

ACE for Development Impact (ACE IMPACT)

2023 Annual Workplan Narrative

(to be submitted along with attached detailed workplan and budget)

Name of Centre	Regional Transport Research and Education Centre Kumasi (TRECK)
Institution	Kwame Nkrumah University of Science and Technology
Country	Ghana
Centre Leader	Rev. Prof. Charles A Adams
Annual Workplan (Month-Month Year)	Jan-Dec. 2023

Narrative

1. Center highlights in 2022 (maximum of 3 Highlights, maximum 100 words each)

In a concise, descriptive statement suitable for public understanding, provide up to three Highlights from the Center accomplishments in the past year. You may attach: weblinks; press releases; photographs.

- The Africa Centre of Excellence (ACE), Regional Transport Research and Education Kumasi, Kwame Nkrumah University of Science and Technology (KNUST), Ghana staff and students visited the CENTRE D'EXCELLENCE REGIONAL SUR LES VILLES DURABLES EN AFRIQUE (CERViDA - DOUNEDON), University of Lome, Togo from 8th -10th September 2022 as part of academic exchange under the ACE- Transport Logistics and Smart Cities (TL-SCN) Network. The visit afforded the partners the opportunity to exchange best practices for student recruitment, publications and industry Academia-engagement. They also discussed ongoing comparative research and other prospective topics for collaboration. Prof. Charles Adams led the TRECK delegation.



- The Centre co-hosted the 3rd Ghana Infrastructure Conference (GIC 2022) theme: *The Role of Transport and Infrastructure in Africa's Post Covid-19 Recovery*. At the Lancaster Hotel, Kumasi City in July 2022. The Keynote speaker was Professor Steven Jones of the Alabama Transportation Institute, University of Alabama, USA. The conference attracted over 200 in person and online participants from USA, Sierra Leone, Liberia, Ghana and Nigeria. The Ghana Transportation Professionals Forum (GTPF), USA and the Ghana Institution of Engineering (GHIE) were co organisers. Over 30% of the over 60 paper and poster presentations were made by Fellows/staff and students of TRECK. <https://www.gtpfconference.com/>



Participants at the Opening session of the GIC 2022 conference



Participants at the capacity building workshop during the GIC 2022 Conference.



Field trip to the Kumasi International Airport by TRECK Students and Fellows

The Volvo Research and Educational Foundational (VREF) Sweden, provided grants valued at USD\$120,000 to conduct Comparative research between Informal settlements in Kumasi-Ghana and Dare Salaam-Tanzania on *Mapping unequal accessibility to transport in Informal settlements, and Mapping transport stakeholders*, and to develop an online professional short course on Essentials of GIS for Transport and Infrastructure which would also be incorporated into the Master program in Transport Systems at TRECK. A stakeholders consultation workshop in Kumasi drew wide participation from the public and private sector stakeholder and ministries, Department and Agencies in the Transport sector.



Centre Leader of TRECK Prof. Charles Adams was appointed as Vice President of the International Roads Federation-Global Road Safety Committee and also as Member of the Southern Africa Transport Conference (SATC). He also delivered the 52nd Presidential Address as President of the Ghana Institution of Engineering.



2. Key Center achievements in 2022 (Maximum 500 words) Describe the Key Accomplishments of the Center in the preceding Calendar Year. Focus on: Teaching, Research, Center-level Operations. In addition, comment on how the Accomplishments align with the ACE Impact project Disbursement Linked Indicators (DLIs) and the Center Implementation Plan.

Teaching and Research

Post graduate Graduations and New Enrolment (Masters and Doctoral Students)

- Graduation of Twenty (20) MSc in Road and Transport Engineering and two (2) 2 PhD students in Transport Logistics under PhD Business and Management in the November 2022 scheduled graduation. The breakdown included 8 regional students, 7 females and 14 Ghanaians. The regional students who hail from Nigeria, Liberia, Kenya and Sierra Leone have all since returned to their countries. We also recruited the fourth cohort of students into the postgraduate programmes consisting of 27 MSc, 10 PhDs and 15 (41%) Regional and 9 (25%) female from the following countries Nigeria, Gambia, Rwanda and Sierra Leone,

Short Terms Courses

- A collaboration between the World Bank, TRECK and the Ghana Institute of Management and Public Administration as resulted in the launch a of professional certification courses on Environmental and Social Risk Management (ESRM) for Development Projects. The maiden overview course attracted 50 participants mostly development practitioners including project managers, environmentalists, social safeguards, academics, researchers, consultants, and road designers from Ghana, Sierra Leone, Liberia and Uganda ([Short course on Essentials of Environmental and Social Risk Management \(ESRM\) Launched | Transport Research And Education Center, KNUST](#)). This activity falls in line with DLI 3 and our sustainability plans.

Regional and Local Internships

- In the 2022, over 41 students completed internship, 39% of the internships were outside Ghana in countries such as Liberia, Nigeria, Sierra Leone. The student interns were placed with both public sector and privates sector companies for the six weeks of internship. All students received some allowance for accommodation, transport and baily subsistence. Regional students were additionally given regional travel support to which they manage their flights and other logistics. The regional students also collected data for their thesis which made the Centre research more diverse and inclusive of the regional topics. This is in line with DLI 5.2.

Research Publications and Impact

- The Centre won 2 grants of value \$70,000 from the Volvo Research and Educational Foundation (VREF), Sweden to conduct applied research on Mapping unequal

accessibility to I Informal Urban Settlements in Kumasi, Ghana and Dare Salaam, Tanzania. This is the fourth successive grants won in the last 3 years from VRE. Part of this grant is to develop an online course on the Essentials of Geographical Information Systems (GIS) for Transportation. This course will be made available online for students and practitioners and will also be used as part of the course requirements of the MSc Transport Systems at TRECK.

- Researchers developed and launched a way finding Mobile App which uses Akan or English ([myTroski Mobile App which uses Akan or English launched in Kumasi by KNUST Researchers | Transport Research And Education Center, KNUST](#)). The App is now available on Google playstore.



- TRECK students and Faculty educational exchange in United Kingdom with Transport Research Institute (TRI) - Edinburgh Napier University (ENU). The exchange programme is part of efforts to find more partnerships to give opportunities to our students and staff for their development. This activity falls under DLI 3.





- TRECK staff, Fellows and students participated or made presentations at Conferences in Ghana and Ethiopia including:
 - 52nd Annual Conference and General Meetings of the Ghana Institution of Engineering (GhIE).
 - Two (2) staff presented papers at the 8th Edition of Africa Engineering Week and the 6th Africa Engineering Conference in Addis Ababa Ethiopia.
 - Leaders in Urban Transport Project workshop organised by the World Bank and the Kumasi Metropolitan Assembly at the Lancaster Hotel in Kumasi
 - WALK 22 Conference in Kigali, Rwanda organised by UNEP, GIZ, TUMI
 - HVT/Transitions Informal Public Transport Dissemination Workshop with Stakeholders at Accra City Hotel.All linked to DLI 4- Quality of Education and Research
- The Centre took delivery of 2 vehicles (Coaster bus and Toyota Prado) to facilitate field trips for students and staff. ([TRECK Bus | Transport Research And Education Center, KNUST](#)).



Some TRECK Ladies during the field trip

3. Status/Progress on Implementation (Maximum 250 words) Describe in what ways, if any, the Center is ahead of schedule with respect to the Implementation Plan.

The Centre's overall performance at the end of 2022 stood at 62%. We project that we can max out all the outstanding indicators. For DLI 3.1 and 3.2, the data submitted to the AAU on our admissions will ensure that we achieve 100% on the DLI3.1, 3.2 and 3.3. The other DLI's which are being accelerated as requested are as below:

Accreditation (National and International)

The GTEC team have completed the site assessment of documents and facilities of TRECK pending final corrections and formal approval. We are hopeful to complete the accreditation of the MSc programmes. Efforts toward Self-Assessment Report International Accreditation from AQAS has advanced.

Centre Building and Equipment

The construction of the Centre building which suffered delay has begun and so far over 60% Complete, the Environmental Social Safeguard report has been submitted to the AAU for verification. Currently, the works Contract is ahead of schedule and projected to be completed in 30th June 2023. This will assist to withdraw funds and increase fund utilisation ratios. The DLI4 is on course.

Entrepreneurship (DLI 5.3)

TRECK has jointly developed the curriculum for teaching entrepreneurship for implementation in 2023 academic year> The Centre has included entrepreneurship activities in our calendar of events for staff and all students starting February 2023. The lectures will assume a modular and hybrid format.

4. Plan for Acceleration (Maximum 500 words) Describe in what ways, if any, the Center is behind schedule concerning the Implementation Plan. How will the Center adjust to achieve the anticipated project deliverables by the conclusion of ACE Impact?

1. The following DLI activities are behind schedule and are being accelerated to ensure that the Centre achieves 100% before the end of the ACE Impact.
 - a. International accreditation
 - b. Procurement of Equipment
 - c. Entrepreneurship
- a. Recruitment of three new research assistant staff (Two (2) research assistant and 1 administrative staff) is underway in January 2023 to support selected activities towards acceleration with emphasis on the areas behind schedule.
- b. AQAS of Germany has been contacted and is ready to replan the process towards International accreditation. TRECK is completing the Self-Assessment Report template of AQAS
- c. Entrepreneurship – students and staff seminars and workshops on entrepreneurship has been scheduled as regular activity on the academic calendar every Friday. TRECK is also jointly implementing DLI 5.3 activities with RWESCK where there are synergies.
- d. Procurement of Equipment for the Laboratory and furniture; The list of equipment and furniture has been prioritised. An application to the Public Procurement Authority is in process to seek sole sourcing procurement approval. The Centre will seek for no objection from the World Bank and obtain permission from the Public Procurement Authority (PPA) to undertake sole sourcing to facilitate the process.