



CCRI

2016

YEAR IN

REVIEW

Chapter 1

Welcome

This annual review presents some of the highlights of the CCRI's work in 2016; our research and the difference that is making to those working with us.

Get more information about the work of the

CCRI at www.ccri.ac.uk

Introduction by Professor Janet Dwyer, Director of CCRI



Dear Friends and Colleagues,

2016 has been a year of continued growth and development for CCRI, building our portfolio of projects, publishing widely and discussing our findings nationally and internationally, as well as receiving many visiting researchers from different countries and cultures.

At the same time, this has been a turbulent year, with the referendum on membership of the EU dominating the concerns of government, civil servants and the media, and presenting us with significant uncertainties, looking ahead.

We remain fully committed to working with valued partners in the UK, Europe and further afield, because we have learned from experience that seeking solutions for both local and global problems needs imaginative thinking and exchange which transcends national boundaries.

At the same time, we are already engaging actively in thinking and planning for UK policy, research and practice in a post-Brexit world. Farming and food systems, rural economies and communities and the public health and welfare

agendas are all likely to change once the UK leaves the European Union and we have been drawing from our research base to help inform thinking and policy development in all of these areas. Our aspiration is to ensure that decisions are made on the basis of the best possible evidence, applying innovative and creative thinking and working constructively with a wide range of stakeholders – the basic principles upon which the CCRI continues to operate.

As we move into 2017, we anticipate a sustained increase in the range and depth of research work in which we engage. All staff, students and members of the wider CCRI network will have opportunities to make an important contribution in that context and I hope that we can fully grasp these opportunities, as the year develops.

I invite you to sign up to receive our **regular newsletter** to keep informed of our research and activities in 2017 and beyond.

A handwritten signature of Janet Dwyer in blue ink on a white background.

CCRI research and activities in 2016

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Policy Activities

CCRI Director, **Janet Dwyer**, has a long background in research related to European and UK rural development policy and practice and is well-known in policymaking circles in the UK and EU.

Following the Brexit vote, uncertainty has been cast over EU farm subsidies and development funds and Janet's experience has been sought by policy-makers.

In November, she was one of only 36 key experts invited to take part in a conference organised by Parliament to consider some of the key policy areas affected by the UK's decision to leave the EU.

The future path of policy is uncertain following Brexit and when the Government starts to negotiate the withdrawal process, the current situation in a range of policy areas is likely to change.

With this in mind, a small number of key experts in different policy areas were invited to share their expertise at '**Brexit: an academic conference**', which was held in the Houses of Parliament.

The purpose of the day was to discuss the effect of Brexit on different policy areas and help researchers and academics connect, network and share expertise and ideas.

Policy areas under discussion included Immigration, Trade Relations and Economic Impact, Science and Research, Foreign and Security Policy, Energy and Climate Change and Environment, Agriculture and Fisheries.

Janet took part in the discussion session for Environment, Agriculture and Fisheries and her role focussed on likely changes in land management and rural development post Brexit.

The key issues that Janet presented to the conference were:

1. Think through (and monitor) the process of how, when and where impacts will occur and how best to manage them, if / as future UK agricultural support is reduced
2. Invest now in action to strengthen sector resilience and environmental sustainability, better to withstand market and environmental shocks and uncertainties in future
3. Recognise the interdependence between environmental, human and social values in land, which means we need to seek multiple goals through a common process, avoiding 'silo' strategies which only deal with single issues
4. Link market players and public policy goals, so government works more with partners in the whole agri-food chain to recognise common interests and responsibilities and address our needs and trends together (e.g. Defra working with the big food multiples to agree how best to sustain the UK's domestic production, if/as our trading conditions with the rest of the world change).

In September, Janet was part of an academic panel speaking at **Climate Change, Environment and Rural Affairs Committee in Wales on the future of agriculture and rural policies in Wales**. The panel was chaired by Mark Reckless, the UK Independence Party (UKIP) Member of the National Assembly for Wales, representing South Wales East.



Janet speaking at the speaking at Welsh Climate Change, Environment and Rural Affairs Committee

The Committee was keen to explore some of the underlying issues about cultural support in relation to rural development and potential change with Brexit.

Welsh agriculture is heavily dependent on the subsidies currently received from the Common Agricultural Policy. During the uncertain situation whilst Brexit is negotiated, Janet outlined two priorities for agricultural support in Wales, which were

1. to maintain a degree of stability during this period of uncertainty to avoid any major collapse of parts of the agricultural sector across Wales

2. investing human capital in the future; in particular resilience and supporting the very wide range of Welsh farming and land management in Wales, ensuring that those who manage the land have the best possible knowledge and advice.

Janet also spoke about trying to increase the resilience of the sector through a more diverse set of linkages in the food chain to help create a positive future. The current EU system is complicated because of the levels of hierarchy of funding, which start from Brussels and have to go down several layers before finally reaching the recipients on the ground, and there is now an opportunity for freeing up these mechanisms and making them more locally appropriate and enabling people to work together to achieve their aims.

The meeting can be viewed on [Senedd tv](#). Janet is involved agenda item 2, immediately after Mark Reckless' welcome and introduction.

Janet also gave evidence at the **Welsh External Affairs and Additional Legislation Committee** on 10 October. She took part in a discussion about the Common Agricultural Policy Pillars 1 and 2 and how Wales can move forward in the light of Brexit. This can also be viewed on [Senedd tv](#).

On a local level, Janet spoke at the opening plenary session on the 2nd day of the **Rural Services Network 2016 rural conference** at the University of Gloucestershire in September. The session was entitled, 'Local Government – where have we got to and where are we heading?'

Janet led a discussion session at an '**Innovation in Gloucestershire's Rural Businesses event**' in September, which was organised by GFirst Local Enterprise Partnership (LEP) Land Based Business Group. Its purpose was to demonstrate to Gloucestershire rural businesses how their businesses could benefit from engaging with GFirst LEP.

Janet is a member of **GFirst LEP Land Based Business Group**, which is working in partnership with the education and public sectors to help Gloucestershire realise its economic potential.

The Growth Hub is a unique partnership between the University of Gloucestershire and GFirst LEP, created to enable businesses in Gloucestershire to maximise their true growth potential.

In April, **Chris Short** hosted a **key policy seminar on waste management and the circular economy** together with Sue Oppenhiemer, who is a former graduate from the University of Gloucestershire Environment Planning and Management Masters course.

The seminar was chaired by the well known British environmentalist and writer, Jonathon Porritt CBE, and shared the latest thinking and current market data with regard to waste management, applying leading European and UK thinking to a local context.



Chris Short is the Chair of the **Upper Thames Catchment Partnerships**. These partnerships are developing all across the country and the UTCP was one of the first to be chaired by an external host. The partnerships are based on the Catchment Based Approach (CaBA), which Defra introduced in 2012 as a community-led approach that engages people and groups from across society to help improve water environments. CaBA Partnerships are now actively working in 100+ catchments across England and Wales.

Chris Short is also a member of the **Gloucestershire Local Nature Partnership (LNP) Board**, representing higher education in the county. The LNP is well linked to the Local Enterprise Partnership and has secured over £3million of investment in natural capital through the European Structural investment Fund. The LNP has also produced a framework to guide the protection and delivery of strategically important green infrastructure alongside a spatial vision for biodiversity based on a set of Guiding Principles. The LNP is partnership-based group bringing together the environmental, health & wellbeing and local authorities across the county.

Of course, much of the CCRI's research is designed to engage with and inform policy makers at national and international levels and this is reflected in the different sections of this review.

Knowledge and Innovation in Agriculture

This year CCRI researchers continue to be involved in projects which look at the way that farmers and advisers generate, access and use knowledge, and how they innovate, learn, and tap into many different information sources.

Following a successful evaluation of the [Soil Association's Duchy Originals Future Farming programme](#) in 2014, a CCRI team, comprising [Matt Reed](#), [Julie Ingram](#) and [Jane Mills](#), was invited to [evaluate Innovative Farmers](#), the successor programme, which was developed building in recommendations from our previous evaluation.

[Innovative Farmers](#) fosters farmer learning and experimentation, bringing together small groups of farmers with researchers from agricultural institutions in practical 'field labs'. In these groups they address research questions identified by farmers themselves and aim to identify practical solutions to these questions, and test and develop new tools and techniques with a coordinator and a researcher. The evaluation of the initial phase involved an online survey and a series of interviews with participating farmers.

As the evaluation will carry on throughout the three year programme, our recommendations will help it develop and improve as it is implemented. A paper reflecting on this evaluation process and outcomes, co-authored by the CCRI team and the Soil Association team, was presented at IFSA 2016.

[Julie Ingram](#) and [Jane Mills](#) will be building on this experience and CCRI's long history of researching how farmers learn from their own on-farm experiences and from other farmers when they commence a new EU H2020 project [Agridemo-F2F](#) (Building an interactive Agridemo-Hub community enhancing farmer to farmer

learning) in January 2017. This project looks specifically at the role of demonstration in farmer to farmer (F2F) learning. Jane and Julie also draw on these insights in developing advisory strategies for the outputs from the [RE CARE](#) and [SOILCARE](#) projects.

Although on-farm and farmer-farmer learning are important to innovation, science continues to be an essential ingredient. In particular, translation and adaptation of research results, the responsiveness of research to users' needs and improved access to results are all regarded as important in achieving a more sustainable European agriculture. This is the background to the EU funded [VALERIE](#) ([Valorising European Research for Innovation in Agriculture and Forestry](#)) project -



www.valerie.eu - which aims to improve access for practitioners and advisers to existing information for innovation in agriculture and forestry from European and national sources. This project is building a 'virtual adviser' tool - *ask-Valerie.eu* - to enable this access; and to support communication among practitioners and advisers.



A CCRI team ([Julie Ingram](#), [Pete Gaskell](#), [Jane Mills](#) and [Janet Dwyer](#)) is coordinating stakeholder engagement activities in ten case studies across Europe representing different farming and forestry systems. Involving advisers, farmers, processors, researchers, decision makers etc. as stakeholders in the project ensures that the development of *ask-Valerie.eu* considers their needs.

As part of the VALERIE project dissemination, Julie Ingram presented a paper at the **14th European Rural Development Network Conference** "Knowledge sharing and innovation in agriculture and rural areas" in Budapest, Hungary in October.

Her paper was entitled 'Integrating co-innovation into research translation: developing a stakeholder-driven methodology' (in the Valerie project), which she wrote together with Peter Gaskell, Jane Mills, Janet Dwyer and Pieter de Wolf, one of the project partners from the University of Wageningen.

The presentation was followed by a VALERIE workshop and a demonstration of *ask-Valerie.eu*.

Julie also drew on work from VALERIE in a keynote paper she presented at the **5th Belgian Agroecology Meeting (BAM)** in Ghent, Belgium, in September. Her paper was called "The challenges and opportunities of 'doing' co-innovation to enhance translation processes".

Agroecology is expected to play an important role in improving sustainability of agricultural systems in the future and the purpose of this 5th BAM meeting was to bridge the gaps between principles and practices in agroecology, between subsystems of the agroecosystem, and especially to bring together research and knowledge on agroecology in Belgium.



[Julie Ingram](#), [Jane Mills](#) and [James Kirwan](#) were all involved in co-convening workshops and presenting papers at the **12th European IFSA Symposium**, which took place in July at Harper Adams University. The theme of the Symposium was 'Social and technological transformation of farming systems: Diverging and converging pathways'.

Julie and Jane, together with VALERIE partners, co-convened the workshop 'Boosting research outputs: novel approaches for integrating research translation with interactive co-innovation'. Julie presented a paper based on VALERIE work in this session.

Julie, together with Rob Lilywhite (Warwick University) and Julia Wright (Coventry University), co-convended the workshop 'Boundary spanning between agroecological and conventional production systems: implications for pathways towards more sustainable production'.

A paper 'Taking farmers on a journey: experiences evaluating learning in Farmer Field Labs in UK' authored by Matt Reed, Julie Ingram, Jane Mills and Tom MacMillan was also presented in a workshop on 'Monitoring for Learning and Innovation'.

James Kirwan co-convended two workshops. The first was called 'Exploring farmers' conditions, strategies and performances in a context of multi-dimensional policy requirements, market imperfections and globalisation: Towards a conceptual mode' and the second 'Sustainability of food chains: contested assessments'. James also presented two papers at the symposium.



Janet Dwyer spoke at the **67th Annual Meeting of the European Federation of Animal Science (EAAP)** in Belfast at the end of August. This is Europe's largest animal science conference and featured over 1000 presentations. The conference provides a unique opportunity for industry and scientists to meet, exchange experiences and work together to implement new science for maximum impact. The theme for the 2016 conference was 'Sustainable Food Production – Livestock's Key Role'.

Janet's presentation was based on 'farming at the periphery of Europe – challenges and policy opportunities for livestock farms', during which she talked about marginal farming and the need for collaboration and innovation, drawing from CCRI's recent work in a variety of UK and EU projects.



Julie Ingram



Jane Mills



Matt Reed



Janet Dwyer



Pete Gaskell

Section 3

Sustainable Agriculture and Resilience



At the beginning of 2015, the CCRI was successful in a consortium bid for an EU Horizon 2020 project called **SUFISA**, an acronym for ‘Sustainable finance for sustainable agriculture and fisheries’.

The purpose of SUFISA is to identify sustainable practices and policies in the agricultural, fish and food sectors that support the sustainability of primary producers in a context of multi-dimensional policy requirements, market uncertainties and globalisation.

Since then, **Damian Maye**, **James Kirwan** and **Mauro Vigani** have been working on two case studies as part of the project, which have been investigating the ability of inshore fishers in Cornwall and dairy farmers in Somerset to adapt to changing circumstances and remain resilient in the long term.

This article draws from this research and sets out some of the key issues faced by primary producers in inshore fishing and dairy farming, derived from the **SUFISA** research.

Understanding inshore fishers' and dairy farmers' adaptive capacity and resilience

Cornwall is one of the poorest parts of the UK in terms of per capita GDP. Historically, both tin and china clay have been important to the local economy, as well as fishing and farming. Today, however, tourism is the most important industry with 4.5 million visitors coming to the county every year, representing about 25% of the county's GDP. The fishing industry is critical to the tourist industry, with recent research suggesting that the primary reason why people come to visit Cornwall is to visit the active fishing harbours. Fishing is integral to the county's cultural and social fabric, with an estimated



one in three people in the county being touched in some way by the fishing industry, whether through ancillary, processing, tourism activities or simply living in a coastal location that supports fishing. There are approximately 900 active fishermen in Cornwall, of whom almost 90% can be described as inshore fishers, meaning that their boats are under 10 m in length and they fish predominantly within 6 miles of the coast.

The key issues, as well as opportunities facing the inshore fishers of Cornwall are summarised in a SWOT table which can be viewed on our website:

Tendall et al. (2015, p. 18) argue that “resilience implies the capacity to continue providing a function overtime despite disturbances... thus form[ing] an essential part of what enables sustainability”. In other words, within this context how can dairy farmers and inshore fishers develop their capacity to be resilient in the face of a range of disturbances and thereby remain sustainable?

Disturbances may be at a producer level (such as illness), structural (such as in changes to the overall sector), sudden or gradual, or internal / external to the businesses involved. The key question then becomes ‘to what extent can businesses develop their adaptive capacity in response to the disturbances they face?’

In order to examine the issues faced by dairy farmers in the UK, Somerset was selected as a case study area because of its high representativeness in terms of agro-ecological and socio-economic characteristics and dairy farming structure. Dairy farming in the UK is undergoing a sustained process of restructuring, characterized by the concentration of milk production in fewer but more intensive farms. Indeed, in the last ten years the number of dairy farms has declined at an average rate of 4% per year, combined with a 27% reduction in the total number of dairy cows. In Somerset, dairy farms account for approximately 12% of Somerset's farms and, in common with the national trend, herd sizes have increased, although essentially the county retains a profile of mostly family run dairy farms. The county is also home to a number of large processors and high-

quality dairy industries, with agriculture, food and drink production employing over 12,000 people in the county.

The key issues, as well as opportunities facing the dairy farmers of Somerset are summarised in a SWOT table which can be viewed on our website:

Adaptive capacity can be described in three different ways: buffering, adaptive, or transformative. Buffer capability is akin to persistence and is particularly important in relation to relatively small disturbances, such as adverse weather events. Adaptive capability is the ability of a system to adjust, to be flexible and to diversify. The changes implemented do not necessarily result in a radical new approach; instead, changes are likely to be incremental, guided by the same goals and values. Adapting to change and disturbance is likely to be the most usual response, but in itself this can create issues; there are trade-offs, for example, between diversifying and specialising. While diversification might enable greater flexibility, specialisation may lead to greater profit potential.



The third capability is transformative capacity, which involves radical changes, new rules of the game and a fundamentally different business logic. Transformations may be triggered by a crisis, in which case they may be abrupt, or they may happen over time. A crisis in this sense may not necessarily be negative, in that it may provide an opportunity for making substantive and positive changes to the business model.

Having set out the key issues faced by inshore fisheries in Cornwall and dairy farmers in Somerset, the next stage of the research will be to examine how, in practice, these two groups of primary producers are developing their adaptive capacities and thereby resilience in the face of growing pressures.

(Tendall, D. M. et al. 2015. Food system resilience: Defining the concept. Global Food Security 6, 17-23)



Understanding inshore fishers' and dairy farmers' adaptive capacity and resilience was presented by James Kirwan at the **2016 RGS-IBG Annual Conference**, which took place from 30th August to 2nd September.

This year's conference theme was 'nexus thinking', an approach that aims to address the interdependencies, tensions and trade-offs between different environmental and social domains. **Damian Maye**, **James Kirwan**, **Dan Keech**, **Chris Short** and **Rob Berry** were all involved in either organising sessions and/or presenting papers. Also in attendance was Marco Della Gala.

Damian Maye and **James Kirwan** organised a session on food system sustainability and resilience, which aimed to connect thinking and theoretical perspectives from resilience theory with food system sustainability approaches, discourses and assessment methodologies. The session was well attended and received very positive feedback on social media for the papers and discussion that ensued. Damian and James also co-presented three research papers.

Damian Maye was elected to the RGRG Committee.

Also at the **2016 RGS-IBG Annual Conference**, **Chris Short** organised a session with Kerry Waylen from James Hutton Institute. The session was entitled 'Managing the rural Nexus: exploring if and how we can manage for multiple goals'. Also, **Rob Berry** presented a paper co-written with CCRI colleague **Mauro Vigani**, which examined landscape diversity and was entitled 'Spatio-economic modelling of agricultural resilience'.



Damian Maye



James Kirwan



Mauro Vigani



Rob Berry



Chris Short

Creating a Local Food app. - Sofia

In June 2016, **Marco Della Gala** joined the CCRI to work on a project called **SOFIA**, an acronym for 'Situated Learning Opportunities (SLOs) fostered by ICT applications in Alternative Agro-Food Networks'. SOFIA is a training-through-research project funded by the EU Horizon 2020 program under the Marie Skłodowska-Curie actions – Individual Fellowship - and it will run over 20 months.

Marco, under the supervision of **James Kirwan** and with support from **Matt Reed** and **Rob Berry**, is exploring the use of mobile and ubiquitous services as a means by which to help people access local food and to facilitate the exchange of knowledge between farmers and consumers who are engaged in Alternative Agro-Food Networks (AAFNs).

AAFNs is an umbrella term used to indicate new forms of collaboration between producers and consumers, which are aimed at shortening the physical distances between producer and consumer (geographical proximity), and the number of intermediaries in the food supply chain (social proximity). These new types of food provision systems, where relations between consumers and producers are mainly based on face-to-face interactions, enable value-laden information such, provenance and distinctive quality assets of local food to be communicated between actors from farm to fork.



AAFNs include:

- Farm shops
- Farmers' Markets
- Box Schemes
- Community Supported Agriculture, and
- Buying clubs.

Although AAFNs are shaped into different organizational forms, they all provide a space where a variety of information and knowledge related to agriculture, the rural economy, the environment, food production, healthy eating and consumer values, might be exchanged. In this way, AAFNs facilitate a range of learning opportunities for both consumers and producers, placing them in a setting where the process of gaining knowledge is contextualized in an experiential framework and learning is a social process that is situated in a specific context and embedded within a particular social and physical environment.

Nowadays, mobile applications have the potential to support and extend such information/knowledge exchange. They can provide ubiquitous and context-aware services regardless of temporal and spatial constraints (e.g., they have the ability to understand enough of a user's current situation in order to effectively meet users' needs by offering information relevant to a particular context). Thus, mobile applications are able to enhance the situated learning opportunities offered by the face-to-face interaction that is enabled in AAFNs.

Mobile apps have the potential to enable producers to provide further information for consumers on who they are and what products they sell, and consumers to share their experiences, preferences and knowledge with their peers, as well as with producers.

In order to foster the sustainable development of local food systems, one of SOFIA's goals is to develop a mobile app that is able to increase the interaction between producers and consumers. The app will be a new tool for helping consumers answer the question "Where can I find local food?" and for producers to get the word out about their products. The app will facilitate re-connection and close communication among agro-food producers and consumers, thus fostering the mutual understanding and the creation of favourable conditions for cooperation and innovation within the agro-food value chain.

Since the beginning of June, the research team has been working on the project's public engagement. They are carrying on activities such as the development of the [SOFIA project's website](#) and social channels ([Facebook page](#), and [LinkedIn Group](#)), the presentation of the project at the "Networks for the sustainability of Traditional Food Sector in Europe" conference, in Brussels, and at the "Researchers' Night" at the University of Calabria (Italy).

Over the last few months, the CCRI researchers have designed and planned a questionnaire survey that is aimed at investigating the features that consumers and producers would like to see in a 'local food' smartphone application. The objective is to enable the research team to design and develop a mobile application that provides information and services that address users' needs in an effective way.

[The questionnaire is available online](#) and will be distributed by e-mail and through face-to-face interviews at farmers' markets, box schemes, and Community Supported Agriculture in South West England.

By filling-in our questionnaire, you can help us to conceive, design and develop app services that better address your needs. You can then become an early adopter of the services that will be provided through the app developed as part of the Sofia project.



TRADEIT and Trafoon Networks

Marco represented the [Sofia](#) project at the TRADEIT and Trafoon Networks joint closing conference in Brussels 'Open to Innovation: Networks for the sustainability of Traditional Food Sector in Europe', which aimed to share a vision for the future development of the SME food sector in Europe.

Marco's successful participation to the Marie-Sklodowska Curie Individual Fellowship led the TRADEIT coordinator to choose Marco as an example of best practice of how the Entrepreneurship Summer Academy stimulated and helped PhD students in their career development.

TRADEIT – Traditional Food: Entrepreneurship, Innovation and Technology Transfer - is a project funded by the European Union's 7th Framework programme.

The CCRI Sofia Team



[Marco Della Gala](#)



[Rob Berry](#)



[Matt Reed](#)



[James Kirwan](#)

PEGASUS - unlocking synergies



Since April 2015, CCRI researchers have been working as one of 14 pan-European partners on a project which is investigating the provision of public goods and ecosystem services from agriculture and forestry, aiming to unlock the synergies between economic and environmental benefits for society.

The project name is **PEGAGUS**, an acronym for 'Public Ecosystem Goods And Services from land management: Unlocking the Synergies'.

CCRI researchers **Janet Dwyer, Chris Short, Peter Gaskell, Paul Courtney, Dan Keech, Katarina Kubinakova** and **Nick Lewis** are involved in this project, which will run for 3 years.

More than one year on, **the first newsletter of the PEGASUS project** was launched in May providing information on the project's progress to date and some of the emerging findings as to how a greater provision of public goods and ecosystem services from different farming and forestry systems in the EU is possible.

Janet Dwyer contributed to an article in the newsletter explaining how the analytical framework for the project was developed, taking a multi-disciplinary

approach to applying existing theories and concepts, and how this will be complemented by findings from **a mapping exercise of the provision of public goods and ecosystem services and an analysis of the drivers influencing the provision of environmental and social benefits**. The analytical framework is currently being used and tested by the project teams in ten EU countries in their field work as part of the 34 farming and forestry case studies of the project. The case studies are diverse and include organic farming in mountain regions, intensive olive production and recreation in urban forest regions.

The aim of the case studies is to examine the issues faced in ensuring effective provision of public goods and ecosystem services from farming and forest activities and find solutions to enable the long term economic social and environmental sustainability of the EU's farmed and forest areas.

The PEGASUS team has identified 19 'Environmental and Socially Beneficial Outcomes' (ESBOs) to describe public goods and ecosystem services that are commonly associated with agriculture and forestry which are being explored in the case studies. **These can be viewed on our website.**

The CCRI is responsible for four UK case studies, which are:

1. WILD river basin management initiative
2. Hope Farm – intensive, sustainable arable farming in the east of England
3. North Pennines multi-stakeholder partnership for sustainable uplands
4. Care farms.

WILD

Chris Short is leading the WILD case study, which is a three-year initiative aimed at bringing about environmental improvements to the rivers and other watercourses in and surrounding the Cotswold Water Park by using an integrated approach.

Phase 1 of the WILD project, which concluded on March 31st 2016, brought agencies, the private sector, local communities and landowners together to manage and resolve challenges on local water courses. For the PEGASUS project, CCRI is conducting interviews with farmers, stakeholders, partners and the wider community to investigate how this integrated project has strengthened the environmental interest among farmers and communities regarding the water environment and helped agencies deliver multiple benefits. A key aspect of the evaluation will be to assess the effectiveness of the approach to implement the required changes in land management and infrastructure management.

Hope Farm

Janet Dwyer, has been working on the Hope Farm case study together with Anne Marechal from IEEP, assisted by CCRI Placement Student, Eleanor Hawketts. Hope Farm is a 181-hectare arable farm which was purchased by the Royal Society for the Protection of Birds (RSPB) in 2000, after a large-scale public appeal to raise funds. In buying the farm, the RSPB's goal was to use it to test and demonstrate management practices to support and enhance farmland bird populations, to inform national policy. It also aimed to show that these practices could be combined with profitable commercial farming. The farm was chosen because it was typical of arable farms in central and eastern England, producing on good quality, clay-based soils.

The aim of the PEGASUS case-study project was to provide the RSPB with fresh ideas for the future direction of Hope farm and approaches to disseminate key ideas to surrounding farms, as well as giving other stakeholders the opportunity to voice their ideas about how Hope Farm could be best utilized.

Following on from an initial literature and data review, the research team spoke to farmers, farm advisors, representatives of environment agencies. This case study identified that sharing ideas and experimenting with new approaches has the greatest potential to unlock new synergies, and the RSPB is now working in partnership with farmers and other technical and market experts all based in the local area.



Hope Farm © RSPB

Care Farms

Dan Keech, **Paul Courtney** and **Katarina Kubinakova** have been working on the Care Farms case-study. A literature review was undertaken and typology of care farms identified before undertaking interviews at three farms covering farm diversification, institutionalized care and social cohesion.

The key ESBOs are social, but care farms depend on high quality environmental ESBOs. It is clear that there is also huge growth potential, as well as an interest in improving the governance approach. It is clear that health benefits have been, and continue to be, difficult to measure. The case-study has provided a strong focus on how non-monetary drivers can significantly influence both ESBO provision and the nature of commercial/business operations.

Allendale

Peter Gaskell and Nick Lewis have made two extended visits to this case study area, which is focused on the Allen Valleys in the North Pennines AONB. It is an area of wild and dramatic moorland with high plateaus and valleys and numerous small towns and villages. Peter and Nick have conducted meetings with various stakeholders, including the Allen Valleys Landscape Partnership, who are carrying out a four-year Heritage Lottery Funded project that aims to conserve and restore some of the area's natural and cultural heritage and whose work is similar in nature to the overall objectives of the PEGASUS project.

During participatory workshops with members of the local community and other stakeholders, participants selected what they felt were the most important five ESBOs for this area.

The three ESBOs ranked highest by the participants were:

- Rural Vitality
- Landscape Character and Cultural Heritage
- Species and Habitats

Next steps

At the end of June, four members of the UK PEGASUS team attended a project meeting in Estonia. During the meeting, 30 team members heard results from all 34 case studies and determined how they would prioritise the selection of in-depth case studies for deeper analysis.

The WILD project has been chosen for inclusion in the final 12 case studies because it is a mature initiative that is able to provide robust evidence as to the impact of this integrated approach. Aspects of the approach might also be transferable to other situations across the EU and the dynamic between public and private partnership is a new area of development. This stage of the work will be complete early in 2017 after which the reports will be discussed in a project meeting.

If you want to subscribe to future PEGASUS newsletters, sign up by sending a request and your email to pegasus@ieep.eu.

[More about PEGASUS](#)

[Read the blog on the trip to Estonia, June 2016](#)

[Read the blog on the CCRI visits to the Allen Valleys.](#)

The CCRI PEGASUS team



Janet Dwyer



Chris Short



Peter Gaskell



Paul Courtney



Dan Keech



Katarina Kubinakova



Nick Lewis

Section 6

Soil - forgotten component to human life

In June this year the UK House of Commons Environmental Audit Committee reported on Soil Health and stated that soil is often overlooked as an essential component to human life

“Soil, water and air are all essential to human life and society—but of these three, soil is often the forgotten component. Yet soil is crucial to agricultural production, climate change mitigation and adaptation, urban development and flood risk management”, said the report.

Researchers at the CCRI are very much in agreement with this sentiment, as concern for the soil has been one of our preoccupations for a number of years. This year we have been working on two projects with researchers across Europe to find ways to address current soil degradation issues.

Within the EU-funded [RECARE](#) project, [Julie Ingram](#), [Matt Reed](#) and [Jane Mills](#) are currently working with 28 different organisations to find and promote solutions to a range of soils threats, including soil erosion, soil compaction, loss of soil organic matter, soil sealing and soil contamination. This project has now reached its half-way point and Jane and Matt were able to reflect on progress at the annual project meeting in Cyprus in April 2016, where they also visited one of the RECARE case study areas, which is looking to restore agricultural terraces in the region to prevent soil erosion. During the year, Jane and Matt have been working with the 17 case study partners in the project to develop their dissemination plans to ensure that the results of their research have a far-reaching impact. [Read Matt Reed's blog on 'Terraces, Agriculture and Innovation'](#).

[Jane Mills](#) and [Chris Short](#) have also been working with the RECARE project partners to develop an ecosystems services framework for soil which will be used in the project to identify and value changes to ecosystem services due to soil threats and soil management and policies impacting on the soil. The framework incorporates elements from several established frameworks, with land management as a central factor in influencing ecosystem services and natural capital. The framework has been presented at a number of conferences throughout the year and was published in [Ecological Indicators](#) in August this year.



Experimental site used in the RECARE project

At the beginning of 2016, the CCRI was also successful in a consortium bid for another soil-related EU project called **SoilCare**, “ **Soil Care for profitable and sustainable crop production in Europe.**” The researchers in the project are concerned that current crop production levels are often maintained by increased inputs, such as fertilisers, pesticides and technology, which can mask losses in production due to reduced soil quality. The project is therefore investigating ways in which soil quality can be improved by identifying and testing cropping systems and techniques, benefiting both the profitability of farms and the environment. It is felt that such soil improvement is necessary to break the negative spiral of soil degradation, increased inputs, increased costs and damage to the environment. CCRI’s main role in the project is to ensure that farmers, the agricultural industry and policy-makers are aware of the findings, so there can be a shift to soil improving cropping systems across Europe.

Jane Mills and **Julie Ingram** attended the SoilCare project kick-off meeting in Leuven, Belgium, in March 2016, where they met the 28 other partners involved in the project and heard more about the 16 study sites that are located across Europe. During the meeting they also had an opportunity to visit one of the study sites coordinated by the Belgian partner, a research and advisory institute for agriculture, horticulture and the environment. They saw how reduced tillage and addition of compost to the soil had enhanced soil quality in experimental plots.

Julie presented a paper at an international conference called ‘**Contested Agronomy: whose agronomy counts?**’, which took place at Sussex University in February. The paper - “‘Here, we argue that’: contested views of managing soil carbon for mitigation” - drew on the research within the SmartSOIL project. This was later developed into a published paper: Ingram et al. 2016. Communicating soil carbon science to farmers: incorporating credibility, salience and legitimacy. **Journal of Rural Studies 48, 115-148**

Jane was invited to attend a workshop in Venice by the Inspiration project, which is producing a strategic research agenda on soil, land-use and management in Europe. The workshop brought together 80 key stakeholders of European soil and land management research to discuss some potential integrated research themes. Jane presented information about the SoilCare project, identifying where the project might address aspects of the research themes and highlight any existing knowledge gaps.

Work in RECARE and SoilCare builds on previous work in the EU project **SmartSOIL**, in which CCRI coordinated a dialogue between scientists developing decision support tools for managing soil carbon and the farming community.

The CCRI issued press releases on behalf of the SoilCare and RECARE projects to coincide with World Soil Day on 5th December 2016. Jane and Julie celebrated **World Soil Day** at the EU 'Soil stakeholders' conference in Brussels.

CCRI will continue working on these two soil-related research projects in the coming years and will endeavour to promote and raise awareness amongst land managers, policy-makers, industry and the general public of the importance of the soil to human life.

Jane Mills wrote a blog on soil in June in response to the House of Commons Environmental Audit Committee’s report, mentioned at the beginning of this section



Jane Mills



Julie Ingram



Matt Reed



Chris Short

Nature-based Solutions to Flooding and Water Quality

Chris Short and colleagues in CCRI and the School of Natural and Social Sciences (NSS), University of Gloucestershire, have been involved in a number of projects looking to implement nature-based solutions aimed at reducing flood risk and increasing water quality, as well as providing other environmental benefits. One of these projects that is seeking to improve and restore natural habitats through the use of natural drainage processes is the “**Stroud Rural Sustainable Drainage Project (SuDs)**” which was set up in response to the 2007 floods.

Instead of spending large sums on concrete and steel structures, the SuDS project uses natural features, such as well managed woodlands and land management, to reduce the risk of flooding further down the valley. As many as 100 leaky dams, soakaways and woody debris gulleys at the top of one water body have been built to help to slow down the momentum of water flowing downstream and increase the infiltration into the soil, thus reducing the risk of flooding. These interventions also provide habitats for wildlife and appear to improve water quality.

This year, the project received two awards. The first was in March, when a **film connected to the project**, which the CCRI helped to make, won the ‘best green film award’ at the fourth Stroud Community TV awards. The film was called “**Rural Sustainable Drainage – Natural Flood Management in the Stroud Valleys**”. CCRI’s Artist in Residence, Antony Lyons, worked closely with Chris Uttley, the Stroud project officer, to produce the film, which shows a strong community connection that was noted by the judges. The film was also shown across the

country in the introduction to the Defra stakeholder meetings on the 25 year plan in July.

The second award was a 2016 Gloucestershire CPRE award for ‘innovative use of natural resources, including land and water’. The award, which was presented on 4th October at a special ceremony at Highnam, Gloucestershire, was a recognition of the work undertaken by Stroud District Council, and in particular Chris Uttley, who has developed a strong partnership across the Stroud valleys to take a creative approach to tackling flood risk.



SuDs winning team at the CPRE awards ceremony

CCRI's Chris Short is second from the right

The pilot project, covering 250 km² of the River Frome, has involved working with local landowners, local flood forums as well as local communities, community groups, developers and businesses. Members of local flood forums have not only visited the site, but have helped in the construction of the interventions and undertaken other work that contributes to the overall project. They also contributed to the **film** that the CCRI and University of Gloucestershire helped produce.

This year also saw the conclusion of the three year **Water and Integrated Local Delivery (WILD) project** that has been seeking to improve water quality and biodiversity around the source of the Thames and the Cotswold Water Park. The project has made contact with virtually all land owners and farmers in the 23,000 hectares and offered advice and support through farm visits, events and assistance in entering agri-environment schemes. Communities have been involved and each has contributed to a River Management Plan that is specific to the parish or town council area. The third strand of the project is biodiversity and this has seen nearly 60km of management, including sensitive ditch management and shade reduction. As a result of the integrated approach, the project worked with ACRE to produce **'A Community Guide to your Water Environment'**

Drawing on his research with the SuDs and WILD projects, Chris gave a **public lecture at the University of Gloucestershire** Oxstalls Campus on the subject of natural flood management in February.

The lecture was attended by around 150 people, most of whom were directly impacted by the floods in 2007. Following the lecture, there was a lively discussion covering such issues as planning, development, education, and the need to show the benefits of natural flood management. The main area of consensus was that we are better off tackling these issues together in partnership.

Chris, **Rob Berry** and Lucy Clarke from NSS have also been working with the Isbourne Catchment Group and the Environment Agency to investigate the potential of natural flood management techniques to reduce the flood risk on the Isbourne Catchment. This has involved the completion of an initial scoping report, a number of meetings with the local community and members of ICG and walking parts of the catchment to assess the potential of different areas. A number of University of Gloucestershire geography students have been providing assistance with this work.

All of these projects exhibit a high level of local engagement in slightly different ways. The involvement of local stakeholders in catchment management is an evolving area and this year Chris Short was delighted to publish an article titled **'Micro-level crafting of Institutions within Integrated Catchment Management: early lessons of adaptive governance from a Catchment-Based Approach case study in England'**.

Chris also presented a paper, entitled **'Evaluating the impact of integrated local delivery on enhancing ecosystem services resilience'** (Chris Short, Janet Dwyer and Jenny Phelps (FWAG)), based on the **WILD** project research, at the **2016 RGS-IBG Annual Conference** in September.

Free Conference on Natural Flood Management

In collaboration with Stroud District Council, the CCRI and the University of Gloucestershire will be hosting a major conference on Natural Flood Management on 25th January 2017. It will be held at the University of Gloucestershire Oxstalls Campus in Gloucester.

The conference will link directly to the [Stroud Rural Sustainable Drainage Project \(SuDs\)](#).

The conference is free to attend, but spaces are limited and therefore it is essential to register your attendance on the [event conference page](#), and indicate your preferred seminar topics. The agenda can also be viewed on the [event conference page](#). For any queries, please email: NFMconference@stroud.gov.uk

[Click here for more information on this conference.](#)



The Future of the Uplands

The CCRI has a wealth of experience in research connected to Britain's uplands. Some of our recent research has explored the [state of farming on Exmoor](#) and evaluated the [South West Uplands Initiative \(SWUI\)](#). Also, one of the case studies of the EU PEGASUS project related to the North Pennines multi-stakeholder partnership for sustainable uplands.

[Janet Dwyer](#) is currently working with CCRI Associate, Allan Butler, from the Royal Agricultural University, to provide an **economic analysis and project evaluation of the 'Molland Graze the Moor'** project in Exmoor.

The Graze the Moor project seeks to monitor the impact of changes to the grazing regime, that includes the re-introduction of winter grazing on the moor by cattle. The aim is to test whether keeping hardy cattle on the moor over winter can bring benefits to biodiversity and be economically viable as a farm enterprise

Janet also continues her work as a member of the [Uplands Alliance steering group](#), which she helped form to help protect Britain's uplands by promoting better communication between practitioners, researchers and policy makers.

Other Steering group members include leading spokespersons from a range of NGOs and universities and colleges. The Chair of the Uplands Alliance is Professor Michael Winter from the University of Exeter and the President is Lord Inglewood. Julia Aglionby, Chairperson for the Foundation for Common Land, also played a key role in bringing the group together.

The project seeks to monitor the impact of changes to the grazing regime, that includes the re-introduction of winter grazing on the moor by cattle. The aim is to improve the moor while at the same time provide income for the farm businesses that use the moor. The project is acting as a focus for a lot of activity and this includes an annual stakeholder meeting to report on the progress of the project.



Janet (centre left) with Molland Moor project team in Exmoor. © Allan Butler

Section 9

Social Value and the Rural Economy

CCRI's commissioned work around 'social value' has continued apace this year, further establishing the institute as a leading centre of excellence for the application of Social Return on Investment (SROI) at policy and programme level, as well as project level.

Paul Courtney has continued to lead a suite of projects using the SROI technique, crossing health, rural development and wider third sector interests in both rural and urban contexts.

Building on his research that demonstrated that every £1 invested in Local Food, could generate up to £7 for the wider society, Paul developed a bespoke outcomes tool for **Hulme Community Garden Centre** in central Manchester. This will be used to capture a wide range of impacts for the centre, other growing alliances in the city and the Growing Health network nationally, who are piloting the tool in Croydon and Leicestershire.

At presentations in March and July, hosted by The Federation of City Farms and Community Gardens and Growing Health, Paul drew on this work, which in addition to the tool involved development of a theory of change and SROI forecasts to allow the Hulme to capture and measure its impact on an on-going basis.

The final report was presented to the project funders 'Tudor Trust' in October. Paul will continue to work with Hulme, Growing Health and other third sector and charitable organizations over the coming year to roll out the tool and gather further social value data.

A two-year evaluation of Gloucestershire's **Active Together** programme for Gloucestershire County Council (GCC) came to an end in December 2016. Led by Colin Baker, from the School of Health and Social Care at the University of Gloucestershire, and involving **Paul Courtney** and **Katarina Kubinokova**, the project has developed a Grounded Theory-SROI approach tailored to capture the social value generated by community health programmes.

A range of qualitative and quantitative data has been collected from Active Together participants to populate an evaluative SROI model and make recommendations for the project commissioners.



A new three-year evaluation of the **Going the Extra Mile (GEM) project** has recently begun, providing **Paul Courtney** and the team - which includes University of Gloucestershire colleagues Leonie Burton and Wend Russell from Performing Arts and Play - the opportunity to further develop and apply their social value research techniques.

Funded by the European Social Fund (ESF) and Big Lottery, GEM aims to move the county's most vulnerable adults closer to employment, training and education. The project involves a consortium of over 70 voluntary community social enterprise (VCSE) and public and private sector partners from across the county. GEM is being managed by the Gloucestershire Gateway Trust and will engage 1,100 people between 2016 and 2019.

John Powell and **Paul Courtney** have continued to apply related SROI techniques in an **Ex-Post evaluation of the Rural Development Programme for England**. Funded by Defra and involving **Janet Dwyer**, **Katarina Kubinokova** and ADAS, the evaluation has encompassed development of 12 SROI models to quantify the level of benefit-to-investment generated at Axis and Measure level, the first study of its kind using an SROI approach.

And as the three-year evaluation of Defra and BEIS' (formally Decc) **Rural Community Energy Fund (RCEF)** comes to a close in spring 2017, Paul and John will pushing further methodological boundaries by incorporating estimates of social value into a wider Cost Benefit Analysis (CBA) model being produced by their collaborators on the project, Ricardo.

Peter Gaskell was part of a working group which looked at 'demonstrating value' at a Heritage Alliance 'Audience Mapping' workshop in April. The aim of the workshop was to find new ways to show the importance of heritage in order to attract support and investment and to assist the development of a new strategic plan for The Heritage Alliance.

Dan Keech was at the 'Orchards in the Landscape'. conference in Sidmouth, Devon, in April where he gave a presentation called '**New commercial models for old cultural landscapes – orchard conservation in Germany and England**'.

The conference was organised by the East Devon Area of Outstanding Natural Beauty and presentations ranged from local to international; from cider and farm wages in Devon to European olive landscapes and reviewed historic orchard landscapes and culture.

Matt Reed was at the Warwick Crop Centre in May to give a presentation at a workshop on 'Organic Movements, Markets & Systems'.

Matt's presentation was entitled '**De-commodifying food: Putting participation at the centre of organic 3.0**'. Its key message was that the future of organic farming lies in participation and the de-commodification of food.



Paul Courtney



John Powell



Dan Keech



Matt Reed



Peter Gaskell

Section 10

Commons - old and new

CCRI has been involved in commons research for the past two decades with a focus both on common land in England and Wales as well as other forms of commons resources more widely.

Chris Short, for example, organised a series of annual conferences on Common Land in England and Wales during the period 1999 – 2009, which built up relationships and understanding among a range of practitioners and representatives of commoners associations in relation to issues surrounding the management of common land. **John Powell** was seconded to Defra for three years (2003-06) to develop and take through Parliament new legislation on common land (The Commons Act 2006).

More recently the concept of commons has been applied to a wider range of issues in which CCRI has research interests including urban spaces, intellectual property rights, water governance, genetic resources, and biodiversity.

Commons resources can be thought of as those which are neither private property nor owned by the state, but shared in some manner between a community of users. They are not ‘free’ or ‘public’ goods (although they do share similar characteristics with public goods), but are goods/resources where access and utilisation is controlled and regulated in some manner. In 2009, Elinor Ostrom received the Nobel Prize in Economics for her work on commons resources, in particular for analyses of the institutional design of commons which can lead to long-term sustainable management of resources. Elinor Ostrom was one of the key speakers at the 2008 IASC Global Conference on the commons,

which was held at the University of Gloucestershire in Cheltenham and organised by the CCRI.

Recent work on commons within the CCRI has encompassed both ‘new’ and ‘old’ commons. **Matt Reed** and **Dan Keech** have been looking at concepts of the ‘city as a commons’, [presenting a paper at the 1st Thematic IASC conference on urban commons](#). They are currently developing ideas around the notion of food as a commons – a potential new direction for commons research.

John Powell has been exploring commons within the rural-urban fringe and the ways in which land-use planning might be influenced by a re-conceptualisation of some peri-urban resources as commons. In this vein, John delivered a [presentation at an ESRC workshop on ‘Realising new commons’](#).

The rural-urban fringe

“a place of change and adjustment”

“a complex landscape”

“a zone of intermingling land uses”

“heightened competition...and inflated cost of land”



John also attended the [2016 IASC European Regional Conference](#) entitled “Commons in a 'glocal' world: global connections and local responses”, held in Bern, Switzerland. The aim of the conference was to extend research on the commons into the entangled institutional processes through which global and local arenas (the ‘glocal’) meet and interact. [Read John’s blog ‘Welcome to the glocality’](#).

[Chris Short](#) continues to chair the [Foundation for Common Land](#), a registered charity established to protect the public benefits from pastoral communing. The Foundation has recently been involved with the [Hill Farming Training programme](#). The CCRI undertook an [evaluation into the England scheme](#) in 2013 (funded by the Prices Countryside Trust).

Chris has also chaired a Defra supported working group looking at how effectively Pillar 1 and 2 schemes cope with commons. He sits on Defra’s National Common Land Stakeholder Group, which has contributed to Natural England’s Operational Standard for Common Land.

Chris has delivered recent presentations at the **Chilterns project Local Spaces: Open Minds conference** that concluded a 3-year HLF project, and at the New Forest’s New Knowledge conference on the subject of ‘Climate change and resilience: a collective problem solving approach’.



CCRI and the International Association for the Study of the Commons (IASC)

The [IASC](#) is a non-profit Association devoted to understanding and improving institutions for the management of environmental resources that are (or could be) held or used collectively by communities in developing or developed countries.

Formed in 1989, the IASC has a focus on developing interdisciplinary approaches to common property resource issues. These include natural resource issues such as forestry, wildlife, fisheries and water management in all parts of the world but also wider environmental problems, such as atmospheric sinks and biodiversity, as well as technological and legal issues surrounding use of the internet and intellectual property rights. The overriding goals of the Association are:

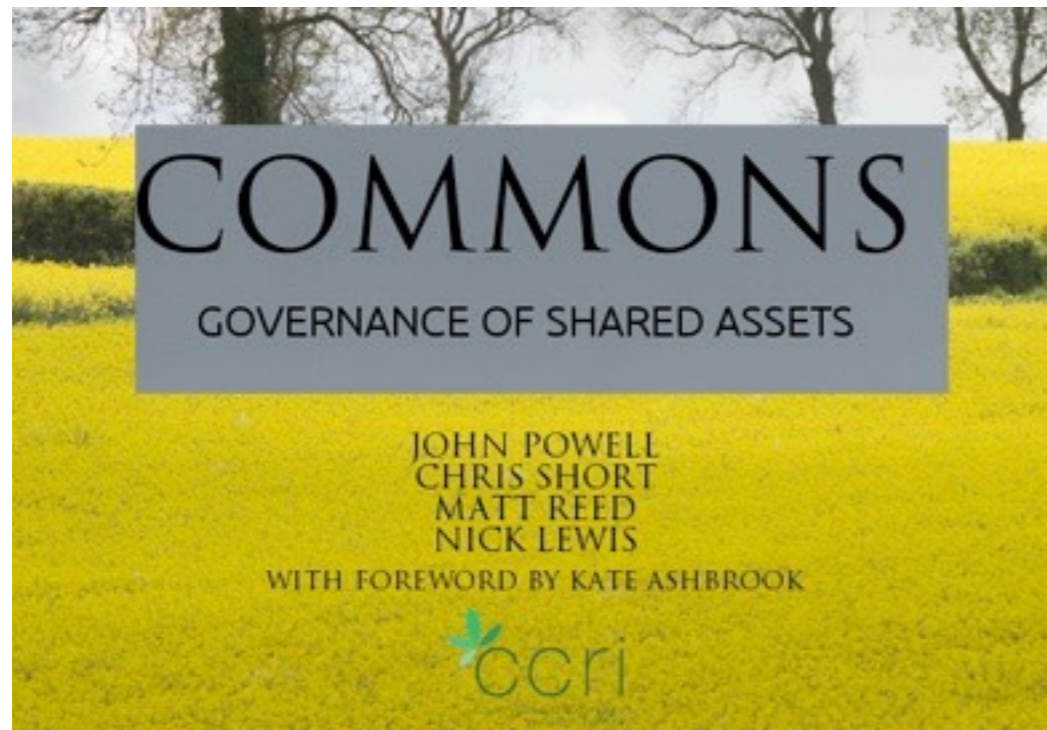
- to encourage exchange of knowledge among diverse disciplines, areas, and resource types;
- to foster mutual exchange of scholarship and practical experience;
- to promote appropriate institutional design.

CCRI has been involved with the IASC since 2006 when [John Powell](#) and [Chris Short](#) attended a European regional conference on commons in Brescia (Italy).

John and Chris, as conference co-chairs, then spent two years developing and delivering the IASC 12th Biennial International Conference at the University of Gloucestershire in 2008. The conference on “Governing shared resources: connecting local experience to global challenges” brought over 500 academics and practitioners from 70 countries to the University for a five-day conference. Since then John Powell, Chris Short, and more recently Matt Reed, have attended regional and biennial conferences to present papers and engage in workshops on commons issues.

John Powell sits on the Executive Council of the IASC and has been elected as President for the period 2017-19.

New Website - Free eBook!



To celebrate the launch of a new [CCRI website](#) in March 2016, the CCRI published a free eBook '[Commons – Governance of shared assets](#)', which presents a variety of short articles relating to commons and common pool resources.

The articles present thoughts and perceptions on management of commons and how, based around the principles of Nobel prize winner Elinor Ostrom, future management may need to adapt to accommodate societal change. The book is authored by John Powell, Chris Short, Matt Reed and Nick Lewis.



John Powell



Chris Short,



Matt Reed,



Dan Keech



Nick Lewis

Online short courses on commons

Chris Short and John Powell have been working with Leticia Merino and Victor Ortiz Rivera from the Instituto de Investigaciones Sociales, at the Universidad Nacional Autónoma de México (IIS-UNAM) to develop a series of on-line short courses on commons.

The courses, addressing different aspects of '[Commons Management and Governance](#)', are delivered in parallel in both English and Spanish, under the banner of the International Association for the Study of the Commons (IASC). Two courses are currently being delivered:

- '**Managing our Common Resources**', which explores the notions of co-operation, self-interest and rational choice in relation to commons resources, as well as tackling mis-understandings – particularly in relation to the concept of the 'tragedy' of the commons.
- '**Defending the Commons: Strategies for Action**', which will take the participant through the skills required for undertaking social action. In the UK these might be referred to as 'campaigning skills', where a campaign is considered to be any form of sustained collective effort by a group of individuals, a community or organisation, or an alliance of different bodies, undertaken to achieve a common goal or set of objectives. In other parts of the world these skills might be better understood as the basics of social action.

Additional courses planned include '**Forests and Community Land Rights**', and '**Source to sea – the governance of water**' which are being developed for delivery in 2017. Please contact [John Powell](#) if you would like to receive information regarding our short courses. [Watch the short trailer of CCRI Short Course - Managing Our Common Resources](#)

- The City: Citizenship and Space

In the last five years, the CCRI has expanded its research into urban agriculture, which brings different aspects of social life into focus, such as urban form and planning. This has involved new research exploring organisational structures, communication methods such as Twitter, and the political networks of urban food activists. Our work reflects on how the physical spaces and the multiple identities associated with some cities can be traced to broader, often rural, hinterlands.

One area where the CCRI is particularly active is around the question of the role of provincial 'second cities' in Europe and the development of food within the city region. The dynamics of cities are different to, but related with those of rural areas, offering new insights into economic developments, global trade, migration and the interdependence of cities with the surrounding regions.

CCRI staff members are involved in a range of European research collaborations, as well as actively pursuing new ones, which explore theoretical and methodological perspectives for understanding the fabric of urban space and citizenship.

Urban Agriculture - Community and commercial practices

Dan Keech spoke at the 'Critical Foodscapes' conference at Warwick University in July. The conference aimed supportive but critical eyes at urban gardening and agriculture (UA), which for some years have been arenas for research on food security, nutrition and organizational innovations, yet the influence of UA networks on the dominant food system and on the way we eat has been limited. Dan's research with Matt Reed suggests that the expectation on urban agriculture is unreasonably high, and findings indicate:

- * urban agriculture networks in Bristol are experimenting with citizenship, in order to augment a local state constrained by austerity, planning regulations, publicity considerations and hierarchies of environmental priorities;
- * the urban food networks conform to understandings of social movements suggested by Manuel Castells, and especially that their use of social media/ internet creates hybrid spaces where this citizenship is played out;
- * in the specific example of Bristol, there is a gap in the profile of food issues in the social media traffic compared to the print media, as demonstrated in the fact that there is almost no mention of food in press coverage of the Bristol Green Capital period, even though almost 20% of Bristol Green Capital's funding went on community food projects.



Findings from this work in Bristol have led to articles in international NGO magazines and journal submissions.

[Damian Maye](#), [Matt Reed](#) and [Dan Keech](#) contributed to two new [E-books on governance in city food systems](#).

We continue our collaboration with the Otto-Friedrich University in Germany. Dan Keech visited Bamberg again in October, where he co-led a workshop for commercial market gardeners with his counterpart, Professor Marc Redepenning, hosted by the city's World Heritage office.

Dan also made a presentation in the food and rurality nexus session at the [2016 RGS-IBG Annual Conference](#) in September. His paper was entitled 'City horticulture – rural identity: local food in Bath and Bamberg'.

Urban Commons

There is an increasing trend to cast cities as a form of commons. The density and multi-functionality of urban spaces suggest that seeing and ultimately managing them as a form of shared resource could prove fruitful and bolster democratic engagement. Governance of the urban space is increasingly contested, not least by communities who demand a say on the basis of practice routines, a strong sense of belonging or forms of social innovation. John Powell was asked to present ideas about the characteristics of commons in the urban-rural periphery at an ESRC workshop exploring the nature of the urban fringe. Further insights into the potentials of city-regions can be gained from investigating the use of urban spaces through the lens of commons theory.

Most recently, CCRI collaboration with colleagues in Belgium and the Czech Republic has highlighted conflicts between place and space in managing open spaces in inner city and urban fringe landscapes, including post-industrial land uses.

Cultural geographies

Changing formats of urban land use and economic development also frame the CCRI's collaboration with Bath Spa University which explores the narrative qualities and ecological potentials of post-industrial and post-Soviet urban ruins.

By drawing on more-than-representational theories, Dan's collaboration with Professor Owain Jones (formerly of CCRI) has sought to provoke new ways to let ruins speak for themselves, while highlighting the temptation to romanticising ruins in the light of current geopolitical traumas which continue in cities in conflict zones.



Linnahall Olympic structure in Tallinn, Estonia, built for yachting events of the 1980 Moscow Olympics (Photo © Owain Jones, 2015)

International Links and Awards

Human well-being depends on the services provided by nature, but these are under increasing threat from climate change, land degradation and resource depletion. These ecosystem services (supporting, regulating, provisioning and cultural) underpin food and water security and are essential to people's livelihoods.

Julie Ingram and Kenny Lynch (School of Natural and Social Sciences, University of Gloucestershire) won a British Council Researcher Links award and funding from the UK's Newton Fund to run a workshop to develop understanding of how new methods in ecosystems services can help secure our water and food security.

The workshop aimed to equip early career researchers from South Africa, Egypt and the UK with the conceptual and analytical tools for evaluating ecosystem services (ES) and for demonstrating their importance when considering development actions.

The workshop - "Equipping early career researchers with tools for evaluating ecosystem services which underpin food and water security" - took place at Wallenberg Research Centre in Stellenbosch from 29th September to 1st October. Over 30 participants from Egypt, South Africa and UK took part and benefited from visits to locations where food and water security are being actively researched.

In November, **Julie Ingram** was a mentor at a British Council Researcher Links Workshop on Management of Innovation in the Agricultural Sector in Kazakhstan, funded by the Newton – Al-Farabi Partnership Programme.

The workshop aimed to increase research capacity of UK and Kazakhstani early career researchers and promote collaboration between them. Kazakhstan is a major wheat producer and exporter but there is potential for the agricultural sector to increase its competitiveness. Part of the workshop investigated the causes of inefficiencies in innovation management and attempted to identify solutions. In this respect the workshop explored the role of human capital and institutional capacity development in research and extension, as well as support and investment for technological innovation.

Julie also delivered a keynote paper - "Changing perspectives for understanding agricultural innovation: from farmers' adoption to systems approaches" - at the workshop and led a discussion on research challenges for agricultural innovation: integrating social perspectives.

The UK and Kazakhstan workshop participants came from universities within both nations and represented diverse fields, such as agriculture, remote sensing, biodiversity, economics, nutrition, tourism, business, policy studies, and regional studies.

FAO and Agricultural Policy in Georgia

Mauro Vigani is working for the **Food and Agriculture Organization of the United Nations (FAO)** as an international expert for the economic impact evaluation of the agricultural programs developed in Georgia.

Georgia has a highly diversified agro-ecosystem, ranging from mountain areas, flat lands to coasts along the Black Sea. The diversity of climatic zones permits a variety of agricultural productions, such as cereals, fruits, nuts, vegetables and potatoes. Among the different products, some have a very long tradition, such as vineyards and tea plantation.

During the post-soviet transition period, much of the agricultural land was abandoned and large agricultural areas are still unproductive. In order to exploit this under-used agricultural potential for exports and domestic food security and to develop the socio-economic conditions of rural areas, the Government set out a Strategy for Agricultural Development in Georgia.

Since 2013, the Georgian government has implemented a series of policy programmes to support the primary agricultural sector as well as the processing sectors. These programmes provide support in the form of subsidized inputs, credit and insurances. Technical support is also provided through training and extension services. Moreover, some programs are specifically targeting the recuperation of traditional products, such as tea and wine.

A more comprehensive portfolio of support programmes is planned through a strategy for the period 2015-2016, which consists of carrying forward some of the existing programmes but also to initiate new ones. These programs are

possible thanks to the support from the Government of Georgia and from international organization.

A fundamental aspect of deciding among different support tools and planning programmes is the evaluation of their impact. In this respect, Mauro is collaborating with the FAO, one of the international organizations supporting the government of Georgia, and is assisting in the methodology and data evaluation for impact assessment.



Mapping Rural Broadband

Rob Berry is currently working on a research project investigating the resilience of agricultural production in England and Wales at a regional level.

One of the components of the agricultural resilience model is an indicator of ‘accessibility to information and markets’, for which Rob is using as proxy rural broadband speeds.

The dataset that Rob has been investigating for calculating this measure in each of the study regions (non-metropolitan counties and unitary authorities) is the 2015 Ofcom broadband data, which was **collected** for the 2015 Connected Nations Report .

This is thought to be the latest and most comprehensive open data available on broadband speeds in the UK, though Ofcom are keen to point out that this data “should not be regarded as a definitive and fixed view of UK’s broadband infrastructure”, it being a snapshot of broadband speeds over a period of 1-2 months in 2015.

The data is aggregated to postcode level, which means that it can be joined to Ordnance Survey postcode boundary data to allow a geographical analysis and cartographic display of the results using GIS software.

This research project is concerned with rural broadband, and seeks to establish the average speed of the broadband connection to farm properties within each county/UA.

To achieve this , the Ofcom broadband data was joined to the Ordnance Survey postcode boundaries, the data for Scotland removed and then overlaid with a spatial dataset of **built-up areas** (Office for National Statistics). Built-up areas were then eliminated from the analysis by selecting only data that fell outside of these areas, leaving a total of 91,185 rural postcodes joined to variables from the Ofcom 2015 broadband data.

Using GIS software (QGIS), the average download speeds within each county/UA were then calculated.

The results of this data analysis support what we already know – that rural broadband speeds in the UK are generally poor (as at 2015), with only 7 out of 49 counties/UAs achieving an average download speed of 10 Mbit/s – a speed considered by Ofcom and the UK government to be the minimum required to meet the demands of today’s typical families and small businesses. Indeed, this Mbit/s figure may well become a legally-binding target as the government intends to legislate for a Universal Service Obligation (USO) in the upcoming Digital Economy Bill that would introduce a legal right to request a broadband connection from a provider at a minimum speed, which is expected to be 10 Mbit/s.

Looking at the map on the next page, it is perhaps surprising to see areas such as **Cornwall**, **Gwynedd** and North Yorkshire featuring among the front-runners, but this does seem to tally with recent reports of significant investment in delivering fast broadband infrastructure in these areas. Despite such investment,

numerous organisations highlight inadequacies across the nation – and the **RSN** has collated many reports on this matter.

Rob's personal Twitter stream can be found **@rural_gis**

RGS-IBG Annual Conference

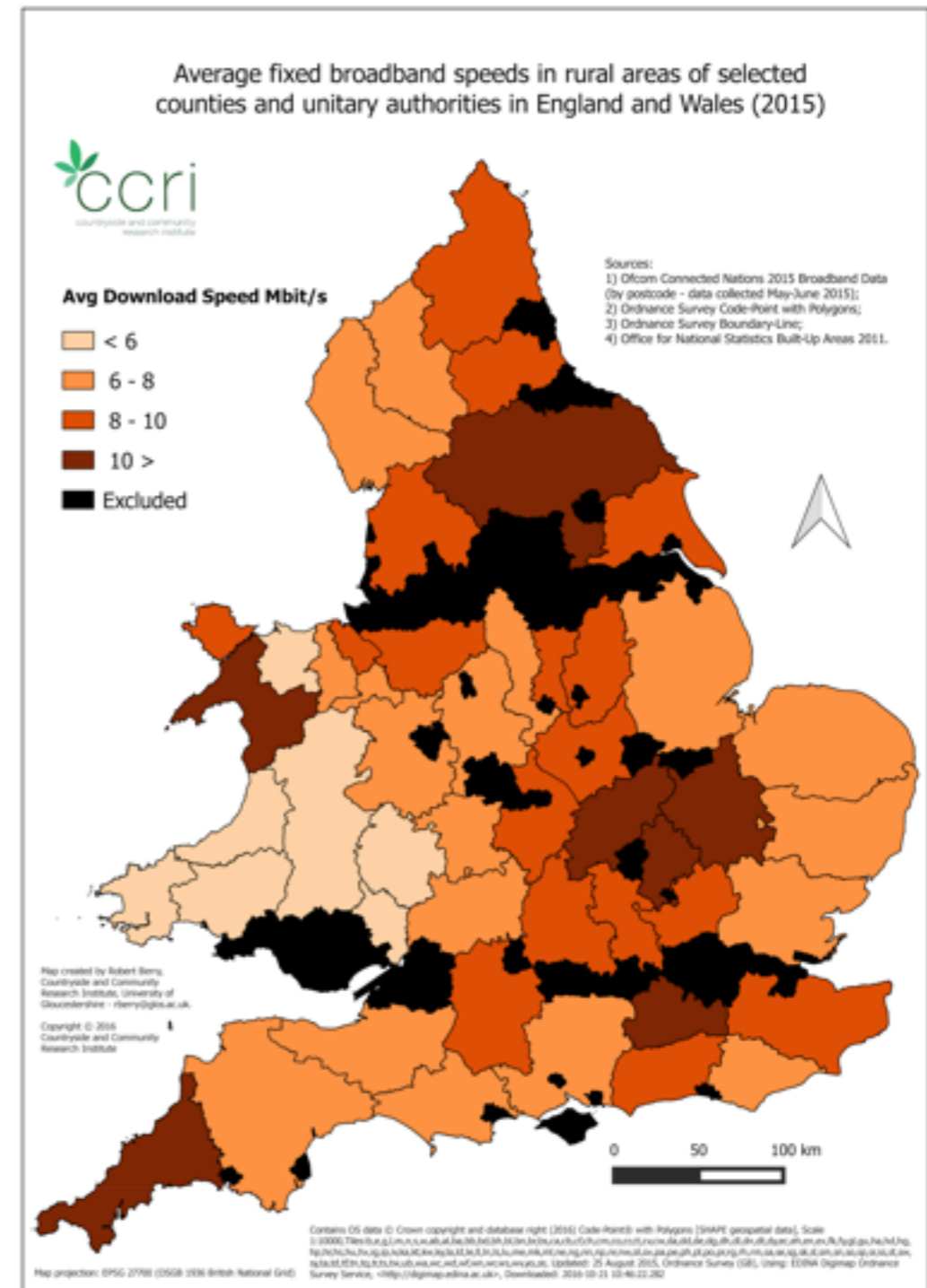
At the **2016 RGS-IBG Annual Conference**, **Rob Berry** presented a paper co-written with CCRI colleague **Mauro Vigani**, which examined landscape diversity and was entitled 'Spatio-economic modelling of agricultural resilience'.



Rob Berry



Mauro Vigani



CCRI Seminar Series

The **CCRI Seminar Series** is open to everyone and aims to provide a flexible vehicle for the dissemination of research and discussion of policy and practice in rural research and policy. It encourages speakers from a broad range of academic, policy and stakeholder backgrounds to take part and remains an important contributor to knowledge transfer within the region. The seminars are free to attend and the up to date programme is available on our [website](#).

The CCRI has been pleased to offer a wide range of speakers and subjects in its seminar series in 2016.

In **January**, **Professor Sergio Schneider**, Academic Visiting Scholar at the Centre for Food Policy (CFP), Department of Sociology, School of Arts & Social Sciences at City University London, gave a presentation on 'Agrifood studies in Brazil coexistence and complementarities among agricultural development and the food security'.

In **March**, human geographer, **Dr Sam Scott**, gave a presentation on 'Migrant Workers in the UK Food Production Industry: What I've discovered and what I'd like to know'. Sam has been researching international labour migration for over a decade and more recently has been researching low-status labour migration and is particularly interested in low-wage employment within the UK food production industry.

Also in **March**, **Dr Rachel Bennett**, a lecturer in Human Geography at the University of Gloucestershire, provided an overview of her substantive and methodological research interests and talked about her work applying large scale

longitudinal datasets to understanding health and wellbeing in developing countries.

Morten Clemetsen, a landscape architect from the University of Life Sciences, Ås, Norway, came in **April** to talk about current trends in integrated landscape protection, planning and management in Norway, followed by **Steve Langton** in **May** who talked about the factors that explain the variability in performance of English farms. Steve Langton is a freelance statistician, working mainly with ecological and agricultural data.

In **September**, we welcomed **Dr David Christian Rose**, from the Department of Geography, University of Cambridge, who gave a presentation entitled 'Decision support tools for agriculture: towards effective design and delivery'

In **October**, **Dr Taro Takahashi**, from the School of Veterinary Sciences at Bristol University, talked about 'Non-farmers' willingness to farm: a large-scale choice experiment to identify policy options that can induce new entry to the agricultural industry'. Also in October, **Sophie Greenway** from Warwick University gave a presentation about the history of the alternative food movement.

In **December**, **Javi Serrano Lara**, a visiting PhD student from the Institute of Local Development, University of Valencia, Spain, presented 'Loss and destruction of social capital and social networks in Spanish rural areas as consequences of the NOT LEADER philosophy'.

In the Media

Mercury is known to be highly toxic and has been linked to diseases of the brain, heart, kidneys, lungs, and immune system. It is contained in almost all the fish that we eat, so should we be worried?

Matt Reed gave some ‘fish for thought’ in May in a BBC Radio Gloucestershire interview regarding heavy metals in fish. Matt’s main message was that it all depends on the type and quantity of fish we eat.

Whilst all fish has naturally occurring mercury, it is mostly found in trace amounts. Matt told BBC listeners that it is the bigger fish that contain larger amounts of mercury, such as shark, marlin, swordfish, Spanish mackerel and large tuna, that we need to wary of, though not completely avoid. These bigger predatory fish eat the smaller fish, which results in an accumulation of mercury in a process called biomagnification. In other words, mercury concentrations in fishes depend on diet and lifespan: those that consume other fish and live longest have the highest mercury concentrations.

More information can be found on the [FSA website](#).

Janet Dwyer was interviewed on BBC 4’s Farming Today in July concerning the funding that the UK currently receives from the EU CAP Pillar 2 funding, now under threat following the Referendum vote.

Across Europe, 100 billion euros is being spent by the EU on rural development over 6 years up to 2020. According to BBC Farming Today, in the UK this rural development adds up to 7.5 billion euros, (just over 6 billion pounds), so what will happen to that post-Brexit?

In the interview, Janet said that it her understanding that Countryside Stewardship schemes, which pay farmers for specific projects, should be honoured, although a treasury guarantee will be needed at some point to confirm this. She also talked about the efficiency of different regions that receive EU development money, and how it might be missed more in some regions than others.

Janet was interviewed on Farming Today again in November, when she was invited to take part in a [conference organised by Parliament](#) to consider some of the key policy areas affected by the UK’s decision to leave the EU.

Dan Keech had an article printed in a celebration issue of LEAF, a newspaper for trees, woods and people published by Common Ground. Dan’s article was on community orchards and explained why community orchards are healthier both for us and for local wildlife. Dan has a background in orchard conservation. [Read the article on page 8.](#)

Chris Short drew attention from the media in connection with his public lecture on natural flood management in February. He was interviewed by Cotswold Life about using nature to prevent flooding, which appeared in the April edition. Chris was also interviewed by BBC Radio Gloucestershire regarding his lecture.

During the year, there were many other articles appearing in various media related to the work of the CCRI, some of which are noted in our [media section](#) on our website.

Chapter 3

Staff, Students and Visitors



New staff, the student community and visitors

New Staff

Project Support Officer, **Isabel Fielden**, joined the CCRI team in July replacing long serving Evelyn Shaw, who retired in the summer. Isabel's main roles are to explore funding opportunities, assist in the submission of project proposals, and provide support to active projects.



Eloise Fresnay joined the CCRI in September on a one-year placement. Eloise is an agronomy student studying for a Masters degree at AgroParisTech, Paris, which is a higher education teaching and research institute ('Grande Ecole') in the fields of agronomic sciences and techniques, the agri-food sector, forestry, management of spaces and natural resources and land management and development.



The student community

The CCRI has a thriving research student community, with students studying on both a full-time and part-time basis. Many of our former students have gone on to distinguished careers in academia, the third and private sectors. Its vibrant research culture includes a range of training and intellectual exchange within the Institute, that research students are actively encouraged to take part in.

The CCRI also holds postgraduate winter and summer schools, which provide a friendly and supportive environment for postgraduate students working in rural research to present their work and receive constructive feedback from CCRI staff. It is also an opportunity for postgraduate students from all over UK to meet up and exchange ideas. This year's winter school, which took place in January, also welcomed rural researchers from Nigeria, China and Brazil to give an international flavour to the event.

The summer school took place in June and was entitled 'Theory, Methods and Structure – making progress with your thesis'. The event included presentations from five of our postgraduate students as well as from CCRI staff.

The next Winter School is scheduled for 10th and 11th January 2017 at Oxstalls Campus of the University of Gloucestershire.

In August this year, the ESRC announced its support for a new group of Doctoral Training Partnerships (DTP). The CCRI is delighted to announce that it is part of the partnership led by Cardiff University.

This means that from October 2011, CCRI students in the DTP can benefit from funding as well as training opportunities from a large team of specialist social scientists and the chance to work with the CCRI on practical research.

In the first assessment, there were 36 collaborative studentships entered for 23 places and we are pleased to report that the CCRI studentship received a high grading and will be funded.

If you are interested in conducting a postgraduate research degree in the CCRI, please contact Dr Matt Reed mreed@glos.ac.uk

New CCRI PhD Students

In 2016, the CCRI was pleased to welcome **George Cusworth** and **Yao Guo** to its research student community.



George Cusworth was the successful candidate for a three year jointly-funded Natural England and University of Gloucestershire research studentship.

He began his research in April and is supervised by Jane Mills and Peter Gaskell. The working title of George's thesis is 'Assessing the long-term impacts of ELS. What can a Bourdieusian analysis teach us about the development of

environmental attitudes within the agricultural community, and how has the ELS tier of the ES scheme affected the land management plans of participating farmers?'

Yao Guo holds a BA in Interior and Spatial Design from the University of the Arts London and a MA in Landscape Architecture from the University of Gloucestershire.

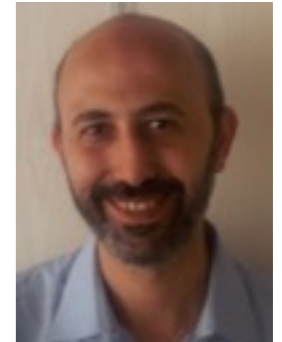
She is undertaking a full-time PhD investigating the relationship between urban agriculture and city planning in



China, focussing on the current urban food system in China and potential contribution of food policy in city planning.

Visitors to the CCRI

Marco Della Gala joined the CCRI in June for 20 months on a Marie Skłodowska-Curie fellowship. Through an EU Horizon 2020 funded 'training through research project' called **SOFIA**, Marco is working towards creating ICT based tools, in particular mobile applications, to help people access local food, a topic very close to the heart of the CCRI.



Marco is from the University of Calabria where he is studying for a PhD in "Business models and ICT services to support the development of agro-food and touristic sustainable local systems".



Javi Serrano, from the Institute of Local Development, University of Valencia, Spain, visited the CCRI for 4 months from September 2016.

Javi came to work on his PhD, which examines social capital in rural areas using social network analysis and worked on a case study of a LEADER group in England. Whilst in the CCRI, Javi gave a CCRI seminar presentation based on his research, entitled "Loss and destruction of social capital and social networks in Spanish rural areas as consequences of the NOT LEADER philosophy".

Camille Glasson, a French student from AgroSup Dijon, came to the CCRI for 3 months in June 2016 to work on the EU funded PEGASUS project. Camille worked on the WILD river basin management initiative, which is one of the 4 case studies that the CCRI is responsible for under the project.





Joo-In Seong, from the Korea Rural Economic Institute, came to the CCRI in December 2016 to spend a sabbatical year as a visiting researcher..

South Korea is quite small – larger than Wales but smaller than England - and there is quite a high population density overall (50 million). But most people live in the city (Seoul) and the rural areas are in decline with an ageing population, declining economic and ecological situations and social fabric weakening. Some urban people are beginning to counter-migrate back to the rural areas, but the quality of life issues are a real challenge.

Joo-In's interest is in understanding how to protect, build and enhance the quality of life in rural areas, learning from experience in the UK, which could be relevant to challenges faced in rural areas of South Korea.

Dr Morten Clemetsen, a Landscape Architect from the University of Life Sciences, Ås, Norway, visited the CCRI in April.

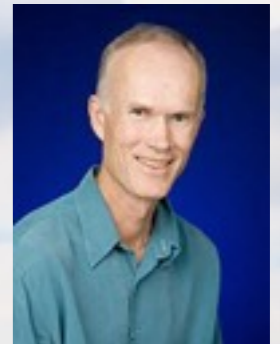
Morten has practiced as a consultant in the field of rural landscape management, landscape assessments and local community development. Associate professor at the University of Life Sciences from 2002, he is currently responsible for teaching and research on strategic landscape scale planning.

During his stay in the CCRI Morten met with a number of professionals across the UK who are assessing mechanisms for implementing an integrated landscape management approach. He also made a presentation as part of the CCRI's Seminar Series entitled 'Current trends in integrated landscape protection, planning and management in Norway'.

The presentation covered two different trends for landscape management, nature based value creation and community development, that have evolved in Norway over the past 10 years; the reshaping of traditional practice for nature conservation and landscape management in National Parks and the introduction of the concept of "Regional Nature Parks" inspired by European models. .

Dan Marsh, an environmental economist based in the Department of Economics at the University of Waikato, came to the CCRI in September to work on the **PEGASUS project**, specifically helping on the in-depth study of the **Water and Integrated Local Delivery (WILD) project**.

For this he is using a Social Return on Investment methodology. Dan, who is taking advantage of a research sabbatical, will be with the CCRI until Spring 2017.



Chapter 4

Repository and round up of research projects



University of Gloucestershire Research Repository

The University of Gloucestershire has made a valuable investment to provide an open access resource that enables the CCRI to distribute a large part of its research in digital format, world-wide and at no cost to the reader.

Where compatible with the University's Green Open Access policy, published and unpublished works are available for re-use and adaptation, so enabling the rapid adoption and deployment of new ideas for the benefit of society. Open access removes subscription paywall barriers so enabling a much wider audience to access our research. Open access and repositories have the potential to narrow the gap between information rich and information poor communities and to accelerate research informed social and economic developments.

The University of Gloucestershire Research Repository provides a showcase and record of the intellectual and creative endeavour of the University's community of academic staff and research students. It also provides a core of research outputs for the Research Excellence Framework in which the UK HEI's research achievements are evaluated and ranked. Click on the links below to access publications with open access on the Repository.



Peter Gaskell



Julie Ingram



Dan Keech



James Kirwan



Katarina Kubinakova



Nick Lewis



Damian Maye



Jane Mills



John Powell



Matt Reed



Chris Short



Mauro Vigani



Robert Berry



Dilshaad Bundhoo



Paul Courtney



Marco Della Gala



Janet Dwyer

Active and Recently Completed Projects

Active Together

GLAMUR

Agridemo F2F

PEGASUS

Development of a Monitoring and Evaluation framework and a Forecast SROI for Hulme Community Garden Centre (HCGC) and to support the Growing Health network

RE CARE

SmartSoil

Economic analysis and project evaluation of the 'Molland Graze the Moor'

SOFIA

SUFISA

Evaluation of Innovative Farmers (Soil Association)

SoilCare

Evaluation of the Rural Community Energy Fund (RCEF)

Tri-lateral Researcher Links Workshop - equipping early career researchers with tools for evaluating ecosystem services which underpin food and water security

Ex-Post Evaluation of the Rural Development Programme for England (RDPE) 2007-2013

VALERIE

Forest of Dean Landscape Partnership – Evaluation

WILD

KEEP INVOLVED WITH THE CCRI!

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Countryside and Community Research Institute
University of Gloucestershire
Oxstalls Campus
Oxstalls Lane
Gloucester
Gloucestershire
GL2 9HW
Telephone: +44 (0) 1242 714122
E-mail ccri@glos.ac.uk

We welcome your feedback regarding this annual review. Please email ccri@glos.ac.uk with your comments and suggestions for future issues. Tell us what you would like to see in next year's edition!

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