

11TH International Conference on Development and Investment in Infrastructure (DII 2025)

Theme: BUILDING INFRASTRUCTURE BETTER: DIGITALISATION, DECARBONISATION AND
DECENTRALISATION

Programme

6th-8th August 2025 - Johari Rotana Hotel, Dar es Salaam, Tanzania

Host & Partners:

Ardhi University, Tanzania

University of Johannesburg, South Africa

CONFERENCE PROGRAMME

PROGRAMME OVERVIEW

Wednesday, 6th August 2025 - Johari Rotana Hotel, Dar es Salaam, Tanzania

14:00 Conference Registration & Arrival

17:00 Sunset Meet-Up (Networking)

Thursday, 7th August 2025 - Johari Rotana Hotel, Dar es Salaam, Tanzania

08:00 Registration

08:35 Conference Opening and Welcome Address

08:45 Keynote Addresses

09:45 Technical Sessions

12:30 Lunch

13:10 Technical Sessions

18:00 Gala Dinner

Friday, 8th August 2025 - Johari Rotana Hotel, Dar es Salaam, Tanzania

08:00 Conference Opening and Welcome Address

08:25 Keynote Addresses

09:15 Technical Sessions

Keynote Speakers

Eng. Bernard Boniface Kavishe - BSc (Eng), MA-M&E, PEng (T), MIET

Registrar & CEO - Engineers Registration Board

Keynote Topic: Green Infrastructure: Designing Resilient Cities for a Sustainable Future

QS. Samuel Nyantari Marwa

Quantity Surveyor & Infrastructure Expert

Keynote Topic: Unlocking Africa's Infrastructure Potential: A Contractor's Perspective on Enabling Growth, Investment, and Local Empowerment

Eng. Mohamed Kuganda

Acting Transport and Spatial Planning Manager: Dar Rapid Transit (DART) Agency

Prof. Geraldine John Kikwasi

Associate Professor at Ardhi University

Keynote Topic: Construction Cost Management: The Tale of Triple Constraints

Eng. George L. Daffa

Manager -Road Safety Department, (TANROADS), Headquarters

Keynote Topic: Tanzania Experience in Implementation of Road Construction Project and Maintenance on Trunks and Regional Roads

Industry Workshop Facilitators

Dr Mushumbusi Medard

President: Ardhi University Convocation

Topic: Technology and Strategic Partnerships: Creating a Level Playing Field for Local Contractors

Prof Innocent Musonda (Ph.D. (Eng. Man.), Reng (ZIM) PrCM, MCIOB, MEIZ, PMI)

Professor of Sustainable Built Infrastructure and Digitalisation

Topic: Professionalising the Construction Industry

CONFERENCE PROGRAMME

EAT	DAY ONE (Wednesday, 6th August 2025)
14:00-16:00	Arrival & Conference Registration
17:00- 19:00	Sunset Meet-Up (Networking)

NB: Sunset Meet-Up is at individual cost

EAT	DAY TWO (Thursday, 7th August 2025)	
08:00-08:30	Registration/Arrival Coffee	
08:30-08:35	Arrival and announcements- Prof Innocent Musonda (<i>DII 2025 Scientific Committee Chairperson</i>)	
08:35-08:45	Welcoming remarks & Official opening of the conference: Prof. Evaristo Joseph Liwa (<i>ARU VC</i>)	
08:45-09:00	Keynote Address 1: Eng. Bernard Boniface Kavishe (<i>Registrar & CEO of the Engineers Registration Board (ERB)</i>)	
09:00-09:15	Keynote Address 2: Eng. Mohamed Kuganda (<i>Aq Dir, DART</i>)	
09:15-09:30	Keynote Address 3: Prof Geraldine John Kikwasi (<i>Associate Professor at Ardhi University</i>)	
09:30-09:45	Mid-Morning Coffee	
	Technical Sessions/ Industry Workshop	
	Breakaway Session 1 (Room-Selous)	Breakaway Session 2 (Room-Mikumi)
	Digitalisation, Smart Technologies, and Sustainable Infrastructure Session Chair: Dr Sarah Phoya	Industry Workshop Session Chair: Dr Rehema Monko
09:45-09:55	BIM-Enabled Sustainability Analysis of Kinetic Façade Systems: A Case Study of Lusail Plaza Tower <i>J. Keloth</i>	Session 1: Creating a Level Playing Field for local Contractors- <i>Dr Mushumbusi Medard</i>
09:55-10:05	Digitalisation in Quantity Surveying: Insights and Barriers from Namibian QS Consultants <i>T. Dhliwayo, R. Dhliwayo, N. Kandjabanga & T. Gumbo</i>	
10:05-10:15	Accelerating BIM Adoption in Tanzania: Lessons from Global Public Sector Interventions <i>Y. Mwishwa</i>	
10:15-10:25	Barriers to the Adoption of Health and Safety Smart Technologies in Construction Projects in Tanzania <i>J. Nshunju, G. Kikwasi & D.E. Challe</i>	Session 2: Professionalising the Construction Industry- <i>Prof. Innocent Musonda</i>
10:25-10:35	Rethinking Sustainable Infrastructure: Trade-offs in Dar es Salaam's BRT System <i>T. Leuta, L.K. Kakuru & C.C. Onyeneke</i>	
10:35-10:45	Affordable Housing Pre-sales: A Case Study of Approval Determinants and Patterns in Johannesburg, South Africa <i>P. Simbanegavi</i>	
10:45-10:55	Passenger Service Qualities of Bus Terminal Infrastructure for Intercity Transportation in Nigeria <i>A.J. Adenigbo</i>	

10:55-11:05	The Role of Digital Transformation in Construction to Improve Performance <i>J. Smallwood & S. Pandle</i>	
11:05-11:20	Afternoon Coffee / Posters Presentation	
	Breakaway Session 3 (Room-Selous)	Breakaway Session 4 (Room-Mikumi)
	Sustainability, Governance, and Equity in the Built Environment Session Chair: Dr Retsepile Kalaoane	Innovations and Strategies for Sustainable Construction Session Chair: Dr George Onatu
11:20-11:30	Industrial Solid Waste Management Practices in Ota, Ogun State, Nigeria <i>D. Olukanni, E. Mmenieabasi & M. Kamlenga</i>	Innovative Technologies for Sustainable Construction in Developing Countries: A Systematic Literature Review <i>M. Zinyama, T. Moyo & S. Chimbqanda</i>
11:30-11:40	Factors Hindering Quantity Surveyors from Playing the Advisory Role of Green Building Uptake <i>L.P. Lulyalya & F.V. Mushi</i>	Unpacking Barriers and Incentives to Sustainable Drainage Systems (SuDS) in Sub-Saharan Africa: Toward Climate-Resilient Urban Infrastructure <i>C. Moobela, B. Mpofu & P. Simbanegavi</i>
11:40-11:50	An Assessment of Finance Models for Sustainable Construction Projects in Tanzania: A Review of Literature <i>A. Moselankoe, S. Phoya & G. Nyamagere</i>	Country-specific opportunities for synergistic waste utilisation in the United Kingdom and China <i>O. Ebohon, F. Okeke, J. Zhou, Z. Pan & A. Al-Otaibi</i>
11:50-12:00	Bridging Urban Inequality Through Resilient Infrastructure Development: The Role of Digitalisation in Tembisa's Water Systems <i>K. Joyi, T.Gumbo, T. Mphambukeli</i>	Cost-effective solutions for large web openings in cold-formed steel joists <i>K. Sivakumaran</i>
12:00-12:10	Translating Policy into Practice: A Critical Appraisal of Sustainability Outcomes in South Africa's Riverside View Mega Human Settlement <i>X. Mkhalali & Z. Zungu</i>	Quality Management System (QMS) Implementation in Construction: A Critical Review <i>A.B. Dery, C.M. Mewomo, F.K. Bondinuba, S.O Sarpong & A. Nansie</i>
12:10-12:20	Examining Stakeholders' Perspective on Construction Project Auditing in Ghana <i>A. Nansie, M.C. Mewomo, F.K. Bondinuba, S.O. Sarpong & A.B. Dery</i>	Exploring Barriers and Strategies to Increase Green Finance Accessibility in South Africa <i>C. Okoro, T. Ntombela & J. Oladeji</i>
12:20-12:30	Sustainable Impact of Post-Occupancy Evaluation: A Case of the Lands Building at Ardhi University <i>J. Nshunju & G. Kikwasi</i>	Barriers to sustainable construction labour management in developing countries: a systematic literature review <i>S. Chimbqanda, T. Moyo & M. Zinyama</i>
12:30-13:10	Lunch (Zafarani Dining)	
	Breakaway Session 5 (Room-Selous)	Breakaway Session 6 (Room-Mikumi)
	Social Justice, Capacity Building, and Governance in the Built Environment Session Chair: Prof Chioma Okoro	Resilience and Well-being in Construction and Urban Systems Session Chair: Prof David Olukanni
13:10-13:20	Benefits of Strategic Spatial Planning for Equitable Urban Renewal: Advancing Housing Justice in Post-Apartheid Soweto <i>N.P. Dube & G.O. Onatu</i>	Water Resource Vulnerability in the Face of Climate-Induced Shock Events <i>K. Ravele & T. Gumbo</i>
13:20-13:30	Pioneering Social Justice: A Critical Review of Women's Leadership in South Africa's Construction Industry	Exploring the Role of Green Building Technologies in Zimbabwe's Climate Resilience Strategy

	<i>N. Mzobe & T. Gumbo</i>	<i>M. Muchakanakirwa, R. Muvungani, T. Dhliwayo, R.A. Dhliwayo & K. Kajimo-Shakantu</i>
13:30-13:40	Managing psychosocial risks in construction: A systematic review of underlying causes and impacts on construction workers <i>M. Mokoena, R. Nemakhavhani & B. Awuzie</i>	Unveiling the Multidimensional Effects of Large-Scale Projects: The Case of Lesotho Highlands Water Projects <i>R. Kalaoane, T. Gumbo and M. Mndzebele</i>
13:40-13:50	Unpacking operational efficiency challenges of local Civil Contractors in Tanzanian road projects <i>N.G. Sospeter, G.J. Kikwasi, M. G. Nyanswe & M. Kanyaga</i>	Indigenous investment practices and community-based models in the minibus industry sector <i>R. Kalaoane, T. Gumbo & K. Ravele</i>
13:50-14:00	Green Skills and Training Models for Construction Operatives: A PRISMA-guided Systematic Literature Review <i>T. Mbaraja & T. Moyo</i>	Critical success factors of quality enhancement in low-cost housing: Insights from Harare and Bulawayo, Zimbabwe <i>T.M. Samu, R.A. Dhliwayo, T. Dhliwayo & K. Kajimo-Shakantu</i>
14:00-14:10	Adoption of digital tools in the South African construction industry <i>T. Mogokonyane & K. Ntakana</i>	Integrated Cost Control in Construction Megaprojects: A Systematic Review of Lean and Technology-Driven Approaches <i>M. Yulriccah & K. Ntakana</i>
14:10-14:20	Unlocking Sustainable Infrastructure Delivery in Emerging Economies: A Systematic Review of Success Factors and Barriers <i>O. Khomane & K. Ntakana</i>	
14:20	End of Technical Session	
18:00-20:00	Gala Dinner-Selous & Mikumi	

NB: Day 2 Program Chair: Dr Rehema Monko

EAT	DAY THREE (Friday, 8th August 2025)	
08:00-08:15	Arrival Coffee	
08:15-08:25	Arrival & Welcoming Remarks- Dr Rehema Monko (DII-2025 Organising Committee Chairperson)	
08:25-08:40	Keynote Address 1: QS. Samuel Nyantari Marwa (Quantity Surveyor & Infrastructure expert)	
08:40-08:55	Keynote Address 2: Eng. George L. Daffa (Manager of Road Safety Department, TANROADS)	
08:55-09:15	Poster Presentation	
	Breakaway Session 1 (Room-Selous)	Breakaway Session 2 (Room-Mikumi)
	Digital Innovation and Smart Technologies in Construction Session Chair: <i>Dr. Rehema Monko</i>	Circular Economy and Sustainable Infrastructure Session Chair: <i>Dr P. Simbanegavi</i>
09:15-09:25	Virtual and Augmented Reality for Safer Construction Sites: Barriers and Adoption Realities in Zimbabwe <i>J. Matande, T. Dhliwayo, R.A. Dhliwayo & T. Gumbo</i>	Food Waste Management in Restaurants of Peri-urban Communities: Evidence from Warri, Nigeria <i>D. Olukanni, E. Samson, D. Bassey & M. Kamlenga</i>
09:25-09:35	Building Information Modeling (BIM) Adoption in Zimbabwe's construction sector	Influencing Travel Behaviour Through Educational Interventions for Sustainable Urban Mobility

	<i>K. Machadu, T. Dhliwayo, R.A. Dhliwayo & T. Gumbo</i>	<i>R. Kalaoane, T. Gumbo & S. Mbatha</i>
09:35-09:45	Leveraging Artificial Intelligence for Sustainable Energy Solutions: Enhancing Energy Efficiency and Grid Reliability in Zimbabwe's Construction Industry <i>K. Mutseta, T. Dhliwayo, R.A. Dhliwayo & T. Gumbo</i>	Investigation on the utilisation of coffee husk ashes to stabilise expansive soil for road subgrade improvement <i>M. Kamlenga, Y. Mhando, T. Chuwa & G. Kitange</i>
09:45-09:55	Unpacking the Structural and Operational Barriers to AI Uptake in Namibia's Construction Sector: A Quantitative Investigation <i>R.A. Dhliwayo, W. Kiimba, T. Dhliwayo & K. Kajimo-Shakantu</i>	Circular Economy in Construction: Risk Landscape and Mitigation Pathways in Zimbabwe <i>R. Shumba, R. Muvungani, T. Dhliwayo & T. Gumbo</i>
09:55-10:05	Integrating Smart Water Management Technologies in Urban Infrastructure: Addressing the Water Crisis in Zimbabwean Cities. A Case of Bulawayo <i>K. Mutseta, T. Dhliwayo, R.A. Dhliwayo & T. Gumbo</i>	Evaluation of Biogas Production from Cassava Peels, Cow Dung, and Oil Palm Fuel Ash <i>D. Olukanni, E. Fagbenle & M. Kamlenga</i>
10:05-10:15	Barriers to adoption of Building Information Modelling in Quantity Surveying Firms in Nigeria <i>L. Odine, O.G. Ajayi, R.A. Dhliwayo & K. Kajimo-Shakantu</i>	A Review of Circular Economy Integration into Disaster-Related Demolition Waste Management: Trends and Future Direction <i>E. A. Nyenku, I. Musonda & T. Mkandawire</i>
Mid-Morning Coffee		
Virtual Sessions		
	Breakaway Session 3 (Room-Selous)	Breakaway Session 4 (Room-Mikumi)
	Quality Infrastructure, Digitalisation, and Inclusive Urban Development Session Chair: Dr Tinoapei. Dhliwayo	Innovation, Circular Economy, and Resilient Built Environments Session Chair: Prof Geraldine Kikwasi
10:20-10:27	Integrated infrastructure construction: The answer to sustainable resource use in South Africa <i>A.A. Ishola & T. Gumbo</i>	Exploring the Potential of Piezoelectric Floor Tiles to Harness Kinetic Energy Harvesting in Shopping Malls in Ghana <i>W.M. Appau, E. Attakora- Amaniampong & I.C. Anugwo</i>
10:27-10:34	Building cemetery infrastructure better through digitalisation and decentralization <i>N. Mhobo, T. Mphambukeli & K. Mocwagae</i>	Circular Economy Implementation in South Africa's Construction Industry <i>A.A. Ishola, D. Tshiamo & T. Gumbo</i>
10:34-10:41	Barriers to green building costing competence adoption in cost management practices by Quantity Surveyors in Zimbabwe <i>Y. Togara, T. Dhliwayo, R.A. Dhliwayo & T. Gumbo</i>	From Housing to Sustainable Human Settlements: A Bibliometric Analysis of Spatial Integration in Reshaping South Africa's Urban Landscapes <i>M. Mndzebele & S. Finzi</i>
10:41-10:48	Equity transitions in engineering: Trends, challenges and strategies for inclusivity <i>T. Moyo & T. Mphambukeli</i>	Preventive strategies for building projects' abandonment in Nigeria <i>O.J. Oladiran & I.I. Salami</i>

10:48-10:55	An Overview of Building Information Modeling Strategies in the Malawian Construction Industry <i>M. Ndwandwe, W. Kuotcha & T. Mkandawire</i>	Construction professionals' perception on the awareness, usage and effectiveness of epoxy resin for concrete repair <i>O.O. Oladiran & B.O. Olatoro</i>
10:55-11:02	South African perspective on the impact of COVID19 on REITS's <i>N. Booysen & M. Booyens</i>	Barriers to green retrofitting practices' adoption in Zimbabwean commercial buildings in Harare <i>G. Chingama, T. Dhliwayo, R.A. Dhliwayo & T. Gumbo</i>
11:02-11:09	The spatial integration of bus rapid transit system and non-motorised transport in Johannesburg, South Africa <i>I.T. Tabane, T. Gumbo & T. Moyo</i>	Assessing the possibilities of enhancing infrastructure for environmental and waste management in Soweto <i>S.G. Mbatha & T. Gumbo</i>
11:09-12:06	The Impact of Industrial 4.0 Technologies on Construction Project Cost Management in Zimbabwe <i>M. Rusenza, R.A. Dhliwayo, T. Dhliwayo & K. Kajimo-Shakantu</i>	Exploring Barriers to Women's Leadership in the Quantity Surveying Profession in Zimbabwe <i>P. Ananias, R.A. Dhliwayo, T. Dhliwayo & K. Kajimo-Shakantu</i>
12:06-12:13	Challenges of integrating climate-resilient buildings into the existing spatial planning in Blantyre City, Malawi <i>J. Matemba, C. Amoah & O. Akinradewo</i>	Building Information Modelling (BIM) for Monitoring Construction Projects Progress in Zimbabwe: Barriers and Opportunities <i>R. Chirimbani, R.A. Dhliwayo, T. Dhliwayo & K. Kajimo-Shakantu</i>
12:13-13:00	Lunch (Zafarani Dining)	
	Governance, Sustainability, and Urban Renewal Session Chair: Dr Ethel Koppa	Building Performance, Health and Sustainability in the Built Environment Session Chair: Eng. M.J. Kamlenga
13:00-13:07	Trapped in Transition: A Governance-Responsive Framework for the Delivery of Temporary Residential Units in South Africa <i>M. Mndzebele & S. Finzi</i>	Reframing Life Cycle Assessment for Low-Income Housing in South Africa: Towards Social, Dynamic and GIS-Integrated Models <i>J. Mahachi & L. Kumalo</i>
13:07-13:14	Stakeholder Synergies for Environmental Sustainability in Ghana's Real Estate Sector: A Qualitative Perspective <i>H. Adjarko, I.C. Anugwo, A.O. Aiyetan, F.O. Danso & D. Paintsil</i>	Condensation and Mould in Low-Income Housing: Causes, Health Risks, and Design Strategies in the Southern Cape <i>J. Mahachi & E. Moyo</i>
13:14-13:21	Urban Renewal for Sustainable Development in Johannesburg CBD: A Critical Assessment of Challenges and Strategic Opportunities <i>S.G. Mbatha & T. Gumbo</i>	A Consumer-Centric Approach for Integrating Indoor Environmental Quality Metrics into Building Performance Optimization in Shopping Malls <i>I.C. Anugwo, W.M. Appau & E. Attakora-Amaniampong</i>
13:28	Best Paper Award & Conference Chair Closing Remarks- Prof Innocent Musonda	
14:00	Excursion: Zanzibar Boat Cruise (To be paid for at own cost)	

NB: Day 3 Program Chair: Eng. Jotham Kamlenga

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