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to the first Durham Global Challenges CDT News issue!

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Welcome

Photo by [Jeff Ackley](#) on Unsplash

International Student Energy Summit Review

Imperial College London and the Royal Geographical Society hosted one of the most inspiring, disruptive and progressive international student events on 17-20 July 2019: the International Student Energy Summit. The organizer, a global NGO with a network of 50,000 young people in over 120 countries, 'Student Energy' put together a programme where over the course of four days, 650 delegates from all around the world became part of a discursive energy transition, including inspiring talks from academic, industry and policy leaders. The major themes of the summit were industry & technology, society & environment, markets & finance, and youth empowerment, while the overarching theme and the vision of the summit was 'Breaking Barriers'.

It is a great pleasure to find myself in such an enabling environment, full with open, committed and forward-thinking minds and being exposed to a genuinely critical, passionate and disruptive ideas which invigorated my belief in my generation, including the change and transition we want to happen and to lead. Among the moving discussions between panellists and student delegates, social and technological innovation, poverty reduction, carbon and emission policies and renewable energy stood out as the most often recurring topics. However, critical concepts such as climate justice, just-and-equitable energy transition, social development, equity in energy systems, political leadership, systems change, power asymmetries and power distribution also took a fair share of the discussions, which more often than not were initiated by student delegates. Their arguments brilliantly levelled the discussions and resonated with wider audience. The discussions showed that an energy transition is currently happening, yet it can only be rendered desirable against climate change and ecological breakdown if it is coupled with a political will and if it pursued by breaking political and social barriers to transition. This was critical to equate the importance of political, social and technological innovations for a desirable energy transition. Churchill Agutu, a student entrepreneur, who started a platform called "The Africa Green Collar Project: Young Africans Supporting Sustainability" took the opportunity to talk about the way we should talk and think about sustainability and concluded the speech with: "We use the two words interchangeably but renewable energy does not necessarily mean sustainability". His remark that renewable energy per se should not be an end-goal but only a pillar to today's transition towards just and green energy systems which can prove effective against carbon emissions, climate change and ecological breakdown links rather well to my presentation during the second day of the summit.

I was lucky enough to be given a seat during the "Students on Stage" session. Despite the limited time on the stage, I could introduce myself, my funding research body, Global Challenges Research Fund-Centre for Doctoral Training (GCRF-CDT), and my sponsor, Durham Energy Institute (DEI) before presenting my research. Relating to multiple discussions during the summit, I presented my research on the concept of water and energy resource nexus, which has been mentioned only once during the summit. Resource nexus underpins the interconnections and interrelations between different resource systems, namely water, energy and food. It is gaining increased prominence within the strategic resource management policies in several countries. However, it stands out as a bona fide technical agenda and an optimization tool, where the

"Inspiring, disruptive and progressive ..."





resource governance and resource politics is being silently and deliberately overshadowed. During my presentation, I demonstrated the ways in which a technical resource nexus is being embraced by neo-liberal institutions for resource development and the ways it is being legitimized for the purpose of resource security accompanied by a narrative of nation-building, not least in Turkey. This, however, often contradicts with the concept of equity, which has been widely discussed during the summit, which I could relate to the concept of cost-shifting occurring under the guise of resource security. Cost-shifting per se is a power-laden resource trade-off decision, which generates social, environmental and economic problems at one level at the benefit of another. The said levels are different geographies, timespans, administrative scales or social groups. A discussion around the key concepts followed my presentation and I believe it sparked a further debate on the paradigm of resource security and cost-shifting in different geographies/localities.

Anecdote: Why intercultural and interdisciplinary summits like these are important?

I very much value intercultural and interdisciplinary dialogues and debates around development, sustainability, technology, and politics; as well as social, economic and environmental problems. Here I will share an anecdote from the summit, where I confronted a fantastic final-year PhD researcher in mechanical engineering, who was specialized in combustion engines. I will briefly elaborate on his research without referring to any scientific article, as I am no expert in his field and my knowledge can cause more misinformation than intended, if I keep it long. So, this Italian mechanical engineer conducts research on the optimization of energy generation during the burning processes in combustion engines, which apparently generates energy both in the form of heat and pressure. He tries to maximize the energy extraction/absorption from this physicochemical process with his research in mechanics. As any researcher would believe, he believed that technological innovations and developments in this particular field were ground-breaking, and it could simply uplift our fight against carbon emissions and energy poverty. True that technology and technological innovations matter so much. However, unless it is coupled with systemic analysis, good governance, political will and socio-technical transition, progress in efficiency and productivity not necessarily brings solutions to our problems, not least of resource conservation, which often motivate the researchers to commit themselves into research in the first place. At this point, I introduced a 19th-century political economist, William Stanley Jevons to the Italian mechanical engineer to put his bona fide rational concepts into a critical, historical perspective. William Stanley Jevons realized that despite greatly-improved efficiency of the coal-fired steam engines in the mid-19th century England, the decline of coal reserves could not be stopped. The impact of the increase in efficiency on aggregate use, also known as the rebound effect, was positive in this case, which has broken the paradigm of the coupling between efficiency and resource conservation. In short, solutions to our complex problems in our complex world are hardly ever as simple as 'one' thinks; and our long lunch-time conversation is a great reminder to both of us that coupled problems can only be solved when solutions are coupled, too.

Acknowledgement

Hereby, I thank both DEI and GCRF-CDT for giving me the opportunity to take part in this inspiring 4-day event in the heart of London. In only three words, it was inspiring, controversial and disruptive!

T

he Global Challenges Summit Was held this year at Northern Stage, Newcastle. The programme showcased the Global Challenges research that is being carried out in North East UK.

Nyaboke Omwega represented the Durham Global Challenges CDT for the session ‘New voices: Are students able to engage with the global challenges research agenda?’

Boke is doing her PhD in the department of Anthropology and Engineering and as part of her PhD she will have a placement at the University of Pretoria, South Africa. Her research focuses on transport as a gendered employment sector and is aligned with the Sustainable Development Goals: 5 Gender Equality, 8 Decent work and Economic Growth and 11 Sustainable Cities and Communities.

This interdisciplinary research project is being conducted in response to a series of DFID-funded ReCAP studies indicating that gender bias continues to be widespread in the transport sector despite lip service to gender mainstreaming. It is hypothesized that women’s lack of visibility in the transport sector contributes to continued male dominance of transport and transport operations as well as real and perceived women’s safety. The research aims to interrogate key factors impacting opportunities for women’s employment and career development in Sub-Saharan Africa’s transport sector, identify perceived barriers to skills acquisition and employment prospects, query if higher visibility of women in the transport sector would lead to more gender sensitive practice and explore how women’s aspirations in the sector can be expanded and enhanced.

In her presentation, Boke explains the impact of a male-dominated transport sector on female users and highlights the lack of tangible change despite the pursuit of gender mainstreaming in the global development agenda. Among the issues raised were safety and security in public transport spaces and the restrictions on women’s mobility's. She talks about her realisation of her own self-regulated and proscribed mobility as well as some of the transport regulations in her own home country, such as requiring the provision of paternal or spousal ID for passport registration. She questions what the implications of the current situation are for women seeking employment in the transport sector and the effects of societal attitudes on their careers and opportunities. She brings out the question of how to promote awareness of the reality of women’s priorities in the transport sector and wonders if visibility of female professionals in the sector would lead to more gender-sensitive policy and practice.

Boke points out that equal access to opportunity for work and economic growth are a cornerstone for success of the UN Sustainable Development Goals. While her research can be linked directly to SDG 4: Quality Education, SDG 5: Gender Equality, SDG 8: Decent work and economic growth, and SDG 11: Sustainable cities and communities, Boke emphasises that all the SDGs require the movement of services, goods and/or information for effective action. This also requires that the needs of all users and service providers are to be considered. She concludes that the SDGs would be impossible to achieve without gender equality and stresses that it must be a change within both society and the legal systems that govern it for such a change to last.

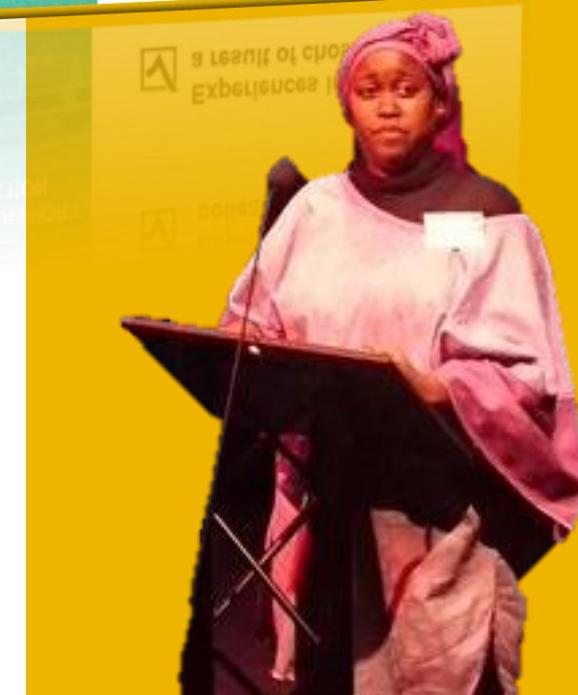
“A Brilliant Presentation from Boke Omwega researching gender & transport; key message: The SDG’s can’t be achieved without gender equality”

01
WOMEN IN TRANSPORT
PLANNING

02
WOMEN IN TRANSPORT
CONSTRUCTION

Research Questions

- Experiences in planning and policy processes
- Engagement with road transportation services as service providers and as users
- Experiences with colleagues.
- Experiences in society as a result of chosen career.



T

Thank you to the [International Office](#) for providing Durham University hoodies for the GCRF-CDT students. The cold and wet British weather needs somewhat getting used to, the students are very pleased with their new hoodies, they are destined to keep them warm all year round!



A

All 25 Durham Global Challenges CDT students have started between February and the end of June 2019. To find out more about the students and the projects they are working on, take a little time to look at their profiles on <https://sites.durham.ac.uk/GCRF-CDT/phd-students>

C

Celebrating Science will take place on 29th, 30th and 31st of October 2019, we need volunteers for the GCRF-CDT stall, if you would like to help out (you can do half a day (am or pm) or a full day or more as you like) please email: abir.van-hunen@durham.ac.uk

If you have any research results, blogs or events related to the GCRF-CDT that would be of interest for the Durham Global Challenges- CDT please contact abir.van-hunen@durham.ac.uk

Please could all GCRF-CDT students, send any planned offsite activity dates through to abir.van-hunen@durham.ac.uk this so that we can take these dates into account when planning in training sessions.

D

Did you know that ...

Dates of upcoming events and training sessions can be found on <https://sites.durham.ac.uk/GCRF-CDT/events/category/upcoming-events-training/>

Useful resources such as the required logos, PowerPoint slides and the forms needed for offsite activities can be found on: <https://sites.durham.ac.uk/GCRF-CDT/resources/>

All GCRF-CDT students on their placement are required for monitoring purposes, to send a weekly update to abir.van-hunen@durham.ac.uk these will be collated to a monthly blog for our website (don't forget to take photographs!).

S

As Sir David Attenborough was right when he called the Farne Islands his favourite place in the UK to see 'magnificent nature'. The Durham Global Challenges-CDT discovered this diverse wildlife on the 1st of July 2019, whilst on their trip to the Angel of the North, Bamburgh, Seahouses and the Farne Islands. The trip offered a unique cultural learning experience of English heritage in North East England and provided an opportunity to network and socialise with the cohort.

After a stop at the Angel of the North, where we learnt some interesting facts about the 20 metre tall steel sculpture with its wings measuring 54 metre across, we crossed over one of Newcastle's seven bridges to get the most characteristic view of the city of Newcastle. From there our journey continued through the villages of North Shields, Tynemouth, Cullercoats, Whitley Bay and Bamburgh. At Bamburgh village we got out of the bus for a photo shoot and found out some facts about the medieval history of Bamburgh castle and the industrialist and inventor Lord Armstrong. Before embarking on a boat to sail to the Farne Islands, we stopped for lunch at a typical British local pub in Seahouses.

Seals, Puffins and over 100 000 seabirds (including Arctic terns, guillemots and razorbills) make the Farne Islands their home each year to breed. The species with the most presence on the islands are the Arctic Terns. During our landing on the island the majority of the terns were feeding their baby chicks small sand-eels along the narrow footpaths. By the end of the year, some of these baby birds will be somewhere in the Southern Hemisphere, most likely off the coast of Australia or the Antarctic pack ice. This species experiences more daylight hours than any other land animal on the planet. Arctic Terns have a somewhat notorious reputation among visitors in that they will resolutely defend their eggs and chicks from perceived attack. This usually involves the bird clicking, flying up, making lots of noise, and occasionally pecking the heads of passers-by! follow the link and check the sidebar for some photographs (including our GCRF-CDT director ducking away from an angry arctic tern!)

<https://sites.durham.ac.uk/GCRF-CDT/>

“Angry Arctic Terns...”





Durham University



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<https://www.dur.ac.uk/globalchallenge-cdt/>



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Sustainable Development Goals

<https://www.un.org/sustainabledevelopment/>

