

Institution: Royal Agricultural University**1. Context and Mission**

- 1.1 The Royal Agricultural University (RAU) is a small specialist institution that gained University status in 2013, but has a long history, originally founded as the Royal Agricultural College in 1845. The University is located in Cirencester (Gloucestershire), around a 55-ha campus developed from 1845 onwards. The focus from its foundation has been on improving agriculture in Britain and globally, through research and education. Today its purpose has widened to embrace more aspects of the land-based sector and is “to cultivate care for the land and all who depend on it”, in terms of food and farming, ecology, rural economy, estate management, equine, and cultural heritage. Our vision is to become the leading specialist university providing deep expertise on the land, agri-food and rural enterprise sectors.
- 1.2 There are 58 members of academic staff, of which 19 (33%) have significant responsibilities for research (SRR). The RAU is led by the Vice-Chancellor (Professor Joanna Price), and a small executive team. The academic structure covers three Schools: Agriculture, Food and the Environment; Equine Management and Science; and Real Estate and Land Management. The University offers 11 BSc programmes, as well as foundation degrees and top-ups, 12 taught MScs, and PhD and Masters by research. As at January 2021, 882 undergraduates, 128 taught postgraduates and 18 research postgraduate students are studying at the RAU (FTE numbers). The University also delivers a number of industry-leading continuous professional development programmes.
- 1.3 For REF2021, the University is submitting into the unit of assessment: Panel 6 Agriculture, Food and Veterinary Sciences.
- 1.4 The annual income of the University (FY2019-20) is £17.8m.

2. Strategy

- 2.1 The RAU, as a small specialist institution, has a research strategy that recognizes and allows us to operate in the space between pure and operational (applied) research, providing both societal impact and underpinning of our knowledge exchange activities. Through our extensive industry connections with the land-based and food supply sectors, we have been able to develop relevant and agile research projects and innovative methodologies. Access to farmland and related facilities (which we either own or lease) enables us to undertake long-term field-based research projects, often decadal in length, while our partnerships with larger universities and research institutes have enabled us to conduct world-class research, often interdisciplinary in nature.
- 2.2 The RAU has established a significant presence in China with collaborative teaching agreements with Shandong Agricultural University, Qingdao Agricultural University (QAU) and Beijing University of Agriculture. Recently we established a new Joint Institute in Advanced Agri-technology with QAU and we are the only UK small specialist institution to have gained Chinese Ministry of Education approval for a Joint Institute. The first exchange of researchers was planned for early 2020 but remains delayed due to COVID-19 until 2022. Our professoriate and SRRs also

have established personal international research networks that have been developed in some cases over decades.

- 2.3 In the last few years, the RAU has transformed its research culture, support systems and strategy, because a key strategic priority for the institution is to become a high achieving and internationally acknowledged research institution which seeks to address questions of practical relevance globally and nationally. This has been associated with renewal of the academic establishment and a rapidly improving track record of grant success, research projects and peer-reviewed publications. We have repositioned our research and Knowledge Exchange strategies to include the appointment of a dedicated Director of Research (DoR), who sits on the University executive, and a Director of Knowledge Exchange (KE) – both professorial-level appointments. A research office is led by the Head of Knowledge Exchange and Research Support, with additional financial, contractual and administrative support. We use standard-operating-procedures for grant applications, including peer review in advance of submission, and post-award procedures and monitoring.
- 2.4 The DoR chairs the Research Committee with representation across the schools and has managerial oversight of the research process. Research integrity is managed by the Research Ethics Committee, which reviews all research work undertaken by the University. The Committee develops policies and codes of conduct and reports directly to the Research Committee on its recommendations. The University encourages and financially supports its staff in publishing in open access (gold route). All research outputs are placed on [CREST](#) – a repository of research outputs, operated by Guild HE.
- 2.5 Central to the RAU's mission over the last few years has been the development of the University as a centre of knowledge and scientific research excellence for the rural food and farming economy. The University has an established track-record for its KE activity and is one of a small number of specialist HEIs to receive HEIF funding, and we are participating in the development phase KE concordant. The Vice-Chancellor represents Guild HE on the KE Strategic Planning Committee. In recent years KE has been driven by an increased focus on research, the creation of knowledge exchange activities to provide input into emergent UK policy, in helping industry navigate change and uncertainty, and in pioneering farmer-led innovation. A number of professorial-level appointments have been made to support this strategic positioning of thought leadership. Through European and Local Enterprise Partnership funding, a LEP Growth Hub and Farm491, an agri-technology incubator and accelerator are located on campus. This co-location provides a unique link between our research activities, the industrial strategy (essentially now the "Build Back Better Plan") and food, farming and environmental strategies locally, nationally and internationally. These easily accessible links bring our researchers into collaboration with industrial innovators and entrepreneurs.
- 2.6 In 2019, the RAU adopted a new 5-year institutional research strategy, to enable it to focus on the future needs of society. Currently agriculture contributes 7% of the UK's greenhouse gas (GHG) emissions, 70% of this directly, through methane, nitrous oxide and carbon dioxide, and around 30% indirectly in manufacturing, land use change and distribution activities. The sector has set itself the challenge of moving towards net zero by 2040 and it will require smart, innovative and agile research to

achieve this. For this reason, the RAU has realigned its research around these three themes:

- feeding the world in a changing climate,
- sustaining and restoring the global environment, and
- enabling and revitalizing global rural Britain in a post-Brexit and post-Covid world.

2.7 These themes focus our research in the land-based food supply sectors and the wider rural economy, to address these critical issues and contribute to a more healthy and regenerative agriculture. The RAU is located in the Cotswolds AONB, and is adjacent to well-managed landed estates, so is in a good position to undertake research that can critically examine animal and soil health, crop and wild plant biodiversity, woodland and wildlife as well as the sustaining and enhancing of the historic environment and rural economy. Contributing to the UN's Sustainable Development Goals and UK Government's 25-year plan for the environment, our overseas connections, established over many years, provide opportunities to develop global research projects that address global warming, food insecurity and reversing biodiversity loss. Our critical expertise in food safety, animal welfare, the supply chain and entrepreneurship are internationally recognized, and inform policy change as UK farming and land managers face an uncertain post-Brexit and post-Covid future. This research strategy directly aligns with the UKRI Roadmap in finding 'nature-based solutions...in building sustainable agricultural and food supply chains'.¹

2.8 The University has ambitions to further develop its research base during the next REF cycle, with expectations of submission into two further UOAs – Panel 17 (archaeology) for cultural heritage, and Panel 19 (business and management studies) for rural economy and land management.

3. People

3.1 The RAU strives to achieve a diverse and balanced staffing structure in both its academic and professional services. The University has a clear policy of identifying its research-active staff and supporting them in their academic career. A Code of Practice (produced in 2019), sets out the institution's policy for the transparent identification of existing staff with a significant responsibility for research, determining research independence, selection of research outputs, and taking into account individual circumstances affecting outputs. Where new appointments have been made, research has been included in their contracts, as appropriate.

3.2 The first element of our strategy created an institutional professoriate to develop research leadership across the institution namely: Mark Horton (Archaeology and Cultural Heritage), Tom MacMillan (Rural Policy and Strategy), David Main (Animal Health and Welfare), Louise Manning (Agri-Food and Supply Chain Security), Meriel Moore-Coyer (Equine Science) and Neil Ravenscroft (Land Economy). Their role has been to enable the RAU to develop its research capacity, research impact and

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https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/896799/UK_Research_and_Development_Roadmap.pdf, p. 8.

knowledge exchange across its activities, to influence national policy, to secure significant research income and to mentor early and mid-career staff.

3.3 Through the 5-year ‘Invest to Grow’ strategy, approved by the University Governors in 2018, the institution has explicitly targeted the development of its research strength as a priority, through a rigorous review of staffing. The RAU has restructured academic roles, removing the grade of Principal Lecturer, introducing that of Associate Professor, and adopting a transparent promotion and progression processes. An important part of our recruitment success has been through the award of a HEFCE, now Office for Students (OfS), Catalyst grant “Building a sustainable future for land management and food production post-Brexit” that resulted in the appointment of four research-focused posts in agriculture and related subjects, one being a joint appointment with the CCRI at the University of Gloucestershire. As a result of these initiatives, the proportion of research-active academics has doubled from 17% to 33% over the REF cycle.

3.4 The progression process (from Lecturer to Senior Lecturer) and promotion process (from Senior Lecturer to Associate Professor) are based on the principles of equity, fairness and the recognition of an individual’s contribution as a member of academic

staff. Research can be a contributing component in support of appointments and progression to Lecturer and Senior Lecturer. For the grade of Associate Professor and above, candidates need to be excellent in at least two of three categories, namely Research and Knowledge Exchange, Teaching, and Leadership. The promotion and progression processes recognize the importance of the protected characteristics; for example, the University takes account of periods of maternity leave and the number of hours that part-time staff are contracted to work. Such staff are expected to produce work of the same quality as their full-time colleagues but may be less in quantity. The University’s Action Plan for the 2020 Gender Pay Gap Report highlights our commitment to supporting and encouraging female staff to apply for progression, promotion and professional development.

		All staff (n= 237)	% of total	Academic staff (n=58)	% of total
Gender	Male	101	43	38	65
	Female	136	57	20	35
Age Profile	Up to 19				
	20-34	53	22	4	7
	35-49	82	35	19	33
	50-64	89	38	28	48
	65+	13	5	7	12
Disability and impairment	Number who identify as a deaf or disabled person	48	21	7	12
	Number of non-disabled staff	189	79	51	88
Ethnicity					
White	British	151	64	41	71
	Irish	1	0.4		
	Irish traveller				
	Other White background	4	1.7	1	1.7
Mixed	Black Caribbean and White	1	0.4	1	1.7
	Black African and White	3	1.3	1	1.7
	Asian and White				
Asian/Asian British	Indian				
	Pakistani				
	Bangladeshi				
	Chinese	4	1.7	2	3.4
	Any other Asian background	4	1.7	1	1.7
Black/Black British	African				
	Caribbean	1	0.4	1	1.7
Other	Arab	1	0.4	1	1.7
	Cornish				
	Any other ethnic group				
	They prefer not to say	18	8	2	3.4
	Not known	49	21	7	12
Sexual Orientation	Bisexual	1	0.4		
	Gay man	1	0.4		
	Gay woman/lesbian	1	0.4		
	Heterosexual/straight	162	68	40	69
	They prefer not to say	28	12	2	3.4
	Not known	44	19	16	28

Table: Academic and All Staff profiles (November 2020).

- 3.5 While academics identified as SRRs have a work-load allocation of at least 30% of their time for research, all academic staff are expected to undertake some form of scholarship or research. This time includes at least 10% devoted to scholarship (including paper writing, grant applications and outreach activity). Staff are supported in their research through regular meetings within their research clusters (set out in REF5b) and in monthly University-wide informal gatherings, mentoring by more senior staff, and formally in annual staff reviews, managed by the DoR and Head of School. Staff who are non-SRR, are encouraged to participate in the research culture of the University, support research informed learning activities, attend seminars, bid for grants, take part in knowledge exchange activities, and publish articles.
- 3.6 The RAU seeks to create an inclusive community, which promotes diversity and equality of opportunity for all. The University's Inclusivity, Equality and Diversity Policy expounds the value and dignity of each individual and states a commitment to treat everyone with fairness and respect, acknowledging the adverse effect any form of discrimination will have on individuals. Our recruitment process for academic staff aims to encourage as much diversity as possible, and to help reverse the current lack of diversity within agriculture.
- 3.7 An Equality, Diversity and Inclusion Committee, chaired by the DoR, monitors and promotes research equality and diversity. The Committee supports statutory equality obligations, OfS requirements and actively works to support the University commitment to be a fully inclusive institution, welcoming people from a diverse range of backgrounds and promoting equality of opportunity for students, staff and other stakeholders. This equality of opportunity is achieved through the development of strategies, procedures and practices to foster inclusion, raise awareness and celebrate difference in the RAU community and in the wider land-based higher education and business sectors. The Code of Practice explicitly includes policies in this area. In 2021, the University set up an independent Diversity Commission (chaired by Mr. Levi Roots) to examine the institution's long-term record in race and diversity, and to make recommendations as to how this might be further improved.
- 3.8 As a small institution, we are well placed to encourage interdisciplinarity, with our academics working out of a single building and therefore in regular contact. This has been done through the establishment of a Research Academy that includes both SRR, research students and non-SRR staff who want to develop their research careers. The Academy organizes regular meetings to discuss opportunities and ideas, as well as weekly seminars, with internal and external contributors, which since COVID-19, have been held via Zoom. We have been especially active in developing research networks beyond the University, enabling us to apply for a wide range of grants and to harness expertise both nationally and globally. Recent grant applications have included partners from Imperial, Leeds, Reading, Cardiff, Leicester, Swansea, Northumbria, Queens University Belfast, Warwick, and Liverpool.
- 3.9 The University's Staff Development Policy outlines a strategic approach to support the attraction and retention of high-calibre staff with the skills and competencies necessary to deliver its objectives in fulfilment of corporate plans. The RAU recognizes that as an educational provider it has a unique responsibility to support the development of its staff and is committed to continuing professional development

of the skills and knowledge of all staff, irrespective of their working hours or contract type. All staff are expected to have a personal development plan (PDP) which they review annually with their manager and DoR during the appraisal process.

- 3.10 Currently our research degrees (doctorates and masters-by-research) are franchised by the University of Gloucestershire (UoG). Our post-graduate research students are supported both at the RAU and in the ability to take courses at the UoG. All research students are allocated at least two supervisors and have a minimum of once-monthly meetings. Research students develop research methodology skills at the UoG and can take additional modules in data analytics run by University of Bristol. Students are encouraged and supported financially, through a designated fund, to present papers at academic conferences. Our PGR community is very diverse, with 41% of students being from sub-Saharan Africa where food insecurity and adaption to climate change form key elements of their studies supporting the RAU's research strategy. The University manages an endowment fund to support up to five research scholarships, (including fees and grants).
- 3.11 The University has aspirations to be granted research degree awarding powers (RDAP) in the near future and will be applying as soon as possible after REF, as we consider that we have reached the required bench-marks.

4. Income, Infrastructure and Facilities

- 4.1 The main Cirencester campus comprises both listed historic buildings from the 19th century, and buildings that have been added during the twentieth century. These include our 650m² laboratories space, with facilities for chemistry, microbiology, dissection and a clean room. In 2020, Governing Council approved the development of a new research campus, to include a dedicated 200m² research laboratory space for post-graduate and staff research, a Big Data Centre and post-graduate study facilities. The start has been delayed due to COVID-19 and will hopefully begin in summer of 2021. During the academic year 2020-2021, the University has committed to a re-equipment spend of £50k.
- 4.2 In 2018 the University completed the £4.2m Alliston Centre, a state-of-the-art location for innovative and near-market research through an incubation and acceleration centre for agri-technology and a Growth Hub business support facility. Funded by GFirst LEP and the RAU, this highly successful centre provides 1,342m² of space to enable academics, innovators, SMEs, student entrepreneurs and funders to come together. Between the Alliston Centre and the main campus, a Living-Land Laboratory has been created as an open collaborative space used by staff, students and Farm 491 members. It is used to carry out field-trials, soil health experiments, UAV multi-spectral imaging and pXRF soil sampling, and campus rewilding activities.
- 4.3 To the west of the main 55-ha. campus, the University leases Coates Manor Farm (194 ha.) and the Fossehill Equestrian Centre. Both locations provide research facilities. At a further location, Harnhill Farm, the University operates the John Oldacre Rural Innovation Centre, with a "dirty" laboratory facility for primary field work and Farm491 workshops to support innovation to commercialization activity. In 2020, the RAU's Swindon Centre was established, located in the Railway Village in Swindon (Wilts). This £1.8m investment by Swindon Borough Council is a facility for

research and teaching in cultural heritage, located adjacent to the headquarters of multiple national heritage bodies as well as UKRI. This co-location provides opportunities to enable our land-based research to influence national landscape policy.