

<p>Institution: Cardiff University</p> <hr/> <p>Unit of Assessment: 16A</p> <hr/> <p>a. Overview</p> <p>This submission covers all research conducted in the Cardiff School of Planning and Geography. Research in the School focuses on the planning, governance and sustainability of cities, regions and rural spaces, with researchers working in and at the interface between the disciplines of city and regional planning, human geography and urban design. Research is organised into four Research Groups – Environment; Spatial Analysis; Spatial Planning and City Environments; and Urban and Regional Governance. The Groups provide the main support mechanism for individual researchers in the School, allowing senior staff, early career researchers and PhD students to come together to discuss and develop research in an informal environment. They also form the primary organising unit for research management. Research Centres and Research Institutes provide a platform for more focused programmes of cross-disciplinary research, combining the interests of several research groups and connecting with other schools in the University and beyond. Across the current REF period eight Research Centres and Institutes have involved critical clusters of School staff, with two of these established since 2008:</p> <ul style="list-style-type: none"> • <i>Centre for Business Relationships, Accountability, Sustainability and Society (BRASS)</i>, ESRC funded research centre, 2001-12, co-directed by Marsden. • <i>Welsh Institute of Social and Economic Research Data and Methods (WISERD)</i>, funded by Welsh Government and ESRC, 2008-, Orford (buyout). • <i>Sustainable Places Research Institute, (PLACE)</i> University and RCUK funded, 2010-, directed by Marsden. • <i>Centre for Education in the Built Environment (CEBE)</i>, HEA funded, 2004-11, directed by Webster. • <i>Centre of Research for Local and Regional Government Research</i>, 2004-, Cowell, deputy director. • <i>Centre for Research on Environment, Society and Space</i>, 2004-, directed by Milbourne. • <i>Centre for Economic Geography (formerly Centre for Advanced Social Studies)</i>, 1993-, directed by Cooke (2008-11) and Huggins (2011-) • <i>Urban China Research Centre</i>, 2007-, directed by Webster. <hr/> <p>b. Research strategy</p> <p>The School's research mission for the 2014-2020 period is to sustain and develop itself as a leading internationally recognised location for agenda setting research and scholarly debates in the sustainability and spatial management of cities, regions and rural areas, and to co-produce knowledge which is relevant to policy and practice communities.</p> <p>In 2007 research was structured around the themes of sustainability, social inclusion, governance and planning, and innovation and regeneration. The RAE 2008 strategy highlighted seven priority themes for future development which evolved out of existing and emergent areas of individual strength, and which aligned with a strategic emphasis upon the development of cross-disciplinary centres and multi-method approaches to research. These themes have been developed and consolidated as key areas of strength during the 2008 to 2013 period as follows:</p> <ul style="list-style-type: none"> • Sustainable production and consumption systems - investigating the linkages between rural and urban food systems, local food procurement and community food production, and the complexities of renewable energy production and consumption. • Poverty, social inclusion and entitlement - examining urban poverty and the rights to the city in developing countries, poverty amongst older people in rural areas, gated communities and property rights, homelessness, environmental justice and health

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inequalities.

- **Regional, city-region and neighbourhood governance** - focussing on city-region governance, ethics, regulation and sustainable planning, and the capacities of neighbourhood governance and area-based responses to disadvantage.
- **Innovation and governance** - exploring the governance of supply chains, urban regeneration and food, the regulation of converging technologies, and bio-patenting and animal breeding.
- **Complexity, environment and urban systems** – examining the relationships between the built environment, urban morphology and health.
- **Pedagogy, knowledge and the built environment** - developing urban network modelling tools for interdisciplinary teaching in the built environment, and examining connections between schools, universities and workplaces in supporting quantitative methods teaching in planning and geography.
- **Methods and data for socio-spatial research** - involving innovative spatial Design Network Analysis (sDNA) software to allow network and morphological analysis of city and regional systems, and the development of new forms of qualitative mobile methods and emotional mapping.

These developments have been supported by major research awards and have produced a range of high quality outputs (detailed in section d).

Two new interdisciplinary **Research Institutes** have also been established to strengthen several of these themes. In relation to the methods and socio-spatial data theme, the Welsh Institute for Social and Economic Research Methods and Data (WISERD) was established in 2008 with funding from the ESRC and Welsh Government, and with staff in the School playing a key role (Orford and Anderson). Providing a model of all-Wales Higher Education Institution collaboration, WISERD has collated and analysed existing socio-economic data, developed new qualitative and quantitative methodological tools, and provided new data sets on Wales at national and local levels. The School's strengths in sustainability research have also been consolidated with the formation of PLACE – Cardiff University's Sustainable Places Research Institute. The School plays a leading role in PLACE, which is directed by Marsden and involves 10 staff in the School as well as researchers from nine other schools in the University. This brings together experts in buildings, energy systems, rural and urban communities, ecosystems, infrastructure, health and policy-making, to provide critical and inter-disciplinary approaches to the development of sustainable places.

The School has secured significant growth in large inter-disciplinary and collaborative research awards since the previous RAE period (see section d). It has also continued to recruit, retain and support high quality research staff (see section c). Significant investments have been made by both the School and University in research infrastructure, library facilities and research support, including the upgrading of computer equipment in the School, the development of a super computer network for the University, and additional appointments within the University's Research Innovation and Enterprise Services (RIES) (see section d). To respond to growing numbers of research students, associates, fellows, and visiting scholars, the School has also acquired additional office space in an adjoining building.

Specific objectives for **2014-2020** are as follows: (i) to broaden and deepen collaborative and inter-disciplinary research, particularly through the work of our existing Research Centres and Institutes; (ii) to create a new Research Centre on cities, sustainability and food; (iii) to develop the ESRC Wales Doctoral Training Centre (DTC) and further improve the quality of postgraduate student training; (iv) to improve the IT and library facilities provided to staff and research students; and (v) to increase useable research space in the School building.

Priority development areas for 2014-20 are set out below. These build on the School's existing research strengths and core research themes – notably the design and delivery of sustainable places, urban food security, the role of the planning system in shaping development, and the governance and resilience of cities, regions and city-regions. They also attend to the continuing

dual strategic focus on international academic excellence and policy and practice impact:

- **Sustainable place-making** – investigating the complex and dynamic interrelations between ecology, society and economy associated with sustainable regions and places.
- **Climate change and renewable energy** – research on the scalar politics, multi-level governance, community impacts and justice implications of climate change mitigation and alternative energy production.
- **Urban food systems and planning** – studies of food security, urban food strategies, community food provision and community growing initiatives.
- **Welfare planning and geography** – investigations of the shifting policy contexts and experiences of welfare, poverty and homelessness in the UK and developing countries.
- **Environment – society relations** – research on animal welfare, bio-security, bio-patenting, marine geographies and the nonhuman dimensions of quality of life.
- **Territorial resilience** – investigations of the capacities of localities, cities and regions to recover, respond and adapt to economic and environmental shocks and crises.
- **Smart specialisation** – critically analysing the new generation of regional innovation policies.
- **Built environment, health and well-being** – investigating the impacts of the built environment and urban morphology on health and well-being.
- **Methodological innovation** - including the development of GIS as a mixed method approach, mobile and sensory methods and visual ethnographies, and the development of meta-data and tools for the discovery and exchange of quantitative and qualitative data.
- **Network analysis research** – extending work on spatial Design Network Analysis (sDNA) software and network-based density and spatial autocorrelation to socio-spatial processes, such as land use, property prices, segregation and well-being.
- **Changing planning systems** – including research on EU planning reform, regulatory enforcement, new technologies and participation in the planning process, and the shifting relations between planning and social justice.

c. People, including:

i. Staffing strategy and staff development

Staffing strategy

The School's **research strategy** fosters and promotes the sustainable recruitment, development and retention of research staff who are, or will be, capable of achieving international excellence and research leadership. This has been underpinned by sustained growth of research income (see section d) and has focused upon reinvesting in early career appointments to provide a balance between senior and junior staff and to support priority research areas. For example, since 2008 the School has recruited 12 lecturers and utilised internal resources to appoint two School Research Fellows (Pill and Smith, for the period 2012-14). The School has also secured funding from the University, through its Serious Brain Power initiative, for a third fellowship (awarded to Kythreothis) for a period of five years, whilst Collins was awarded an RCUK fellowship (2007-12) that straddles the last RAE and current REF periods.

External research income has also allowed the appointment of 21 Research Associates across the REF period. Further evidence of the support for research staff is provided by the promotion of 12 members of staff, including six to Senior Lecturer, four to Reader, and two to Chair. Recruitment at more senior levels is used strategically to develop or sustain established research strengths or to promote new ones (for example the appointment of Huggins to a Chair in Economic Geography). Turnover of staff since 2008 has resulted mainly from retirements, whilst a number of research associates have secured tenured positions in other universities. The majority of the School's academic staff are employed full-time on open-ended Teaching and Research, or Teaching and Scholarship contracts. All staff on Teaching and Research contracts are allocated similar teaching and administrative workloads which are monitored according to a research-led staff workload model. This allows lecturers on probation a reduced teaching load for the duration of their

probationary period. Allowances are also made for staff with particularly heavy administrative responsibilities and large research grants (see below). This provides a supportive context for all researchers in the School, at all stages of their career.

Staff development

Research support operates at related levels. **Research Groups** provide the informal 'home' for individual researchers and foster support for research grant applications, presentations and publishing. There is an **induction programme** for new entrants, which sets out the expectations, structures and support mechanisms associated with research in the School and University. Early career recruits are also allocated a mentor to monitor progress during their first three years of post. All research staff are appraised annually and any **training needs** identified through this process are met primarily through the University's Career Development Skills programme, Research Development courses, and Leadership and Management training (which have collectively been undertaken by 12 members of staff to date). Where appropriate, full or part funding for external training is made available. The School has a long-standing commitment to the support and development of staff at all stages of their career, and implements the principles of the 'Concordat to Support the Career Development of Researchers' as part of the integrated approach promoted by Cardiff University. The University has been recognised by the European Commission for its efforts in improving the working conditions and career development opportunities for researchers through the *HR Excellence in Research* accreditation. This accreditation was renewed in 2012 in recognition of the University's progress in implementing the Concordat. The School has acted to ensure an appropriate gender balance in relation to senior research positions within the School, with Gillian Bristow currently Director of Research and Mara Miele being Director of Postgraduate Research. In addition, the School will be applying for a Gender Equality Mark from the Equality Challenge Unit following the launch of this initiative in late 2014.

Study leave is an integral component of the School's staffing strategy. Applications are submitted to the School's Management Team and, on average, two members of staff are granted study leave of one semester each year. The School introduced a **seed corn research funding** initiative in 2009 aimed at increasing research capacity. Awards of up to £1,000 for small-scale empirical research were made to five staff during this REF period, leading to the publication of ten articles and the submission of two research grant applications. Further funding has been provided in 2013 to allow up to 10 new seed corn awards to be made. The School's research strategy has also sought to **increase research capacity** amongst highly research active staff. The School operates a flexible policy of buy-outs and buy-ins for staff with large grants, which allows them to manage major research projects through reductions in teaching and administrative duties. This acts as a powerful incentive for research grant submissions. Similarly, the School encourages staff buy-outs through secondments to academic institutions outside the UK and to government organisations. The School fully implements an equality and diversity plan and recognises all staff equally within the School. This has fostered growing diversity of staff and their career opportunities. Flexible working is supported where possible in conjunction with the line manager/Head of School as appropriate.

ii. Research students

The School has actively grown its **postgraduate research body** since 2008 as part of its commitment to develop the next generation of high calibre researchers, and there are currently 52 PhD students registered. It has invested £420k of its research funds to create 8 new studentships, co-funded 9 ESRC DTC studentships (involving £122k of School monies) and secured £293k from the University through its prestigious President's Scholarship scheme to fund eight studentships. The training and supervision of research students is accorded a high priority. The quality of this provision was recognised by the School's inclusion within the ESRC-funded Wales Doctoral Training Centre (DTC), with ESRC recognition given to its environmental planning and human geography pathways.

Each research student is allocated two supervisors with expertise in their relevant topic. An

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independent internal reviewer is chosen to assess the student's written work every 3-6 months as part of a progress review scheme that is monitored by the Director of Postgraduate Research (PGR) and the School's PGR Monitoring Committee. Each student participates in at least one Research Group, and is expected to make a presentation to the Group on an annual basis, usually as preparation for a major conference paper. This provides students with a sense of inclusion within the School, interaction with junior and senior researchers, and mentoring and support for their career development. A bespoke package of **methods training** is designed for all first year PhD students, with the details of this package dependent on students' research topics and their prior learning and experience. Training is provided in generic and subject-specific research skills, as well as transferable skills, in order to broaden their development as researchers. Students are expected to accumulate a minimum of 20 full training days over their period of study. Research students in the School organise their own weekly PhD seminar series, which involves students making presentations to their peers (and research staff) in an informal and supportive environment. These are supplemented by two PhD Away Days per year. Research students are also all members of the University's Graduate College (UGC), which exists to foster an intellectually stimulating environment where students are encouraged to share and develop research interests with peers from other Schools and to feel part of a wider cross-disciplinary research community. An extensive UGC Programme offers students training in a range of skills that contribute not only to the efficient management of their research studies but also to their personal development and future employability. Since 2008, research students have attended more than 70 training courses provided by the UGC.

Research students occupy high quality shared office space in an adjoining building and have access to high specification computer facilities. They benefit from a generous photocopying allowance and an annual fieldwork and conference budget of £750. Students are also encouraged to become involved in seminar-style teaching, tutorials and live research projects in the School, with additional payments made for such contributions. Each supervisor is expected to contribute 40 hours per year per student as first supervisor and 20 hours as second supervisor. The School's research students have presented at more than 200 conferences and have published eight articles in peer reviewed academic journals during the REF period.

d. Income, infrastructure and facilities

Consistent with the strategy outlined in RAE 2008, the School has continued to generate **sustained investment** for high quality research in line with its priority themes. A total of £9.69m has been secured in research awards since January 2008, equivalent to £1.76m per year. RCUK awards total £2.2m (23 per cent of overall income), European Union awards sum to £2.36m (24 per cent) and £5.07m has been secured from UK Government, Charities and Industry (53 per cent). These successes can also be expressed in terms of numbers of research grants secured by staff. Since January 2008 the School has been awarded 15 ESRC grants, eight British Academy grants, 12 European Commission grants, 52 grants from UK Government, Industry and Charities, and four Higher Education Authority grants. Significant amongst the awards secured by the School either alone or in partnership are:

- Welfare Quality - European Commission, £13.7m, 2007-11, Miele (Co-director).
- Centre for Business Relationships, Accountability, Sustainability and Society (BRASS) - ESRC Centre, £11m, 2001-12, Marsden (Co-director).
- Welsh Institute of Social and Economic Research Data and Methods (WISERD) - ESRC / Welsh Government, £5.2m, 2008-, Orford, Anderson.
- Centre for Education into the Built Environment (CEBE) – Higher Education Academy, £5m, 2004-11, Webster.
- Sustainable Places Research Institute (PLACE) – Cardiff University, £5m, 2010-15, Marsden.
- Purefood – European Commission, £2.4m, 2010-2014, Sonnino.
- Wales Rural Observatory (WRO) - Welsh Government / European Commission, £4.1m, 2004-13, Milbourne, Marsden.

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- Climate Change Consortium for Wales (C3W)- Welsh Government, £4.1m, 2009-14, Milbourne.
- Smart Specialisation for Regional Innovation (FP7), European Commission, £2m, 2013 -16, Morgan.
- Grey and Pleasant Land? An investigation of the connectives of older people within rural society - RCUK, £1.1m, 2009-12, Milbourne.
- Economic crisis: resilience of regions – European Commission (ESPON) award, £348k, 2012-15, Bristow.
- Territories and technologies: an evolutionary framework of regional resilience – ESRC, £297k, 2011-2014, Bristow and Cooke.
- Animal Welfare Regulation – DEFRA, £270k, 2012-2014, Miele.
- The development of migrant villagers under China’s rapid urbanization – ESRC/DFID, £267k, 2010-12, Webster.
- Making space for the poor: law, rights, regulation and street-trade in the 21st century, ESRC/DFID, £254k, 2010-12, Brown
- The health and wealth of cities: a new technology for evidence-based urban policy and planning, ESRC, £199k, 2013-14, Webster.
- Delivering renewable energy under devolution – ESRC, £164k, 2011-12, Cowell.

This success has been supported by the School’s **attractive incentive system** for research, with 40 per cent of recovered indirect costs from externally funded research projects passed back to investigators, who have discretion to use these funds for the enhancement and impact of their research. Early career researchers without research grants are allocated funding for conference attendance. The maintenance of a high quality intellectual environment ensures that researchers are able to generate the innovative ideas required of RCUK applications. The School also operates a **peer review system** for RCUK research grant proposals, which involves the submission of a proof of concept note and detailed proposal prior to submission. The School’s Research Office and the University’s Research Innovation and Enterprise Services (RIES) both provide valuable advice and support to staff developing research grant applications. A member of RIES spends one day per week in the School to support and advise staff about research grant opportunities and the application process.

The School’s high quality research and publications record is underpinned by continued investment in its **research infrastructure and facilities**. The WISERD and PLACE research institutes have their own refurbished and customised research spaces. The School is actively involved in ambitious University proposals to develop a new social science research park (SSPARK). This will be a major capital investment that will enable researchers, policy-makers and professional practitioners to be co-located in order to promote the design, conduct and evaluation of high quality cross-disciplinary research with impact. The School is also actively involved in designing the Cardiff University Innovation System, where social scientists will be co-located with natural and physical scientists in a new nine-acre Innovation and Enterprise Campus in the heart of the city. This investment is intended to create a campus that will host a new generation of University Research Institutes in fields such as sustainable water management, renewable energy and big data, fields in which the School can make an important contribution.

The School provides high quality office space and research support facilities to staff, including state of the art computer facilities and cartographic support. The School has a large library budget of £54.8k per year and a dedicated section of the University’s Bute Library. The University’s central library budget for 2013-14 is £2.4m, and in line with the University Library Service’s collection development policy, the Bute library is increasing its electronic journal provision. The School invests around £40k per year on computing and IT infrastructure across research and teaching. In addition, the University has invested heavily in advanced computing facilities, providing valuable resources for staff working on spatial analysis and complexity. There are currently 3.0 FTE technicians supporting research in the School and a Research Office providing 2.0 FTE of dedicated research support.

e. Collaboration and contribution to the discipline or research base

In line with its international standing, researchers from the Cardiff School of Planning and Geography are prominent contributors to the disciplines and professional fields associated with the governance, development and sustainability of cities, regions and rural spaces. This is evidenced by both the volume and quality of peer reviewed research awards, monographs and articles in leading international journals, as well as membership of editorial boards and learned societies. In terms of research outputs, 20 research-based books, more than 320 articles in academic peer reviewed journals and 75 book chapters have been published during the REF period. Eight of these journal articles have been nominated for, or awarded **prizes** for their excellence including, the 2011 Ashby Prize for best paper in *Environment and Planning A* (Miele); the 2011 Charles Tiebout and 2012 Springer Prizes in Regional Science (Wang); and the 2011 AESOP prize for best planning paper (Webster).

Members of the School have been extremely active in relation to journal editorial work with the following **journals edited by staff** since 2008:

- Environment and Planning C (co-editor Bristow)
- Environment and Planning B (co-editor Webster)
- European Planning Studies (editor Cooke)
- Journal of Environment Policy and Planning (editor Cowell)
- International Journal of the Sociology of Agriculture and Food (co-editor Miele)
- Journal of Education in the Built Environment (managed by CEBE until 2012)
- Regional Studies (co-editor Bristow)
- Transactions of CEBE (editor Webster)
- International Planning Studies (co-editor Orford)
- Research in Transportation Economics (editor in chief Santos)
- Commonwealth e-Journal of Local Governance (co-editor Brown).

The School has also been represented on the **editorial boards** of a further 10 journals in the discipline during the REF period, namely: Planning Theory and Practice (Cowell); Journal of Rural Studies (Milbourne); Sociologia Ruralis (Milbourne, Sonnino); Environment and Planning B (Webster); Urban Design International (Biddulph); Critical Policy Analysis (Cowell); International Journal of Innovation and Regional Development (Huggins); Research in Transportation Economics (Santos); Agriculture and Human Values (Miele); and Society and Animals (Miele).

In addition to this editorial work, several special editions of journals have been **guest edited** by staff since 2008:

- *Environment and Planning A*, 2008, Biosecurity: spaces, practices and boundaries, Enticott
- *International Journal of Innovation and Regional Development*, 2008, Intellectual capital and regional development, Huggins
- *Urban Design International*, 2008, An international review of liveable street thinking and practice, Biddulph
- *International Planning Studies*, 2009, Feeding the city: The challenge of urban food planning, Morgan
- *Sociologia Ruralis*, 2009, Rural sociology and animal disease, Enticott
- *Environment and Planning A*, 2011, The matter of water, Bear
- *Journal of Rural Studies*, 2012, Growing old in rural places, Milbourne

The School's researchers have also been extremely active in **the organisation of international conferences, sessions at international conferences and ESRC funded seminar series**. Of particular note here are the **2nd International Conference on China's Urban Transition and City Planning** (Webster, 2011, Cardiff) and the Smart City Expo World Congress (Biddulph, Barcelona, 2012). Two ESRC seminar series awards cover this REF period - Urban Design and

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the British Urban Renaissance (Biddulph, 2007-09) and Where next for wind? (Cowell, 2007-09). Sessions have been organised by staff at the international conferences of the Association of American Geographers, the Association of European Schools of Planning, the Royal Geographical Society, the International Rural Sociology Association, the European Society of Rural Sociology, the British Sociological Association, the World Planning Schools Congress and the World Urban Forum. The School has also hosted 80 Visiting International Scholars from prestigious universities in China, Denmark, Brazil, Germany, Japan, Mexico and Thailand during the REF period, integrating them into the Schools' research culture through a recognised **International Scholars Programme**.

The research contributions made by staff in the School have been recognised by learned societies, with five members of staff elected Academicians of the Academy of Social Sciences (Cooke, Marsden, Milbourne, Morgan, Webster), and Biddulph, Marsden and Webster elected Fellows of the Royal Society of Arts. Marsden is also a member of The Learned Society of Wales and Eminent Fellow of the Royal Institute of Chartered Surveyors (RICS). Other contributions to learned societies and research organisations during the REF period are also worthy of note, including the Royal Geographical Society (through Milbourne's member of its Higher Education and Research Committee, as well as Bear's membership of the Social and Cultural Geography Research Group Committee, and Enticott's membership of the Rural Geography Research Group Committee); Regional Studies Association (Bristow, Vice Chair); Council of the International Rural Sociology Association (Miele, Milbourne); Executive Committee of the European Society for Rural Sociology (Miele, Milbourne); ESRC Evaluation Committee (Milbourne); RCUK Strategic Advisory Committee for the Rural Economy and Land Use Research Programme; International Rural Sociological Association (Marsden, Vice Chair); and Transportation Research Board of the National Academies in the USA (Santos). The School also has strong research links with the Royal Town Planning Institute (RTPI) including Biddulph's membership of the Urban Design Network Advisory Group.

The School and University pro-actively encourage and support inter-disciplinary and collaborative research. The School has been at the forefront in securing funding for inter-disciplinary and collaborative research since 2008, including eight awards for research students and staff under the University's Interdisciplinary Research Funding scheme. Research projects running since 2008 have involved collaboration with researchers in other social science disciplines, including human geography, economics, social psychology, social gerontology, political science and sociology (see BRASS, WISERD, WRO, Grey and Pleasant Land, CEBE, Purefood). Collaboration has also involved research with physical and life scientists. For example, the Sustainable Places Research Institute includes staff from the Engineering and Medical Schools, the Climate Change Consortium for Wales (C3W) brings together social and physical scientists from four universities across Wales, and Welfare Quality involved animal and social scientists. Funded research during the REF period has involved collaboration with researchers at the following UK universities: Aberdeen, Aberystwyth, Bangor, Bristol, Cardiff Metropolitan, Glamorgan, Heriot Watt, Manchester, Newcastle, Plymouth, Queen's Belfast, Salford, Sheffield, South Bank, Stirling, Swansea, UCL and Ulster. International research collaboration has involved Aristotle University of Thessaloniki, University of Bordeaux, Gdansk University, University of Helsinki, HTWK Leipzig, Nanjing University, University of Paris I, Peking University, Università di Pisa, Sun Yat Sen University, University of Tartu, University of Toulouse, Uppsala University, University of Utrecht, Wageningen University, Xiamen University, Xi'an University and Yunan University.

The School has also developed significant research relationships with user groups in line with research priorities and the strategic focus upon impact. Research income from UK Government, Charities and Industry has increased by 75% since the last RAE and now represents over 50% of the School's research income. Important here has been the £10m of funding secured from the Welsh Government for the WRO, WISERD and C3W research programmes. The ESRC-funded BRASS Research Centre has also been commended for its collaborative work with industry. The School has an excellent working relationship with the Welsh Government, with staff serving on or providing expert advice to various advisory bodies, task and finish groups, and

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committees, notably relating to rural development and agri-food (Marsden, Milbourne and Morgan); city-regions (Morgan); ecological footprinting (Collins); animal health and welfare (Miele and Enticott); homelessness legislation (Mackie); sustainable development (Marsden and Enticott); and devolution finance (Bristow). Furthermore, Enticott secured an ESRC placement fellowship for a secondment to the Welsh Government (2010-11).

Beyond Wales, Milbourne has been a member of DEFRA's International Expert Review Panel for Forest Research, Marsden is a member of the UK National Environmental Assessment Expert Panel, and Brown has acted as the urban planning advisor on DFID's Technology, Infrastructure and Urban Planning Resource Committee. In addition, Sonnino advised the Scottish Government on the development of its National Food and Drink Policy, and Huggins was an advisor to DEFRA on rural innovation. At the international level, Brown is a member of the steering committee of UN-HABITAT's World Urban Campaign, a consultant to the UNESCO/UN-HABITAT project on *Urban Policies and the Right to the City*, a member of the UNESCO expert team for the project on *Migrants in the City*, and an expert advisor for UNESCO on the *Right to the Indian City*. Morgan is a member of the European Commission's Expert Group on Smart Specialisation, and Huggins has acted as an advisor to the OECD on regional competitiveness.

Members of staff have also developed research relationships with a broad range of other UK based governance bodies.

These include relationships with a number of local authorities such as Cardiff Council (Huggins, Marsden, Morgan and Webster), as well as with third sectors organisations and charitable trusts such as the Joseph Rowntree Foundation (Milbourne), the Plunkett Foundation (Morgan and Sonnino), and the Soil Association (Morgan and Sonnino). Finally, in its aim to enhance the links between research and practice, the School has appointed several people from government and NGOs as **honorary fellows** since 2008, including Kioe Sheng Yap, previously director of poverty reduction at the UN Economic and Social Commission for Asia and Pacific, Graham Meadows, the former Director-General of Regional Policy in the European Commission, Duncan Green, Senior Strategic Adviser to Oxfam GB, Kevin Bishop, Chief Executive of Dartmoor National Park and Havard Prosser, Former Chief Environmental Science Officer, Welsh Government.