptualization, J.-C.M.L. and M.-Y.H.; methodology, M.-Y.H.; validation, J.-C.M.L.; formal analysis, M.-Y.H.; investigation, J.-C.M.L.; resources, J.-C.M.L. and C.-L.W.; writing—original draft preparation, M.-Y.H. and C.-L.W.; writing—review and editing, M.-Y.H.; visualization, J.-C.M.L.; supervision, M.-Y.H.; project administration, M.-Y.H.; funding acquisition, and C.-L.W. All authors have read and agreed to the published version of the manuscript.

Funding: This research was supplied by the research supporting research projects (MOST 110-2420-H-002-003-MY3-Y11017) of Ministry of Science and Technology and (NTCU109105) from the National Taichung University of Education.

Institutional Review Board Statement: This research did not execute the questionnaires and interview and hence, this research did not require ethical approval.

Informed Consent Statement: Not applicable because this research did not involve any humans.

Data Availability Statement: No new data were created.

Conflicts of Interest: There is no conflict of interest in this research.

References

- 1. Raihan, A. Nexus between economic growth, natural resources rents, trade globalization, financial development, and carbon emissions toward environmental sustainability in Uruguay. *Electeonic J. Educ. Soc. Econ. Technol.* **2023**, *4*, 55. [CrossRef]
- 2. Raihan, A.; Muhtasim, D.A.; Farhana, S.; Hasan, M.A.U.; Paul, A.; Faruk, O. Toward environmental sustainability: Nexus between tourism, economic growth, energy use and carbon emissions in Singapore. *Glob. Sustain. Res.* **2022**, *1*, 53. [CrossRef]
- 3. Raihan, A.; Muhtasim, D.A.; Farhana, S.; Hasan, M.A.U.; Paul, A.; Faruk, O. Dynamic linkages between environmental factors and carbon emissions in Thailand. *Environ. Process.* **2023**, *10*, 5. [CrossRef]
- 4. Raihan, A.; Tuspekova, A. Toward a sustainable environment: Nexus between economic growth, renewable energy use, forested area, and carbon emissions in Malaysia. *Conserv. Recycl. Adv.* **2022**, *15*, 200096. [CrossRef]
- 5. Wang, Q.J.; Feng, G.F.; Wang, H.J.; Chang, C.P. The influence of political ideology on greenhouse gas emissions. *Glob. Environ. Chang.* **2022**, 74, 102496. [CrossRef]

Eng. Proc. 2023, 38, 53 4 of 4

6. Hsieh, Y.M. The most sustainable niche principles of social-media education in a higher education contracting era. *Sustainability* **2020**, *12*, 339. [CrossRef]

- 7. Huang, Y.-M.; Hsieh, Y.M.; Usak, M. A Multi-Criteria Study of Decision-Making Proficiency in Student's Employability for Multidisciplinary Curriculums. *Mathematics* **2020**, *8*, 897. [CrossRef]
- 8. Chan, Y.-K.; Hsieh, M.-Y.; Usak, M. A Concrete Study on Social-Media Connection of Global Literacy Abilities in MOOCs under the Dual Impacts of Lower Birth-Rate and COVID-19. *Sustainability* **2021**, *13*, 2203. [CrossRef]
- Usak, M.; Hsieh, M.-Y.; Chan, Y.-K. A Concertizing Research on Making Higher Education Sustainability Count. Sustainability 2021, 13, 2724–2738. [CrossRef]
- 10. Duran, M.; Usak, M.; Hsieh, M.-Y.; Uygun, H. A New Perspective on Pedagogical Content Knowledge: Intellectual and Emotional Characteristics of Science Teachers. *Rev. Cercet. Interv. Soc.* **2021**, 72, 9. [CrossRef]
- 11. Wu, T.-L.; Hsieh, M.-Y.; Min, K.-W.; Yu, M.-T.; Ho, C.-T. Use of Sensor Technologies in Online Courses in Post-COVID-19 Era. *Sens. Mater.* **2021**, *33*, 2045–2062. [CrossRef]
- 12. Huang, C.C.; Chan, Y.-K.; Hsieh, M.Y. The Determinants of ESG for Community LOHASism Sustainable Development Strategy. *Sustainability* **2022**, *14*, 11429. [CrossRef]
- 13. Chan, Y.-K.; Hsieh, M.Y. An Empirical Study on Higher Education C-ESG Sustainable Development Strategy in Lower-Birth-Rate Era. Sustainability 2022, 14, 12629. [CrossRef]
- Hsieh, M.Y. The Sustainable Development and Strategic Approaches for Contemporary Higher Education. Sustainability 2022, 14, 12925. [CrossRef]
- 15. Huang, C.-C.; Chan, Y.-K.; Hsieh, M.-Y. Preliminary Research on the Sustainable Determinants of Taiwanese Ecotourism with the International Standards. *Int. J. Environ. Res. Public Health* **2022**, *19*, 14489. [CrossRef] [PubMed]

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.