

<b>Institution:</b> University of East Anglia (UEA)
<b>Unit of Assessment:</b> 22 (Anthropology and Development Studies)
<p><b>1. Unit context and structure, research and impact strategy</b></p> <p>The School of International Development (DEV) was established by the UEA in 1967 to influence policy and practice for combatting global problems of underdevelopment and poverty, especially those caused by land degradation and environmental change. Our journey since then saw us being awarded, in 2009, the Queen's Anniversary Prize, the most prestigious university award in the UK, for decades of ground-breaking research and profound impact on those problems. REF2014 deemed our research environment to be 75% world-leading and 25% internationally excellent. During the current REF assessment period, we have carefully maintained and strengthened our research and impact culture through sympathetic management and investment in groups and individuals. This has paid off in the following ways.</p> <p><i>I. We maintained and took advantage of our distinct research identity</i></p> <p>DEV's academics work in interdisciplinary research clusters, of which gender, water security, global environmental justice, climate change and behavioural development economics are the biggest. Our distinctive research identity follows from balanced strengths in a range of disciplines: natural, environmental, social, political and economics sciences. Today's global development challenges require understanding how environmental, social, political and economic factors work together to affect people's livelihoods, which is why our balanced strengths across the corresponding disciplines is so important for fully grasping these issues.</p> <p>For example, a project led by Schroeder (ESRC, £791k, 2018-2021) studies indigenous-international interactions for sustainable development, using political science, geography and anthropology. Another example is the fruitful collaboration between social and environmental sciences in the qualitative comparative analysis, directed by Rao, of women's agency in 25 climate change hotspots across Asia and Africa (see Rao's paper in <i>Nature Climate Change</i> in this submission). 56% of our peer-reviewed publications involve interdisciplinary collaborations (Section 4), and our recruitment strategy (Section 2) ensures that within-DEV partnerships continue to span across a large range of disciplines.</p> <p><i>II. We increased concentration in clusters of research excellence</i></p> <p>Staff on an ATR (academic teaching and research) contract typically belong to 1-3 thematic clusters. Solitary research is not discouraged – see in this submission the prestigious and well-received monographs by Jenkins, Hoechner, Martin, Pattenden and Pickles – but in practice most work is collaborative. Our strategic objectives articulated for REF2014 included that we would increase concentration in the following four clusters of research excellence, in response to the demands of an increasingly competitive funding environment.</p> <p>The <b>Global Environmental Justice research group</b> now consists of 15 academics, 17 PhD students from DEV, and six affiliate members from other institutions, and is conducting 30 live externally-funded research projects. Its engagement with communities, activists, researchers and policy makers is extensive. In the last five years, this team has secured over £5 million in research funding, hosted numerous workshops and a major international conference, produced an Environmental Justice MOOC attended by more than 10,000 learners to date, published more than a 100 journal articles and books and contributed two impact case studies for REF2021 (one for UoA22 and one for UoA25). From a fledgling group in REF2014, it is now responsible for about 40% of our external income.</p> <p>The UEA <b>Water Security Research Centre</b> consists of some 30 water scientists at UEA (10 from DEV), and has key expertise in water resources management, transboundary basins, irrigation, and water politics and governance. It draws upon expertise from across UEA: DEV, the School of</p>

Environmental Sciences, the Tyndall Centre for Climate Change Research, the Climatic Research Unit, and the Schools of Medicine and Health Sciences. It was founded in 2011 and has firmly established itself as a leader in its field during the assessment period, as demonstrated by editorial (five water journals), steering and board (e.g. WHO) positions.

DEV's **Behavioural Development Economics** research group has increased its membership from six ATR members of staff to 10, which to the best of our knowledge constitutes the largest concentration of behavioural development economists in Europe. This resulted from three development economists from the School of Economics joining it (submitted to UoA16), and from DEV's recruitment of an early-career researcher (Santana). Whereas in the past we struggled to attract PhD students to this area of study, at the time of writing six PhD students are members of the group. The group continues to be housed in DEV and has invested in its collective identity through organising an annual PhD training workshop, a major conference (the 2017 Symposium for Economic Experiments in Developing Countries) and establishing a permanent field lab in eastern Uganda.

DEV's **Gender and Development** research group has stayed the same in size (nine ATR members of staff) but has substantially increased its external funding, from an already high base. This was an indirect result of the Gender Equality Act, passed by parliament on March 13, 2014, which made it a requirement for DFID to 'promote gender equality in the provision by the Government of development assistance and humanitarian assistance to countries outside the United Kingdom'. The resulting strong demand for research evidence and policy guidance in the field of gender and development has stood the group in good stead, which focused on training programmes and webinars, while maintaining its track record in terms of research council funding and research publications.

While we increased concentration in these four clusters of research excellence, some 30% of ATR staff work outside them. Their research is on leading issues in development studies related to impact evaluation, education, health, youth, ageing, migration, aid, trade, poverty, inequality and relative deprivation. We value this diversity, both for its own sake and for the flexibility it entails to alter our research foci in future.

### *III. We substantially increased our already high levels of external income*

The UEA value of DEV awards active during the REF period rose from £7.2M for REF2014 to £23.2M for REF2021. We outline below and show in detail in Section 3 how this tripling of external research income was achieved. This income is important for the fieldwork, engagement, and analysis and writing it allows faculty to do (Section 2). For example, because of how we allocate workload, the time it buys out (after fieldwork and other expenditures have been deducted) is on top of university-funded time: on average per 1.0 FTE, 1.6 months added to 4.8 months, so 6.4 months per year available for the activities mentioned.

We achieved this in spite of the increased competition for research funding, and in spite of a historically high number of early career researchers among our ATR staff, following a deliberate strategy. First, through workshops, peer review of grant applications, seed funding and relief from teaching (Section 2), staff were empowered and encouraged to take the risks involved in applying for grants. This was particularly important for early career researchers, who achieved a number of notable successes, such as Macdonald's £104k ESRC grant. Second, our investment in interdisciplinary clusters of research excellence paid off. The range of disciplines found within DEV meant we were able to secure funding from six different research councils. They also enabled partnerships between junior and senior members of staff: about half of our externally funded projects are of this kind. For junior staff members this creates an important track record that facilitates being successful in future applications. Third, we took advantage of the availability of GCRF money, which plays to our strengths.

#### IV. *We developed impact from research adopting a systematic approach*

Academics in DEV engage through their research with communities, policy makers, civil society, practitioners and activists (Section 4). For REF2014 we used an ad hoc approach for letting this engagement result in impact from research, but since 2014 we have become much more systematic. One of our professors, Lloyd-Sherlock, adopted the role of impact champion throughout the assessment period, and was given 1.5 months per year for this, so about a full year FTE over the entire period. He conducted a baseline survey for impact at the start of the assessment period in individual meetings with all members of staff, and staff were encouraged to lead on impact projects if their research was deemed to be likely to give rise to important impact. We supported the development of 13 impact projects during the period, which benefited from internal funding (on average £54k per impact project), teaching remission (91 months in total), intensive mentoring by the impact champion, and plentiful advice and practical support from colleagues in DEV. Our impact case studies and Section 4 summarise the resulting impact.

#### **Strategy for 2021-2026 and new developments**

In the following years, we intend to **maximise the impact from our research** through inducting new staff into our impact culture; close mentoring, advice and support from a senior member of staff; generous financial support and time remission for impact and engagement activities; and encouraging junior-senior partnerships in impact case studies – a more deliberate version of our strategy followed in recent years. A new element is that we intend to **incorporate high-quality impact evaluation** in the development of impact projects. DEV has key expertise in this area (Camfield, Duvendack, D'Exelle) which we intend to use to improve our knowledge and understanding of the impact our research has.

For promoting research excellence while **Covid-19 and its ramifications** are still with us, we will continue to equitably support our researchers using the approach described in the following sections, making full allowance for the extra home and university demands that many of our staff currently face.

We will continue to **build up clusters of research excellence**, making the most of complementary strengths in UEA and the rest of the Norwich Research Park (NRP):

- We intend to **establish the Sikor Centre for Global Environmental Justice Research**. The GEJ group, as described above, has seen remarkable growth during the REF period, so far without core funding. The time has now come to establish the group as an externally funded research centre. The ambition is to build a global science-society network of excellence to produce robust new evidence, theory and tools that will enable policymakers and practitioners to integrate environmental justice frameworks into environmental decision making, inspired by the work of DEV Emeritus Professor of Environment and Development, Thomas Sikor. At the time of writing, our ESRC centre application has been shortlisted.
- We intend to **establish the Norwich Institute for Sustainable Development (NISD)**, with the John Innes Centre (JIC), a world-class plant sciences research institute located on the NRP, just a stone's throw away from DEV. NISD work will be on the development and adoption of new crop varieties in the Global South that are nutritious, high-yielding, resistant against plant pests and diseases and resilient in the face of climate change. This is a new avenue for DEV, with huge growth potential, which combines the development studies and plant sciences research that the NRP excels in. The NISD will be launched in early 2021.
- We intend to forge **new links with the UEA's School of Economics (ECO)**. The Behavioural Development Economics research group will further strengthen its connections with the behavioural economists in ECO and the UEA's Centre for Behavioural and Experimental Social Science (CBESS) through the secondment of one of its DEV

professors (D'Exelle) to ECO, at first for one day per week. Research themes we intend to explore together are gender and identity, intra-household bargaining and plant-based dietary choices.

- We intend to **maintain and develop gender as a strong cross-cutting theme**. Gender has always been an important research theme for DEV, uniting its anthropologists, economists, and political and environmental scientists. As we develop in the areas indicated above, we will simultaneously strengthen our gender research. For example, the DEV director of the NISD, Rao, is a specialist in gender, agriculture and rural livelihoods; she will ensure that the DEV-JIC joint projects fully integrate a concern for gender equality in the adoption of new crop varieties. The continued development of gender as a strong cross-cutting theme means we will prioritise gender expertise in new recruitments the coming five years.

These new alliances will bring new funding opportunities: a larger range of funders (public, private, charitable) and funding calls to engage with. It will also require us to be more strategic and directive in how we engage with funding opportunities. For this purpose, **we will institute a funding executive committee** consisting of the Head of School, the Research Directors and senior academics in key areas, to identify and encourage themes and teams for funding applications.

### Research openness and integrity

DEV rigorously implements UEA's policies and guidelines that ensure that all research and impact activities undertaken by staff and students adhere to the highest professional standards of research integrity (REF5a): on good practice, ethics, allegations of misconduct, open access, and data management, among others. Overall responsibility for maintaining these standards rests with the Head of School, while the two Research Directors and the International UEA Centre Manager oversee their implementation. All research and consultancy projects that involve primary data collection or engagement with stakeholders require a prior application for ethical approval. Applications comprehensively cover aspects of respecting participants' autonomy, maximising benefit from the proposed activities, minimising harm, being fair and behaving with integrity. The DEV Ethics Committee scrutinises all applications and routinely asks for often substantial revisions before they are approved. During the return period, it approved 112 applications per year.

The Research Directors encourage making anonymised datasets publicly available, including where appropriate the sharing of files to facilitate replication of quantitative findings. However, important work in the School during the return period highlights that a wider definition of replication than a simple rerunning of computer code for a given data set is called for: issues such as p-hacking, publication bias, data quality, to name but a few affect the reliability of key findings in development studies. Section 4 summarises our work on understanding these issues and why replication meets with such resistance.

## 2. People

### Staffing strategy and staff development

The School has continued to grow since the start of the REF period, from 36 research staff (32.2 FTE) to 39 (36.7 FTE). Its first recruitment objective over the REF period (and beyond) has been to attract world class researchers to the selected groups in which the School aims to build or sustain critical mass as a world leader, supported by strengths in the wider UEA and Norwich Research Park (NRP) environment. New appointments here are:

- Global Environmental Justice (Armijos Burneo, Carmenta, Edwards, Forster, Rodriguez Fernandez, Tebboth), with the School cluster linking to the UEA's School of Environmental Sciences (ENV) and Tyndall Climate Change centre staff groupings.



- Behavioural and Experimental Development Economics (Santana), which is part of a wider UEA network of behavioural social scientists (the Centre for Behavioural and Experimental Social Science).

The School's second recruitment objective is through a balanced recruitment of outstanding individual researchers to enhance the strengths of each of its main disciplinary strands, since it is the combination of natural, social, political and economics sciences that defines its distinct research identity. The combined expertise from a range of sciences provides outstanding opportunities for inter and transdisciplinary research, which we boost through our recruitment strategy. The new appointments along disciplinary lines are two geographers (Edwards, Ramakrishnan), four natural and environmental scientists (Armijos Burneo, Forster, Rodriguez Fernandez, Tebboth), three anthropologists (Abranches, Hoechner, Pickles), three political scientists (Jenkins, Macdonald, Theuerkauf), two sociologists (Muttarak, Stavinoha) and one development economist (Santana).

#### *Commitment to equality, inclusion and diversity*

DEV's workforce is diverse, as is evident from the 38 research staff whose outputs are submitted to UoA22. These 38 are born in 15 different countries, eight of which (so more than half) are low and middle income countries. 21 are born outside the UK, on each of the world's continents apart from Antarctica: continental Europe (10), Africa (2), East (2) and South (3) Asia, Latin America (1), North America (1), and Oceania (2). Exactly half (19) are female. Gender parity resulted from recent recruitment: the majority of our early career researchers are female (9f/2m).

Our diversity agenda includes all protected characteristics and forms of intersectionality. The DEV Diversity Committee (DDC)'s two co-chairs and 15 members represent diversity in the School, notably in terms of gender, race (ethnicity, nationality, colour), sexuality, disability and age. A diversity of grades/career stages are included in the DDC, as are support staff.

The DDC is an influential body in the School. It occupies a central position on the promotions and executive committees to ensure that the School remains a welcoming, supportive and fulfilling place to work. It meets on a six-weekly basis to steer and review progress with enhancing inclusion, and monitoring and addressing inequalities among both staff and students across gender and other identity groups. DDC members:

- Review workload model patterns and propose adjustments to progress equality, including strongly pushing a pro-active promotions process through the annual comprehensive review of CVs and additional support measures for maternity and paternity care leave (e.g. establish mentors who have taken such leave available for support and advice to all staff taking leave);
- Collect and monitor data on patterns of staff recruitment, induction and appraisal, probation and promotion in terms of all protected characteristics;
- Consult staff every 18 months via a survey and organise group discussions about their views on fairness and inclusion around recruitment, probation, promotion, mentoring, appraisal, and support with research and impact;
- Enhance equality in staff recruitment, e.g. through ensuring that essential criteria within the Further Particulars are kept to a minimum, requiring that all shortlisting and interview panels are gender-balanced, implementing a mandatory unconscious bias training and bias interrupters for recruitment chairs and panels.

Beyond our formal processes several DEV staff are leading 'Decolonising the Curriculum' initiatives in UEA, and have been active in our University of Sanctuary activities. DEV also hosts the University's Sanctuary Officer.

*Equitable and inclusive staff development*

DEV's research and impact culture supports scholars to do world-class research on leading issues in development studies that can help, take to task, or inspire policy makers, practitioners and activists. A dense internal network across the whole of DEV of strong, reciprocal bonds between staff facilitates the reading of each other's papers and grant applications, advice, collaboration and access to external networks of research users and partners. The School has continued to prioritise the fostering of such a collegial environment which enables staff to communicate across disciplines and stimulates innovative research and impact. A policy of comprehensive research and impact support, together with the guidance and advice that is generously shared in DEV, enables all staff and especially early career researchers to forge a research and impact career trajectory with the help of a range of academic and other colleagues.

The School takes pride in its commitment and measures to promote equality of opportunity and adopts a pro-rata basis for research performance criteria and entitlement to study leave for part-time staff. It recognises that an academic career is highly demanding and fully supports staff moving from full-time to part-time contracts to facilitate effective work and family life balances related to child care, child ill-health, or a partner's move abroad. It has robust frameworks and procedures to support staff research and impact plans, activities, outputs and dissemination, and so support career development. Whereas the pandemic has been challenging, these have helped in recent times to protect core research and impact activities not just of some but of all DEV faculty.

- There are **two research directors**, who are approachable, encouraging and provide tailored support: one for impact and funding and one for research outputs.
- School staff access dedicated research support from **International Development UEA** (see Section 3), for research proposal writing and review, budgeting and research project logistics and administration. Senior staff include early-career colleagues in grant applications, share examples of successful applications and review draft proposals. Positively, Co-Is have been approximately 50% female, and women PIs are more likely to experience grant success overall (44%/40%) during the assessment period. Women's awards' mean values overtook men's in recent years.
- The School's **workload model** automatically allocates 40% of staff's university-funded time to research and impact. External funding is then entered into this workload model to 'buy out' additional time, which ensures that success with funding bids translates in its entirety into *extra* time for research and impact activity.
- Many staff are able to pursue all or most of their **teaching in one semester**, freeing up time for research, engagement and impact activities in the other semester and the summer period.
- **Entitlement to a Study Leave** for all staff for a six month period every seventh semester, so six months per 3.5 years. After identifying a small deficit in uptake by women staff early in the return period, we now flag entitlement on the Teaching Allocation tables, and use appraisal to encourage women to take their entitlement. The research directors help staff to devise clear and achievable study leave plans for impact, research or grant applications. Study leave is often taken up for the sake of generating or evaluating impact from research, which the School fully supports and encourages. For example, Verschoor used his study leave to establish connections with insurance companies and farmers' organisations in Uganda. This ensured that UEA research findings on smallholders' investment decisions were used for developing new insurance products.
- Support for research through **maternity and paternity leave** is discussed prior to uptake with the Head of School and supported during leave by 'return to work days', and after leave by phased re-entry, and timetable adjustment to allow for nursery hours. We have a 100% return rate during the assessment period for staff following maternity leave, and a high uptake of paternity leave. Flexible working supports women researcher's careers: e.g. reduced FTE to allow a period of annual absence, or temporary reduction in FTE to allow for childcare and phased return to work.

- Individuals receive annual review, feedback and encouragement on their research and impact achievements and plans through the **personal research plan** that they submit once a year and the annual **appraisal** with a senior member of staff.
- Transparent **promotions procedures and criteria** have been developed for research and impact activity attainment, helping guide staff in their plans for career development. The promotion thresholds relate to a variety of criteria such as quality of publications, quantity of publications, research funding, research impact, engagement, enterprise, PhD students; and evidence of research leadership, management and administration.
- The School provides financial resources for research and impact activity: an **Academic Allowance** (£1000 per year) for each individual; and a **Research Leave Reserve**, which is an entitlement that accumulates in proportion to the external funding staff bring in. We also provide financial support to research groups, which in practice varies from £1000 - £5000 per group per year, depending on group plans.
- The School encourages staff to apply for various **UEA-allocated pots of money for engagement and impact activities**, especially the HEFCE Impact Fund, the SSF Innovation Fund, the PVC Impact Fund, and UEA GCRF Rapid Response funds. This helped to ensure that 13 DEV staff who led on impact projects on average benefited from £54k internal financial support during the REF period, or £0.7M between them.
- The School strongly supports and offers flexibility for staff to take up **secondment opportunities** with high profile international development agencies, e.g. Muttarak as senior research scholar and deputy director of the World Population Program, International Institute for Applied Systems Analysis based in Austria (full year, 2020), McGuire as a seed system analyst at FAO in Rome (2015-2017), and Serneels working one day per week as adviser on economic development strategy for DFID (now the FCDO) in London (since 2017). These secondments help build the School's profile and influence beyond academia, and inform its staff's research and impact agenda. For example, Lloyd-Sherlock's secondment to the World Health Organisation during the previous REF period (2010-11) gave rise to one of our current impact case studies.

Early career researchers (ECRs) benefit equitably from the measures of support listed above, as well as from the following *additional* ones:

- The workload model gives new lecturers a **40% remission from teaching loads** in their first year, 30% in year two, 20% in year three and 10% in year four to provide space to forge a research and impact trajectory at an early stage.
- The School has a **mentoring system**, whereby new staff are linked with a more experienced and trusted colleague as a mentor to whom they can go for advice, guidance and feedback, on research plans, impact and engagement plans, draft proposals and papers. Mentors ensure that early career staff are introduced to research groups to foster belonging and intellectual support. Gender-aware mentoring during confirmation periods, and beyond, supports women researchers.
- Clear **confirmation of post criteria** relating to research attainment have been developed by the School for early career staff on probation, to ensure transparency and confidence in career development procedures.
- We organise regular **grant bidding workshops** for ECRs. These are either generic or focus on a particular funder (British Academy, ESRC, etc.).
- In addition to the Academic Allowance and Research Leave Reserve, the School has provided small grants to early career researchers on a competitive basis to **seed fund** pieces of research and fieldwork.

Evidence of the School's success in mentoring and developing the careers of early career researchers is a retention rate among them during the assessment period of 100%.

At any point in time, about eight **research associates** are employed by DEV, on grants held by DEV PIs. We apply UEA's Code of Practice (REF5a) to ensure that our research associates

benefit from the same high-quality support and career progression opportunities as our permanent staff and fully share in our research and impact culture. Their PI acts as their line manager, sets objectives, performs appraisals and provides ongoing supervision and support. Women RAs frequently work flexibly, agreed with their PI (the same opportunity is open to men RAs but less frequently taken up). A dedicated **research staff coordinator** promotes access to networks (e.g. DEV's research groups) and awareness of support. A mentor different to the PI provides advice and guidance on career development. The School Manager and School coordinators liaise with HR on behalf of research associates, and ensure that they receive the training, mentoring, appraisals, access to facilities and annual leave they are entitled to. International Development UEA provides support to research associates with submitting funding applications and helps with finance and international travel needs. DEV aims to provide better continuity for women RAs through extended contracts and opportunities for career progression and recently committed to 'bridging' funding gaps between contracts where possible.

### Research students

Our PhD students are firmly embedded in our research environment, enriching it as much as being enriched by it. The current cohort of 52 originate from 18 countries, 58% outside Europe. The strong diversity of DEV's PhD student body has long been a point of pride for the School. Currently, 48% of our students are from BAME backgrounds and 43% from White backgrounds (9% have not recorded their ethnicity); and 7% declared a disability. We currently have 69% female and 31% male students. Over the return period, a PhD student's median age was 32.5, with ages ranging from 23 to 70. Many of our students are parents, and the School fully supports those with childcare commitments, e.g. in providing advance notice of compulsory training, and having flexibility in teaching and supervisory sessions. During the pandemic, we have lobbied for them to maintain access to their workspaces and receive continuation grants, and we have used the International Development UEA reserve to establish a fund for research adaptation.

Degrees awarded	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Professional doctorates	-	-	-	-	-	-	-	-
PhDs awarded	14	8	11	9	15	7	8	72

Each research student has two designated supervisors. Much of our PhD students' research is interdisciplinary, with over two thirds being jointly supervised by faculty from different disciplinary backgrounds. The School provides high-quality doctoral training and has a strict formal process for progression and confirmation. The training programme speedily identifies individual students' needs, and helps them to fulfil them. Our Research Skills Workshops form a two-semester long research training module that is intensive, flexible and advanced. Convenors coordinate their efforts with individual students' supervisors to offer focused and bespoke training. The Social Science Faculty runs approximately 80 advanced training workshops per year. These are designed to satisfy the ESRC's RDTS learning outcomes. The 'UEA/SeNSS Online Training Series for PGRs' offers a further 20 training sessions per year, in a live-taught online format. As a function of UEA's membership of the South East Network for Social Sciences (SeNSS) DTP consortium, students can also access training at Essex, Kent, Surrey, Sussex, Reading, Goldsmiths, Royal Holloway, Roehampton, and City University. Students have a dedicated budget to attend outhouse external specialised training and conferences.

We also run four specialist annual training workshops for PhD students: full-day events held at UEA and open to PhD students from other universities: Impact Evaluation, Development Studies Epistemologies, Research Ethics in Development Research, and Lab-in-the-Field Experiments. These are widely praised by participants for training that cannot be readily found elsewhere, and have become a reference point in their respective fields. The workshop on Lab-in-the-Field



Experiments, offered since 2013, is widely considered to be *the* training event for this research method, and brings together PhD students and experts from across Europe and beyond.

We organise an annual International PhD students' conference, together with two continental European universities. We hosted the SeNSS conference in 2019 on Social Science, Social Value and Social Justice, with 100 students presenting from 10 institutions. Both the training workshops and the conferences attract excellent students from across Europe's universities and are hugely over-subscribed.

Students are integrated into externally funded work when appropriate, actively participate in DEV-organised conferences, and frequently publish with Faculty. Three members of Faculty are ex-DEV PhD students. There is a tradition of continued engagement between faculty and their graduated PhD students, which at the time of writing include collaborations with DEV graduates at the International Potato Centre (CIP), UN Women and the Stockholm Environment Institute.

### 3. Income, infrastructure and facilities

Over the REF period, the School has been engaged in research, consultancy, policy advice and capacity building in 46 countries, working with an estimated 191 user organisations and partnership institutions. There were 264 "live" projects, about two-thirds of which classified as research and the remainder were impactful consultancies.

We organise all of that activity through International Development UEA. Presented to outsiders as DEV, so by the same name as the School, this university division is presided over by a Centre Manager and employs a further six support staff organised into project development, finance and training teams. These manage the development and running of short courses, oversee our work with research associates and external consultants, support grant application and management, handle travel arrangements, and contribute to project development work (source opportunities, bring teams together, and so on).

The School is well placed to attract research funding due to newly emerging trends in the funding landscape that prioritise multidisciplinary research often in conflict-affected areas with the aim to address global challenges enshrined in the Sustainable Development Goals. However, an increasing number of players have entered the research funding arena, e.g. private sector consultancy and accounting firms alongside research think-tanks, NGOs and universities across the globe. At the same time, pressure on funding sources and volumes has intensified, which required the School to position itself more carefully in this increasingly competitive environment, e.g. through strategic funding alliances with other Schools within UEA and external organisations. Furthermore, the School has hired a large number of early career researchers over the last few years who require additional support and mentoring from senior faculty members before being able to register large-scale funding successes.

Despite these challenges, we managed to substantially increase during the REF period our already high levels of funding. Measured as the UEA value of DEV awards active during the period, external research income (£21.1M) plus income from consultancy and training (£2.0M) for the School totalled £23.2M, or £3.3M per annum. This is more than three times the external income for REF2014, which on the same measure equalled £7.2M. The figure remains high if we exclude DEV members of staff submitted to other REF units of assessment; in that case it becomes £19.9M.

New awards for the School during the REF period are worth £18.9M to UEA, with the bulk of them recent: this explains why the income figures reported in the previous paragraph are higher than the annual spending recorded in REF4b. In other words, the School is on an upwards trajectory in terms of its success in securing external funding. How have we achieved this?

The first thing to note is that most of our external income derives from large and medium-sized grants. Two of the 264 grants during the REF period are for over £1M (all figures in Section 3 are UEA value only) and represent 11% of our external income. 19.3% of grants were for over £100K, which add up to more than three quarters of total external income. The 213 smaller grants are still very much worth having for the work they enable us to do, and the way they act as a springboard for early career researchers, but they cannot be relied on for sustaining financial viability. For

strategic purposes it is also necessary to consider that *all* of our large and medium-sized grants involved collaborations with other institutions. In a fairly typical example, DEV's 2019-21 £284K ESRC grant (Rao PI) to study coastal transformations and fisher wellbeing in India and Europe involves 16 Co-Is from three research institutes in India (Indian Institute of Technology, Bombay; French Institute of Pondicherry; Madras Institute of Development Studies), one in Norway (University of Tromsø) and one in Slovenia (Research Centre SAZU). Strategic alliances have been the lifeblood of DEV in the current REF period, and are at the heart of our research funding strategy (below).

Through this REF period, 70% of funding originated in the UK, of which 64% came from Research Councils, with the remainder being more or less equally split between (a) UK government (mainly DFID), (b) grant-making organisations such as British Academy and Leverhulme, and (c) charitable foundations and charities such as Save the Children UK and HelpAge International. The characteristics of these awards demonstrate the claims made above about the nature of our research environment:

- *Breadth of interdisciplinarity.* Awards were made by six different councils (AHRC, BBSRC, EPSRC, ESRC, MRC, and NERC), in 58 separate awards.
- *Depth of interdisciplinarity.* In 63% of the awards, teams are interdisciplinary, such as social anthropologists Rao and Abranches working with marine biologist White to study physical, ecological and social transformations of coasts in the ESRC project just mentioned.
- *Ample space for individuals specialising in a well-defined theme.* During this period 31 grants awarded were for solitary research, such as the £114K British Academy mid-career fellowship held by Jones for studying the influence of educated young women and men on local politics in Uganda.

In the return period, 30% of funding originated outside the UK, of which about 40% is EU and 60% non-EU funding. Non-EU funders include a wide range of organisations such as the African Development Bank, the Bill & Melinda Gates Foundation, the Ford Foundation, the International Committee for the Red Cross, several UN organisations, the Save the Children Fund and the Indian Institute of Technology. EU funders included the European Association of Development Research, the Swedish Research Council, the Danish Institute for International Studies and the German Agency for International Cooperation.

Some EU funding will continue into the next REF period. For example, DEV's Martin was successful in his bid under the JPI Climate 2019 transnational Call entitled 'Enabling Societal Transformation in the Face of Climate Change'. The Call was part of the SOLSTICE project, a joint transnational collaboration between ten EU countries, which invited researchers and other experts within the Social Sciences and Humanities to submit proposals that address the societal impact of climate change. Only seven projects were selected under this Call, and only five UK organisations were part of them, UEA being one. Martin's 'Just-Scapes' proposal was entitled 'Environmental justice analysis to advance rural landscape transformations in the face of climate change' and has secured €794,000 in funding over three years (c€375,000 to UEA). While the UK government has agreed access to some EU funding in the post-Brexit era, we anticipate that our reliance on EU funding will reduce during the next REF period, which we will seek to make up with funding from other sources – see below for our funding strategy.

Externally funded research is very important for us. Of the 81 outputs selected for REF submission, 62 originate in funded research of which 23 were funded by user organisations. An analysis based on internal reviews revealed no significant difference between the average quality of the latter and that of those originating in blue-chip (mainly research council) funding. To take some examples from this submission, D'Exelle and Verschoor's paper in the *Economic Journal*, Lloyd-Sherlock's paper in the *International Journal of Epidemiology*, and Guan's paper in *Nature* originate in ESRC-funded research, whereas Anderson's paper in *World Development*, Duvendack's paper in *Journal of Economic Surveys*, and Rao's paper in *Nature Climate Change* are based on research funded by DFID. Funded research, including that by user organisations, is important for us, but user funding does not preclude an independent academic stance that our peers recognise yields top notch research.

Most of our engagement, impact and research relies on externally funded research. For DEV to continue to thrive in an increasingly competitive funding environment, we have devised the following strategy for 2021-26.

- *Incorporate ECRs into funding bids* as our default position. In the current REF period 48% of our externally funded projects involved partnerships between at least one ECR and at least one more senior researcher. We aim to increase this proportion to 60-70% by promoting a standard model of within-DEV partnerships that include ECRs whenever that can reasonably be achieved. This will help ECRs to build up a track record of funding that increases their chances of funding success in future, and so is good for the long-term financial viability of DEV.
- *Maintain our norm of applying for funding frequently.* We will continue to instil this norm through mentoring, appraisals, promotions criteria, formal and informal peer review of applications, workshops, poster presentations of ideas for grant applications, sharing of examples of failed and successful applications, and so forth. All these things are already very noticeable elements of our research culture, and it is vital that they are sustained.
- *Diversify our funding portfolio.* Stronger and/or new alliances across UEA and the Norwich Research Park (NRP) (Section 1), with the John Innes Centre (JIC), the Sainsbury Laboratory (TSL) and the Schools of Economics, Environmental Sciences, and Business, through the Centre for Behavioural and Experimental Social Sciences, the Water Security Research Centre, the Tyndall Centre, and the Norwich Institute for Sustainable Development, and through joint appointments, will enable us to target new funders as well as existing funders more frequently. Examples are joint proposals with JIC/TSL to the BBSRC on the breeding and adoption of nutritious and resilient crops in developing countries (the first ones have gone out at the time of writing), and proposals on a comprehensive range of aspects of water and food security to large charitable foundations and to GCRF or its successor.
- *Be more directive in encouraging grant applications.* As shown above, for DEV's financial sustainability it is vital that we think big. We judged that imposing more direction on funding applications in future will be beneficial for the School and will therefore institute the funding exec outlined in Section 1 for collating ideas, building teams, and selecting ideas for support in the form of seed money and freeing up time for developing grant applications.

#### 4. Collaboration and contribution to the research base, economy and society

##### *Interdisciplinary and collaborative research*

Each of the thematic research clusters introduced in Section 1 brings together members of several disciplines, which is the primary way in which we encourage interdisciplinary research. Economists and anthropologists work together on issues of intra-household allocation, literacy and gender and economic growth; natural and political scientists on issues of climate change and development, and global environmental justice; among many other examples. Staff returned to UoA22 published 398 peer-reviewed journal articles during the return period; of these 222 (56%) were co-authored by members of multiple disciplines.

Faculty use the flexibility of the buy-out system and the generous study leave allowance (see Section 2) to develop strong international collaborations, with opportunities to undertake extended periods of research abroad. For example, for his BA fellowship Jones spent eight months in Uganda during 2018. In some instances, the School cross-subsidises these buy-outs by allowing lower overheads in recognition of their importance for effective research collaboration and impact.

78% of all peer-reviewed publications by staff returned to UoA22 were produced with academics at partnership institutions outside the UEA, 81% of which were outside the UK. This amounts to 350 peer-reviewed publications involving international collaboration during the return period, of which 151 were co-authored with academics from low and middle-income countries.

Such joint authorship is a manifestation of the elaborate network of external relationships of DEV, which comprise many longstanding links with universities, researchers, practitioners and alumni

worldwide, supported through funding partnerships and other academic collaborations. In the review period, we have worked with an estimated 191 organisations in 46 countries. 21 of the 36 staff returned to UoA22 held fellowships or visiting academic positions during this period at other universities or research organisations: examples are Gilberthorpe at the Sustainable Minerals Institute's Centre for Social Responsibility in Mining, Brisbane, Australia, Kebede at the Stanford Center for International Development, Stanford University, Lloyd-Sherlock at the Bronfenbrenner Center for Translational Research, Cornell University, Muttarak at the World Population Program, International Institute for Applied Systems Analysis, Austria, Schroeder at the Institute for Advanced Sustainability Studies in Potsdam, Germany, and Serneels at The World Bank, Development Economics Research Group.

We counted 47 roles of being long-term advisers or trustees among the staff returned to UoA22. Examples include Rao's membership of the High Level Panel of Experts to the Global Commission on Food Security, Muttarak's role of scientific advisor to the World Health Organization, Women on the Move Expert group meeting, Macdonald being advisor to the OECD reference group on 'States of Fragility', and Lloyd-Sherlock's serving on the Lancet Commission on COVID-19 as member of the Task Force on Humanitarian Relief, Social Protection and Vulnerable Groups.

These partnerships inform and shape the research we do: always rooted in development practice. An example of their importance for our research is the Water Security Research Centre being invited to join the Universities Partnership for Water Cooperation and Diplomacy, which unites 10 research institutions with world-leading expertise in water resources conflict prevention and resolution, and Zeitoun being invited to join the Council for British Research in the Levant. These partnerships were key to multi-year research projects on the river Yarmuk, an important transboundary river of the Jordan system over which multilateral cooperation has faltered over the years because of tensions between Israel and its Arab neighbours (funder Swiss Agency for Development & Cooperation, £139K, 2016-2017; £676K, 2019-2021, Zeitoun PI). Zeitoun's Oxford University Press book in this submission is a key output.

A second example of the importance of partnerships is the network of leading centres in behavioural development economics that our Behavioural and Experimental Development Economics Research Group (BEDERG) forms part of. Because we belong to this network of centres, in 2017 we organised the main annual conference in this field, the Symposium on Economic Experiments in Developing Countries (SEEDEC). The network has also facilitated the annual PhD lab-in-the-field training workshop that we have offered since 2013. It is co-organised with FAIR, at the University of Bergen, like BEDERG a centre of excellence with expertise in this specialised field. Each year we attract between 50 and 100 applications to attend a themed one day event that contains two lectures and one closing talk by leading experts, with eight selected PhD presentations sandwiched in between.

A third example of the importance of partnerships for our research is the UNESCO Chair Programme in Adult Literacy and Learning for Social Transformation, which is a partnership between DEV, the UEA's School of Education and university departments specialising in adult literacy and community learning at the Bahir Dar University, Ethiopia, the University of Malawi, the Kathmandu University School of Education, Nepal, the University of Santo Tomas, the Philippines, and the Ain Shams University, Egypt. The programme was established in May 2016 and aims to develop understanding about how adult learning – particularly for women and young adults – can help address inequalities in the poorest communities of the world.

#### *Partnerships crucial for research impact*

As well as for enriching the research environment, our partnerships are crucial for facilitating impact from research. Examples abound during the assessment period.

Our partnership with DFID (now FCDO) through the secondment of a member of staff for one day per week (Serneels) and several commissioned pieces of research influenced this government department's actions profoundly. Duvendack's DFID-commissioned systematic review of micro-finance impact led to a major shift in its funding priorities, since the review cast doubt on micro-finance effectiveness in terms of poverty reduction and female empowerment. Clist was asked by



DFID to study payment-by-results in overseas aid, which led to a substantial revision of the principles on which DFID bases its aid allocation.

Lloyd-Sherlock's secondment to the WHO inspired them to recognise the long-term care (LTC) for older people as a major challenge in low and middle-income countries, and develop a global strategy for tackling it. This in turn inspired several national governments (including Vietnam and Argentina) to revise their LTC policies and provisions accordingly. For the impact on care homes in Argentina, Lloyd-Sherlock won the 2020 Healthy Longevity Global Competition

Martin's partnership with the International Institute for Environment and Development was crucial both for translating DEV research findings into technical policy advice for meeting the equitable governance targets for protected areas under the UN Convention on Biological Diversity, and for ensuring the advice was implemented at national and site levels.

Zeitoun is a long-term research collaborator and advisor of the International Red Cross. His advice on the impact of armed conflict on urban services has increased their resilience, notably in Gaza and Iraq.

Verschoor has worked in the agriculture sector in Uganda since 2001 and built up close partnerships with its stakeholders. He worked with the policy advocacy network PASIC for ensuring that officials in the Ministry of Agriculture took notice of DEV research findings on agricultural investment in the country, which inspired the government to launch an insurance scheme that 10 insurance companies joined and through which hundreds of thousands of Ugandan farmers are now protected against droughts and other calamities. For this work, D'Exelle (DEV economist, submitted to UoA16) and Verschoor won the 2020 ESRC Celebrating Impact Prize for Outstanding Business and Enterprise Impact.

McGuire was seconded to the FAO during the assessment period for his expertise on seed systems. He now works full time for them on emergency seed relief in countries such as Syria and South Sudan. His close ties with DEV after leaving has secured the FAO as a key partner in the NISD, the institute that DEV and the John Innes Centre will launch in early 2021 (see Section 1). This is an example of how our partnerships both lead to impact (here, emergency seed relief in conflict-affected countries) and enrich our research environment (here, the NISD).

Some of our impact results from user funding. For DEV academics, user-funded work does not preclude a critical, independent stance. For example, Zeitoun's ICRC funded research, and the studies led by Duvendack and Clist funded by DFID did not hold DEV researchers back in being critical of the commissioner. It inspired DFID to rethink its use of payment by results in aid (Clist) and enthusiasm for micro-finance (Duvendack), both previously massive components of UK aid. ICRC meanwhile was stung by Zeitoun's research to greatly increase its focus on the resilience of urban services during protracted armed conflict, and promote the same across the entire humanitarian sector. Such a "critical friend" approach to impact is also neatly illustrated by Lloyd-Sherlock's secondment to WHO, which gave him an opportunity to demonstrate through his research findings that their long-term care policy needed an overhaul, on which they acted decisively: see his impact case study.

Having written in Section 1 that we have adopted a systematic approach to impact, much of it is still serendipitous. A good example is an unanticipated impact of Rao's work as PI of the Sustainable Food Systems project on a UEA's £1.4M UKRI funded Global Research Translation Award. Rao's project focuses on addressing food and nutrition insecurity in India. It sought to set up an Interactive Voice Response Service, a mobile phone based system for knowledge sharing, to assist communities with food and nutrition-related consumption and production choices. Rao's team was unable to make much progress, as the IVRS platform had just been launched in the Indian state of Bihar when a Covid-19 lockdown was imposed. Fortuitously however, the IVRS platform then became a tool that was widely used by local communities, especially migrant workers stranded in other parts of the country, to seek help and support. In most instances, the local partner teams were able to resolve the problems by making connections with NGOs or state agencies, helping the workers to return home.

The School's engagement leads to much wider ranges of impact than can be done justice to in the three submitted impact case studies. Duvendack's work on micro-finance, Clist's on payment by results, McGuire's on seed systems, Zeitoun's on urban services, Guan's on China's CO2 emissions would each have made for an impact case study that we would have gladly submitted.

#### *Training and short courses for development professionals*

During the REF period we hosted and trained 512 Visiting Professionals from 49 countries. DEV runs short courses on a range of subjects for professionals working in the development sector. These take the form of one or two week UEA based courses, or tailored bespoke courses as requested. Since 2014 the School has run over 25 such courses. The courses are designed to deliver insights from research to decision-makers and practitioners. Topics include Impact Evaluation, Climate Change, Forest Governance, Water Security, Beyond Surveys, and Evaluation Methodology Training. Organisations for whom bespoke courses have been developed include HMRC, BIS (UK Department of Business, Innovation and Skills), International Institute for Environment and Development (IIED), UK China Training Ltd, and UNDP. All short courses are run by academic staff with strong research and applied expertise, drawing on expertise within DEV and UEA and also externally. DEV trainers have trained UK Government staff on Evaluation Methodology Training, and Supporting Evaluation Capacity in Government and Civil Society staff in Uganda. Recent bespoke training includes training female early career researchers from the global South in Supporting Academic Writing to enable submission of papers to high impact factor journals (2018) and training BRAC University staff in Bangladesh, on Applied Research in Behavioural Development Economics and Social Sciences (2019).

#### *Services to academia and indicators of wider academic influence*

Our non-academic impact and contributions to the economy and society ultimately derive from excellent publications. Many of the articles published during the return period appeared in top interdisciplinary journals such as *Nature*, *The Lancet* and *Science Advances*, top disciplinary journals such as *Nature Geoscience*, *The Economic Journal*, *European Economic Review*, *Global Change Biology*, *Journal of Development Economics* and *Journal of Population Economics*, and top development studies journals such as *World Development* and *Journal of Development Studies*. Rhys Jenkins' 2019 Oxford University Press book (this submission) won the 2021 award for best academic work on Asia & the Americas from the Latin America Studies Association. As well as prestigious, our research output is prolific. During the return period, the 36 members of staff submitted to UoA22 (32.2 FTE) published 398 peer-reviewed journal articles, 15 edited books, four multi-authored books, five sole-authored books, 93 chapters in edited volumes, 37 other peer-reviewed outputs, and 122 policy briefs, blogs and reports, or a total of 674 research outputs. Per full-time equivalent member of staff, this equates to 21 research outputs during the period, 12 peer-reviewed journal articles, three book chapters and three quarters of a book.

During the assessment period, DEV members of staff submitted to UoA22 fulfilled 28 editorial roles for academic journals, seven as editors or co-editors in chief. They also edited 16 special issues. These editorial roles often reflect our keen interest in research integrity and openness (on which more below). For instance, Gilberthorpe was the founding editor of *Development Studies Research* in 2012, a journal dedicated to peer-reviewed open access publications. She remained editor in chief until 2020, after which DEV's Esposito took over the role. Duvendack is an editor of the new journal *International Review of Re-views in Empirical Economics*, which is dedicated to replication and critical analysis of influential research findings, as well as of *Campbell Systematic Reviews*. Camfield edited a special section of the *Journal of Development Studies* called the "Three 'Rs' of Econometrics: Repetition, Reproduction and Replication". Her co-editor was Richard Palmer-Jones, Emeritus Reader at DEV and one of its current research associates. He recently retired from DEV's faculty but is as research active as ever, focusing on critically examining high-profile, policy-relevant research findings in development economics, at the time of writing those reported in the 2007 *Quarterly Journal of Economics* paper "Dams" by Esther Duflo and Rohini Pande, which has influenced global policy on hydroelectric dams. Richard is also one of the six managing editors of the *Journal of Development Studies*.

A number of DEV faculty actively promote integrity, rigour and openness in research on international development, through their research and dissemination activities. Examples include

the use of meta-regression analysis to explore publication bias (e.g. the paper by Anderson, Duvendack and Esposito in *World Development* in this submission on the relationship between government spending and income poverty). Duvendack and Camfield published eight papers between them on improving the quality of development research during the assessment period and an edited book. Duvendack presented her work on replications in economics at six conferences during the assessment period, including at the 2017 Annual American Economic Association Meeting in Chicago, reporting on a study of why replication encounters such resistance. That presentation resulted in a paper in the *American Economic Review* and a video in *Latest Thinking*, a series that highlights important publications.

During the assessment period, 15 international conferences, 29 conference panels, eight major international workshops and nine seminar series were organised by staff returned to UoA22, which amounts to 1.9 such a convening role per full-time equivalent staff member. The international conferences included five held at UEA, i.e. the 2014 Norwich Conference on Earth System Governance (chaired by Schroeder), the 2015 International Conference on Gender Relations and Increasing Inequality at UEA (organised by DEV's Gender Research Group), the 2017 Symposium on Economic Experiments in Developing Countries (as mentioned, organised by DEV's Behavioural and Experimental Development Economics Research Group), the 2019 Transformative Connections Conference (organised by DEV's Global Environmental Justice Research Group), and the 2019 Annual Conference of the Association of Social Anthropologists (organised by Gilberthorpe and Jackson). In 2021, UEA hosts the Development Studies Association's annual conference.

We counted 29 (about one per full-time equivalent member of staff) distinct contributions to the development of Development Studies through council or executive committee membership of a professional association, learned society or research council or similar. Examples include Camfield being the Vice President with a focus on Young Researchers of the European Association of Development Research and Training Institutes, and Rao being member of the Strategic Advisory Group of GCRF.

Finally, we share the School's distinct research expertise more widely in numerous ways. Annual training workshops for PhD students are a good example: full-day events held at UEA and open to PhD students from all over Europe. One of these yearly workshops is on Development Studies epistemologies, the other on field experiments in developing countries, a third on ethics in development research, and a fourth on global environmental justice. These are widely praised by participants for training that cannot be readily found elsewhere. We also organise an annual PhD students' conference on international development, together with IDS and two universities in Germany and the Netherlands. Both the training workshops and the conference attract excellent students from across Europe's universities and are hugely over-subscribed. Another good example of wider sharing of our expertise is through the Environmental Justice bi-annual MOOC (Massive Open Online Course). We first launched this course in 2015. The MOOC is a five week course for learners everywhere to access for free, and is available every March and October. Over 10,000 people have joined the course from 150 countries. This course is accessed by students, researchers, government officials, lawyers and professionals and is highly valued, particularly by learners from low and middle income countries. The course has proved effective in recruiting PhD students, with at least three joining DEV after participating.