



THE UNIVERSITY of EDINBURGH
Global Academy of
Agriculture and Food Systems

Newsletter 04

SPRING 2022

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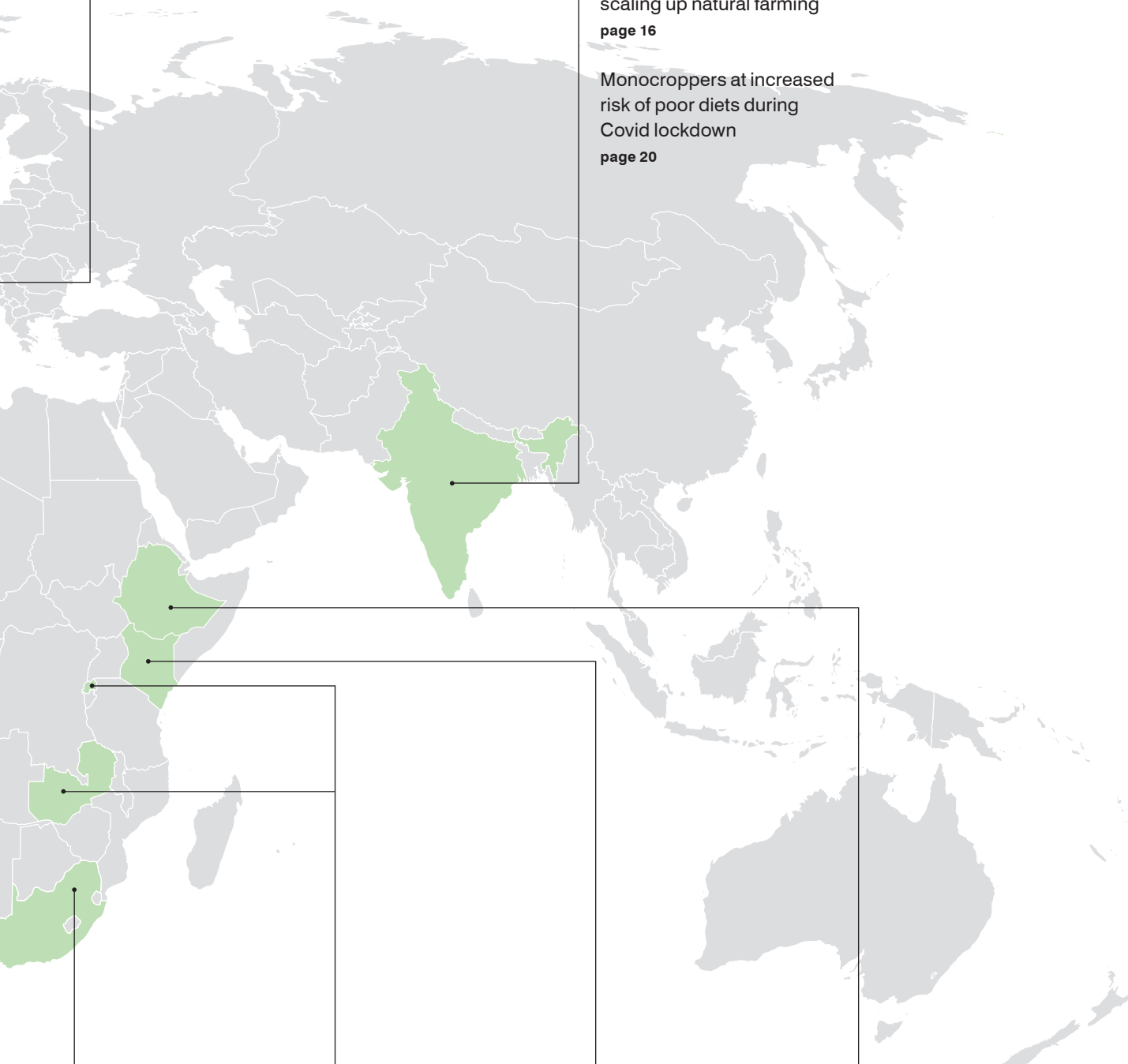
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Last year's COP26 summit and the recent IPCC Assessment Report remind us that the climate crisis will intensify the threats to food security.

Welcome

Welcome to our latest Global Academy newsletter. Sadly, the impacts of the Covid-19 pandemic, ongoing conflict in several parts of the globe, now including Ukraine, and various natural disasters including severe drought in the Horn of Africa, mean that food security concerns remain very much in the news headlines.

Last year's COP26 summit and the recent IPCC Assessment Report remind us that the climate crisis will intensify the threats to food security.

It is easy to be discouraged by the scale of these challenges. However, we believe that our work, and our partnerships, to help develop more sustainable and ethical food systems for healthy people and a healthy planet, can make a difference.

We were especially pleased to launch the Jameel Observatory for Food Security Early Action during COP26. The Global Academy leads this partnership on behalf of the University of Edinburgh, with founding partners including the International Livestock Research Institute (ILRI), Save the Children, the Abdul Latif Jameel Poverty Action Lab (J-PAL) and Community Jameel. You can read more about this and other exciting developments in this Newsletter.

The number of staff and students in and associated with the Global Academy continues to grow, and our interests span many parts of food systems. To better reflect this range of expertise, we have amended our name to the Global Academy of Agriculture and Food Systems.

Many thanks for your time in reading our news – as always, your feedback is welcome!

 [GlobalAgEd](#)

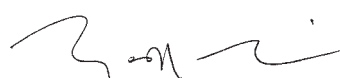
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EurSafe Conference 2022

We are delighted to be co-organising the 2022 Conference of the European Society for Agricultural and Food Ethics (EurSafe) on Transforming Food Systems. The conference, organised jointly with the University of Edinburgh's School of Social and Political Science, will take place in Edinburgh on 7-10 September. We hope you will join us then.

 eursafe2022.ed.ac.uk



Professor Geoff Simm
Director, Global Academy of
Agriculture and Food Systems

Research news in brief



Jameel partnership to tackle climate impact in dry areas

The Jameel Observatory for Food Security Early Action was launched at an event during COP26.

Based in Nairobi, Kenya, the international partnership is led by the University of Edinburgh, collaborating with the International Livestock Research Institute, Save the Children, the Abdul Latif Jameel Poverty Action Lab (J-PAL) and Community Jameel.

The initiative combines community knowledge, data science and humanitarian action to tackle the growing threat to people in the world's drylands posed by the increasing severity and frequency of climate-related disasters.






The Observatory brings together leading research and humanitarian agencies to harness data and technology in a bid to deal better with climate-related food shocks.

Observatory initiatives are now gaining momentum. For example, aiming to tackle critical gaps holding back early action against droughts and food insecurity, the Observatory has joined the Data for Children Collaborative and UNICEF to support a collaborative process to produce a time series of childhood wasting estimates, accounting for climate impacts and seasonality.

Together with Save the Children UK, the Observatory also commissioned the Centre for Humanitarian Change in Nairobi to assess how well different public and private actors in Kenya and Somalia are tracking and responding to the progression of recent droughts in the region.

The results will feed into an update of Oxfam and Save the Children's 2012 'Dangerous Delays' report to consider the extent that forecast, early warning and early action lessons from the 2011 drought in the Horn of Africa are still relevant.

In late April, the Observatory will convene a meeting of partners and stakeholders in Nairobi to identify priority issues to work on while also establishing a community of practice to help mobilise the expertise and people we need to work together on promising solutions.

-  jameelobservatory.org
-  savethechildren.org
-  povertyactionlab.org
-  communityjameel.org/en
-  ilri.org



Natural farming programme halves use of pesticides

Moves to transition farms in the South Indian state of Andhra Pradesh to organic practices have reduced pesticide use among farmers, an evaluation of the programme led by Dr Lindsay Jaacks of the Global Academy has shown.

Reducing pesticide use is a key aim of the Andhra Pradesh Community-managed Natural Farming (APCNF) programme, to limit environmental and human harm.

Improved training of both farmers and retailers, increased support from government agricultural representatives, and moves to limit the availability of pesticides could help meet aims for the state become all-organic by 2030, according to the study.

Data science applied to key food systems challenges

Researchers from the Academy are taking part in an initiative to identify urgent challenges in ensuring sustainable food systems, which can be tackled with help from data science.

The project, led by an international collaboration, seeks to identify the 10 most impactful research questions that could be investigated to make food systems healthier.

The scheme forms part of the 100 Questions initiative, led by the GovLab at New York University, which aims to define problems across a range of topics that may be addressed with improved access to data and application of data science.

Members of the public are invited to input by voting for action on issues encompassing the use of data science in food production, distribution and consumption.

 food.the100questions.org



Photo by Tim Mossholder/Unsplash.

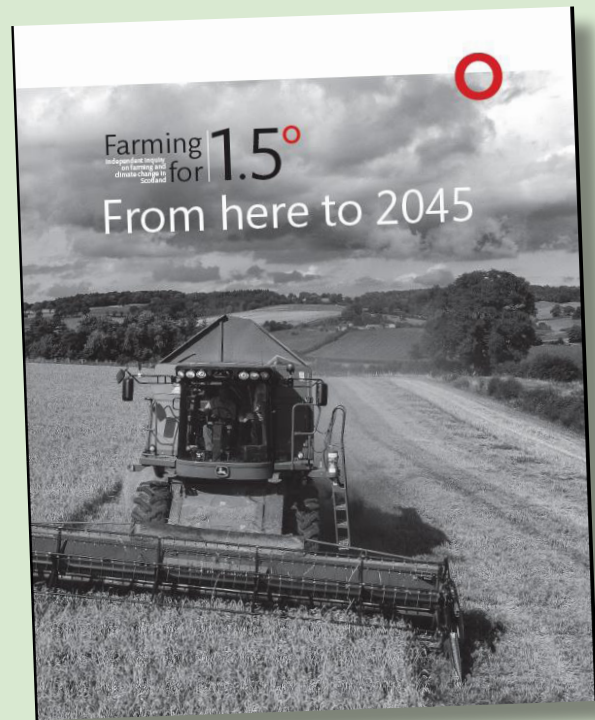
Consensus breaks out on net-zero farming

Professor Geoff Simm, Director of the Global Academy of Agriculture and Food Systems, took part in a panel of farmers, academics and non-governmental organisation representatives to publish a consensus pathway for making Scottish farming climate compatible.

In a debate that has been notoriously polarised, the Farming for 1.5 Inquiry set out a credible way forward to net zero by 2045, by bringing different perspectives around the table.

The panel heard from experts on farming practices, environmental impacts and behavioural change; and conducted farm visits.

Its report recommends whole farm contracts to deliver on farming and nature from 2024; reducing total emissions from agriculture while maintaining food production per capita; and a rapid uptake in low methane breeding for cows and sheep.



Agricultural universities team up on research plan

The University of Edinburgh is one of 16 universities offering courses in agriculture and conducting agricultural research who are getting together to agree on joint agricultural research priorities, working with farmers and others with a stake in the industry's future.

As farming in the UK goes through a rapid transition, the initiative responds to calls for more joined-up research and to ensure public investment in agricultural innovation makes a difference on the ground.

The universities recently formed the Agricultural Universities Council (AUC), which will engage with all four administrations in the UK in its ongoing work.

Professor Geoff Simm, Director, Global Academy of Agriculture and Food Systems, said: "We're pleased to be part of the AUC and look forward to collaborating with other UK agricultural institutions on education and research for farmers and the agri-food sector."





Photo by Eaters Collective/Unsplash.

Changing markets put pressure on livestock sector

Changes in the livestock sector are likely to be influenced by market pressures driven by concerns over the environmental and health aspects of producing and eating meat, according to a study by the Global Academy.

Changing consumer preferences, as well as pressures from sector investors and government concerned by the risks and impacts of raising livestock and of meat consumption, could prompt a response from producers, according to the research, led by Professor Dominic Moran, published in the journal *Animal*.

Researchers reviewed economic studies of sustainable livestock systems, considering aspects that are likely to affect demand in the sector.

Producers may need to respond with technical innovation or revised production practices to ensure sustainability. Meanwhile, policymakers must manage the impacts of these so-called social costs on health, the study found.

edin.ac/3trKJgt

Health warnings can nudge consumers to eat less meat

Labels on red meat warning of its potential harmful health effects are more likely to dissuade consumers than labelling showing its associated environmental impact, research from the Global Academy shows.

In tests where consumers were offered ready meals labelled as harmful to the environment, to health, or both, they were more likely to be influenced by health warnings, especially those relating to a specific condition, according to the study involving Dr Lindsay Jaacks.

The findings in the *International Journal of Behavioral Nutrition and Physical Activity* suggest that warning labels may aid efforts to deliver the targets of the recently released National Food

Strategy in the UK, which suggests nudging consumer habits to deliver a 30 per cent reduction in meat consumption over the next 10 years.

Elsewhere, research has shown consumption of red meat in the US is not dominated by any single food type. The findings offer potential opportunities to encourage consumers towards alternatives.

The study, in the journal *Public Health Nutrition*, may inform efforts to encourage people towards alternatives to red meat.

This would help reduce average intake, currently around 450g per adult each week, towards the recommended limit of 100g each week.

edin.ac/36z7yFU

edin.ac/3L9kW2y



Partnership to deliver data-driven tech to farmers

The Global Academy of Agriculture and Food Systems is forming a partnership with software development company Trinity AgTech, with the aim of helping farmers achieve greater profitability and environmental progress.

Partners will work to apply data-driven innovation to farming, seeking to develop technologies that will add value to supply chains, to help producers and benefit the environment.

This partnership is formed at a time when food production and land use management involve complex challenges relating to climate change, poor nutrition and lack of biodiversity.

In addition to the partnership, Dr Jon Hillier from the Global Academy has taken on the role of MD Science for Trinity AgTech and Professor Geoff Simm, Director of the Academy and the University's Chair of Global Agriculture and Food Security, has joined Trinity AgTech's Scientific Board.

Professor Simm said: "Trinity AgTech's ... collection of commercial, farming and scientific stakeholders is why it has a unique footprint – that and its vision and mission can help steer the industry in a direction where it will have a real impact."

 edin.ac/3wcma6Q





Summer school to focus on One Health

The Global Academy is to lead a summer school focused on One Health – the collective health of people, animals and the environment – as part of its involvement with the Una Europa network of European research universities.

Professor Lisa Boden, Chair of Population Medicine and Veterinary Public Health Policy, will spearhead the project with colleagues from the University of Edinburgh and Una Europa partners.

Some five or six staff, a network of early career mentors, and up to 60 students will work in interdisciplinary and international teams to explore and pose solutions to global challenges relating to One Health and/or Planetary Health. They will do so through lectures, seminars and group work.

The call for applications is open to undergraduates of any discipline in their final or penultimate year to take part in the school. Funding is available from the Una Europa 1Europe Project to support students' involvement.

The event aims to create opportunities for staff and students to engage, and to help students develop skills relating to research, science communication, teamwork, and data analysis.

It is the first workshop of its kind hosted by the University on behalf of Una Europa. The network aims to enable mobility between its staff and students through shared professorships, degree programmes and research projects.

Professor Boden said: "The summer school will create a platform for cross-disciplinary work and facilitate connections to support research. In this context, the diversity of One Health offers many opportunities to gain insight and to learn from others."

 una-europa.eu

 edin.ac/3qxQFmm

Scientist adds voice to UN climate change report

An expert from the Global Academy of Agriculture and Food Systems has been involved in the latest report from the Intergovernmental Panel on Climate Change (IPCC), the branch of the UN responsible for assessing human-led climate change.

The new findings highlight the vulnerabilities of the world's socio-economic and natural systems to climate change, its wide-ranging consequences and options for adapting to it.

It warns that many changes to the climate are likely to be irreversible, and that they are unequivocally the result of human actions.

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This report underscores the need to limit warming to as close to 1.5°C above pre-industrial levels as possible, and to avoid pathways that do not limit warming to less than 2°C.

Dr Peter Alexander
Senior Lecturer in Global Food Security



Data skills training supports AgriTech development

World-class training in data skills for the AgriTech sector, addressing local and global food security and sustainable food production, is being developed in an ongoing initiative.

The Talent theme, delivered by the Global Academy along with the Royal (Dick) School of Veterinary Studies and the Roslin Institute, is being carried out under the Edinburgh and South East Scotland City Region Deal, a UK and Scottish government-led investment in infrastructure, skills and innovation.

Talent, in place since August 2021, aims to enable learners, students and industry professionals to realise the value of data in the sector. It seeks to enable an improvement in the sustainability of agri-food production, including reduced environmental impact, and ultimately healthier consumers.

Course material is being developed with a modular approach, so that resources can be repurposed to suit BSc, MSc, Continuing Professional Development, and citizen science projects, among others.



Photo by Christin Hume/Unsplash.

The scheme has also enabled a collaboration with the Edinburgh Futures Institute to create a joint MSc in Planetary Health.

“We are excited at the enthusiasm and creativity staff and students have already brought to this programme, and expect that to continue as it develops.” – Dr Susan Jarvis, leader of the Talent programme and Senior Lecturer in Animal Science, Global Academy of Agriculture and Food Systems. Updates will follow on our website.

Expert gives evidence on Scottish Good Food Bill

Dr Kirsteen Shields of the Global Academy of Agriculture and Food Systems gave evidence to the Scottish Parliament’s Rural Affairs, Islands and Natural Environment Committee on the Good Food Nation (Scotland) Bill.

The Bill seeks to establish a new food strategy across Scotland by empowering councils and health boards to create good food nation plans.

Dr Shields gave evidence to the Committee in a session focused on the environmental aspects of the proposed legislation, alongside Dr Mike Rivington of the James Hutton Institute, Vicki Swales of RSPB and Iain Gulland of Zero Waste Scotland.

The discussion covered the governance aspects of the legislation, methods of measuring progress on objectives, and alignment with the right to food and nutrition.

More details on the session can be found on the Scottish Parliament website.

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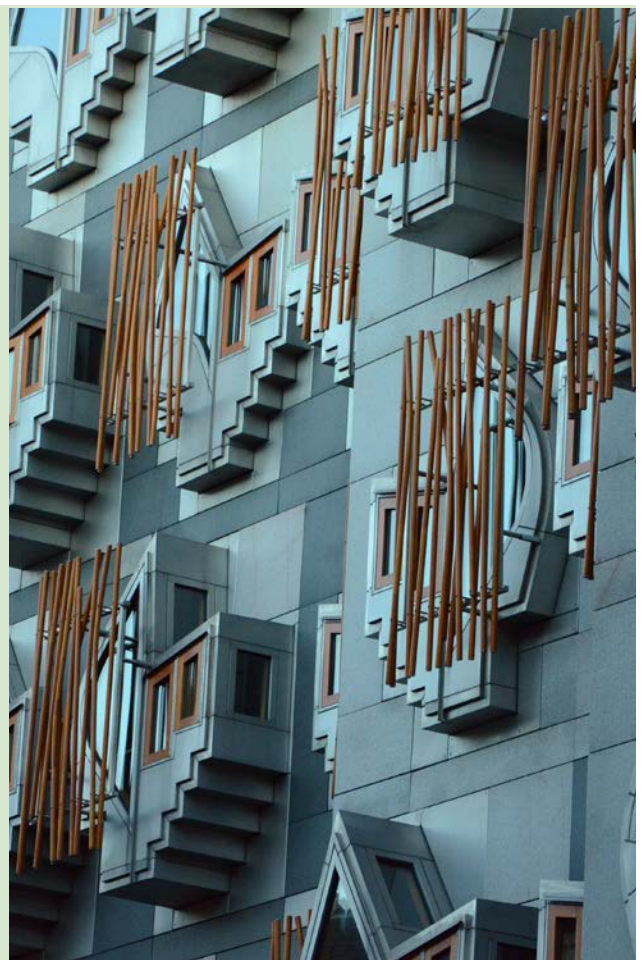


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COP26

Lessons from India on scaling up natural farming

Learnings from a large-scale organic farming programme being studied by Global Academy researchers were discussed at an event at COP26.

Speakers shared their experience of the sustainable agriculture operation, implemented by the government of Andhra Pradesh in India.

Scientists are evaluating the effects of the Andhra Pradesh Community-managed

Natural Farming (APCNF) initiative, which aims to transform 8 million hectares of land in the southern state into chemical-free farmland by 2030.

The transition, which will affect 6 million farming families, aims to provide health benefits by reducing exposure to pesticides.

Research, led by Dr Lindsay Jaacks, is being carried out under a Memorandum

of Understanding between the Government of Andhra Pradesh, and researchers from India and the UK.

The COP26 event was held as part of the 'Recipes for resilience: the food and climate zone' programme, organised by Nourish Scotland.



Student takes part in UN Youth4Climate delegation

An undergraduate student joined a United Nations event for young people ahead of the COP26 climate change summit.

Xandru Cassar, a third-year BSc Agricultural Economics student, represented his home nation of Malta at the Youth4Climate Summit in Milan.

Mr Cassar was one of 400 delegates representing nations around the world at the pre-COP26 gathering, at which young people were tasked with developing and presenting proposals for tackling climate change.



Expert speaks on Brazilian sustainable livestock

A Global Academy scientist whose work on sustainable livestock production has influenced Brazilian government policy joined a high-profile event at COP26.

Dr Rafael Silva, a Chancellor's Fellow in the Global Academy of Agriculture and Food Systems, took part in a Sustainable Livestock panel in Brazil's Pavilion at the Glasgow event.

In this panel, government representatives and farmers discussed promotion and adoption of low carbon emission technologies.

Dr Silva's expertise is in applied mathematics, working with models of agriculture, food security and biodiversity conservation, to better understand the relationships between energy, livestock and deforestation.

He previously informed policy regarding livestock contribution at COP21 in 2015, when Brazil first announced a target of zero deforestation in the Amazon by 2030.



Photo by Oriol Portell/Unsplash.

Scientist joins sustainable industry panel

The Global Academy was represented at a panel discussion of Scotland's food and drink industry.

Dr Fiona Borthwick, Programme Director for the MSc Global Food Security and Nutrition, joined the Edinburgh Chamber of Commerce panel on Green Food and Drink, focused on sustainable production and procurement.

It was delivered as part of a COP26 events programme in partnership with the City of Edinburgh Council.

Covid

Young population helps limit Covid-19 impact in Ethiopia

Climate, clean air and other nationwide factors helped suppress the number of deaths in Ethiopia in the first wave of coronavirus, reveals research undertaken by the Global Academy.

Ethiopia's youthful population, in combination with environmental factors including its warm climate and low rates of smoking, may have contributed to the country's low mortality rate.

Ethiopia suffered a lower incidence of deaths from Covid compared with many other countries – just over 1.5 per cent of cases up to October 2019 resulted in death, compared with a global average of 5.7 per cent.

This is despite a lack of infrastructure suited to managing severe cases of coronavirus, and expectations that Ethiopia might suffer high mortality rates during the outbreak, in common with other countries in the Global South.

Most of the Ethiopian population is aged below 30, and less than 4 per cent are over 65, which may have helped to limit the number of severe infections.

In addition, frequent flu outbreaks may have led to production of beneficial immune cells in many of the population.

Environmental factors such as low air pollution may have played a part in keeping cases down, while the warm climate and relatively high levels of vitamin D among the population may have helped limit the impact of the virus.

“

The low numbers of severe Covid-19 cases across Ethiopia is probably linked to a combination of factors linked to individual and public health. These have suppressed the number of fatalities, and prevented pressure on Ethiopia's healthcare facilities.

Dr Taddese Zerfu
Global Academy of Agriculture and Food Systems





Monocroppers at increased risk of poor diets during Covid lockdown

During the most restrictive part of Covid-19 lockdown in India, farmers planting only one type of crop were more likely to experience a decline in diet quality than those cultivating two or more.

These findings are based on surveys of farmers by researchers from the Public Health Foundation of India, the Centre for Sustainable Agriculture (Hyderabad), Harvard University (US), and Dr Lindsay Jaacks and Divya Veluguri of the Global Academy of Agriculture and Food Systems.

Crop diversity influences diets through two major pathways: home consumption and increased income, which can be used to buy food.

During the initial lockdown, access to markets was restricted and demand dropped. Therefore, the second pathway was

largely blocked. On average, farmers consumed just two food groups per day. Staples and dairy were the most eaten, followed by vegetables. The number of foods consumed fell most in the initial phase of the lockdown, from May to June 2020, and then rebounded slightly as the lockdown was eased from June to August.

Farmers who grew a single crop, in most cases rice, were approximately twice as likely to eat fewer types of food compared with those who cultivated two or more crops.

About half of farmers had a kitchen garden, and these individuals were significantly less likely to experience a decline in the number of food groups consumed throughout lockdown.



Events

Nutrition expert hosted at food systems seminar

A seminar on progress in food systems for nutrition was hosted by a researcher from the Global Academy.

Professor Suneetha Kadiyala, Professor of Global Nutrition at the London School of Hygiene and Tropical Medicine, gave a talk in December 2021 titled "Food systems for nutrition: progress in the last decade and future directions".


Professor Kadiyala spoke as part of the Easter Bush Research Seminar Series, which brings together staff across the Royal (Dick) School of Veterinary Studies campus, of which the Global Academy is a part. She was hosted by Dr Lindsay Jaacks, UKRI Future Leaders Fellow and Chancellor's Fellow.

EurSafe conference focuses on food systems

'Transforming Food Systems' is the theme of a European conference being co-organised by the Global Academy of Agriculture and Food Systems.

The 2022 conference of the European Society for Agricultural and Food Ethics, EurSafe, will examine how to provide safe, nutritious food for all amid challenges such as Covid-19, climate change, environmental degradation and social inequity.

EurSafe 2022 Transforming Food Systems, taking place on 7-10 September, is co-organised with the School of Social and Political Science and the independent consultancy Edinethics. It will be held in Edinburgh, if Covid conditions allow.

 eursafe2022.ed.ac.uk



Schools have food for thought at Scottish produce webinar

School pupils were invited to consider the role of Scotland's food sector in a global context at an online event.

A webinar, Scotland in a Global Food System, was hosted by the Global Academy of Agriculture and Food Safety in September 2021 as part of Scottish Food and Drink Fortnight.

Pupils and their teachers took part in activities based on aspects of Scottish produce, covering topics such as food's impact on biodiversity and climate change.

Topical issues such as shortages caused by Brexit and the coronavirus pandemic, and the role of policymakers, were also highlighted in the one-hour programme.

Pupils were encouraged to think about their role as consumers and shoppers of Scottish produce, and the impacts their choices may have.

Hosting the webinar was Dr Fiona Borthwick, Programme Director for MSc in Global Food Security and Nutrition at the Global Academy of Agriculture and Food Systems, with guest speaker David Thomson, Chief Executive Officer, Food and Drink Federation Scotland.





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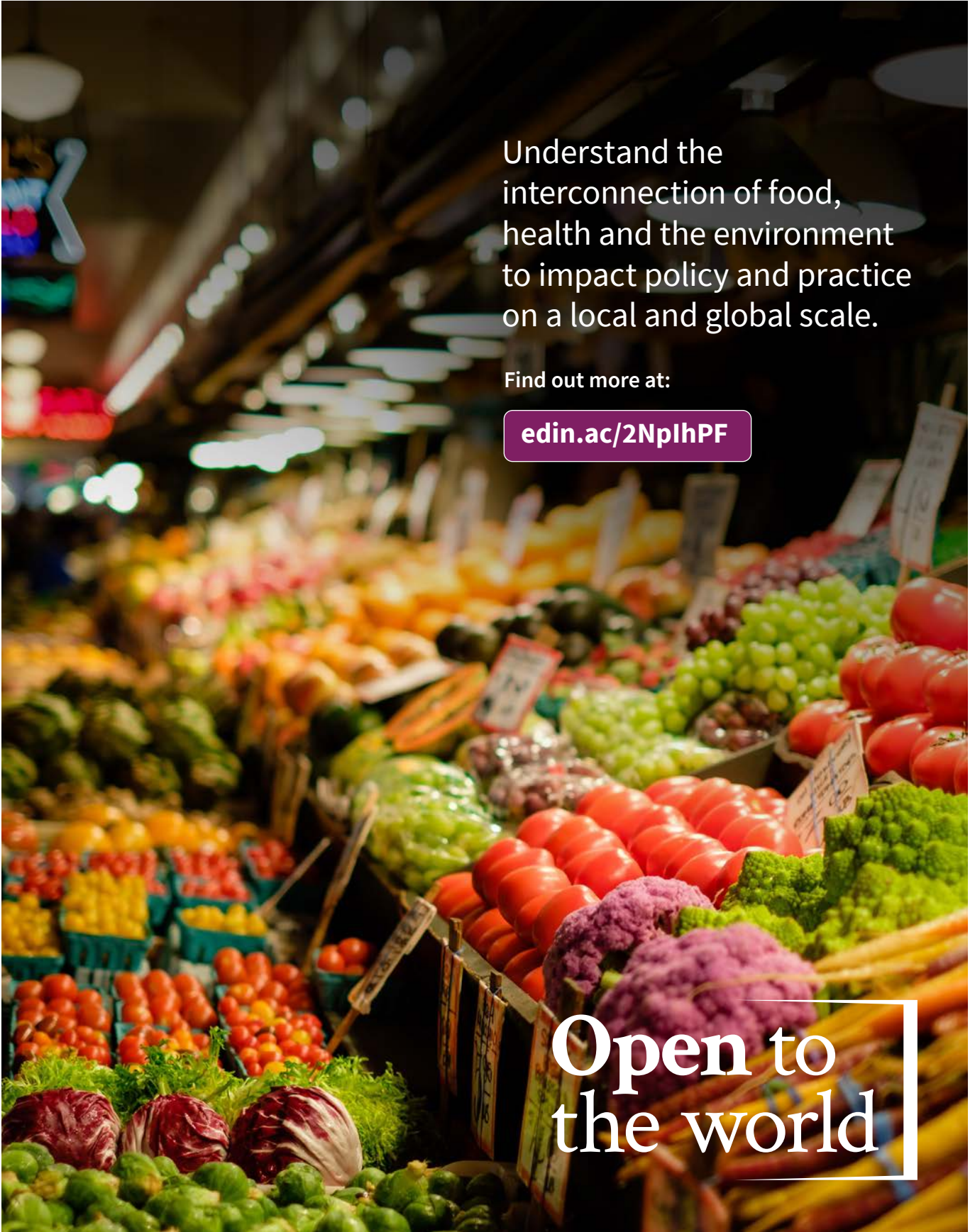
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Student news

Virtual student work placement success at Aviagen

Third-year undergraduate students from the Global Academy undertook a three-week online work placement at Aviagen, a global broiler breeding company.

Aviagen's vision – to feed future generations by producing a healthy, sustainable source of protein – was a perfect match for the students' interests in sustainable food systems, integral to their degree programme in Global Agriculture and Food Systems.

Projects undertaken by Francesca van der Linde (above right) and Lovisa Bergmann (above left) included working within the marketing team at Aviagen to review their sustainability messaging.

The task was to review marketing materials and to consider strategies to increase the profile of sustainability on the organisation's website.



Another project, focused within the Research and Development team, involved analysing a large dataset to explore the key production traits in birds related to biological performance and sustainability.

By focusing on specific tasks, the students were able to put their learning into practice and to apply their skills in communication, planning and data analysis.

The students met Aviagen team members in various locations, helping them to gain a greater global perspective.

The experience triggered conversations among the students around the importance of speaking a second language, data skills, teamwork, leading projects and much more.

Placement focuses on data at SEBI in Livestock



An undergraduate student from the Global Academy spent a work placement with Supporting Evidence-based Interventions in Livestock (SEBI Livestock), an organisation that seeks to improve

livelihoods for smallholders in low and middle-income countries through good investments.

Grace Kiruja spent three weeks working remotely with SEBI Livestock at their offices at the University of Edinburgh's Easter Bush Campus.

Ms Kiruja was tasked with working on a guidance system for agricultural research centres, on where and how to lodge data on open-access platforms.

The tasks allowed the student to apply her research skills to a real-world project, and to learn about data modelling.

She was impressed by SEBI Livestock's close-knit, supportive culture.

Ms Kiruja said: "Everyone was trying to make things easier for everyone else, with support and ideas always only an email away. This took away any sense of hierarchy, while the organisation remained efficient."

Students gain experience with FAO internship

Three undergraduate students from the Academy have undertaken work placements with the United Nations' Food and Agriculture Organization (FAO), working remotely with teams based in their Rome headquarters.

Luming Yang, Dylan Edgar and Martin Heriard-Dubreuil each spent three weeks working with the FAO.

Ms Yang was tasked with researching energy in agri-food systems in the green recovery and food loss via storage in developing countries, in which she was able to apply research skills and gain practice in producing presentations.

Mr Edgar helped produce a report of key objectives relating to the FAO's European Green Deal and the Africa-EU Partnership. This required summarising relevant material from a large pool of information, drawing on literature review skills gained in written assessments.

Mr Heriard-Dubreuil was placed with the Energy in Agriculture team.

The students also joined seminars to gain an overview of FAO work and had the opportunity to meet team members in Rwanda and Zambia.

Parasite insight could curb infections and limit waste

Matthys Uys, an MSc Food Safety student at the Academy, carried out research at the largest beef abattoir in South Africa, looking at ways to increase the efficacy of inspection for a common parasite while reducing food waste.

Control of the beef tapeworm – *Taenia saginata* – is by mandatory carcass inspection at abattoirs where meat is produced.

The student's work showed that additional incisions into the carcass heart picked up significantly more positive cases, meaning this simple technique, costing very little, can reduce the prevalence and spread of the disease in humans and animals by identifying more cases and breaking the cycle.

Furthermore, it showed that making a cut into the shoulder did not significantly aid in the detection of cysts, meaning that it should be removed from the inspection technique currently mandated in many African countries.

Employing these changes will reduce food waste, increase the amount of meat that can be utilised in every carcass and improve the financial reward to the farmer.

“

My MSc ... provided me not only with the wealth of knowledge needed to manage relevant food safety issues, but it also allowed me to undertake research that could make a real difference in areas where it is most needed

Matthys Uys
MSc Food Safety student

Student team wins prizes for sexual health project

An undergraduate student from the Global Academy has been recognised with University of Edinburgh awards for her contribution to a sexual health programme for young people.

Grace Kiruja is Co-Founder of the Linda Initiative, which has won a Changemaker Award from the University’s Department for Social Responsibility and Sustainability.

Ms Kiruja has also been awarded an Outstanding Student Leadership Award from the Global Academy of Agriculture and Food Systems, in recognition of her efforts.

The Linda programme is a social enterprise, run by a team of University of Edinburgh students, which aims to address a lack of information for young people on sexual and reproductive health issues.

It seeks to educate, empower and engage young people by offering a platform to gain information and share experience. Users can engage anonymously through social media platforms.

Changemaker accolades recognise those who have made a noticeable positive impact at the University, by undertaking a successful socially responsible or sustainable project, or by inspiring others to act in a more socially responsible or sustainable way.

PhD student wins sustainability award

A PhD student from the Global Academy has been recognised with an award for founding the not-for-profit social enterprise Vet Sustain.



Laura Higham was nominated by her supervisor for the SRS Changemakers’ Award.

The prize, from the University’s Department for Social Responsibility and Sustainability, was given for making sustainability and climate action relevant to a specific profession, as well as the impressive communications, education and reach of the Vet Sustain network.

Vet Sustain produces tools, training and communications centred around six veterinary sustainability goals, aligned with the UN’s global goals.

Resources include a greener veterinary practice checklist and accompanying guidance to help implement sustainable practices, working in partnership with professional associations.



Students challenged to eat well for the planet

A month-long challenge to encourage students to eat well while supporting the environment was held by a University of Edinburgh society.

The Planetary Health Meal Plan got under way at a live online event, featuring a cook-along and tips on how to make the most of the initiative.

The dietary challenge, aimed at students from Edinburgh and Dundee, was developed by the University of Edinburgh’s Food Security and Sustainability Society and Dundee University Medical Society, inspired by the EAT Lancet’s recent Commission on Food, Planet, Health.

The first 30 people to sign up for the month-long challenge received a free essentials meal box courtesy of Easter Greens, a shop with net-zero ambitions.

Meals included in the plan promote plant-based items such as whole grains, fruits, vegetables, nuts, and legumes, with meat and dairy in small quantities.

The EAT Lancet Commission found that this type of diet can reduce carbon emissions, while making the general population healthier.



We hope the meal plan will inspire students to think about how to make their diet more sustainable and healthier, and to improve their cooking skills in the process

Julian Mashingaidze
Undergraduate student and President of the University’s Student Society on Food Security.

Debate puts lab-grown meat in spotlight



Alice Ritchie, MSc in Global Food Security and Nutrition student at the Academy, took part in a Green Alliance panel discussion on lab-grown meat.

The event took place as animal agriculture comes under increasing scrutiny amid declining biodiversity, climate change, water availability and the spread of infectious disease.

Panellists included Dr Alexandra Sexton, research fellow at the University of Sheffield, James Arbib, cofounder of RethinkX, and Ms Ritchie, who is also Climate Change Lead for the Country Land and Business Association (CLA), representing the perspective of farmers and land managers across England and Wales.

The discussion was chaired by Anna Turns, an environmental journalist.

Dr Sexton began by talking through the consumer concerns around new food technologies and lab-grown meat.

Mr Arbib talked through the possibilities posed by a growing market for lab-grown meat as costs come down and it becomes a cheaper, healthier and potentially even tastier option.

Ms Ritchie countered with the important role livestock production plays in the UK, particularly in supporting valued landscapes and helping promote biodiversity and carbon storage.

Despite differing views across the panel, all agreed that the status quo for food production globally is unsustainable, and options such as lab-grown meat could be a part of a suite of low carbon options for food.



It seems clear that animal agriculture is on the cusp of a transformation towards higher environmental standards and better animal welfare, but it's crucially important that farmers and land managers are supported throughout this transition

Alice Ritchie
MSc in Global Food Security and Nutrition

Welcome to our newest PhD researchers

Deksha Kapoor

A Data-Driven, Community-Based Approach to Evaluating and Improving Scottish Food Environments

Carys Redman-White

Antimicrobial use and resistance: modelling the animal-human interface

Alexandra Sadler

Investigating the distribution and exchange of agroecological products in South India

Jacqueline Tereza Da Silva

Comparing the economic, environmental and social impacts of baseline diets with less meat-heavy diets

John Mutua

Estimating livestock diets in support of improved estimation of greenhouse gas emissions for the livestock sector – a case study in East Africa

Poppy Frater

Is mob grazing beneficial for soil health and the environment?

Kim Hay

An investigation into genetic improvement of lamb survival and mothering behaviour in extensive sheep flock

Joseph Hills

Precision livestock technologies to improve welfare: needs and constraints of farmers and veterinary surgeons

Emma Mutch

Application of random regression and genomic models to study growth curves in UK beef cattle and sheep and estimate Genotype x Environment interaction

Kirsty Paterson

Do UK grasslands have the ability to sequester more carbon? Assessment of stability and resilience to changing climate and management

New Staff



Dr Lilia Bliznashka – Research Fellow Dr Bliznashka works at the nexus of agriculture, nutrition and health. Her research focuses on assessing the effectiveness of multi-input, nutrition-sensitive and nutrition-specific interventions, and the mechanisms through which they work to improve maternal and child health and nutrition on a global basis.



Dr Smaragda Tsairidou – Teaching Fellow

Dr Tsairidou is a Doctor of Veterinary Medicine with international expertise in livestock health management and animal breeding, with a degree and PhD from the University of Edinburgh.

She is enthusiastic about teaching and has won the Edinburgh Teaching Award, and is a Fellow of the Higher Education Academy, UK.



Juliana Gonzalez – Administrative Assistant

Ms Gonzalez joined the team as an administrative assistant from her previous role on the Easter Bush campus as a client care assistant for the Dick Vet Hospital for Small Animals. Her strengths include team collaboration, problem solving and excellent organisational skills, and her role includes social media as well as website updates.



Dr Joao Gabriel Oliveira Marques – Research Fellow

Dr Marques was the first researcher to undertake the entirety of his PhD with the Global Academy, and has now joined our staff.

Dr Marques is an agricultural modeller, working on antimicrobial resistance (AMR) modelling in beef systems trying to address the trade-offs of antimicrobial usage from an economic and environmental perspective.

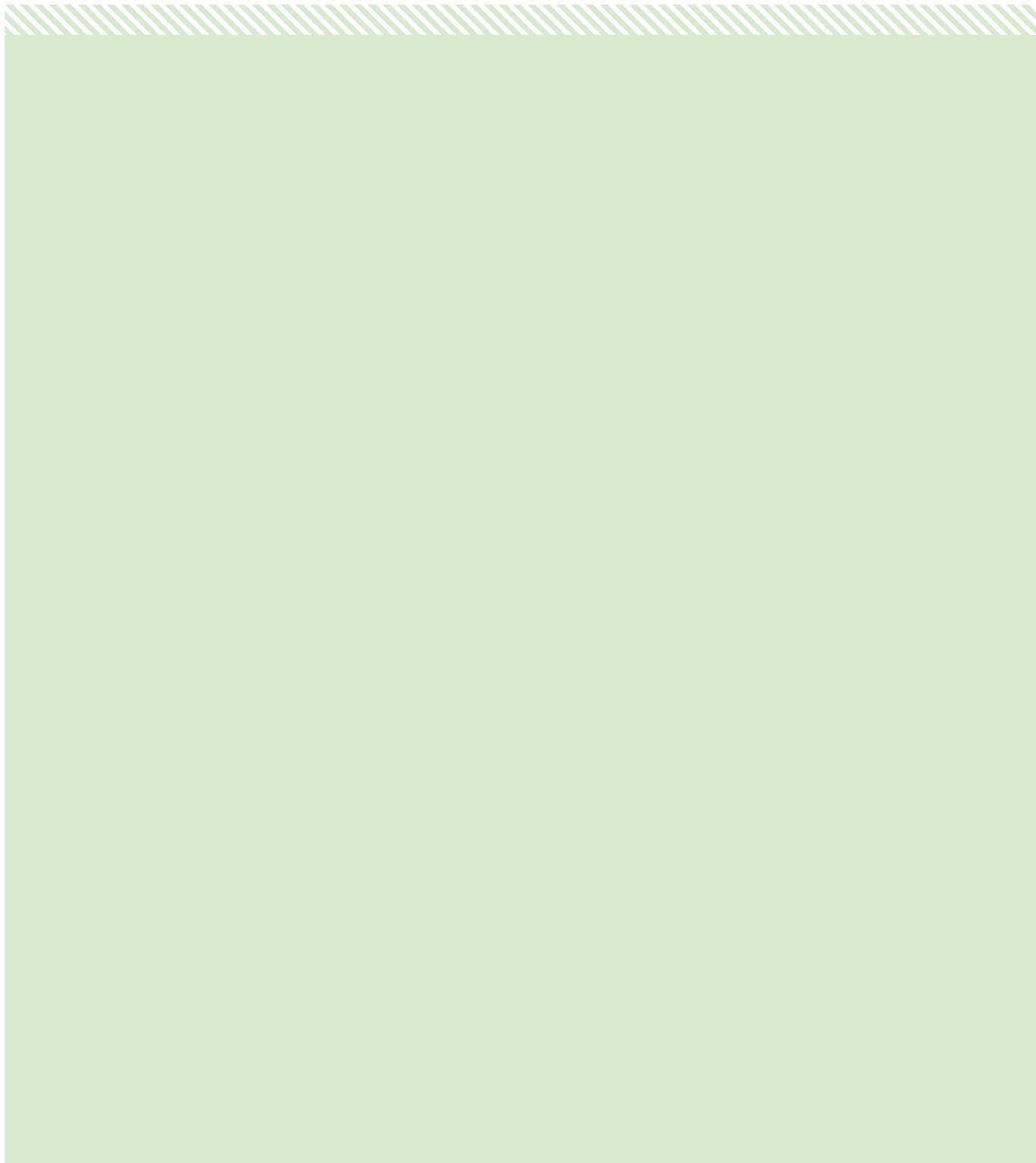
Dr Marques said: "I knew that an interdisciplinary formation and a collaborative environment were crucial to support my ideas and research. As such, the University of Edinburgh provided an exceptional setting that combined all these characteristics."

Congratulations to Dr Fiona Borthwick



The Global Academy's Programme Director for MSc in Global Food Security and Nutrition, Dr Fiona Borthwick, was made a Senior Fellow of the Higher Education Academy.

An experienced teacher, Dr Borthwick was Programme Director of the campus-based MSc in Food Security at SRUC/University of Edinburgh for five years and chaired the Professional Certificate in Strategic Food Security Planning for the International Centre for Parliamentary Studies in 2014 and 2017.



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