

Expanding Horizons: Commonwealth Distance Learning Scholarships

Partnerships To Promote a Low-Carbon World

Since 2018, the Commonwealth Scholarship Commission has funded a total of 15 Scholars to undertake a Master's Degree in Carbon Management at the University of Edinburgh as distance learners.

Designed for graduates interested in advancing climate change management across business, industry, NGOs, and government, this interdisciplinary course aims to provide a broad and deeper understanding of climate science and economics, and an integrated understanding of carbon management. The course is specifically designed to suit professionals who want to enhance their knowledge and apply newly acquired skills while they work.

The CSC Evaluation Team conducted in-depth interviews with Dr James Paterson, Programme Director at the University of Edinburgh for the online Master's Degree in Carbon Management and Moses Phiri, a 2018 Commonwealth Distance Learning Scholar, with the aim of understanding their distinct perspectives and experiences with the programme.



University of Edinburgh.



Moses Phiri, a 2018 Commonwealth Distance Learning Scholar.

Motivations and Expectations for Participating in the Commonwealth Distance Learning Programme

For Moses, a science teacher from Zambia, enrolling in this programme offered an opportunity to improve his workrelated knowledge and skills and to advance his career, 'What really motivated me to study the programme was to sharpen my way of thinking and enable me to have a broader perspective and in-depth understanding of climate-related issues. This would be a stepping stone for me to achieve a lot. I also realised that as a science teacher it is very important for me to be effective in delivering information to others. And at the same time, I was motivated to do the programme because I was looking at my career advancement. For example, I intend to start teaching at the local university.'

Meanwhile, speaking from the perspective of the University of Edinburgh, Dr Paterson shared the university's motivations for offering a Master's Degree in Carbon Management as a distance learning course. These included an impetus to create and widen learning opportunities for students from diverse personal and professional backgrounds, and to create networks and share knowledge and experiences through a flexible learning experience. Widening opportunities by taking this MSc course to students from many countries that wouldn't otherwise be able to do it is something that we believe in strongly. We get students with different professional backgrounds, experiences, countries, and age groups and this diversity enriches the programme. Having a diverse student body is our biggest selling card. It's an online experience, the students work from home, and we have a good online student community who get to meet (virtually) during the tutorials and in doing coursework. The programme is designed to fit around work and personal life.

The Role of the University of Edinburgh in Delivering the Distance Learning Programme

The Master's course is delivered by talented lecturers, with substantial expertise that can meet the demands and expectations of students from diverse professional backgrounds. It is also designed to offer a platform for interaction and networking of Scholars and staff, which promotes knowledge exchange as explained by Dr Paterson, 'We have a lot of expertise in the GeoSciences Department, so the Scholars get lectures from people who are quite senior professors and experts in climate change science. When they do their final year dissertation project, they can be supervised by these experts, or professors in other departments. And we do insist on the tutorial system where we can talk to and meet the students in a live situation, and that's one of our strengths as we do get to know the students, and they meet each other virtually, which is an important part of the programme, unquestionably.'

Additional support is provided to Scholars through one-on-one tutoring, which include discussions on progress and challenges faced by Scholars. To maximise flexibility, lectures are also recorded and made available to Scholars who are unable to attend. Dr Paterson added that lecturers also offer practical guidance to Scholars regarding which courses to take and how much time to spend on studies, 'I meet my students through tutorials twice a week online as the programme director, and we also have personal tutoring which has a pastoral element of looking after the student.' This support offered by the university lecturers extends beyond completion of the course, as confirmed by Moses who had just completed his studies, 'There is interaction with the university, I still communicate with my former personal tutor. And I have been able to ask him to write a job recommendation letter for me, which he has been able to do without hesitation.' This was echoed by Dr Paterson who added that, 'I still have a relationship with the alumni who are five years out of the programme and they come and give talks.'

Asked about the existence of partnerships in delivering the distance learning programme, Dr Paterson highlighted that by virtue of offering funding to some of the Scholars undertaking the Master's Degree in Carbon Management, the CSC is considered by the University of Edinburgh as a key partner. However, the university additionally collaborates with various organisations in the United Kingdom, Germany, Australia, and the United States to deliver the programme. These informal partners provide expert talks, demonstrations, tours for Scholars, and topics for student dissertations and projects. In some cases, employers of the students, or students with expertise in a specific area, deliver talks during course tutorials, 'Quite often we have one-off talks from the employers of the Scholars, and that relationship exists because of that connection with the student. The students themselves do provide quite a few of those talks, particularly if they're an expert in the field.'

Leading Environmental Projects in the Workplace and Community

As a proud beneficiary of a Commonwealth Scholarship, Moses shared his experience in the distance learning programme and how he has been using the extensive skills and knowledge gained through his studies to effectively deliver his work tasks and activities, 'The DL programme enabled me to acquire analytical skills which I use in my day-to-day routine to make better decisions that integrate sustainable development goals such as reducing the carbon footprint. My employer has benefited from my training which has had a trickle-down effect. I have facilitated workshops to train other teachers on environmental issues and I have been involved in policy development for schools based on what I learnt.'

Drawing from the knowledge and skills gained through his Master's studies, Moses successfully implemented a biodigester project, that uses clean energy and recycles food waste, at Chadiza Boarding Secondary School where he worked as Deputy Headteacher while pursuing his studies.



Biodigester construction at Chadiza Boarding Secondary School.

The school that I influenced to develop a commercial biodigester is now used as a model for schools and communities on how they can use clean energy to save forests.

Undertaking the Master's course and applying the skills gained to implement projects at his workplace has also had a positive impact on Moses' career progression. 'As a result of the skills which I acquired from the programme, my supervisors were convinced that if they gave me more responsibilities I would be up to the task. My promotion [to a Headteacher] came after implementing some of the projects at the school while I was studying, such as the biodigester.'

As a Headteacher at Lundazi Boarding Secondary School, Moses initiated a piggery project. Starting with just 6 pigs in January 2021, by June 2022 the pig farming project had expanded to 88 pigs.



Pigs being fed on waste vegetables from the Lundazi school garden.

More recent projects include the installation of solar lights at Lundazi school and promoting local production of vegetables to feed pupils, using clean energy. These activities reduce the school's carbon footprint, benefitting the local environment and improving people's livelihoods.



Organically grown cabbage to feed pupils at Lundazi Boarding Secondary School.

Through recycling of food waste from the boarding section of the school as food for pigs and through aquacultural projects that I introduced to grow tilapia fish locally to feed pupils and to sell to the local community, it means the community can have fresh fish and pork produced with very little carbon footprint.



Solar lighting at the fishpond and greenhouse at Lundazi school.

Moses has also taken up a part-time lecturing role at a local university, the University of Zambia where he teaches undergraduate and postgraduate students. He often draws from the skills honed during the Scholarship in his teaching, and he has been instrumental in developing the course curriculum, 'I was offered a part time lecturing job at The University of Zambia because of my studies which were sponsored by the CSC. Another local university has also benefited in that I developed their undergraduate programme in climate change based on what I learnt on the Master's programme.'



One of the three fishponds at Lundazi Boarding Secondary School.

The support Moses has received from his employer has been crucial, enabling him to pursue his studies smoothly, while simultaneously applying the developmental activities that were inspired by course learnings at his workplace, 'My employer has been supportive during my studies. When I was doing my dissertation, I had to concentrate on my research and do my work tasks at the same time. I was granted some time off work.'

Benefits of the distance learning programme to the Scholars, their employers and wider communities were reinforced by Dr Paterson, who highlighted the importance of identifying skills gaps, and dissemination of knowledge, 'The benefit has been that the Scholars are getting what I hope is an up-to-date and worldclass education in climate change topics. They're talking to different experts running different courses, everything from learning about energy systems, renewable energy, to climate change impacts, to climate change adaptation and mitigation. We're increasingly seeing students who are already working in the sector and are sent by their employer to study because it's useful for their jobs, and their employers see their skills gap and want them to have the skills and the knowledge on climate change issues. We give the students a good grounding and understanding of science, how to interpret the science, and how to educate somebody in their company and in their community. It's about being able to understand and disseminate knowledge to a non-expert audience.'

The Value of Knowledge Exchange and Sharing Lived Experiences

Participating in delivering the distance learning course has contributed to the University of Edinburgh's goals of widening inclusivity and broadening opportunities to recruit students from diverse contexts, and professional backgrounds. This in turn has stimulated fruitful knowledge exchange between students, and between staff and students, who can share their diverse lived experiences of the impacts of climate change and adaptation through tutorials, 'The university has goals and ambitions to widen inclusivity and to broaden the opportunities for students from different backgrounds. Having students from different countries, and certainly the Commonwealth countries who are living and experiencing the impacts of climate change, whether that's drought, floods, or heatwaves bring those experiences and stimulate discussions on how they are trying to overcome them.'

Dr Paterson attributed the successful delivery of the distance learning course to date to having access to CSC funding, which has boosted student recruitment for the course, as well as the support offered by international partners and the employers of the students, all adding unique value to the course, 'It's great to be able to have this partnership with the Commonwealth Scholarship Commission because it brings in students from countries we wouldn't otherwise be able to reach. The beauty of doing an online programme is I can have somebody from anywhere in the world, join us for a tutorial and do a 30-minute presentation. We had a woman who set up a community wind turbine project in the Isle of Lewis in the Hebrides, and the students have learnt all about renewable energy, wind turbines, and all the issues and the potential benefits of that. Setting a community turbine project up is an element that we don't really touch on. Sometimes we get professionals in because of a student contact. I've had, for example, one student brought in his former manager to talk about setting up energy systems in refugee camps.'

Looking Ahead: The Expected Long-Term Impact of the Distance Learning Programme

Some of the long-term impacts of the course identified by Dr Paterson include ongoing knowledge transfer from Scholars to pupils, colleagues, or their local communities as the course equips them with the knowledge to tackle societal problems and improve livelihoods, 'Most of the Scholars are working professionals who are quite skilled in one aspect or another, and they go on to do something useful, climate change related back home. We've had schoolteachers who wanted to learn more about climate change, so they can teach their students. There's an encouraging number of students who are now applying acquired skills in the real world such as working in a local community to improve water sanitation or creating awareness on understanding of adaptation to climate change or introducing renewable energy systems.'

He added that the programme offers a platform to network and establish collaborations that continue after the Scholarship, 'We are providing students with good knowledge, and they continue to network afterwards. The testimony to that is we have a very strong LinkedIn group of alumni, of students from the course. It's currently over 400 students, so we do get to see what they're doing.'

Overall, delivering the course contributes towards the University of Edinburgh achieving the 2030 Sustainable Development Goals. By equipping talented professionals from around the Commonwealth with the knowledge and skills needed to have immediate and long-term environmental impact in their communities, this programme is ultimately making the world a better place for people to live.

The University has 2030 goals, and they talk about sustainability and improving the world to make it a better place for people to live in. We're certainly I think doing that, as in the long-term we are slowly increasing the number of students who have a good understanding of climate change issues and are working to make their societies, their communities, and their countries a better place.

