# The Role of Entrepreneurship and Green Innovation Intention on Sustainable Development: Moderating Impact of Inclusive Leadership

#### Wilson Cruz Mamani

Universidad Peruana Unión Juliaca. Email: wilson.cruz@upeu.edu.pe

## **Germain Marcos Lagos Manrique**

Universidad Nacional Federico Villarreal Email: glagos @unfv.edu.pe

# Soraya del Pilar Carranco Madrid

Universidad Central del Ecuador Email: <a href="mailto:spilarcm@hotmail.com">spilarcm@hotmail.com</a>

# **Edward Espinoza Herrera**

Universidad Nacional Federico Villarreal Email: eespinozah@unfv.edu.pe

### **David Barrial Acosta**

Universidad Nacional Micaela Bastidas de Apurímac Email: <u>dbarrial@unamba.edu.pe</u>

# Rolando Remy Rivas-Diaz

Universidad Nacional de San Agustín Email: <u>rrivas@unsa.edu.pe</u>

### José Luis Arias-Gonzáles

University of British Columbia Email: <u>Joseariasgon6@gmail.com</u>

# Yuselino Maquera Maquera

Universidad Nacional del Altiplano Puno Email: <u>ymmaquera @unap.edu.pe</u>

## Francisco Samael Saravia Ramos

Universidad Nacional De San Agustín Email: <a href="mailto:fscsaravia@gmail.com">fscsaravia@gmail.com</a>

Today, sustainable development (SD) is a worldwide requirement due to the numerous environmental challenges that require the attention of academics. Consequently, the current study explores the effect of entrepreneurial and green innovation aims on SD in Peru. In addition, the study examines the moderating effect of inclusive leadership on entrepreneurship. green innovation intention, and sustainable development in Peru. The study utilized primary data collection instruments such as questionnaires to collect information from the selected respondents. The paper also used smart-PLS to examine the data's dependability and the correlation between factors. In Peru, entrepreneurship and green innovation intentions were found to have a good relationship with sustainable development. In addition, the data demonstrated that inclusive leadership moderates the relationship between entrepreneurship, green innovation intention, and SD in Peru. The essay supports policymaking authorities in formulating SD-related policies by refocusing entrepreneurs' attention on green innovation.

**Key words:** Entrepreneurship, green innovation intention, sustainable development, inclusive leadership.

# 1. INTRODUCTION

Sustainable development is essential for a nation's existence and advancement in the global market. It is the achievement of human development goals alongside preserving nature's production and maintaining the quality of the ecosystem upon which the economy and society depend. Its result must be a society and economy in which living and nonliving natural resources are exploited to meet current human needs without compromising the stability and integrity of nature. Therefore, according to Silvestre and Ţîrcă (2019), sustainable development (SD) can be understood as the development that satisfies present requirements without endangering the demands of future generations. Sustainability goals, such as those presented by the UN Assembly for SD, address various global challenges, such as environmental degradation, climate change, poverty, inequality, peace, and justice (Dantas et al., 2021). The present SD concept is derived from the 1987 Brundtland Report. It also affects twentieth-century ideas regarding environmental concerns, sustainable forest

management, etc. Due to the evolution of SD objectives, the focus switched to the economic development, social progress, and environmental protection of future generations (Kaul et al., 2022).

Environment, economy, and society are the three pillars of SD, as outlined in the UN 2030 Sustainability Agenda. Therefore, SD's success is influenced by several economic elements, such as entrepreneurialism and green innovation, which can contribute to environmental protection, economic growth, and social prosperity (Sharpley, 2020). Entrepreneurship entails the establishment of a new business, the management of its operations, and the assumption of the majority of the associated risks and benefits. As entrepreneurs are viewed as responsible for most threats and those who benefit most from any gains, they attempt to minimize risks and increase profitability. To improve the total business performance, including environmental, social, and financial performance, which determine Sustainable Development (SD), they maintain innovation, produce and execute new ideas, increase the

quality of goods and services, and work on business procedures (Fatimah et al., 2020). Environmental sustainability is one of the pillars of sustainability that support others, such as social well-being and economic growth. Green innovation intention refers to an organization's aim or objective to bring innovation to all business processes, the innovation that eliminates the negative environmental repercussions of business. It is possible to accomplish sustainable corporate development with good ecological performance (Leal Filho et al., 2020).

# Sustainable Development in Peru

The 2030 Agenda and the SDGs have been integrated into the overall government policy of the Peruvian government. In the 2019 SD statistics, Peru ranks 51 out of 161 countries, demonstrating a mediocre performance. If Peru's SD is compared to the global average, the country receives a score of 6.1% and is still on track to achieve development. It has been claimed that the government is making significant strides in achieving the SDGs (Alvarez-Risco et al., 2021). Virtually no government-driven businesses have participated in the 2030 Agenda. As an initial step towards greater openness and transparency from businesses, essential sustainable practices are being implemented, such as the Superintendencia de Mercado de Valores' demand that all companies trading on the Peruvian Stock Exchange submit sustainability reports. According to (Salmoral et al., 2020), among the most prioritized Goals are SDG 4 'Quality Education' with 64% progress, SDG 8 'Good Jobs and Economic Growth with 60% progress, SDG 17 'Partnerships for the Goals' with 52% progress, and SDG 5 'Gender Equality' with 50% progress. Following these were SDGs such as Zero Hunger, Good Health, and Innovation.

# **Problem Statement and Study Objectives**

Peru's economy is emerging rapidly. Environmental pollution is caused by economic activities such as fuel consumption, electricity production, transportation, chemical manufacture and use, construction, mining, and manufacturing. Moreover, the majority of firms prioritize profits over social responsibility. It is a warning sign for the county's SD (Gustafsson & Scurrah, 2019). There is a need to eliminate this risk, and the current study is a step in that direction. This study aims to explore the effects of entrepreneurial and green innovation intentions on sustainable development. It also investigates the moderating impact of leadership inclusive on entrepreneurship, green innovation intention, sustainable development.

# 2. RESEARCH CONTRIBUTION

The significance of this work to literature is significant. First, in prior research, entrepreneurship and green innovation intention impacts SD have been investigated. Still, the simultaneous analysis of entrepreneurship and green innovation intention effects on SD has received little attention. This study contributes to the existing body of knowledge by examining the influence of entrepreneurship and green innovation ambition on SD achievement.

Second, previous research has examined the relationship between inclusive leadership and sustainable development without addressing inclusive leadership as a moderator between entrepreneurship, green innovation intention, and sustainable development. This study attempts to use inclusive leadership as a moderator between entrepreneurship, the intention to engage in green innovation, and SD (Talha et al., 2022). Thirdly, the rate of SD advancement in Peru is slow. Very little research in Peru has addressed this subject. In Peru, the role of inclusive leadership, entrepreneurship, and innovation intention in SD has been evaluated for the first time.

#### 2.1 **Study Structure**

After explaining the subject of the study, the second examines the relationship section between entrepreneurship, green innovation intention, inclusive leadership, and Sustainable Development (SD). The third section consists of a description of the methods used to collect data on variables and an analysis of their relationship. After finding the study results, these are compared with the previous studies. The ramifications, findings, and limitations of the study are then presented.

### LITERATURE REVIEW

SD is the state of a nation in which living and nonliving resources are utilized to meet current demands. The three pillars of SD are environmental sustainability, social welfare, and economic development. These three pillars are interdependent and can act as one another's drivers. Entrepreneurship results in the administration of an organization to enhance and sustain its performance, which adds to SD. Green innovation fosters eco-friendly methods, and environmental sustainability contributes to SD (Duff & Downs, 2019). This study explores the role of entrepreneurship and green innovation intention, with inclusive leadership as a mediator, in achieving Sustainable Development (SD). The study examines the importance of entrepreneurship, green innovation intention, and inclusive leadership in attaining sustainable development and occupies a prominent place in previous research. The next section analyzes the hypothesis on the relationship between entrepreneurship, green innovation intention, inclusive leadership, and achieving SD based on previous research findings (Arce et al., 2021).

#### 3.1 **Entrepreneurship and Sustainable** Development

Johnson and Schaltegger (2020) study the importance of entrepreneurship in achieving Sustainable Development. A systematic review method was utilized to develop the relationship between the relevant variables, and a multilevel causal mechanism framework was developed. The study hypothesizes that the firm's internal operations, such as inventory management, production, labor productivity, and the quality of technology resources, influence the firm's contribution to economic growth, the social welfare of stakeholders, and environmental quality. A good entrepreneur controls the firm such that all business activities are properly regulated, generate greater revenues, and have no negative effect on the environment or social welfare. Thus, entrepreneurship paves the road for a nation to attain SD. Vázquez Maguirre et al. (2018), states that business operations are governed by entrepreneurs. If a business owner is efficient and socially responsible, they will not just seek to increase profits but also protect the interests of all stakeholders. This improves the quality of products and services, contributing to economic growth, environmental quality, and social welfare, all of which contribute to sustainable development. Galindo-Martín et al. (2021) investigate the effects of general and social entrepreneurship and economic and socio-cultural aspects on accomplishing Sustainable Development (SD).

The empirical investigation utilized structural equation modeling. A research survey was done in 15 OECD countries, and information on understudy factors for 2015-2016 was obtained from these nations. The research suggests that general entrepreneurship conducts its activities effectively to earn earnings greater than those of company units by reaching a high market ranking. It adds to SD's economic objectives (Al Dallal & Pitts, 2021). In the case of social entrepreneurship, when the major objective of organizational endeavors is to increase social welfare, environmental and socially sustainable development goals, which also function as economic goals, are attained. Given the above explanation, we may state the following:

H1: Entrepreneurship has a positive influence on SD achievement.

#### 3.2 Green Innovation Intention and **Sustainable Development**

Zhang and Zhu (2019) discussed the role of green innovation intent, stakeholder pressure, and organizational learning in SD. We collected empirical data regarding innovation, pressures, green stakeholder organizational learning in SD based on a sample of 259 Chinese manufacturing enterprises. The survey reveals that businesses with a green innovation strategy utilize green technologies for business processes such as lighting or heating the organization's facility, manufacturing products and services, and transportation. This eliminates environmental degradation and makes SD possible for the economy. According to Abbas and Sağsan (2019), green innovation activities such as using green raw materials, green technologies, green production, and green marketing are implemented in organizations whose management has a green innovation goal. The implementation of these ecofriendly strategies improves the environmental performance of the companies. Environmental protection ensures the availability of natural resources and quality human resources for the economy, thereby contributing to the nation's sustainable development. Asadi et al. (2020) explore the relationship between green innovation intention and sustainable performance. Collect data was used to inspect 184 Malaysian hotels and gather information regarding their green innovation intentions and sustainable performance. PLS was utilized for the study of the variables and their relationships. According to the survey, green innovation techniques such as energyefficient appliances, chemical-free food preparation, clean serving equipment, and adequate waste disposal are implemented in hotels where management has a green orientation. This enhances the quality of hotel products and services and, consequently, people's health, which is essential to achieving SD. Based on the literature mentioned above, it is possible to establish the following hypothesis:

**H2:** Green innovation intention has a positive influence on SD achievement.

#### 3.3 Inclusive Leadership Role between **Entrepreneurship and Sustainable** Development

Galindo-Martín et al. (2021), explores inclusive leadership, entrepreneurship, and SD. During Covid-19 predominance, data on inclusive leadership, entrepreneurship, and SD were collected from OECD countries. Partial least square modeling was utilized for the empirical investigation of components nexus. The study hypothesizes that, under inclusive leadership, the leaders, on the one hand, encourage the entrepreneurs to care for the employees' needs and, on the other hand, convey the organizations' concern for the employees. Therefore, it enables entrepreneurs to be socially responsible and compels employees to work efficiently on socially responsible projects, propelling the nation towards SD. Sun et al. (2020) study the relationship between inclusive leadership, entrepreneurship, and sustainable development. Information on inclusive leadership, entrepreneurship, and SD was obtained using a panel dataset of 35 Sub-Saharan African nations, including middle-income and low-income. The connection between components was analyzed using the PMG estimator with the ARDL model. According to the study, inclusive leadership increases the efficacy of entrepreneurship and accelerates the country's progress toward sustainable development. Thus, inclusive leadership enhances entrepreneurship's contribution to SD. This study by Iqbal and Ahmad illustrates that entrepreneurship aims to improve corporate performance. When a team leader employs inclusive leadership, subordinates are committed to the organization and driven to carry out their responsibilities effectively.

Consequently, entrepreneurial aims can be attained. Moreover, via inclusive leadership, the organization supports and improves the performance of its employees, which contributes to SD. Therefore, including leadership strengthens the relationship between entrepreneurship and SD. Based on the studies discussed, it can be stated:

H3: Inclusive leadership is a significant moderator between entrepreneurship and SD achievement

#### 3.4 **Inclusive Leadership Role between Green Innovation Intention and Sustainable** Development

Shahzad et al. (2022) investigate the impact of inclusive leadership, green innovation intent, and green technology on SD acceleration. A survey of 516 Pakistani manufacturing companies gathered information about green innovation technology and SD. The artificial neural network (ANN) method and structural equation modeling (SEM) was utilized. The report asserts that companies with a policy of adopting inclusive leadership, incorporating green innovation into business operations, and focusing on the green improvement of the technology required to perform a business function are the most environmentally conscious. The resultant environmental performance facilitates sustainable economic development.

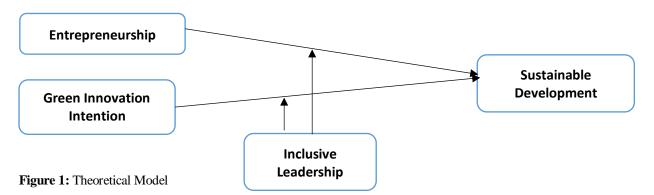
Consequently, inclusive leadership establishes connection between green innovation intent and SD. Zhou et al. (2020) investigate the effects of green innovation on SD objectives. The adoption of inclusive leadership generates an environment of cooperation and support. In this situation, the aim of the green invention can be realized, and the enhanced environmental sustainability adds to SD. As a result, the connection between green innovation and SD becomes stronger. Melander and Pazirandeh (2019) examine the effects of green innovation intention assimilation on SD. The green innovation intention and SD analysis are based on 11 case studies with 30 top management interviews conducted at high-tech enterprises. The study hypothesizes that company management that focuses on adopting green innovation in many business domains accomplishes marketing potential and safeguards social welfare, natural resources, and the living environment. This contributes to the SD of the country. To explain why:

H4: Inclusive leadership is a significant moderator between green innovation intention and SD achievement.

### **Research Methods**

This study examines the effects of entrepreneurship and green innovation intention on SD and the moderating impact of inclusive leadership on the relationship between entrepreneurship, green innovation intention, and SD in Peru. The study utilized primary data collection instruments such as questionnaires to collect information from the selected respondents. The survey respondents are students enrolled in entrepreneurial and environmental studies at government universities. The students were randomly selected, and the questionnaires were distributed via personal visits. 536 questionnaires were sent out. However, only 290 legitimate responses were obtained, representing a response rate of around 54.10 percent. In addition, the smart-PLS was used to examine the data's reliability and the correlation between factors. An appropriate data analysis instrument yields the best results when evaluating primary data. In addition, it handles tiny and large data sets adequately.

In addition, the study includes two independent variables: entrepreneurialism and intention to pursue green innovation. In addition, the study uses inclusive leadership as a moderating variable and SD as a predicting predictor. Entrepreneurship (ENP) has twelve items adopted from Staniewski and Awruk (2019), and green innovation intention (GII) has eight items extracted from Singh et al. (2020). Inclusive leadership has ten items extracted from Qi et al. (2019), and social desirability has eight items adopted from Gericke et al. (2019). Figure 1 presents these variables within the theoretical framework.



# RESEARCH FINDINGS

The correlation between the constructs was examined in this study, and the results revealed that the Alpha values are greater than 0.70, the average variance extracted (AVE) values are greater than 0.50, the composite reliability (CR) values are greater than 0.70, and the factor loading values are greater than 0.50. These values suggested a strong relationship between elements. Table 1 contains these values. Additionally, the correlation between the variables has been examined. Fornell Larcker and cross-loadings revealed that the values indicating the association between variables are greater than those revealing the association between variables and other constructs. These results showed a weak relationship between factors. These values are presented in Tables 2 and 3.

Table 1: Convergent Validity

Constructs	Items	Loadings	Alpha	CR	AVE
Entrepreneurship	ENP1	0.850	0.950	0.957	0.668
	ENP11	0.845			
	ENP12	0.804			
	ENP2	0.822			
	ENP3	0.827			
	ENP4	0.828			
	ENP5	0.841			
	ENP6	0.802			
	ENP7	0.830			
	ENP8	0.785			
	ENP9	0.749			
Green Innovation Intention	GII1	0.920	0.978	0.981	0.865
	GII2	0.931			
	GII3	0.930			
	GII4	0.940			
	GII5	0.926			
	GII6	0.926			
	GII7	0.943			
	GII8	0.925			
Inclusive Leadership	IL1	0.831	0.935	0.946	0.663
	IL10	0.578			
	IL2	0.858			
	IL3	0.849			
	IL4	0.812			
	IL5	0.865			
	IL6	0.862			
	IL8	0.855			
	IL9	0.777			
Sustainable Development	SD1	0.760	0.915	0.931	0.630
•	SD2	0.837			
	SD3	0.655			
	SD4	0.808			
	SD5	0.814			
	SD6	0.812			
	SD7	0.829			
	SD8	0.821			

Table 2: Fornell Larker

	ENP	GII	IL	SD
ENP	0.817			
GII	0.488	0.930		
IL	0.452	0.428	0.814	
SD	0.500	0.442	0.424	0.794

The connection between factors was also examined using the Heterotrait Monotrait (HTMT) ratio. The results revealed that the values were less than 0.85 and that the correlation between variables was weak. Table 4 contains these values. Entrepreneurship and green innovation intentions have a favorable relationship with sustainable development in Peru, confirming hypotheses H1 and H2. The data also demonstrated that inclusive leadership moderates the relationship between entrepreneurship, green innovation intention, and sustainable development in Peru and supports hypotheses H3 and H4. These associations are shown in Table 5.

#### DISCUSSION 5.

According to the study's findings, entrepreneurship positively affects SD achievement. These findings are consistent with prior research on Al-Qudah et al. (2022) . This study demonstrates that entrepreneurs are responsible for the firm's survival, liable for losses, and entitled to greater earnings. The business owners manage the business procedures. If they identify a weak point in the organization's operations that threatens to disrupt business operations, or if business performance declines, they attempt to implement

adjustments. The country's capability to attain SD is enhanced by value-creating and environmentally-friendly developments in business. These findings are also consistent with Lotfi et al. (2018) examination of the effect of entrepreneurship on SD attainment. According to the study, effective entrepreneurs monitor not only the fluctuation of current profits but also the constancy of corporate performance. Therefore, they attempt to implement environmentally friendly and socially desirable methods contributing to the country's SD.

The study's findings indicate that green innovation intentions positively affect SD performance. These results are consistent with Awan et al. (2019). This study demonstrates that when business owners and administrators are committed to green innovation, they are willing to invest in environmentally friendly activities. Therefore, environmental conservation ensures the availability of natural resources and effective human resources for economic and social growth. This contributes to the nation's SD. These findings are also consistent with Lisi et al. (2020) findings, which shed light on the impact of green innovation intention on SD achievement. Incorporating green innovation intention sustains economic activity and the attainment of financial goals without harming the environment when resources are created, and live organisms thrive. This ensures the sustainable development of a nation.

Table 5. Cross-	ENP	GII	IL	SD
ENP1	0.850	0.405	0.375	0.464
ENP11	0.845	0.353	0.396	0.388
ENP12	0.804	0.324	0.352	0.304
ENP2	0.822	0.452	0.351	0.459
ENP3	0.827	0.435	0.379	0.459
ENP4	0.828	0.451	0.369	0.438
ENP5	0.841	0.351	0.398	0.386
ENP6	0.802	0.326	0.358	0.300
ENP7	0.830	0.456	0.376	0.434
ENP8	0.785	0.393	0.358	0.382
ENP9	0.749	0.385	0.351	0.399
GII1	0.453	0.920	0.402	0.389
GII2	0.458	0.931	0.428	0.394
GII3	0.463	0.930	0.396	0.395
GII4	0.454	0.940	0.413	0.420
GII5	0.447	0.926	0.371	0.437
GII6	0.459	0.926	0.394	0.394
GII7	0.457	0.943	0.416	0.416
GII8	0.445	0.925	0.370	0.435
IL1	0.333	0.350	0.831	0.342
IL10	0.261	0.184	0.578	0.261
IL2	0.390	0.354	0.858	0.349
IL3	0.361	0.345	0.849	0.333
IL4	0.393	0.379	0.812	0.304
IL5	0.389	0.368	0.865	0.320
IL6	0.411	0.376	0.862	0.381
IL8	0.408	0.392	0.855	0.423
IL9	0.343	0.351	0.777	0.354
SD1	0.460	0.430	0.368	0.760
SD2	0.429	0.345	0.364	0.837
SD3	0.253	0.338	0.237	0.655
SD4	0.430	0.404	0.342	0.808
SD5	0.382	0.306	0.316	0.814
SD6	0.384	0.322	0.355	0.812
SD7	0.413	0.332	0.358	0.829
SD8	0.375	0.307	0.324	0.821

**Table 4: Heterotrait Monotrait Ratio** 

Table 4. Heterotrait Monotrait Natio					
	ENP	GII	IL	SD	
ENP					
GII	0.500				
IL	0.478	0.445			
SD	0.519	0.463	0.451		

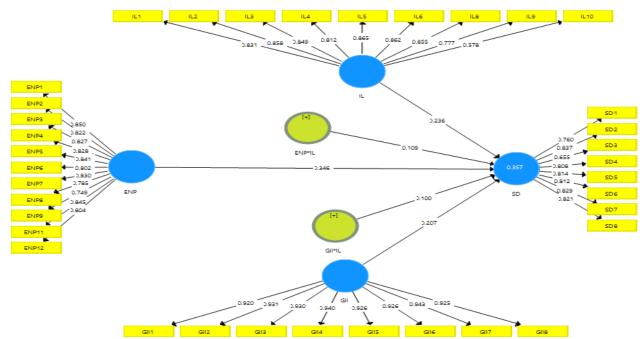


 Table 2: Measurement Model Assessment

Table 5: Path Analysis

Relationships	Beta	S.D.	T Statistics	P Values
ENP -> SD	0.346	0.067	5.165	0.000
ENP*IL -> SD	0.109	0.058	1.867	0.032
GII -> SD	0.207	0.071	2.905	0.002
GII*IL -> SD	0.100	0.058	1.717	0.045
IL -> SD	0.236	0.065	3.654	0.000

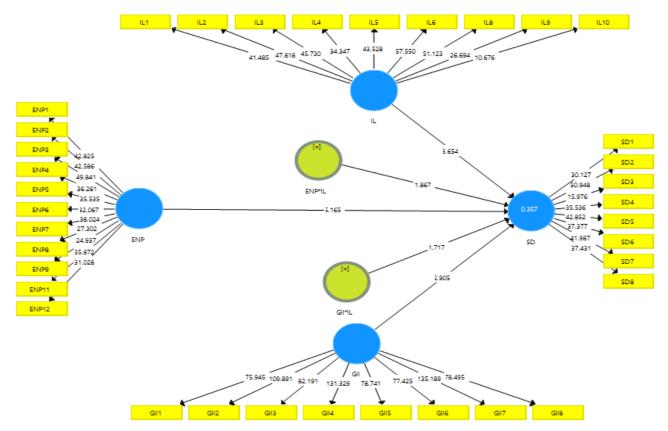


Figure 3: Structural Model Assessment

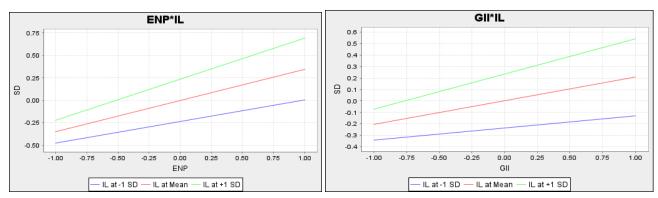


Figure 4: Moderation Analysis

According to the study's findings, inclusive leadership is an important moderator between entrepreneurship and SD accomplishment. These findings are consistent with the prior research of Bhutto et al. (2021). This study demonstrates that the objective of entrepreneurship is to enhance the performance of organizations. When a team leader in a business adopts inclusive leadership, subordinate employees are intrinsically committed to the organization and motivated to provide greater service. Thus, the objectives of entrepreneurship are realizable. As a result of inclusive leadership, the organization supports and improves the work of its people, thereby contributing to SD. Including leadership increases the connection between entrepreneurship and SD achievement in this manner. Óskarsdóttir et al. (2020), who address the impact of entrepreneurship on SD performance, concur with these findings. Inclusive leadership enhances entrepreneurship by facilitating the accomplishment of its objectives and facilitating the implementation of SD practices. It increases the contribution of effective entrepreneurship to SD attainment.

According to the study, inclusive leadership is an important modulator between green innovation intention and SD achievement. These results are consistent with the past research of Hope Sr (2020). This study demonstrates that the adoption of inclusive leadership produces a supportive and cooperative atmosphere in which the green innovation intention can be carried out, and the improved environmental performance of the enterprises contributes to the country's sustainable development. Thus, the association between green innovation intent and SD strengthens. These findings are also consistent with Zhao et al. (2020)'s examination of the relationship between green innovation intention and SD achievement. The study demonstrates that when an organization's management has a strong commitment to green innovation, it integrates environmentally friendly methods into its daily business operations to reduce its environmental impact. If inclusive leadership is implemented, the aim for green innovation may be developed, and SD objectives can be attained.

# THEORETICAL IMPLICATIONS

Scholars and researchers can learn more and better about their literary works due to the current investigation. This study investigates the effects of entrepreneurial intent and green innovation on SD achievement. The combined investigation of the function of entrepreneurship and green innovation intention in SD achievement occupies a unique place in the literature. In addition, the study contributes to the existing literature by evaluating inclusive leadership as the moderator between entrepreneurship, green innovation intention, and sustainable development. In addition, this paper investigates the importance of inclusive leadership, entrepreneurship, and the goal of green innovation in SD accomplishment in Peru.

# 7. EMPIRICAL IMPLICATIONS

The present study is of great importance to all nations because it focuses primarily on sustainable development, a global topic. The study instructs state and organizational policymakers on how to attain sustainable development. The analysis assists them in formulating legislation and implementing strategies that promote socially responsible, innovation-focused, and economically effective entrepreneurship so that SD can be realized more rapidly. The research also instructs the government and environmental regulators to devise fiscal policies, sanctions, subsidies, and developmental programs to support green innovation to protect the environment so that the country's sustainable development goals may be met. The essay helps policy-making authorities formulate SDrelated policies by refocusing entrepreneurs' attention on green innovation. Similarly, this piece of writing encourages company management to encourage leaders to adopt inclusive leadership to enhance the effectiveness of entrepreneurship and so hasten SD's success. The study reveals that inclusive leadership must be established to promote green innovation intent, and SD may be realized.

# CONCLUSION

The study aimed to assess the impact of entrepreneurship and green innovation on SD attainment. In addition, the purpose was to examine the function of inclusive leadership in entrepreneurialism, green innovation goal, and SD success. Through the distribution of questionnaires to students in Peru, actual data on inclusive leadership, entrepreneurship, green innovation intent, and SD achievement were gathered. The results reveal a correlation between entrepreneurship, the ambition to engage in green innovation, and SD achievement. The authors discovered that social and environmentally responsible practices are implemented when the objective of entrepreneurship is not just to increase profits but also to consider the interests of stakeholders (locals. employees, consumers, etc.). The social and environmental performance of the organization contributes to the country's attainment of SD. Incorporating the concept of green innovation preserves economic processes without negatively impacting the environment. This is useful for attaining SD. The study demonstrates that inclusive leadership boosts entrepreneurship and accelerates the realization of sustainable development. Additionally, the study suggests that inclusive leadership promotes the propensity to pursue green innovation, hence increasing SD.

#### LIMITATIONS 9

There are several limitations involved with this study. While producing comparable studies, scholars must evaluate and eliminate these constraints in the future. The influence of only two elements in SD performance is examined in this study: entrepreneurialism and green innovation intention. SD is a wide economic notion that is influenced by a variety of other variables. Future authors must include additional variables in their research on the impact of entrepreneurship and green innovation intention on sustainable development (SD) achievement. This study examined inclusive leadership as a moderator between entrepreneurship, green innovation intention, and SD. Future researchers must expand the breadth of the literature by incorporating at least one mediator between entrepreneurship, green innovation intention, and SD achievement.

# **REFERENCES**

Abbas, J., & Sağsan, M. (2019). Impact of knowledge management practices on green innovation and corporate sustainable development: A structural analysis. Journal of Cleaner Production, 229, 611-620.

> https://doi.org/https://doi.org/10.1016/j.jclepro.2 019.05.024

Al-Qudah, A. A., Al-Okaily, M., & Algudah, H. (2022). The relationship between social entrepreneurship and sustainable development from economic growth perspective: 15 'RCEP' countries. Journal of Sustainable Finance & Investment, *12*(1), 44-61.

- https://doi.org/https://doi.org/10.1080/20430795. 2021.1880219
- Al Dallal, S., & Pitts, P. J. (2021). Value over Volume: Maximizing Resources by Prioritizing Value: The Dubai Healthcare Experience. Journal of Commercial Biotechnology, 26(3), 5-4. https://doi.org/10.5912/jcb1013
- Alvarez-Risco, A., Del-Aguila-Arcentales, S., Rosen, M. A., García-Ibarra, V., Maycotte-Felkel, S., & Martínez-Toro, G. M. (2021). Expectations and Interests of University Students in COVID-19 Times about Sustainable Development Goals: Evidence from Colombia, Ecuador, Mexico, and Peru. Sustainability, 13(6), 3306. https://doi.org/https://doi.org/10.3390/su130633 06
- Arce, C., García-García, C., Corrales, R., & Botella, I. (2021). Consensus on Metrics for the Assessment of a Medical Science Liaison Using the Delphi Method. Journal of Commercial Biotechnology, 26(3). https://doi.org/10.5912/jcb982
- Asadi, S., OmSalameh Pourhashemi, S., Nilashi, M., Abdullah, R., Samad, S., Yadegaridehkordi, E., Aljojo, N., & Razali, N. S. (2020). Investigating influence of green innovation on sustainability performance: A case on Malaysian hotel industry. Journal of Cleaner Production, 258, 120860. https://doi.org/https://doi.org/10.1016/j.jclepro.2 020.120860
- Awan, U., Sroufe, R., & Kraslawski, A. (2019). Creativity enables sustainable development: Supplier engagement as a boundary condition for the positive effect on green innovation. Journal of Cleaner Production, 226, 172-185. https://doi.org/https://doi.org/10.1016/j.jclepro.2 019.03.308
- Bhutto, T. A., Farooq, R., Talwar, S., Awan, U., & Dhir, A. (2021). Green inclusive leadership and green creativity in the tourism and hospitality sector: serial mediation of green psychological climate and work engagement. Journal of Sustainable Tourism, 29(10), 1716-1737. https://doi.org/https://doi.org/10.1080/09669582. 2020.1867864
- Dantas, T. E. T., de-Souza, E. D., Destro, I. R., Hammes, G., Rodriguez, C. M. T., & Soares, S. R. (2021). How the combination of Circular Economy and Industry 4.0 can contribute towards achieving the Sustainable Development Goals. Sustainable Production and Consumption, 26, 213-227. https://doi.org/https://doi.org/10.1016/j.spc.2020 .10.005
- Duff, P. M., & Downs, T. J. (2019). Frontline narratives on sustainable development challenges/opportunities in the 'illegal' gold mining region of Madre de Dios, Peru: Informing an integrative collaborative response. The Extractive Industries and Society, 6(2), 552-

- 561. https://doi.org/https://doi.org/10.1016/j.exis.201 9.01.005
- Fatimah, Y. A., Govindan, K., Murniningsih, R., & Setiawan, A. (2020). Industry 4.0 based sustainable circular economy approach for smart waste management system to achieve sustainable development goals: A case study of Indonesia. Journal of Cleaner Production, 269, 122263. https://doi.org/https://doi.org/10.1016/j.jclepro.2 020.122263
- Galindo-Martín, M.-Á., Castaño-Martínez, M.-S., & Méndez-Picazo, M.-T. (2021). Effects of the pandemic crisis on entrepreneurship and sustainable development. Journal of Business Research, 137, 345-353. https://doi.org/https://doi.org/10.1016/j.jbusres.2 021.08.053
- Gericke, N., Boeve-de Pauw, J., Berglund, T., & Olsson, D. (2019). The Sustainability Consciousness Questionnaire: The theoretical development and empirical validation of an evaluation instrument for stakeholders working with sustainable development. Sustainable Development, 27(1), 35-49. https://doi.org/https://doi.org/10.1002/sd.1859
- Gustafsson, M.-T., & Scurrah, M. (2019). Strengthening subnational institutions for sustainable development in resource-rich states: Decentralized land-use planning in Peru. World Development, 119, 133-144. https://doi.org/https://doi.org/10.1016/j.worlddev .2019.03.002
- Hope Sr, K. R. (2020). Peace, justice and inclusive institutions: overcoming challenges to the implementation of Sustainable Development Goal 16. Global Change, Peace & Security, *32*(1), 57-77. https://doi.org/https://doi.org/10.1080/14781158. 2019.1667320
- Johnson, M. P., & Schaltegger, S. (2020). Entrepreneurship for Sustainable Development: A Review and Multilevel Causal Mechanism Framework. Entrepreneurship Theory and Practice, 44(6), 1141-1173. https://doi.org/https://doi.org/10.1177/10422587 19885368
- Kaul, S., Akbulut, B., Demaria, F., & Gerber, J.-F. (2022). Alternatives to sustainable development: what can we learn from the pluriverse in practice? Sustainability Science, 17(4), 1149-1158. https://doi.org/https://doi.org/10.1007/s11625-
- Leal Filho, W., Brandli, L. L., Lange Salvia, A., Rayman-Bacchus, L., & Platje, J. (2020). COVID-19 and the UN Sustainable Development Goals: Threat to Solidarity or an Opportunity? Sustainability, 12(13), 5343.

022-01210-2

- https://doi.org/https://doi.org/10.3390/su121353
- Lisi, W., Zhu, R., & Yuan, C. (2020). Embracing green innovation via green supply chain learning: The moderating role of green technology turbulence. Sustainable Development, 28(1), 155-168. https://doi.org/https://doi.org/10.1002/sd.1979
- Lotfi, M., Yousefi, A., & Jafari, S. (2018). The Effect of Emerging Green Market on Green Entrepreneurship and Sustainable Development in Knowledge-Based Companies. Sustainability, 10(7), 2308. https://doi.org/https://doi.org/10.3390/su100723
- Melander, L., & Pazirandeh, A. (2019). Collaboration beyond the supply network for green innovation: insight from 11 cases. Supply Chain Management: An International Journal, 24(4),
- https://doi.org/https://doi.org/10.1108/SCM-08-2018-0285 Óskarsdóttir, E., Donnelly, V., Turner-Cmuchal, M., &
- Florian, L. (2020). Inclusive school leaders their role in raising the achievement of all learners. Journal of Educational Administration, 58(5), 521-537. https://doi.org/https://doi.org/10.1108/JEA-10-2019-0190
- Qi, L., Liu, B., Wei, X., & Hu, Y. (2019). Impact of inclusive leadership on employee innovative behavior: Perceived organizational support as a mediator. PLOS ONE, 14(2), e0212091. https://doi.org/https://doi.org/10.1371/journal.po ne.0212091
- Shahzad, M., Qu, Y., Rehman, S. U., & Zafar, A. U. (2022). Adoption of green innovation technology to accelerate sustainable development among manufacturing industry. Journal of Innovation & Knowledge, 7(4), 100231. https://doi.org/https://doi.org/10.1016/j.jik.2022. 100231
- Sharpley, R. (2020). Tourism, sustainable development and the theoretical divide: 20 years on. Journal of Sustainable Tourism, 28(11), 1932-1946. https://doi.org/https://doi.org/10.1080/09669582. 2020.1779732
- Silvestre, B. S., & Ţîrcă, D. M. (2019). Innovations for sustainable development: Moving toward a sustainable future. Journal of Cleaner Production, 208, 325-332. https://doi.org/https://doi.org/10.1016/j.jclepro.2 018.09.244
- Singh, S. K., Giudice, M. D., Chierici, R., & Graziano, D. (2020). Green innovation and environmental performance: The role of green transformational leadership and green human resource management. Technological Forecasting and Social Change, 150, 119762. https://doi.org/https://doi.org/10.1016/j.techfore.

# 2019.119762

- Staniewski, M. W., & Awruk, K. (2019). Entrepreneurial success and achievement motivation – A preliminary report on a validation study of the questionnaire of entrepreneurial success. Journal of Business Research, 101, 433-440. https://doi.org/https://doi.org/10.1016/j.jbusres.2 019.01.073
- Sun, H., Pofoura, A. K., Adjei Mensah, I., Li, L., & Mohsin, M. (2020). The role of environmental entrepreneurship for sustainable development: Evidence from 35 countries in Sub-Saharan Africa. Science of The Total Environment, 741, 140132. https://doi.org/https://doi.org/10.1016/j.scitotenv .2020.140132
- Talha, M., Wang, F., Maia, D., & Marra, G. (2022). Impact of information technology on accounting and finance in the digital health sector. Journal of Commercial Biotechnology, 27(2). https://doi.org/10.5912/jcb1299
- Vázquez Maguirre, M., Portales, L., & Velásquez Bellido, I. (2018). Indigenous Social Enterprises as Drivers of Sustainable Development: Insights From Mexico and Peru. Critical Sociology, 44(2), 323-340. https://doi.org/https://doi.org/10.1177/08969205 16688757
- Zhang, F., & Zhu, L. (2019). Enhancing corporate sustainable development: Stakeholder pressures, organizational learning, and green innovation. Business Strategy and the Environment, 28(6), 1012-1026. https://doi.org/https://doi.org/10.1002/bse.2298
- Zhao, F., Ahmed, F., & Faraz, N. A. (2020). Caring for the caregiver during COVID-19 outbreak: Does inclusive leadership improve psychological safety and curb psychological distress? A crosssectional study. International Journal of Nursing Studies, 110, 103725. https://doi.org/https://doi.org/10.1016/j.ijnurstu. 2020.103725
- Zhou, M., Govindan, K., & Xie, X. (2020). How fairness perceptions, embeddedness, and knowledge sharing drive green innovation in sustainable supply chains: An equity theory and network perspective to achieve sustainable development goals. Journal of Cleaner Production, 260, 120950. /https://doi.org/10.1016/j.jclepro.2020.120950