



# OBJETIVOS DE DESARROLLO SOSTENIBLE

12 PRODUCCIÓN  
Y CONSUMO  
RESPONSABLES

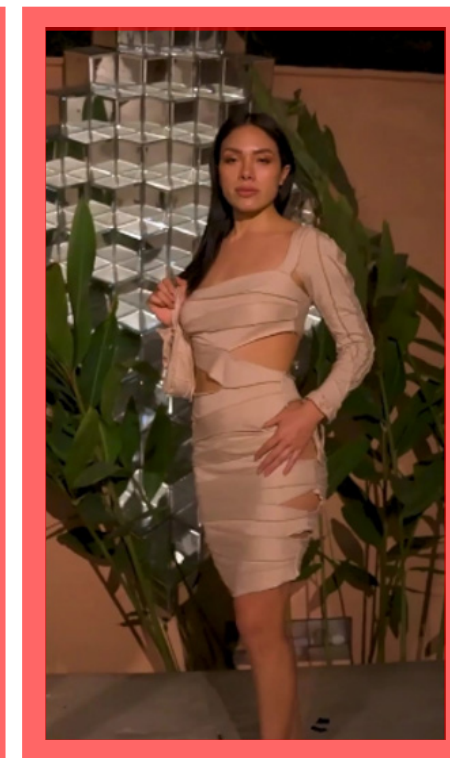
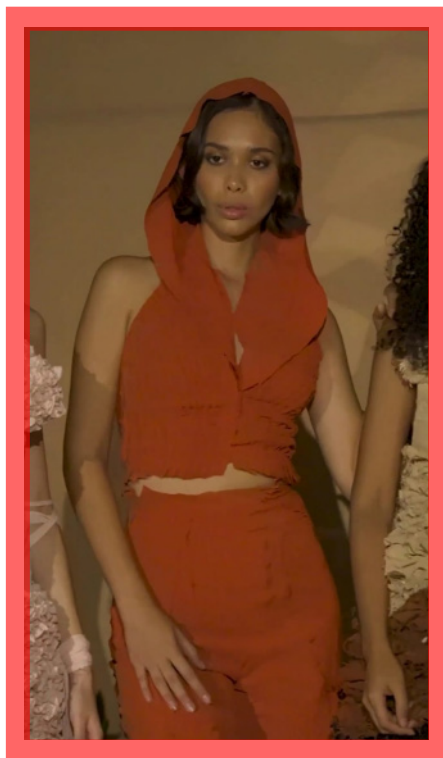


# Kuyana Project



La carrera de Comunicación Audiovisual y Medios Interactivos organizó la Kuyana Project, iniciativa que buscó fomentar la conciencia acerca de la moda sostenible y circular, con el propósito de abordar los desafíos del consumo y minimizar su impacto medioambiental.

El objetivo del evento fue impulsar la adopción de prácticas sostenibles en la industria textil y evidenciar la economía circular. Asimismo, el evento favoreció a una organización sin fines de lucro y al trabajo de señoras artesanas, quienes reutilizaron merma de telas para realizar diferentes trajes. Los beneficiarios fueron personas entre 20 a 33 años, con interés sobre economía circular, moda sostenible y afines.



# Semana del Turismo “Inversiones Verdes”



La Facultad de Administración en Hotelería y Turismo de la UPC organizó la Semana del Turismo “Inversiones Verdes”, desde el 20 hasta el 27 de setiembre de 2023, en modalidad virtual. Se realizaron 3 ponencias con expertos internacionales vinculados al sector turismo, alojamiento y restauración. Estos expertos presentaron casos internacionales vinculados a las inversiones verdes en cada uno de los sectores. Además, se llevó a cabo una mesa de discusión con representantes del sector empresarial y tres mesas de discusión con representantes de cada una de las 3 carreras de la facultad y estudiantes del CETT de Barcelona, de la Universidad del Valle de México y de la Universidad ANAHUAC.

El objetivo de la actividad fue incentivar en los estudiantes la reflexión en torno a las inversiones verdes en el sector del turismo, de las empresas de alojamiento y de restauración. Asimismo, tuvieron la oportunidad de conocer las buenas prácticas ambientales y sostenibles en sus campos profesionales, para lo cual tomaron como ejemplo casos de éxito. Además, analizaron el impacto negativo a consecuencia de las malas prácticas.



# Concurso de Proyectos de Desarrollo Turístico de la Ciudad al Campo- (3 Edición)



La Facultad de Administración en Hotelería y Turismo de la UPC y StartUPC, en alianza con el Instituto Iberoamericano de Turismo Rural (IBEROATUR), convocaron a estudiantes de las carreras de Turismo, Hotelería, Gastronomía o afines de universidades públicas y privadas a la 3ra Edición del Concurso de Proyectos de Desarrollo Turístico de la Ciudad al Campo, que se realizó en modalidad virtual el 22 y el 23 de noviembre.

Se seleccionaron proyectos que tuvieron como característica principal el proponer nuevas alternativas de empleo e ingresos que permitan diversificar las actividades agrícolas y agroindustriales de los pobladores rurales, demostrando a través de los proyectos beneficios para los propietarios de los emprendimientos y para los pobladores rurales dedicados al agro.



El objetivo de este concurso fue fomentar proyectos que impulsaran el flujo turístico hacia áreas con un gran potencial y en desarrollo, con un enfoque especial en el turismo rural, como el agroturismo, enoturismo, gastro turismo y otras categorías relacionadas.

# Alumnos del programa de Ingeniería de Gestión Minera participaron con éxito en congresos y talleres



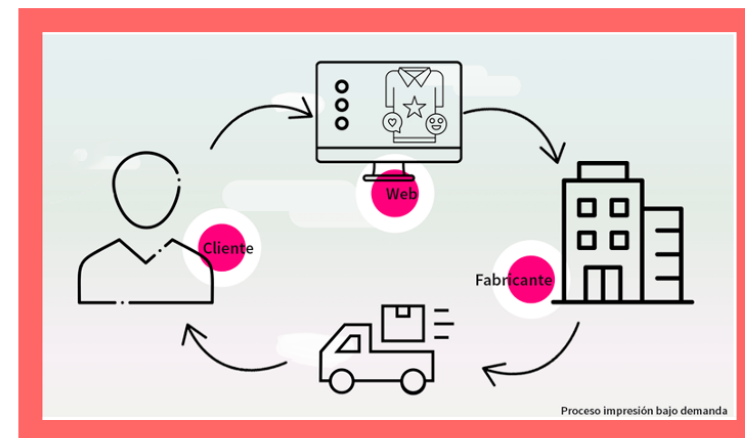
Alumnos de la carrera de Ingeniería de Gestión Minera participaron en las siguientes actividades y talleres formativos durante el semestre 2023-1:

- Congreso Nacional de Estudiantes de Ingeniería de Minas (CO-NEIMIN).
- Encuentro de Minería Residuos Sólidos.
- Taller de Residuos Sólidos Grupo Amautas UPC.
- Capacitación a estudiantes destacados.

Todas estas actividades se realizaron con el objetivo de fortalecer en los beneficiarios los conocimientos teórico-prácticos en la minería de manera responsable y sostenible en el tiempo; actualizar conocimientos en proyectos mineros responsables, en gestión estratégica para fortalecer las habilidades y conocimientos sobre los residuos sólidos (RRSS) en la industria minera.



# Impresión bajo demanda



La Dirección de Gestión del Conocimiento de la UPC realizó la actividad “Impresión bajo demanda”, metodología de publicación en la que se produjo un número determinado de ejemplares en el momento de recibir el pedido. Se trató de consumir menos papel y utilizar menos transporte. El objetivo de la iniciativa fue optimizar el tiraje de los libros, impri-

miendo solo aquello que realmente es demandado. De esta manera, se evitó el uso innecesario de insumos como papel, tinta y otros.

Asimismo, con esta iniciativa la universidad optimizó los recursos económicos, ya que no se utilizaron los almacenes porque solo se imprimieron los

ejemplares que las librerías solicitaron y en el momento que lo solicitaron. Los libros publicados por la Editorial UPC se subieron a la plataforma del distribuidor Bibliomanager, que estuvo conectado con librerías e imprentas del Perú y otros países. Esta iniciativa fue dirigida para el público en general y la comunidad UPC.



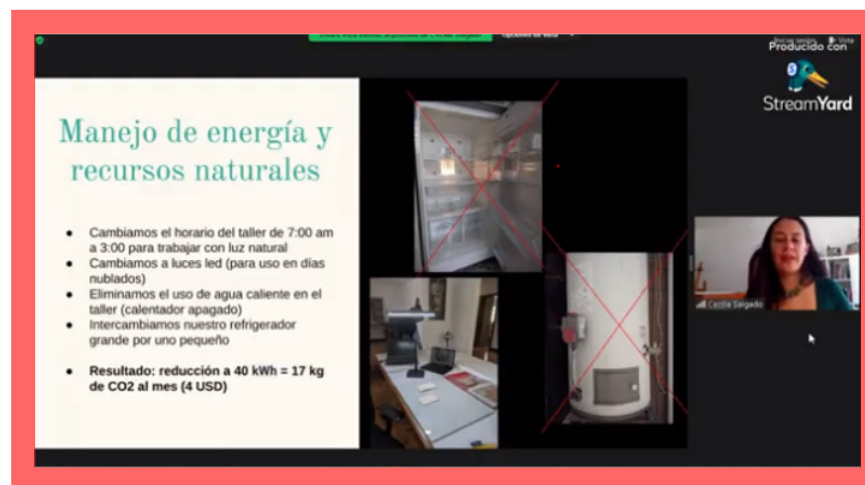
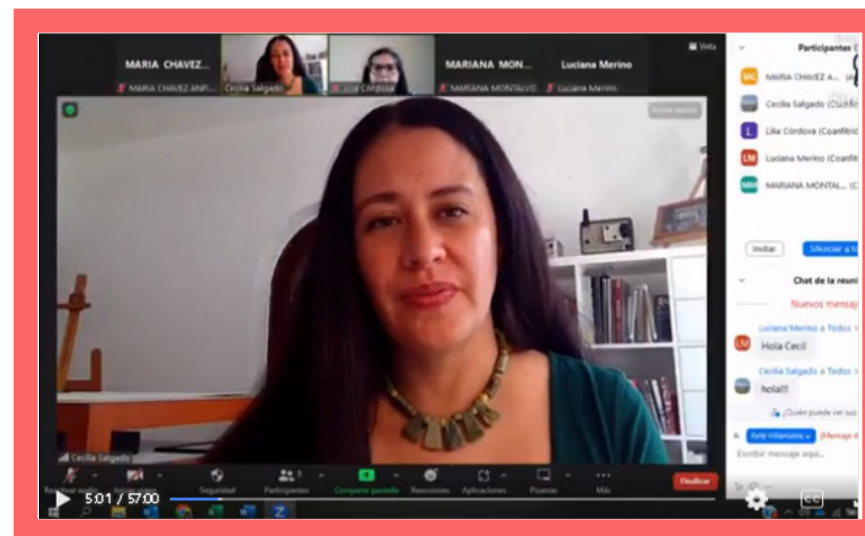
# Mes de la fotografía



En setiembre de 2023, la Carrera de Comunicación y Fotografía ofreció una charla virtual para reflexionar sobre el impacto de la fotografía con el cambio climático y la importancia de las buenas prácticas en el campo de la conservación. La ponente de la charla fue la fotógrafa mexicana Cecilia Salgado.

El objetivo fue poner en práctica los conceptos básicos de la economía circular. Se trataron temas sobre el buen uso del agua, el manejo del HR y las nuevas políticas que adoptan los museos en el mundo de cara al calentamiento global. Se compartió un manual de buenas prácticas de sostenibilidad ambiental en la fotografía.

La actividad fue dirigida para miembros de la comunidad externa y para la comunidad UPC. Esta actividad permitió a los beneficiarios conocer las buenas prácticas de la fotografía respetando el medio ambiente.



# Recolección de prendas de vestir y donación de zapatos



Durante agosto y setiembre de 2023, la carrera de Diseño y Gestión en Moda realizó la campaña de recolección de prendas de vestir para donar a la ONG Aprendo Contigo. Colaboraron vendiendo las prendas con el fin de recaudar fondos para brindar educación de calidad a los estudiantes de un colegio en Andahuaylillas, Cusco. El objetivo fue crear conciencia en la compra y uso de prendas de vestir.



Asimismo, la carrera realizó la recolección de zapatos en campus Monterrico, San Miguel y Villa con el fin de ser donados a la ONG Caminando Juntos, con el objetivo de brindar calzado a los niños necesitados.





# Laboratorio de diseño de indumentaria



En octubre de 2023, la carrera de Diseño y Gestión en Moda realizó la actividad Laboratorio de diseño de Indumentaria con el objetivo de brindar información sobre la buena utilización de materiales textiles, realizando técnicas de zero waste, upcycling y substraction. Se brindó el conocimiento de la utilización de materiales de manera consciente con el medio ambiente para evitar dejar mermas que continúen contaminando el medio ambiente.



# UPC se une a la iniciativa de reciclaje de Claro para aparatos electrónicos en desuso



La Universidad Peruana de Ciencias Aplicadas (UPC) se convirtió en el más reciente aliado estratégico del programa de gestión y manejo de Residuos de Aparatos Eléctricos y Electrónicos (RAEE) de Claro, conocido como “Yo reciclo, yo soy Claro”.

Gracias a esta alianza, tanto estudiantes como profesores y colaboradores de la UPC tienen, desde el 2023, la oportunidad de darle un destino adecuado a sus aparatos electrónicos en desuso, tales como celulares, cargadores, cables y laptops.



# UPC y Perú Sin Jaulas: Comprometidos con la Sostenibilidad y el Bienestar de las Gallinas Ponedoras



La Universidad Peruana de Ciencias Aplicadas (UPC) continúa su firme compromiso con la sostenibilidad y el bienestar animal al anunciar una colaboración histórica con Open Wing Alliance y su representante en Perú, la Asociación por el Rescate y Bienestar de los Animales (ARBA). A partir de septiembre de 2023, la Facultad de Hotelería, Turismo y Gastronomía de la UPC se convirtió en la primera institución educativa del país en utilizar exclusivamente huevos de gallinas criadas en libertad.

Este esfuerzo es parte del compromiso más amplio de la UPC de promover prácticas sostenibles y éticas en su cadena de valor. Al optar por huevos de gallinas criadas en libertad, la universidad demuestra su determinación de ser líder en la promoción de prácticas responsables y respetuosas con el medio ambiente.



# Transformative learning for a sustainable and healthy future through ecosystem approaches to health: insights from 15 years of co-designed ecohealth teaching and learning experiences



**Authors:** Webb, J.; Raez-Villanueva, S.; Carrière, P.D.; Beauchamp, A.-A.; Bell, I.; Day, A.; Elton, S.; Feagan, M.; Giacinti, J.; Kabemba Lukusa, J.P.; Kingsbury, C.; Torres-Slimming, P.A.; Bunch, M.; Clow, K.; Gislason, M.K.; Parkes, M.W.; Jane Parmley, E.; Poland, B.; Vaillancourt, C.

**Abstract:** This paper presents insights from the work of the Canadian Community of Practice in Ecosystem Approaches to Health (CoPEH-Canada) and 15 years (2008–2022) of land-based, transdisciplinary, learner-centred, transformative learning and training. We have oriented our learning approaches to Head, Hands, and Heart, which symbolise cognitive, psychomotor, and affective learning, respectively. Psychomotor and affective learning are necessary to grapple with and enact far-reaching structural changes (eg, decolonisation) needed to rekindle healthier, reciprocal relationships with nature and each other. We acknowledge that these approaches have been long understood by Indigenous colleagues and communities. We have developed a suite of teaching techniques and resources through an iterative and evolving pedagogy based on participatory approaches and operating reciprocal, research-pedagogical cycles; integrated different approaches and ways of knowing into our pedagogy; and built a networked Community of Practice for continued lear-



# Transformative learning for a sustainable and healthy future through ecosystem approaches to health: insights from 15 years of co-designed ecohealth teaching and learning experiences



ning. Planetary health has become a dominant framing for health-ecosystem interactions. This Viewpoint underscores the depth of existing scholarship, collaboration, and pedagogical expertise in ecohealth teaching and learning that can inform planetary health education approaches.

**Keywords:** Land-based learning, Transdisciplinary approach, Learner-centered, Transformative learning, Head, Hands, and Heart learning Cognitive, psychomotor, affective learning, Structural changes, Decolonization, Reciprocal relationships, Indigenous knowledge, Teaching techniques, Participatory approaches, Pedagogy, Community of Practice, Planetary health, Health-ecosystem interactions, Scholarship, Collaboration, Pedagogical expertise, Ecohealth teaching, Planetary health education

The Lancet Planetary Health, Volume 7, Pages e86-e96

[https://doi.org/10.1016/S2542-5196\(22\)00305-9](https://doi.org/10.1016/S2542-5196(22)00305-9)



# Quality Assurance Model using Lean Manufacturing and ERC Work Motivation to Reduce the Rate of Defective Production of a Footwear SME



**Authors:** Cuadros-Lopez, R.; Mercado-Beraun, C.; Quiroz-Flores, J.

**Abstract:** Footwear imports have been increasing in recent years and have radically affected the profitability of the footwear sector, especially those from China. This situation has particularly affected SMEs in this sector, as they lack sophistication with respect to the quality of their products and the lack of quality assurance strategies. In Peru, SMEs represent a great importance for its economy, since approximately 99.5% of its companies are SMEs. Specifically, SMEs in the footwear sector generate 57,000 direct jobs and contribute 1.2% of the industrial GDP. Therefore, there is a need for research to ensure the quality of the footwear produced by SMEs in order to make them more competitive in the market. This through a model of quality assurance by combining the tools of quality standardization and motivation ERC. This is expected to reduce the rate of defective production of SMEs in the footwear sector in order to increase the sophistication of their products with respect to quality and generate an efficient and sustainable production.

**Keywords:** Quality Assurance Model, Footwear sector, ERC Work Motivation

AIP Conference Proceedings, Volume 2613

<https://doi.org/10.1063/5.0119317>



# Process innovation and sustainable production: the role of methods engineering in exporting companies



**Authors:** Pacheco, A.; Vegas-Gallo, E.; Pariona-Luque, R.; Añaños-Bedriñana, M.A.; Marín, W.; Franco-Medina, J.; Pacheco-Pumaleque, L.

**Abstract:** Nowadays, the implementation of methods engineering is fundamental, as it allows the identification of unnecessary processes and the design of new methods that make better use of resources. Therefore, a method engineering model is proposed to improve the productivity of exporting companies in Cañete. The research is applied, with a quantitative approach and experimental design. A questionnaire addressed to 389 employees was used with regard to the methods engineering variable and the productivity variable. The results show that 44.73% of the employees state that the level of methods engineering is poor, 48.59% state that the level of time engineering is poor and 52.96% state that the level of production is poor. These results reflect that a method engineering model should be proposed to promote process innovation with a sustainable production approach that increases resource efficiency.

**Keywords:** Methods engineering, productivity, use of resources, study of methods, process innovation, quality

Progress in Industrial Ecology, Volume 16, Pages 46-58

<https://doi.org/10.1504/PIE.2023.132687>



# Lean Planning Model to Reduce Returns of Heat-Sensitive Products in A Peruvian Chemical-Pharmaceutical Company



**Authors:** Machuca-Vasquez, P.; Perea-Olivar, M.; Quiroz-Flores, J.

**Abstract:** Nowadays, the implementation of methods engineering is fundamental, as it allows the identification of unnecessary processes and the design of new methods that make better use of resources. Therefore, a method engineering model is proposed to improve the productivity of exporting companies in Cañete. The research is applied, with a quantitative approach and experimental design. A questionnaire addressed to 389 employees was used with regard to the methods engineering variable and the productivity variable. The results show that 44.73% of the employees state that the level of methods engineering is poor, 48.59% state that the level of time engineering is poor and 52.96% state that the level of production is poor. These results reflect that a method engineering model should be proposed to promote process innovation with a sustainable production approach that increases resource efficiency.

**Keywords:** Methods engineering, productivity, use of resources, study of methods, process innovation, quality

AIP Conference Proceedings, Volume 2613

<https://doi.org/10.1063/5.0119314>





# Algorithm Based on Deep Learning Techniques for Classification of Solid Waste in Recycling Plants



**Authors:** Cesar Peña Carrillo; Ciro Rodriguez; Martha Gonzales Loli; Amador Vivar Recarte; Diego Ampuero Aldorarin; Diego Rodriguez Hide

**Abstract:** The imperatives of environmental sustainability and resource efficiency necessitate advancing recycling technologies, among which solid waste classification is a pivotal process. Traditional manual sorting methods, hindered by inefficiency, cost, and scalability issues, have given way to innovative solutions employing deep learning algorithms and specialized software, promising to revolutionize the solid waste management sector. This manuscript explores the burgeoning domain of algorithm-based classification systems for solid waste, specifically focusing on their application within recycling plants. It comprehensively studies these systems' effectiveness, precision, and environmental impact while examining their implementation's particularities in various contexts, including the Peruvian districts. Comparative analysis of CNN architectures suggests that while ResNet18 was sufficient, Inception-ResNet could yield higher accuracy due to its complexity and depth if computational resources were not a limiting factor.

**Keywords:** Deep learning, Training, Waste materials, Computational modeling, Software algorithms, Computer architecture, Maintenance engineering

2023 IEEE 15th International Conference on Computational Intelligence and Communication Networks (CICN), Bangkok, Thailand, 2023, pp. 211-217,

[10.1109/CICN59264.2023.10402176](https://doi.org/10.1109/CICN59264.2023.10402176)



# Corporate Social Responsibility and Peruvian apparel SME Internationalization



**Authors:** Martin Fidel Collao Diaz, Juan Carlos Quiroz-Flores, Ahad Ali

**Abstract:** The general objective was to analyze the relationship between Corporate Social Responsibility, here after CSR, and the Internationalization of SMEs that belong to the clothing sector at the Metropolitan Lima level. To do this, the current context of the SMEs in the clothing sector is described, and the dimensions of corporate social responsibility are explored: social, economic, and environmental; finally, the relationship of these dimensions with the internationalization of the SMEs. The methodology used is mixed since a description and analysis of the confection sector of the SMEs in Metropolitan Lima is carried out, and it is quantitative because the questionnaires corresponding to the study are carried out. The research results provide information so that SMEs can implement corporate social responsibility and subsequently achieve better opportunities with the internationalization process. This article concludes that the dimensions of corporate social responsibility are related to the internationalization process of the SMEs of the clothing sector in Metropolitan Lima.

**Keywords:** Internationalization, Corporate Social Responsibility (CSR), Micro and small enterprises (SMEs), Textile Sector, Apparel

2023 Congreso Internacional de Innovación y Tendencias en Ingeniería (CONIITI), Bogotá, Colombia, 2023, pp. 1-7,  
<https://doi.org/10.1109/CONIITI61170.2023.10324206>



# Implementation of Lean Warehousing to reduce food waste of a Distribution Company



**Authors:** Orosco, Luz; Ramos, Edgar

**Abstract:** According to recent research, the application of engineering approaches in distributors in the commercial sector needs to be improved. Likewise, there is evidence of a growing need for the analysis of processes in warehouses in order to reduce activities that do not generate value to increase profitability in companies. In the current study, a food distribution company was examined and a distribution system model focused on solving problems in the warehouse due to waste generated in each process was suggested. The main problem was identified as food losses in the storage area and a suitable solution was suggested to address it. For this, cross contamination must be reduced in the storage process and thus reduce the amount of products lost due to contamination of moisture products and reduce products lost due to improper location of products. Likewise, the amount of expired products in the picking process must be reduced. Finally, errors in the packing process must be reduced with standardized packing and stacking methods. Using the Lean Warehousing methodology, an improvement model was presented based on the integration of tools such as Slotting for Warehouse Control, Kanban, FEFO for perishables control, PokaYoke and Standard work for method error control. Currently, the company proposes a 6.65% reduction in losses in warehouse management and 3% is considered a limitation according to the literature.

**Keywords:** logistics, lean warehousing, warehouse distribution, warehouse waste, lean principles, waste reduction

3 rd LACCEI International Multiconference on Entrepreneurship, Innovation and Regional Development - LEIRD 2023 Virtual Edition, December 4 – 6, 2023

<https://dx.doi.org/10.18687/LEIRD2023.1.1.469>



# Governance in Tourism Activity: a Systematic Review



**Authors:** Elma Valdivia Ramírez; Miguel Armesto Céspedes.

**Abstract:** Tourism is an income-generating activity that helps rural communities generate income within sustainable parameters, but with the COVID-19 pandemic, the impacts were devastating for the sector and the communities. However, with governance capable of ensuring conditions for interaction among the various actors, the process of restructuring the sector should have better prospects. Therefore, the general objective of this article was to analyze tourism governance experiences, while the specific objectives were to analyze the methodological designs and theoretical premises proposed in the articles. To this end, a qualitative methodology was used, through content analysis, in which, after purifying the databases and using the Prisma methodology, 17 articles were processed. The conclusion reached was that governance is understood as a dynamic process in which various elements interact, with civil society, private initiative and the community as actors, and that the authorities must ensure that this space for interaction is as transparent as possible. © 2023, Ludomedia EN. All rights reserved.

**Keywords:** Participation, Actors, Norms.

(2023). GOVERNANCE IN TOURISM ACTIVITY: A SYSTEMATIC REVIEW . New Trends in Qualitative Research, 19, e879.

<https://doi.org/10.36367/ntqr.19.2023.e879>



# Sustainable development and fair trade. A systematic review of the main research published between 2010-2022



**Authors:** Martin Leonardo Aranda Cerna, Esperanza de Jesús Castro Cruzado, Daniela Díaz Jiménez, Dusant Q'ente Dongo Herrera, Estefanía Milagros Velarde Vega, Carlos Alberto Azabache Morán, y Julio Ricardo Moscoso Cuaresma.

**Abstract:** Currently, the impacts caused by sustainable development and fair trade in agriculture are favorable for the growth of production. The objective of this research was to determine the current trends on the commercial, environmental, and economic impact of sustainable development and fair trade in the agricultural sector during the period 2010 - 2022. The systematic review of literature (SRL) was used as a methodology, giving as a result, the choice of 40 sources for the analysis of this research. The results had determined that there is a greater use of the qualitative approach in refereed publications on the field of study. In addition, concluded that the effort of economic, public, private, and socioeconomic actors is required to achieve a synergy to induce a joint transformation of the agricultural sector. Likewise, research trends determine that there is a positive commercial impact of the usage of fair trade and sustainable development in the world that caused a greater commercial growth in the agricultural sector.

**Keywords:** Fair trade, sustainable development, agricultural sector, trade, and consumers.

21 st LACCEI International Multi-Conference for Engineering, Education, and Technology: “Leadership in Education and Innovation in Engineering in the Framework of Global Transformations: Integration and Alliances for Integral Development”, Hybrid Event, Buenos Aires - ARGENTINA, July 17 - 21, 2023.

<https://dx.doi.org/10.18687/LACCEI2023.11.209>



# Exploring the Impact of Fair Trade on the Agricultural Sector of Latin America: A Review of the Scientific Literature



**Authors:** Judith Cielo Milla Morales; Leslie Torres Veliz; Alvaro Tafur Varas; Noelia Mancilla De La Cruz; Julio Ricardo Moscoso Cuaresma

**Abstract:** In recent years, the number of agricultural exporting companies that obtain fair trade certification has increased significantly. This is done to achieve responsible business practices, demonstrate transparent and equitable trade with suppliers and customers. However, fair trade has recently been subject to various controversies and questions due to its application in both developed (DCs) and developing countries (LDCs). These include concerns related to improving the quality of life of small farmers, reducing environmental pollution, and the impact on consumer decisionmaking regarding agricultural products. The academy has addressed these issues from different perspectives, approaches, and geographical areas, resulting in different contradictions for the Latin American reality. In this regard, this study analyzes the main fairtrade trends generated through peer-reviewed publications in Latin America during the period 2010-2020. The methodology used was qualitative and bibliographic, with the most recent publications being analyzed through the systematic literature review technique and the use of VOSviewer software. The results determined a positive impact of fair trade on agricultural and social responsibility practices for environmental protection, as well as the modification of ethical patterns in consumer choice and the development of better socioeconomic, labor, and commercial variables for everyone involved in supply chains. This also favors the future generation of equitable wealth in an increasingly globalized world.

**Keywords:** Fair Trade, Quality of life, Environment, Consumer perception, VOSviewer.

21 st LACCEI International Multi-Conference for Engineering, Education, and Technology: “Leadership in Education and Innovation in Engineering in the Framework of Global Transformations: Integration and Alliances for Integral Development”, Hybrid Event, Buenos Aires - ARGENTINA, July 17 - 21, 2023.

<https://dx.doi.org/10.18687/LACCEI2023.1.1.1124>



# Digital Strategies in the Performance of the Global Supply Chain in the Period of 2010-2022



**Authors:** Judith Cielo Milla Morales, Alvaro Alfonso Tafur Varas, Edwing Mishael Vasquez Holgado, Adriana Guadalupe Tapia Guerra, Fernando Leonardo Reyes Salazar and Julio Ricardo Moscoso Cuaresma.

**Abstract:** The objective of the paper is to analyze the research trends generated on the digital strategies applied in the performance of the supply chain established at a global level during the period 2010-2022, in addition to reviewing their evolution over time and application of the model's business in various technologies. As a methodology, a bibliographic review (SLR) was used from the literature published in Scopus databases. Through an exhaustive systematization, 41 articles were selected, classifying them by year of publication, type of quartile, number of citations, and according to the Sustainable Development Goals (SDG). In turn, the VOSviewer software was used to determine the concurrence between the variables. The literature findings reveal that the implementation of technological tools in the supply chain has been generated with a lack of government support, a deficit of trained personnel and a strong traditional management of the supply chain, the main challenges being those problems that Companies face to contribute to the adaptation of technologies in the improvement of processes and thus meet the goals set out in the SDGs and the improvement of the competitive advantages of nations.

**Keywords:** Supply Chain, Industry 4.0, Sustainability, Sustainable Development, Logistics 4.0

21 st LACCEI International Multi-Conference for Engineering, Education, and Technology: “Leadership in Education and Innovation in Engineering in the Framework of Global Transformations: Integration and Alliances for Integral Development”, Hybrid Event, Buenos Aires - ARGENTINA, July 17 - 21, 2023.

<https://dx.doi.org/10.18687/LACCEI2023.11.149>

