





## 21st International Conference on Sustainable Development Ottawa, Canada, July 15-16, 2025 **University of Ottawa**

Faculty of Social Sciences Social Sciences Building 120 University Private Ottawa, Ontario- Canada

### **REPORT**

21st International Conference on Sustainable Development jointly Organized by International Centre for Interdisciplinary Research in Law (ICIRL), Centre for Research in Social Justice and Policy (CRSJP) at Laurentian University and Ontario International Development Agency (OIDA) in Canada. The Major Themes involved in this International Conference on Sustainable Development are as presented in the sequel:1. Development, 2. Economics, 3. Environment and Natural Resources, 4. Food and Agriculture, 5. Governance, 6. Health, 7. Information and communication, 8. Science and technology, 9. Social policy. 10. Gender equality.



University of Ottawa

**Conference Objectives:** The conference aims to exchange and share all stakeholders' experiences and research results about all aspects of sustainable human and social development, and discuss the practical challenges encountered and the solutions adopted. This conference provides opportunities for the delegates to exchange new ideas and apply experiences face to face, to establish business or research relations and to find global partners for future collaboration.

All submitted papers will have opportunities for consideration. The selection will be carried out during the review process as well as at the conference presentation stage. Submitted papers must not be under consideration by any other journal or publication. The final decision will be made based on peer review reports. All accepted papers will be indexed in **SCOPUS**, **DOAJ**, **SSRN**, and **AMICUS**, Library and Archives Canada's database to ensure their permanent preservation for present and future generations. **Note:** Please refer to the **Titles on SCOPUS**\_and download the **Titles on SCOPUS** from the Source **Title list in the xlsx file.** Please search under the **SCOPUS Sources tab f**or the keyword **OIDA**. **SCOPUS Record ID**: **21101260637**.

**Accepted Papers** No. of papers received across the various countries: **514 Nos**, the Number of papers accepted are **107**, with acceptance ratio: **20.81%**, as of July 10, 2025.

**Accepted Papers 001**. Developing Green Campus Paradigm for Higher Education Institutes in Pakistan Attaullah Shah 1, Geok Kim Tan 2, Rehmat Karim 3, Irfan Ullah Jan 41,3 Karakoram International University, Gilgit, Pakistan.2 Multimedia University Malaysia.3 University of Peshawar, Pakistan, 002. Promoting Sustainable Development through Rural-Urban Interdependency in South AfricaPaul MudauDepartment of Public, Constitutional and International LawUniversity of South Africa, South Africa.003. Determinants of Non-Motorized for Sustainable Transport Planning in Kota City, Rajasthan, India, Adinarayanane Ramamurthy 1, and Ayushi Bhatt 2 Department of Planning, School of Planning and Architecture Vijayawada, Government of India, Vijayawada, Andhra Pradesh, India; 2 Department of Planning,

School of Planning and Architecture Vijayawada, Government of India, Vijayawada 520008, Andhra Pradesh, India.004. Evaluation of the Role of the Department of Planning Monitoring and Evaluation: Water and Sanitation in South Africa Engeline Ntombi ZwaneTurfloop Graduate School of Leadership University of Limpopo, South Africa.005. Urban Physics and Outdoor Thermal Comfort for Modelling Urban Energy Dynamics: A Case of Lucknow City, India. Adinarayanane Ramamurthy 1, Srajati Tiwari 2, Faiz Ahmed Chundeli 31,2,3 School of Planning and Architecture Vijayawada, Government of India, Vijayawada 520008, India. 006. Resilience of Coastal Communities to Climate Change, in Thiruvananthapuram Region, Kerala State, India Adinarayanane Ramamurthy 1, Aswinth G Chandran 2 and Faiz Ahmed Chundeli 31,2,3 Department of Planning, School of Planning and Architecture Vijayawada, Andhra Pradesh, Government of India.007. Trade Facilitation and Non-Tariff Barriers at Regional Economic Community Level of The African UnionSello Selelo 1, Prayers Thabelo 2University of South Africa, South Africa.008. Modelling Strategic Management for Communal Property Associations (CPAs) revitalization in Land Reform Program: A case of North-West Province in the Republic of South AfricaManketsi Tlhape 1, Victor Mmbengwa 2, Joseph Lekunze 31,3 Business School, North-West University, South Africa. 2 University of Limpopo, South Africa. 009. Effect of Climate Change Adaptation Strategies on Arable Crops Production Efficiency in Odeda Local Government, Nigeria Emmanuel Olugbenga Fakoya 1, Kehinde Oluwaseye Ogunjinmi 2, Bolaji Grace Abiona 3, Olufunmilola Amao 4, Toyin Grace Olonibua 5, Qudus Tunde Olayiwola 61,2,3,5,6 Department of Agricultural Extension and Rural Development, Federal University of Agriculture, Abeokuta, Nigeria.4 Oyo State College of Agriculture and Technology Igboora, Nigeria.010. Evaluation of Residents' Satisfaction with Housing Quality in Staff Quarters of Southwest Nigerian Universities Dorcas Oluwaseyi Adeoye 1, Kayode Adeboye Amoo 2, Olusola Oladapo Makinde 3, Olumuyiwa Idowu Ojo 41,2,3,4 Ladoke Akintola University of Technology, Ogbomoso, Nigeria.011. A Review of Generative AI's Impact on Workforce Transformation and Future Skill RequirementsKayode Oyetade 1, Tranos Zuva 21,2 Vaal University of Technology, South Africa.012. Job motivation and satisfaction: Implication on employees' retention in agro-allied industries in Oyo

State, Nigeria Bolaji Grace Abiona 1, Bolaji Jeffery Wilson 2, Easther Tolorunju 3, Faith Oluwakolayemi 41,2,3,4 Federal University of Agriculture, Abeokuta, Ogun State, Nigeria.013. Ensuring equity and accessibility of universal health coverage of Climate Changed Marginalized Population: Establishing linkage system with GOVT. Health Care and Family Planning Services for the Bede Community in Bangladesh Md. Tarik Hossain 1, Umme Sumaia 2Chemonics International, Bangladesh.2 Ministry of Education, Bangladesh.014. Determinants of Utilization of Traditional Adaptation Strategies among Arable Crop Farmers in Odeda Local Government Area of Ogun State, Nigeria. Kehinde Oluwaseye Ogunjinmi 1, Emmanuel Olugbenga Fakoya 2, Felicia Itunu Wole-Alo 3, Mathias Umunna 4, Adekunle Anthony Ogunjinmi 5, Olufemi Adeola Ogunlusi 6, Adeola Tayo Lordbanjou 7, Damilola Aishat Dada 81,2,3,8 Federal University of Agriculture Abeokuta, Nigeria. 4 Federal College of Forest Resources Management, Ishiagu, Ebonyi State. Forestry Research Institute of Nigeria. (FRIN), 5 Federal University of Technology, Akure, Ondo State, Nigeria.6 Federal Airport Authority of Nigeria Headquarter, Ikeja, Lagos State, Nigeria.7 Federal Ministry of Agriculture and Security (FMAFS), Nigeria. 015. Rural Feeder Roads and Socio-economic Development of Rural Communities in Ondo North and Central Senatorial Districts, NigeriaArowolo Taofeek AbimbolaWesley University of Science and Technology, Ondo City, Ondo State, Nigeria.016. Role of Indigenous Climate Change Adaptation in Ogoni Rural Communities, Knowledge in NigeriaSalome Akpowho 1, Olufemi Martin Adesope 2, Friday Ogar Idiku 31,2 Institute of Natural Resources, Environment and Sustainable Development, University of Portharcourt, Rivers State, Nigeria.3 Department of Agricultural Extension &Rural Sociology, University of Calabar, Calabar Nigeria.017. Impact of Land Use Types on the Spatial Heterogeneity of Extreme Heat Environments in Jaipur City, Rajasthan, IndiaAdinarayanane Ramamurthy 1, Vanya Mathur 2, Faiz Ahmed Chundeli 31,2,3 School of Planning and Architecture Vijayawada, Government of India.018. Bridging the Gap: Unpacking the Role of Social Workers Towards Sustainable DevelopmentNondumiso Yolande Hadebe 1\*, Fikile Gladys Xaba 21,2 University of Zululand, South Africa.019. Stormwater Management and Drainage System at Ethekwini Municipality Durban South AfricaThobile Gumede 1, Phakamani Bhengu 2,

Onyeka Nkwonta 3\*1,2,3 Mangosuthu University of Technology, South Africa.020. Assessing the Geotechnical Challenges Posed by Soft Marine SedimentsPhakamani Bhengu 1\*, Onyeka Nkwonta 21,2 Mangosuthu University of Technology, South Digital trade and regional integrationDidier Francois Diegane Africa.021. DiopUniversity Cheikh Anta Diop of Dakar, Senegal.022. Enhancing the Role of Participatory Land Use Planning in Building Community Resilience to Climate ChangeMuhyadin Mohammed Ahmed 1, Addis Teshome Kabade 2, Joselyn Bigirwa 3, Daher Elmi 41,2,3 Intergovernmental Authority on Development (IGAD), Ethiopia.023. The Impact of Maize on Engine Efficiency: A Comprehensive studySamuel ChukwuUniversity of Kwazulunatal, South Africa.024. Assessment of the future Environmental Carrying Capacity for Sustainable Development in Kochi City, Kerala State, IndiaRajeev R. 1, Adinarayanane Ramamurthy 2, Ayon Kumar Tarafdar 31 Department of Planning, School of Planning and Architecture, Vijayawada, Government of India.2 Department of Planning, School of Planning and Architecture, Vijayawada, Government of India. 3 School of Planning and Architecture, Government of India. 025. Factors affecting effective implementation of performance management system in South African MunicipalitiesShikha Vyas-Doorgapersad 1\*, Ryder Machete 21,2 School of Public Management, Governance and Public Policy, College of Business and Economics, University of Johannesburg, South Africa.026. Enhancing energy efficiency using thermoelectric generators in NigeriaChristopher Uzoma Ihekoronye 1\*, Andile Ngema 21,2 University of KwaZulu-Natal, South Africa.027. An exploration of biometric technology to combat online banking fraud and digital identity in the South African Banking IndustryMokopane Charles MarakalalaUniversity of South Africa, South Africa.028. The Use of Radiology in Wildlife Conservation and Veterinary Medicine in South AfricaUgochukwu OnwubikoDurban University of Technology, South Africa.029. Sustainable Future with the Development of a Secure Mini-bus Taxi Pick-up System for Children going to and coming from Schools Mkateko G. Maluleke 1 and Johnson O. Dehinbo 21,2 Department of Computer Science, Faculty of Information & Communications Technology, Tshwane University of Technology, Soshanguve, Pretoria, 0001, South Africa.030. Regulation of Fornication and Adultery (zina): What Malaysia can Learn

from International Law to Enhance the Achievement of Millennium Development GoalsNgobizwe Mvelo NgemaUniversity of Zululand, South Africa.031. Denial of Reproductive Rights in Senegal as an Enemy of Sustainable Development: What can Senegal learn from South Africa and the International Law? Ngobizwe Mvelo Ngema 1, Lionel Moonsamy 21,2 University of Zululand, South Africa.032. Evidence in Zina Cases as a Form of Discrimination against Women in Pakistan Ngobizwe Mvelo Ngema 1, Desan Iyer 21,2 University of Zululand, South Africa.033. Punishment for Committing the hudud crime of fornication and adultery (zina) as a form of assaultNqobizwe Mvelo Ngema 1, Desan Iyer 21,2 University of Zululand, South Africa.034. Exclusion of traditional leaders from decision-making in local government: What can South Africa Learn from Lesotho and the United Kingdom?Ngobizwe Mvelo Ngema 11 University of Zululand, South Africa.035. Ukuthwala Custom: Exploring African Epistemologies to Solve Some Societal Problems Ngobizwe Mvelo Ngema 1, Tolaine Matadi 21,2 University of Zululand, South Africa.036. Feminist Reflections on the Exclusion of Women from the Acquisition of Land and from Participating Actively as Members in Traditional Courts Ngobizwe Mvelo NgemaUniversity of Zululand, South Africa.037. Road Network Vulnerability and Risk Management for Flood Resilience in Kochi City, Kerala State, IndiaAdinarayanane Ramamurthy 1, Amal Das 21, 2 School of Planning and Architecture VijayawadaGovernment of India, Vijayawada 520008, Andhra Pradesh, India.038. Understanding Multidimensional Barriers to Sustainable Development Goals in Vietnam's Construction Industry: Insights from a Rough Set Theory ApproachHa Thi Thu Nguyen 1, Anh Phan Viet Nguyen 2, Jieh-Haur Chen 31 Can Tho University, Vietnam.2,3 National Central University, Taiwan.039. Empowering Sustainable Agriculture: Digital Twin Technology and Solar-Powered Smart Irrigation for Enhanced Productivity and InclusivityMagdi Osman Ali HamedCollege of Engineering, University of Dongola, Sudan.040. The perceived effect of soil degradation and coping strategies among arable crop farmers in Atisbo Local Government of Oyo StateOyeronke Adenike Adekola 1, Philip Olanrewaju Eniola 2, Michael Gbenga Adeduntan 3, Olatunbosun Jonathan Soetan 4, Stephen Adekunle Adeoye 5, Emmanuel Olugbenga Fakoya 61,4,6 Federal University of Agriculture,

Abeokuta, Ogun State, Nigeria.2,3 Oke Ogun Polytechnic Saki, Nigeria.5 Federal College of Education, Abeokuta, Ogun State, Nigeria.041. Enhancing Sustainability with the Impact of Organizational Learning on the Change to the Use of Free and Open-Source Software at a South African UniversityJohnson Olumuyiwa DehinboTshwane University of Technology, Pretoria, South Africa.042. Prison Security in the Fourth Industrial RevolutionMpho Mark Matlala 1, Aaron Labane 2University of South Africa, South Africa.043. What if Pigs Could Fly? Separating Myth from Possibilities through Fourth Industrial Revolution Technologies and Applications in Law EnforcementMpho MatlalaUniversity of South Africa, South Africa.044. Emerging Trends in the Georgraphical Information System: Possibilities for Crime Prevention and SustainabilityMokiritalana Given Makola1, Mpho Matlala 21,2 University of South Africa, South Africa.045. Extending Offender Reform and Reitegration to Capacitate Law Enforcement and Sustainability Using 4IR Instruments: A New Approach to Combating Global Organized CrimeAaron Labane 1, Mpho Matlala 21,2 University of South Africa, South Africa.046. Investigation of the Vandalism of the Cell Phone Towers: Perpectives of the Closed-Circuit TelevisionMokiritalana Given MakolaUniversity of South Africa, South Africa.047. Cultivating Climate-Ready Minds: Agro-Trainees Awareness and Perception toward Climate Change in South-West NigeriaOluwakemi Enitan Fapojuwo 1, Babatunde Adeoye Okubena 2, Michael Tunde Ajayi 3, Michael Tunde Ajayi 41,2,3,4 Federal University of Agriculture, Abeokuta, Nigeria.048. The evaluation of the development of agricultural extension services in Gauteng province: What is the status at the district level?Lindikaya Wiseman Myeki 1, Elvis Nakana 2, Kayalethu Sotsha 3, Khathutshelo Rambau 4, Bernard Manganyi 51 Department of Agricultural Economics & Extension, North West University, Mahikeng Campus, Private Bag X2046, Mmabatho 2745, South Africa2 Department of Agriculture, Land Reform and Rural Development (DALRRD), 17 Van Rensburg Street, Bateleur Office Park, Mbombela 1200, South Africa3,4,5 National Agricultural Marketing Council, Private Bag X935, Pretoria 0001, South Africa.049. Guilty Until Proven Innocent? Examining Reverse Onus in South AfricaXolisile Nomasonto KhanyileUniversity of Zululand, South Africa.050. The Impact of a Compromised Chain of Custody on the Admissibility of Evidence in South African Criminal TrialsXolisile Nomasonto KhanyileUniversity of Zululand, South Africa.051. Shared Resources, Shared Prosperity: Examining Role of Common Property Systems in Rural India Venkateshwara Swamy Gajavelli Institute of Management Technology, Nagpur, India.052. Industrialisation Through Digitalisation of Fingerprints Taking in Criminal Justice System Ntombenhle Cecilia Dube 1, Rakgetse John Mokwena 21,2 University of South Africa. South Africa.053. Beyond External Interventions: The Role of Spirituality in Reducing Poverty and Inequality for Sustainable Development Sunethra Thennakoon 1, Rohana Ulluwishewa 2, Indujeewa Peiris 3, U.H. Kaushalya 31,3 University of Sri Jayewardenepura, Sri Lanka.2 Environment and Planning, Massey University, Palmerston North, New Zealand.054. Assess the Sustainability of Underserved Settlements in Jaffna Municipality and Its Urban Fringe Cavitha Thiliepan 1, Sunethra Thennakoon 21 University of Jaffna, Jaffna, Sri Lanka.2 University of Sri Jayewardenepura, Sri Lanka.055. The role of bank subject matters experts in the investigation of fraud in South African Banking Industry Mokopane Charles Marakalala University of South Africa, South Africa.056. Underutilization of Fingerprints to Identify Suspects in Business Robbery Matsidinkane Solomon 1, Rakgetse John Mokwena 21,2 University of South Africa, South Africa.057. Exploring the Impact of Traffic Policing for Sustainable Development: The South African ContextRakgetse John Mokwena 1, Maseeng Patricia Maphaka 21,2 University of South Africa, South Africa.058. Exploring the learners' and teachers' challenges related to road safety measures in Makapanstad Primary SchoolsRakgetse John Mokwena 1, Matsidinkane Solomon Manamela 21 University of South Africa, South Africa.059. An Evaluation of The Use of Electronic Evidence in the Investigation of Procurement Corruption: A Case Study of Ethekwini Regional OfficeMlondolozi Bonga Prince Hlengwa 1, Matsidinkane Solomon Manamela 21,2 University of South Africa, South Africa.060. Critical Thinking in Sustainability: Conflicting PerspectivesRobert W. TaylorMontclair State University of New Jersey, USA.061. Comparative Analysis of Sustainability Reports of Major Cosmetic Companies using Opinion Mining Artificial IntelligenceKarina Magro Machado 1, Robert W. Taylor 21,2 Montclair State University, USA.062. Sustainability and Global Engagement for U.S. Universities" with

the presentation, "Critical Thinking in Sustainability: Conflicting PerspectivesRobert W. TaylorMontclair State University, USA.063. Nature-Based Solutions and Corporate Initiatives for Biodiversity and Climate Change AdaptationNisarg Vyas 1, Robert W. Taylor 21 Atlantic Health System, USA.2 Montclair State University, USA..064. A Systematic Literature Review on Strategic Energy Policy for Enhancing Renewable Energy Investment to Support Economic Growth, Environmental Sustainability, and Energy Resilience in IndonesiaAli Sundja 1, Muhammad Zilal Hamzah 2, Eleonora Sofilda 3, Dwi Atty Mardiana 41 PT Pertamina (Persero), Indonesia.2,3,4 Universitas Trisakti, Indonesia.065. The Impact of Fiscal Decentralization, Social Funds and Indicators of Sustainable Development to Indonesian Human Development IndexDyah Ayu Retno Inten 1, Muhammad Zilal Hamzah 2, Eleonora Sofilda 31 Krisnadwipayana University, Indonesia.2,3 Universitas Trisakti, Indonesia.066. Determining Factors of Successful Commercial Banks in Implementing Sustainable Finance Policy in IndonesiaEdi Setijawan 1, Muhammad Zilal Hamzah 2, Eleonora Sofilda 31 Otoritas Jasa Keuangan Republik Indonesia. (Financial Service Authority of Republic of Indonesia)2,3 Universitas Trisakti, Indonesia.067. State Asset Management Strategy: Highest and Best Use Analysis to Increase Non-Tax RevenueNuning Sri Rejeki Wulandari 1, Muhammad Zilal Hamzah 2, Eleonora Sofilda 31 PT Arta Bakti Nusantara, Indonesia.2,3 Universitas Trisakti, Indonesia.068. Integrating Ubuntu Philosophy in Promoting and Communication of Mental Health Through Traditional Healing Practices. Wellington Mthokozisi HlengwaUniversity of Zululand, South Africa.069. Exploring the role and effectiveness of the Crime Information Management and Analysis Centre within the South African PoliceMpho Maboa 1, Juanida Suzette Horne 21,2 University of South Africa, South Africa.070. Analysing the Role of Data Integrity in Crime Analysis and Crime Prevention within the South African Police ServiceMpho Maboa 1, Juanida Suzette Horne 21,2 University of South Africa, South Africa.071. Enhancing Crime Prevention by Converting Data into Intelligence within the South African Police ServiceMpho Maboa 1, Juanida Suzette Horne 21,2 University of South Africa, South Africa.072. Exploring Crime Analysis and Operational Efficiency in the South African Police Service with a Focus on Challenges and OpportunitiesMpho Maboa 1, Juanida Suzette Horne 21,2 University of South Africa, South Africa.073. Hindrances to partnership policing: A case study of Gauteng townships, South AfricaDumisani Quiet MabundaUniversity of South Africa, South Africa.074. A VECM Study of Assets Growth Determinants: Short-Term and Long-Term Perspectives in Indonesian BanksAkmal Amiruddin 1, Muhammad Zilal Hamzah 21,2 Universitas Trisakti, Indonesia.1 Central Bank, Indonesia.075. Fiscal Decentralization and Welfare Economics: The Linkage Eleonora Sofilda 1, Muhammad Zilal Hamzah 2, Dida Nurhaida 3, Tasum 4, Renny Risgiani 51,2,3,5 Universitas Trisakti, Indonesia.4 Krisnadwipayana University, Indonesia.076. Withdrawn077. Ensuring equity and accessibility of universal health coverage of Climate Changed Marginalized Population: Establishing linkage system with GOVT. Health Care and Family Planning Services for the Bede Community in Bangladesh Md. Tarik Hossain Room to Read, Bangladesh.078. Student Perspectives on Artificial Intelligence Integration in English Language Learning: Towards Quality, Innovative, and Equitable Education Gianinna Elaine Malapote Labicane Romblon State University, Philippines.079. Financial Inclusion and Its Determinants: A Study of Laku Pandai in IndonesiaIda Rumondang Hasiholan Sipahutar 1, Muhammad Zilal Hamzah 2, Eleonora Sofilda 30JK Institute, Financial Services Authority, Indonesia.2,3 Universitas Trisakti, Indonesia.080. The Paradox of Freedom and Poverty in Post-Apartheid South Africa: Lessons from Political and Economic Dynamics for a more Inclusive and Resilient Socio-Economic SystemsMarc Emile Oosthuizen 1, Thato Mazwe Madibo 21,2 The Independent Institute of Education's Varsity College, Pretoria.081. Understanding the South African Drug Crime situation through Criminological Theories Petrus Machethe University of South Africa. South Africa.082. The negative impact of the influx of undocumented immigrants into Johannesburg central business district, South Africa Mapooa Charlie Vilakazi 1, Petrus Machethe 21 South African Police Service, (UNISA Alumni), South Africa.2 University of South Africa, South Africa.083. The evolving landscape of the 21st century governments: A need for adaptable and responsive public administration systems in South AfricaThembelihle Mpungose University of KwaZulu-Natal, South Africa.084. An Interdisciplinary Analysis Through the Lens of Burden of Proof, Presumptions, Estoppel and the Parol Evidence Rule Across Succession, Contract and Criminal Law Xolisile Nomasonto Khanyile 1, Pallolo Lehloenya 21 University of Zululand, South Africa.085. Challenges in Achieving Sustainable Development Goals for rural communities due to habitat fragmentation and human-elephant conflicts in South-Asian countries: A geospatial and socio-economic assessment based on the dry zone of Sri LankaH.M.B.S. Herath 1, Nayanajith Kumara 2, Pavithra Jayasinghe 31,2,3 Department of Geography, University of Sri Jayewardenepura, Sri Lanka.086. Evaluating the Role of the South African Police Service (SAPS) in Enforcing the Cybercrimes Act: Effectiveness and Challenges in Combating Cybercrime Mmabatho Portia AphaneUniversity of South Africa, South Africa.086. Evaluating the Role of the South African Police Service (SAPS) in Enforcing the Cybercrimes Act: Effectiveness and Challenges in Combating Cybercrime Mmabatho Portia Aphane University of South Africa, South Africa.087. Public Policy and Food Security in Nigeria: An Evaluation of the Agricultural Transformation Agenda (2011-2015) and Agricultural Promotion Policy (2016-2022) Osaretin Igbinehimwen Idahosa 1, Ukponmwan Osayande Omigie 21,2 Department of Political Science, Faculty of Social Sciences University of Benin, Benin City, Nigeria. 088. Business Growth and Access to Finance: Evaluating the Impact of Bundled Services for Women-Owned Small and Medium Enterprises (WSMEs)Maya Giorbelidze 1, Natia Jibladze 2, Hoa Nguyen 3 1,2 Cape Breton University, Sydney, Nova Scotia, Canada.2 Georgian National University, Georgia. 089. Employees' protest actions: Policing dilemmas in the Southern African countries Godfrey Thenga University of South Africa, Preller Street, Muckleunick, Pretoria, South Africa.090. Perishable commodity trading by informal traders: A South African conundrum Godfrey Thenga University of South Africa, Withdrawn092. Enhancing Communication and Complaints South Africa.091. Resolution: Α Strategic **Approach** Mitigating Healthcare-Related to Litigations. Charlene Khethiwe Mavimbela 1, Promise Sibusiso Raseala 21,2 University of South Africa, South Africa.093. Evaluating Construction Management Approaches in PietermaritzburNtando Iheukwumere Durban University of TechnologySouth Africa.094. Maximizing Research Impact, Minimizing Waste: The Case for Explicit Priority SettingKomla TseyJawun Research Institute, Central Queensland University, Cairns, Australia.095. Building Capabilities for the Twin Transition: Technological Trajectory and Organizational Adaptation at GKN Automotive Mexico (2000– 2024) Adriana Martínez Martínez Industrial Economics, UNAM, Blvd. UNAM 2011, Mexico.096. Exploring the impact of environment-related technologies on the sustainability of energy and economic growth in China and IndiaArshad AliNortheast Agricultural University, China.097. Enablers and constraints of channeling mature talents into workforce: insights from Nova Scotia, CanadaMaya Giorbelidze 1, Bishakha Mazumdar 2, Kevin McKague 31,2,3 Cape Breton University, Canada.098. Local Communities, Resource Use, and Sustainable Forest Management in the Terai Region - A Case Study of Katerniaghat Wildlife Sanctuary, IndiaAzra Musavi 1, Ahmad Masood Khan 21,2 Aligarh Muslim University, India.099. From Waste to Wealth: Mobilising the African Diaspora and International Development Funders to Tackle Africa's Plastic Pollution CrisisKomla TseyJawun Research Institute, Central Queensland University, Cairns, Australia.100. Tragedy of the Commons in the West BankYakub S. HalabiUniversity of Haifa, Western Galilee College, Mount Carmel, Haifa, Israel.101. The Paradox of Law: Do Tough Enforcement Activities Neglect Residents' Rights in Long-Term Care Homes? Denise Bedard 1, Azar Varahra 21,2 University of Western Ontario, Canada.102. Electronic Governance and the Rule of Law in HaitiPierre Caleb Deshommes Faculté de Droit et des Sciences Economiques/Université d'Etat d'Haïti, Haiti.103. Knowledge and awareness of cervical cancer, HPV, and the vaccine among higher education institution in South Africa: A qualitative study Keabetsoe Oleboheng Manini Motuba 1, Bukola G. Olutola 21,2 Independent Institute of Education (IIEMSA), South Africa.104. Role of Digital Financial Inclusion in Promoting Sustainable Economic Development inSub-Saharan AfricaMasa Sylvester MotadiUniversity of Venda, South Africa.105. Colorectal Cancer Prognosis: Gene Expression Clustering and Survival Analysis Using Kaplan-Meier and Cox ModelsHari Priya Narra 1, Ravina Madhulitha Nalamolu 21,2 Vignan's Foundation for Science Technology and Research, Andhra Pradesh, India.106. Sustainable Common-Pool Resource Management Through Community-Based Enterprises: A Pathway to Community Resilience in BangladeshRaisul Millat Safkat 1\*, Md. Abu Jafor 2, Mir Muhtadi Faiaz 31,2,3 University of Dhaka, Bangladesh. 107. Implications of procedural justice on police legitimacy in South AfricaJacob Tseko Mofokeng 1,

Mmabatho Aphane 2\*, Moitsadi Zitha 31 Independent Senior Researcher, South Africa.2,3 University of South Africa, South Africa.

Pearson Global was established to celebrate great Canadian Prime Minister Lester B. Pearson, his work as a diplomat to make the world a safer place. Pearson lectures provide a congenial intellectual environment for the exchange of opinions and ideas. The intention is that experienced, thought provoking lecturers will share their knowledge and expertise for the benefit of the larger community. Each lecture will focus on a different aspect of sustainable development under nine different themes such as development, economics, environment and natural resources, food and agriculture, health, governance, information and communication, science and technology, social policy and gender equality. And also may draw on a variety of disciplines including, but not limited to, resource economies, social and economic issues related to development, issues related to design capacity, policy discussions and the global challenges of urban and rural communities. Pearson Global forms a multi-disciplinary and diverse community that includes distinguished senior scholars and eminent members of society beyond the academic world. Dr. Neville Hewage, program director of Ontario International Development Agency, was one of the founders of the Pearson Global.

Two Research Papers got accepted for the 21st International Conference on Sustainable Development was held between 15/07/2025 and 16/07/2025, at University of Ottawa, Ontario, Canada, jointly organized by International Centre for Interdisciplinary Research in Law (ICIRL), Centre for Research in Social Justice and Policy (CRSJP) at Laurentian University and Ontario International Development Agency (OIDA) in Canada. I had attended the above conference online and these papers were presented on Virtual mode and details are as presented in the sequel:

- 1. Impact of Land Use types on the Spatial Heterogeneity of Extreme Heat Environments in Jaipur City, Rajasthan, India.
- 2. Resilience of Coastal Communities to Climate Change, in Thiruvananthapuram Region, Kerala State, India.
- 1. Impact of Land Use types on the Spatial Heterogeneity of Extreme Heat Environments in Jaipur City, Rajasthan, India.

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#### **Abstract**

Rapid urbanization has been accompanied by the construction of large amounts of impervious surfaces, artificially built environments, and transportation systems and has further resulted in extreme heat events in urban core areas, which are much warmer than the surrounding areas. Urbanization strongly correlates with land use land cover (LULC) dynamics, which further links to changes in land surface temperature (LST) and urban heat island (UHI) intensity. Each LULC type influences UHI differently with changing climate, therefore knowing this impact and connection is critical. Local climate changes due to urbanization are epitomized by the UHI, which is characterized by temperature differences between urban and rural areas. The UHI is a critical factor for energy consumption and air quality, resulting in higher peak electricity demand in summer because of air conditioning, increased emissions of primary pollutants associated to power production, and increased generation of ozone. However, planners need a better understanding of the relationship between the UHI and land-use patterns to reduce the UHI and promote more sustainable urban development. Keeping the aforesaid knowledge in mind, Jaipur City, Rajasthan State has been chosen as study region for further detailed investigation. The study has been carried out on two levels viz., one is City level and another at Planning zone level to get better understanding of the existing scenario of the study region. At City level, Spatial Autocorrelation followed by multiple regressions using ArcGIS software has been established. Multiple regressions using geographically weighted regression tool gave a mix of parameters which are affecting the temperature and thermal comfort of the study city. On the other hand, at planning zone level, the land uses considered are commercial, residential, and industrial level which had a dominant land use among the different land use compositions. Fishnet analysis with grid size of 250m by 250m was run leading to different sets of factors contributing to UHI in the Jaipur Municipal Corporation. The findings of this research also provide important insights for city planners, urbanist and policy makers to examine urban climate resilience through the lens of land use dynamics and UHI intensity in the system. Based on the results and findings, recommendations were made at city level as well as at the planning zone level. This research study demonstrate that it is possible to reduce temperatures in residential and urban areas through judicious sitting of green areas to navigate towards sustainable urban development.

*Keywords:* UHI; Land Surface Temperature; Urban Energy; Land Use Planning; Sustainable Development.

#### Online Presentation – Defended Research

The Online Recording Session **Ref No.017/CAD/25,** the Video has been processed and posted it on the OIDA You Tube Channel.

Please refer the below mentioned URL and access the conference presentation

## https://youtu.be/lvyGaI K4yw



# 2. Resilience of Coastal Communities to Climate Change, in Thiruvananthapuram Region, Kerala State, India

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#### Abstract:

Climate change poses a significant threat to coastal communities worldwide, particularly those in developing countries. The Indian coastline, amongst the world's most vulnerable to climate change impacts, spans over 7,500 km with almost 3.5% of the world's population residing within 50 km of the coast. People living in the coastal region in India are continually experiencing the adverse impact of climate change, such as extreme temperatures, changes in precipitation, sea-level rise giving rise to coastal flooding and erosion, increased risk of drought, and more, leading to loss in the productivity of fisheries, agriculture and aquaculture. Coastal communities are often disproportionately affected by climate change due to their geographic vulnerability and reliance on marine resources. The population living in coastal areas, the infrastructure, and the economies are at risk from storm tide flooding, shoreline erosion, and sea level rise. This climate-induced phenomenon is a direct consequence of ongoing environmental changes. Erosion, a natural geological process shaped by forces like wind and water, continues to play a significant role in shaping landscapes over millions of years. As sea levels rise, the increased frequency of coastal flooding further underscores the vulnerability of coastal areas, necessitating a thorough assessment of the potential impacts on communities and ecosystems. Coastal districts of India being diverse in nature are under constant vulnerability to hazards. High population density, low nearshore bed slope, low coastal elevation, high erosion rates, built-up areas, and roads near the coastline are some of the factors contributing to very high vulnerability in coastal districts of Kerala.

Keeping the aforesaid knowledge in mind Thiruvananthapuram Municipal Corporation, having a coastline length of 27.40 km has been selected for the detailed investigation. The research study aims to assess the differential impact of climate change. This coastline has experienced different issues in the last two decades, especially storm tides, flooding, and coastal erosion, with an eroded area of 650 acres from the mainland affecting the livelihood of coastal communities. The district-wise statistics indicate the maximum shoreline erosion is in the Thiruvananthapuram district, with 23% of its coastline being vulnerable. The study deliberates analytical tools such as Shoreline Detection-Digital Shoreline Analysis System (DSAS), and Socio-Economic and Infrastructure vulnerability by employing weighted overlay analysis to generate the Composite Vulnerability Map (CVM) using Geospatial techniques. Based on the results of the findings, the study explores the high-risk vulnerable zones, to evolve policy framework through spatial interventions which can aid resilience spatial planning in the study region. The study concludes with integrated climate-adaptive livelihood strategies towards the resilience of vulnerable coastal communities for inclusive climate adaptation.

**Keywords:** Coastal Communities; Climate Change; Coastal Erosion; Coastal Vulnerability; Community Resilience; Inclusive Climate Adaptation.

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21st International Conference on Sustainable Development 2025 at University of Ottawa, Ontario, Canada

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Ref.006/CAD/25

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