APPENDIX 2: Universities Innovation Fund: Approach adopted by SRUC to deliver the UIF priorities during 2018/19

Amendment to take into account additional funding announced in July 2018 provided at Appendix 2A.

Introduction

Knowledge exchange to promote innovation is the core, uniting competence required to help achieve the SRUC Mission - "committed to excellence and impact in the advancement, communication and translation of knowledge throughout the rural sector". SRUC has a long established framework for KE delivery of innovation from its R&D programme (funded from a number of sources including Scottish Government, SFC and industry). For SFC funding this is documented in our Outcome Agreement for 2018/19. This paper outlines for 2018/19 how SRUC proposes to use UIF in support of national and individual outcomes. SRUC will continue to address and develop these national priorities as part of its UIF funding, within the context of its particular mission and focus. We undertake many activities collaboratively with This collaborative approach is co-ordinated through the other Scottish universities. Research and Commercialisation Directors Group (RCDG), which, in discussion with Scottish Funding Council has agreed the best mechanism to work at a sector level to deliver the national outcomes. SRUC, while having specialist expertise of relevance to the primary and secondary food producing industries (ie. the rural sector and food and drink), also has wide, extensive and long standing experience of interacting directly with industry to effect translation and uptake of research outputs and outcomes into practice. SRUC therefore will continue to share this experience with the wider HEI community, through deepening collaboration and through various collaborative initiatives through Universities Scotland and its relevant Committees, particularly RKEC, and especially through RCDG, the UIF manager to the nationally agreed UIF outcomes.

Priority Outcomes

The national outcomes for UIF were identified through a sector-wise workshop facilitated by SFC in October 2016. SRUC's approaches to these outcomes are given below:

Outcome one (demand stimulation); Working with Scotland's enterprise agencies, Scottish Government, business networks, Interface and others to increase the demand and quality of engagement from businesses and the public sector for university services.

SRUC specialises in the primary food and land-based sector and currently has over 16,000 SME (mostly farmer and grower) clients and a further 2,000 food industry related clients from a diversity of companies. We directly interact with these to translate and exchange the outputs of our R&D programme as specific KE initiatives that promote innovation to the farming and land-based industries organised as part of the UIF funding. To maximise impact we use a network of "trusted brokers", staff who are well regarded by industry and are well known and trusted. It takes time to build this trust. In addition to "one to one" relationships we extensively use various KE mechanisms ("one to many" e.g. various targeted events / farmer days etc. to translate key KE messages from our research outputs directly to the rural industries. In addition, we are always open to learn from others on where other approaches have been effective, therefore through active participation in US RKEC and RCDG we will continue to fully participate with HEIs on defining best practice in this area.

Further support to industry is provided through a fully structured advisory programme (worth £12m per annum, partly funded from Scottish Government (for policy relevant initiatives) and though farmer subscriptions). UIF KE activities complement and reinforce such activities. We also fully interact with Interface. Most enquiries from Interface come from the Food and Drink sector, rather than primary producers We have continued to increase our activity as

evidenced by an increase in the number of completed innovation vouchers during 2016/17. This continues to increase in 2017/18 and we fully expect further growth during 2018/19. We will continue to fully participate with the wider HEI sector in collaboration to understand how we can further promote demand for our services and participate in promoting the services of the wider university sector.

Outcome two (simplification/commercialisation): in partnership with the Enterprise Agencies (EAs) and Interface, Scottish HEIs as a sector will have demonstrably simplified access to the knowledge and expertise in Scottish Universities.

SRUC is an organisation that is designed to enable easy access to businesses (see outcome one above) who mainly wish to access innovative services and advice. However, we also work closely with the wider HEI sector to ensure easy access to knowledge and expertise, particularly at the research / innovation interface. Our model is to provide for the transfer and exchange of innovative paid for novel services (rather than mainly through protected IP) to the food and land-based sector. We are, however, open to deepen our collaboration with other HEIs to ensure the better transfer of new IP to new business start ups. We are actively working to deepen collaboration within Scotland with other research institutes and wider afield, including key HEIs, other research organisations and the Scottish and UK governments. Further, we have much experience of direct contact with industry to access our knowledge and expertise (mainly as noted above through the provision of services). We will continue to fully share our experience with all HEIs to contribute to mechanisms that will simplify access to knowledge and expertise in the Scottish Universities.

Outcome three (simplification/greater innovation): In partnership with the EAs and Interface, Scottish HEIs will, at a national level, have made strategic use of their sectoral knowledge to promote greater innovation in the economy.

SRUC actively promotes knowledge, innovation and enterprise to the primary food and landbased (ie. rural) sector (working with others (see below)).

We continue to work for more flexible interventions for innovation led growth that do not assume a one size fits all model, and encourages traction in high growth sectors such as Food and Drink, where R&D spend has been low but sector growth projections are high.

We will continue to work in collaboration with Queen Margaret and Abertay Universities to look at the alignment of resources focused on collaborative academic capacity building. We will further develop this partnership and engagement with the Food and Drink Industry via our joint work with the Food and Drink Industry Liaison Group. This will support ongoing inter-institutional initiatives in support of graduate start up and employability in the Food and Drink sector.

In SRUC researchers working with consultancy colleagues ensure that links and networks with industry are very close. Many our research projects are "applied-specific" in nature and are collaborative with industry or indeed deliver directly to industry. We encourage our younger staff to become members of local business groups, as it is from such experience that benefits accrue and help facilitate building of trust as well as effective mechanisms for promoting innovation and enterprise within our staff.

SRUC will continue to fully engage with RKEC/RCDG to continue to develop a national approach to enterprise and innovation, and for us to learn lessons that we can transfer to our staff. In 2017/18 we extended this to our students, through "Entrepreneur Week" activities and intend to further develop this during 2018/19 with further activities.

Further, SRUC is an active member of the contract group of RCDG and this made good progress to formulate simple agreed contract templates which are now ready for wider dissemination.

Outcome four (entrepreneurialism): Scottish HEIs as a sector will have made a significant and positive change in the way entrepreneurial opportunities are promoted and delivered to students, HEI staff and businesses.

At SRUC we deliver courses that are vocational and focused on supplying skills needs for the rural industries. They are applied in nature and feature units/modules that train and help prepare students to run a business. Many of our graduating students will have careers within a rural enterprise.

Beyond formal training we aim to promote an innovation culture in our students. We equip students with the skills and attitudes to be open to new ideas, to think of novel solutions, to adopt new technology i.e. be entrepreneurial; we do this by using our specialist farm resources to promote innovation and entrepreneurship. These research farms can be used to demonstrate state of the art activities and facilities eg. measurement of greenhouse gas emissions from farmed animals; "smart" monitoring equipment for optimising production; precision agriculture.

We also promote through UIF the use of external speakers from Scottish Universities and other organisations (eg. Scotland Food and Drink) as well as invitees from our well developed industry; links to specifically promote aspects of innovation and entrepreneurialism as part of the formal delivery of our undergraduate and taught postgraduate courses.

SRUC staff in addition specialise in research, consultancy or education activities with many operating across more than one area. Researchers working with consultancy colleagues ensure that links and networks with the rural industries are very close. Many research projects are collaborative with industry or indeed deliver directly to industry. However, within this already productive framework, we intend to continue to encourage development of further networks with industry (SRUC is already a member of local business groups), especially for our younger staff. In our experience, it is from such activities that added benefits accrue, not only for future collaborative research, but also from the development of trust, that facilitate and enable the effective uptake of innovation and innovative new approaches.

During 2017/18 we engaged with Entrepreneurial Spark, to provide training in their "Catalyst" programme to 15 staff, as well as appointing an Entrepreneurial Fellow to progress a business idea to the marketplace. We feel as an SSI that such an approach can make a real difference to our culture and intend to continue this approach during 2018/19. We will aim to achieve this in association with other HEIs (learning from their experience) and through active and full participation with RCDG. And with our strong direct linkages to industry (eg. through local business groups) we will continue to develop close networks with industry and will activity encourage mobility to industry from our staff, not only in the UK but internationally.

Outcome five (international): In partnership with Scottish Development International, Connected Scotland and others, Scottish HEIs will have pooled their knowledge and networks, and shared good practice to promote and engage Scotland internationally.

Having international impact is a cornerstone of our new strategy. SRUC is involved in a number of international funded initiatives (eg. the BMGF funded Centre for Tropical Livestock Genetics and Health (CTLGH) with other HEIs. SRUC has undertaken joint initiatives and collaboration with other HEIs across various sectors to promote more effective

international engagement. Agri-food industries face substantial challenges to feed a world population of up to 10bn by 2030; not just scientific, but also cultural, economic and social. Solutions must be grounded in multidisciplinary, multifaceted approaches. We aim to work together with others in a smart, connected way to address these "grand" challenges. We will deepen collaboration with key HEIs and with Government to develop and fully engage with a coherent programme of international agriculture and primary food production. As such we are interested in ensuring that we are involved with the development of best practice in these activities. We aim to grow our international programme of activity, in collaboration with others, to make a step change difference in international agriculture, with emphasis on improving sustainability, application of appropriate technology and reduction in food waste. To further foster good practice in this area SRUC will continue to fully collaborate with all other HEIs in Scotland through participation in the RCDG sector group to find ways to build international collaboration and to promote Scotland internationally more effectively.

Outcome six (inclusive growth and social impact). Building on current and good practice Scottish HEIs will have scaled up their support of the Scottish Government's ambitions for inclusive growth.

Taking consideration of the Scottish Government's policy framework for inclusive growth SRUC is well positioned to make a significant contribution in specific aspects of each of the three main pillars of this framework.

In regard to multi-dimensional social justice, we promote and contribute to equality of opportunity, participation and environmental sustainability. Specifically for opportunity and participation, our courses are designed to provide training opportunities from secondary (NC) through to tertiary. HNC/ HND. Degree and PhD in land-based and rural disciplines, all of which are vocationally oriented, preparing students for diverse careers in all aspects of the rural sector. All courses have well designed articulation, allowing entry and transfer at all points. We have embedded flexibility for entrance of students from a diverse range of backgrounds and outlooks. The purpose of these mechanisms is to allow students to progress (ie. perform as well as they are able) as far they wish. This is coupled with a support system to provide advice and tutoring at each stage of their student career. Use of UIF in particular with students (tailored by course) is to provide opportunity to engage with practitioners to encourage innovation and entrepreneurship (as noted above). Further, promoting environmental sustainability within the rural sector is at the core of what we do, with a portfolio of relevant research, translated (with the aid of funding from UIF) for our education courses (at various levels), and for specific KE events with key end users, especially our diverse industry clients (as noted in outcome one above), providing direct consulting services for a range of appropriate rural end users.

In terms of *tackling inequality*, this is coupled with our philosophy of flexibility of progression to allow students to enter courses at a range of entry points, together with support to progress as noted above. In terms of the wider rural community, SRUC provides consulting services (see outcome one above) to the whole rural sector (accomplished by a number of regional offices across Scotland). The aim of these services is to provide equality of opportunity to all participants in the rural industries regardless of size / remoteness (ie. place) of the rural enterprise. We aim to reach and influence all types of rural enterprise promoting the outputs of our research through innovative changes in various farming practices that will benefit in terms of improved quality, profitability and competitiveness.

Tackling inequality is linked to our approach to pro-growth and improving competitiveness. Our structure is such that research, education and consultancy services are all linked to provide an effective means to disseminate advances in innovation in the rural industries. SRUC is primarily a KE organisation whether that is to our education, research or consulting clients. Our primary aim is to encourage the effective diffusion of knowledge generated though our R&D programmes through well designed KE activities. As such we will utilise UIF to undertake KE training of our staff to ensure that they are up to date in the latest mechanisms to deliver innovation to the full range of our industry clients and learners.

Much of what we do is aimed at improving the competitiveness of the rural sector. Linked to outcome five, we also take an international perspective, in particular, through association with international networks and linkages encouraging the uptake of innovation that can be applied collaboratively to the benefit to rural industries and at home and abroad.

We recognise, however, that much can be done here by adopting effective collaborative approaches with other HEIs and will continue to develop deeper collaboration with HEIs in the area.

Outcome 7 (equality and diversity). Building on current and good practice HEIs will have ensured positive promotion of equality and diversity in staff and all who are affected by the use of UIF).

This is central to everything we do, whether in relation to activities associated with the UIF or any of our other activities. Our policies in SRUC recognise the value and contribution of every individual and seek to enable them to achieve their full potential and aspirations without suffering discrimination of any kind. Our policy helps meet our obligations within the Equality Act 2010 and through the Public Sector Equality Duty. SRUC has developed a Single Equality Scheme with the express aim of eliminating any form of discrimination, harassment or victimisation in relation to the identified Protected Characteristics, and promoting equality across the organisation and in our interactions with our clients and, students.

Platform Grant

As noted above SRUC uses UIF, guided by its objectives, to undertake a comprehensive programme of KE focused on rural industry across Scotland, promoting the uptake of innovative outputs from our R&D. In addition we also have a major commitment to the public audience, through school based KE and our participation in science festivals and key agricultural events such as the Royal Highland Show. SRUC would use the Platform Grant to partly support the administrative and managerial costs of producing an enhanced This includes a contribution to specialist activities such as programme of KE. communications, publications, web development and marketing services. It would also provide a contribution to senior staff time to actively participate, leading where appropriate, in cross university groupings such as RKEC and RCDG, together with interaction with Interface, Scotland Food and Drink, Innovation Centres, Scottish and Highlands and Islands Enterprise and other organisations. In addition, specific KE co-ordinators have been identified within the institution to ensure a cross institution approach across its Education, Consulting and Research Divisions. We also allocate resources to train staff in KE approaches as well as the systematic evaluation of KE to facilitate continuous improvement and to maximise impact.

The current SRUC cost of such necessary support (including initiatives to the public and for cultural engagement) is £500K. Current cost to support communications/marketing and senior staff is £450K. In future, assuming a platform grant of £250K, SRUC would be able to support such service activities for KE to around the same levels as now.

Appendix 2A: Universities Innovation Fund: Approach adopted by SRUC to deliver the UIF priorities during 2018-19; Amendment to take into account additional Funding announced in July 2018

Introduction:

As noted above, knowledge generation and exchange to promote innovation to and with industry is the core, uniting competence required to help achieve the SRUC Mission – "committed to excellence and impact in the advancement, communication and translation of knowledge throughout the rural sector".

SRUC is an institution that specialises in the rural, land based (i.e. food producing) industry sector. Therefore our use of UIF is focused on promoting innovative outputs (in terms of improvements to systems, processes and products) to this sector. Our research and the outputs from those activities are designed to have application in mind. We do this in close collaboration with the industries we serve, and as such have particularly close collaborative, direct relationships with industry, developed for over many years, and aided by our extensive consultancy and education services. Our approach to UIF is to internally commission specific projects, each of which are reported on. This approach ensures that our UIF activities are monitored for impact and reach. All such projects align to the 7 national outcomes.

Therefore we will use extra funding to further enhance our activities and hence help contribute to the seven nationally agreed outcomes as well as our institutional mission. We undertake many activities collaboratively with other Scottish universities. SRUC not only has specialist expertise of relevance to the primary and secondary food producing industries, but also has wide, extensive and long standing experience of interacting directly with our target industries to effect translation and uptake of research outputs and outcomes into practice. SRUC therefore will share this experience and participate with the HEI community, through collaboration and specific initiatives promoted by Universities Scotland and its relevant Committees particularly RKEC and especially through RCDG.

In relation to the priority outcomes below we propose the following additional activities.

Priority Outcomes

Outcome one (demand Stimulation). SRUC has over 16,000 SME (mostly farmer and grower) over 2000 food industry related clients from a diversity of companies with whom we directly interact to translate and exchange the outputs of our R&D programme as specific KE initiatives. We actively engage with Interface (mainly on providing solutions to food related SME's) and with Scottish Government (on the delivery of a large programme of rural R&D and its associated KE to industry). We will use the extra UIF funding to further increase the demand for our research outputs to our target industries in association with the initiative described for Outcome 2 below. Our emphasis will be on better quality engagement through strategic collaboration. A key and central part of our strategy is being industry facing, producing outputs designed to have impact and be inspiring. As part of this aim an objective is to promote greater collaborative linkages. We will do that in association with Scottish HEI's, who reach out with like minded attitudes and related expertise. However, the extra funding also allows us to further develop effective collaborative and synergistic linkages with others across Scotland, UK and beyond. For example we have began a process to strengthen strategic linkages to the Moredun Research Institute, discussions and activities (e.g. a joint conference) with Teagasc, collaboration with UHI as well as strategic discussions with key rural industry players across the UK. Together with other established collaborations (e.g. with the University of Edinburgh) these activities are all designed to grow engagement and increase demand for our expertise, outputs and services.

Outcome two (simplification/commercialisation). As noted in our original submission SRUC is an organisation designed (through our Consulting service) to enable easy access

to businesses with whom we provide innovative services and advice. However, we wish to use additional UIF funding to go further. We want to enhance the commercialisation of new products, services and systems of production to our target industries. We propose to improve the delivery route of innovative new knowledge/ products/processes to industry by promoting the imperative of commercial thinking to key identified staff in SRUC. This includes consideration of profitability and acting in an entrepreneurial manner, working directly with industry clients proactively. This accords with SRUC's transformation plan, that is fully aligned to the Government's Industrial Strategy, developing the skills of our staff in commercialisation and exploitation. We intend to form a centre where both employees and students can contribute their ideas towards commercial growth in an agile process, where they will be provided with the required skills to help achieve a viable commercial outcome for their ideas. Where possible and sensible, we are fully open to collaboration & exchanging experiences with like minded institutions to promote and widen this approach to endearing and embedding a commercial "mind-set" in key staff aimed at increasing entrepreneurialism and realistic commercialisation.

Outcome three (simplification/greater innovation): Given the close linkages SRUC has with industry, we have a long track record in collaborating with government and industry in applied specific rural based research aimed at promoting innovation into the economy. We will use the increased UIF to promote a co-ordinated approach to the Industrial Strategy Challenge Fund. Our close linkages to key rural industries mean that we can exploit these links to advantage for project applications to this fund. We have already submitted a number of responses to the ISCF Transforming Food Production Seedling Catalyst initiative. To do so we have collaborated with a number of universities, research institutes and key industries across Scotland and the UK. However, we would like to further our linkages to HEI's in Scotland that are synergistic with our expertise and discipline base to facilitate future coordinated applications. We will therefore collaborate with Scottish HEI's to co-ordinate and target specific calls to ISCF that build suitable proposals with industry partners. Such initiatives will have the positive effect of further deepening productive collaboration over time. For such an approach to be successful it will need to be simple to operate and primarily based on sectoral specialisms. Overall we feel it is important to make a start on such an initiative as all institutions could benefit given a sustained effort over a number of years and therefore fully support such an initiative promoted by RCDG.

Outcome four (entrepreneurialism): This outcome is very much linked to our proposal made for outcome 2 above. At SRUC we intend to set up a "safe space" where ideas can be grown, tended, cared for and improved upon, very much to allow employees and students to contribute their own ideas towards commercial growth across SRUC. We would use some of the extra UIF funding to promote this "safe space". Being more commercial is one way we see of actually improving entrepreneurialism within the institution. We would also very much like to participate in generic entrepreneurial training for staff provided in a connected way across the Scottish HEI's. We fully recognised that a relatively small, focused institution like SRUC can promote such activity to our staff and make a difference. It is perhaps is much more difficult for a larger multi faculty, multidisciplinary university, but sharing common experiences may be one positive way to make collective progress.

Outcome five (International): As noted in our original submission being more International is a cornerstone of our new Strategy. The additional UIF provides opportunity to deepen collaboration and leverage with key third sector organisations with international interests, and further exploit opportunities created with HEI partners to better utilise Global Challenge funding from a range of funding bodies. Our aim remains to develop and fully engage with a coherent programme of international agriculture and primary food production collaborating with other HEI's in Scotland and to promote Scotland internationally more effectively in this sector.

Outcome six (inclusive growth and social impact). As noted in our original submission, growing the scale and efficiency of the rural industries while promoting environmental sustainability is at the core of what we do. However, increased funding enables us to consider, through linking to appropriate other funded initiatives, such as ISCF and GCRF, the promotion of pro-growth, yet sustainable initiatives in Scotland, the UK and internationally.

Outcome 7 (equality and diversity). This will continue as per Appendix 2.