

<p>Institution: University of Greenwich</p>
<p>Unit of Assessment: (UoA 24) - Anthropology and Development Studies</p>
<p>a. Overview</p> <p>This submission represents the social scientists of the Natural Resources Institute (NRI) of the University of Greenwich, an interdisciplinary centre specialising in research, advisory work, training and education in support of global food security, sustainable development and poverty reduction. NRI social scientists work in support of these aims alongside agricultural and food scientists, the majority of which are submitted under UoA6. More than 65% of NRI staff are research active, and those in UoA24 fall within two operational Departments (Livelihoods and Institutions; and Food and Markets). Research is closely integrated with consultancy and advisory activities, leading to on-going relationships with donors, research funders and research users in the public, private and voluntary sectors in the UK and overseas.</p> <p>The NRI social scientists submitted to UoA24 are not formally constituted in research groups, but their research can be viewed as part of NRI's Development Programmes, each of which crosscuts research and consultancy work. The programmes most relevant to the current submission are listed below and demonstrate clear continuity with research groups submitted for RAE2008.</p> <p>The Rural Institutions and Policy Programme (leader Quan) carries out research on governance arrangements and institutions (including institutions for agricultural research and extension, and rural financial services) affecting smallholder farmers and other categories of the rural poor.</p> <p>The Climate Change, Agriculture, and Natural Resources Programme (leader Morton) brings expertise in smallholder agriculture, natural resources management, economic development and rural livelihoods to the challenges posed by climate variability and change, contributing to the search for effective adaptation and mitigation strategies.</p> <p>The Equitable Trade and Responsible Business Programme (leader Nelson) will generate knowledge through critical analysis and action-research on the potential and limitations of trade and business to support equitable and sustainable development.</p> <p>The Value Chain Development Programme (leader Andrew Graffham) carries out research on all aspects of agricultural value chains, from farmers and their organisations to international standards systems.</p> <p>NRI social scientists collaborate actively with social scientists elsewhere in the University of Greenwich: the Business School, the School of Science, and the Greenwich Maritime Institute. Marr holds a split appointment between NRI and the Business School.</p> <p>b. Research strategy</p> <p>NRI set out its strategy for research in the social sciences during RAE2008. In summary we planned to:</p> <ul style="list-style-type: none"> • further build a culture of synergy between research, advisory and consultancy work • intensify research on existing priority topics including: knowledge management and learning within agricultural development; adaptation to climate change; incorporation of governance into value chain analysis; local governance, land policy and economic development • intensify research on agricultural marketing, producer organisations and commodity trade, which had not by 2008 been adequately represented in formal research outputs • further diversify research funding sources • build a culture of research student supervision. <p>Since 2008, these objectives have been pursued collectively by NRI social scientists, with support from NRI management and the heads of both the relevant Departments. Substantial internal funding has been allocated to a Development Studies cluster for activities including research bidding, participation in conferences, workshops and working groups, writing of key papers for submission to peer-reviewed journals, and funding of research students. In addition, all staff (and particularly early career researchers - ECRs) are able to bid on a University-wide competitive basis</p>

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for further internal funding, which has been used for scoping studies of research areas where NRI can expand its activities, writing of both journal articles and working papers, and support to high-profile roles such as **Morton's** as a Coordinating Lead Author for the Intergovernmental Panel on Climate Change (IPCC). Within this context, significant achievements have been made towards the objectives set out in RAE2008.

Expanding and diversifying research funding

A series of major new projects won by NRI social scientists since 2008 have developed core research interests, led research into new areas such as management of financial risk for farmers, and international trade standards, and diversified our funding base for research:

- Accessible Systems to Manage Risk in Family Agriculture in Africa (European Commission, £3.5 million with £700,000 for research activities)
- Assessing the Impact and Governance of Sustainability Certification and Labelling Schemes (DFID, £538,000)
- Fisheries and Aquaculture Investment Partnerships in Africa (NEPAD, £244,000)
- Optimising the Dual Goals of Microfinance: Financial Sustainability and Poverty Reduction in India, Peru and Tanzania (The Leverhulme Trust, £220,000)
- Agro-Ecology Based Aggradation-Conservation Agriculture (ABACO): Soil Degradation & Food Insecurity (European Commission, NRI share £201,000)
- Climate Learning for African Agriculture (DFID Climate and Development Knowledge Network, £200,000)
- Commodity Based Trade: A Potential Route for Improving Developing Countries' Access to Trade in Livestock Products (DFID, £150,000)
- Institutions and Policies in the Ugandan Stamp Out Sleeping Sickness Campaign (DFID Research into Use Programme, NRI share £89,000)
- Rural Territorial Dynamics in Northeast Brazil (ESRC, £85,000)
- Exploring Urban-Rural Interdependence and the Impact of Climate Change in Tanzania and Malawi (DFID-IDRC, £76,000)
- Farms for the Future (CGIAR Programme on Climate Change, Agriculture and Food Security, £64,000)

Additional research projects have been secured from the EU Food Security Thematic Programme, the Fairtrade Foundation, the McKnight Foundation, and the International Rice Research Institute. NRI social scientists have also played a major role in designing, winning and implementing, in some cases as Work Package Leaders, the following major interdisciplinary projects (values are totals for NRI – income has been attributed in varying proportions between UoA24 and UoA6):

- Cassava: Adding Value for Africa (Bill and Melinda Gates Foundation – £7 million)
- Strengthening Capacity for Agricultural Research and Development in Africa (DFID – £1.9 million)
- Yam Improvement for Incomes and Security in West Africa (Bill and Melinda Gates Foundation – £2 million)
- Reducing Post-harvest Losses and Waste Utilisation (FP7 – £2.37 million)
- Improving the Livelihoods of Smallholder Cassava Farmers through Better Access to Growth Markets (EC – £2.33 million).

Synergy between research and consultancy

The internal funding streams referred to above, and mentoring by senior staff including Heads of Department, have created space for staff to formulate research proposals in areas where they have consultancy experience, and write scholarly outputs based both on research and on consultancy activities. **Quan's** output on customary land institutions in Ghana is an example of the latter. Besides staff submitted here, several other NRI social scientists (Bennett, Kleih, Onumah, Lam, Forsythe, Phillips) have published or submitted peer-reviewed articles, especially on market and value chain topics. The establishment of NRI's Development Programmes will further encourage staff to reflect critically on consultancy practice, and develop peer-reviewed outputs, alongside dissemination of findings to practitioners.

Future strategy

NRI has developed a five year strategic plan (*Knowledge to Feed the World*) for 2012–17 that provides clear strategic aims, goals and indicators to grow research. The plan reinforces our mission ‘**To discover, apply and share knowledge in support of global food security, sustainable development and poverty reduction**’. At the core of the plan is the objective of growing research, as measured by income growth, by a minimum of 35%, through committing staff to increasing their portfolio of projects from both competitive and non-competitive bidding activities to secure a balance of large, medium and small projects. The aim will be to continue to support NRI’s Development Programmes, including those of particular relevance to development studies identified in the overview above.

Competitive bidding efforts will continue to focus on existing funding sources, combining this with increasing efforts to diversify sources of funding, including the ESRC, different European Commission programmes and budgets, Foundations, bilateral donors and NGOs. We plan a mixed strategy of bidding for large projects, which have the potential to bring financial stability and growth, and smaller innovative projects. Research leaders will be supported in developing closer relationships with funding agencies in UK, Europe and worldwide.

We will maintain our broad-based strategy for dissemination of research outputs, publishing in peer-reviewed journals to reach an academic audience and maintain our own standards of academic rigour, and in a wide variety of media (project bulletins, NRI’s own website, project websites, policy briefs, newsletters, NRI annual report, and training materials). This will reach research users and a broader audience, widen the visibility of our research, ensure more rapid and broader uptake of research findings and recommendations, and enhance the impact of the research. This strategy recognises the benefits of being able to demonstrate evidence of the impact of the unit’s research activities in terms of supporting research bids and programme development.

The unit has promoted, and continues to promote, research dissemination and discussion by active participation in a range of fora including:

- national and international research conferences (see section d)
- contributions to international assessment initiatives such as the IPCC: **Morton** is serving as Co-ordinating Lead Author for the Chapter on Rural Areas of the Fifth Assessment Report of the IPCC, and **Martin** served as a Lead Author for the International Assessment of Agricultural Science and Technology for Development until 2009
- participation in meetings at international organisations such as the World Bank, the European Commission, the World Animal Health Organisation (OIE), UN-HABITAT, the Working Group of the Standards and Trade Development Facility, COMESA, the ISEAL Alliance, etc.
- the All-Party Parliamentary Group on Agriculture and Food for Development, which brings together policy-makers and practitioners in the field to encourage informed debate on agriculture, nutrition and wider food/water security in the developing world – NRI is a founder member and a staff member has been the Coordinator until October 2013
- Meetings of the House of Commons Science and International Development Committees.

c. People

Staffing strategy and staff development

NRI aims to grow research volume by continuously seeking to increase the portfolio of research projects and by applying a balanced recruitment process, bringing in staff at different stages of their research career as the volume of research work grows.

Responsibility for staff development and quality control of research activities and outputs rests with the heads of NRI’s operational Departments, under the overall leadership of the Institute’s Director. Staff development is managed through annual staff appraisals that provide the framework for personal development. Management of staff retention and recruitment has focused on core research strengths, and losses have not affected the coherence or quality of research in UoA24. Staff are entitled to study internally for a part-time PhD at no cost: **Stathers** has been awarded a PhD under this arrangement, and **Quan** and Lora Forsythe are currently registered. Staff are

encouraged to apply for the titles of Reader and Professor in the University of Greenwich. **Morton** was already a Professor in 2008. Ben Bennett, who is not submitted here but is a co-author of papers submitted for **Naziri**, became a Professor in 2013. **Marr** has become a Reader.

Recent recruitment initiatives have led to the appointment since 2008 of staff who are currently, or were at the time of their appointment, ECRs. These include **Posthumus** and **Naziri** within the submission, and Forsythe, Lam, Kumar and Phillips who are not submitted. **Scrieci** was appointed as a Reader in 2012 to increase capacity in quantitative environmental economics and on climate mitigation and green economy issues.

Particular attention is given at Departmental level to foster ECR development and support in research bidding activities and delivery, in line with the broader Greenwich Early Career Researcher Initiative set up in 2010 and the Vitae Concordat to Support the Career Development of Researchers. ECRs are encouraged in their research with an opportunity to win an annual University-wide prize for achievement (won by **Posthumus** for 2010/11), which can be used for purposes such as international conference participation. ECRs new to postgraduate supervision are required to participate in the University's 'Supervising Postgraduate Research Students' programme, covering good supervisory practice, and the wider context of the University's postgraduate research policy.

NRI actively seeks to maintain active collaboration with retired staff. Conroy, Pound and Sutherland, all submitted to RAE2008, have been appointed Visiting Fellows and continue to work on NRI projects. An external researcher, Susan Bragdon, has been given the title of Visiting Professor in order to expand our work on issues at the interface of agricultural development and law.

Research students

Since 2008, the University has had eleven PhD completions (compared with four PhDs and two MPhils in RAE2008) in the field of development studies:

- Forbidden (sacred) lakes and conservation: the role of indigenous beliefs in the management of wetland resources in the Niger Delta, Nigeria
- Smallholder food security in sub-Saharan Africa: the case for diatomaceous earth grain protectants
- Understanding the influence of livelihood features on cassava value chains
- The impacts of farmer organisations and their implications on pro-poor growth among smallholder farmers in Malawi
- Improving urban water quality for livelihoods enhancement in the Odaw-Korle river catchment of Accra, Ghana
- Financial sustainability of rural microfinance institutions (MFIs) in Tanzania
- Strength of weak ties in microfinance
- Port security in a developing country pre- and post- the 9/11 terrorist attacks: a case study on Port Klang in Malaysia
- An evaluation of the community conservation service at Tarangire and Lake Manyara national parks in Tanzania
- Protected area assessment and reporting: an examination of current approaches and evolving needs with application of an integrated model in Egypt
- Developing conservation governance strategies: holistic management of protected areas in Nepal.

At present, 19 research students are researching development studies topics at NRI (an increase from 10 in RAE2008) and two in the University of Greenwich Business School, several at advanced stages. These are funded from a mixture of project funding, home government bursaries, and self-funding. Funding gained as a result of RAE2008 was used to fund two competitive bursaries to students proposing innovative topics within NRI priority research areas – it is expected that these students will complete in early 2014. The aim is to increase postgraduate numbers by 40% over five years, mainly through incorporation of studentships within larger project bids and bidding in to the Vice Chancellor's postgraduate bursary scheme. The majority of research students are from developing countries. NRI social scientists have also provided co-

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supervision to research students attributed to UoA6, and external supervision to students registered at African universities: Makerere University, Uganda (under a Commonwealth Split-Site Scholarship); University of Agriculture, Abeokuta, Nigeria; and Egerton University, Kenya.

Each research student is supervised by a team of three supervisors, with experience of supervising at least three students to completion. The administration and quality control of research degrees are overseen by the University Research Degrees Committee. The University also runs and internally audits a transferable skills programme, and from 2013 is implementing its Postgraduate Researcher Development Programme, as part of its response to the Vitae Researcher Development Framework. All students have to complete a set of online courses in research skills and management. NRI recruits students on a flexible basis to undertake research programmes that may: involve work at NRI for most of the research period; or be based in the student's home country; or have an intermediate arrangement. When students are based in their home countries, effective communications are ensured and a local supervisor is also appointed. Students are allocated a dedicated workspace and their own networked computer, with software purchased if required. NRI runs a one-on-one statistics support service to provide individual assistance. A seminar series is run for PhD students as part of the post-graduate student club and final year students also present at the NRI research seminar series.

Research students in social-scientific and interdisciplinary topics have also participated in dedicated seminars on methodological issues in development studies and have been encouraged to attend courses offered under NRI's MA in Rural Development Dynamics. Topics covered have included: qualitative research methodologies and appropriate data analysis; ethnographic and case-study approaches; stakeholder analysis, institutional analysis, gender and diversity; social network analysis; and advanced quantitative approaches. These activities have also enhanced the peer support students give each other, which is an invaluable part of their student experience. Students have been actively encouraged to participate in events for research students organised by the Development Studies Association, the University of East Anglia, London South Bank University and other institutions, and to attend international conferences. An NRI PhD student, Mathews Madola, was awarded the prize for Best Student Poster at the 2009 Annual Conference of the Development Studies Association.

d. Income, infrastructure and facilities

Total income attributable to this UoA during the REF period has been around £4 million. As described in b) above, research projects have been won from a variety of research funders, including the ESRC and the Leverhulme Trust, and development donors.

Research in NRI is coordinated by the Director of Research and Enterprise and takes place within the context of the University's Strategic Plan for 2012–2017 and under the overall leadership of the Deputy Vice Chancellor for Research and Enterprise. NRI's Departments are the primary operational units for identifying research and consultancy funding opportunities, mentor staffing, maintaining professional standards, and overseeing staff development. The Head of the Livelihoods and Institutions Department (**Morton**) assists the Director of Research and Enterprise in matters relating to social-scientific research, in his own Department and in the Food and Markets Department, including research proposals, advising staff on publications, recruitment of PhD students and oversight over their supervision and other training, and allocation of internal budgets for research support. Heads of Department, the Director of Research and Enterprise, and other senior staff provide both active intellectual support for research bidding, and quality control under systems validated by ISO9001:2000 to ensure quality, financial viability, and responsibility for delivery of outputs. For larger bids, and bids with both research and consultancy elements, NRI's Commercial Director and Business Development Manager also provide assistance. Information is disseminated throughout the Institute via the Intranet and departmental meetings, and fortnightly research seminars are held on a time-tabled basis with presentations by staff members, research students, and visiting researchers and development practitioners.

NRI regards its international partnerships, described in e) below, as a core feature of our intellectual infrastructure, allowing us to formulate, win and implement innovative research projects incorporating a wide variety of Southern research expertise, in-depth understanding of local contexts, and opportunities for uptake by national and local stakeholders. We are pleased also to act as partners on research projects led by Southern institutions, such as the projects Exploring

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Urban-Rural Independence and the Impact of Climate Change in Tanzania and Malawi, led by the University of Dar es Salaam, and Agro-Ecology Based Aggradation-Conservation Agriculture, led by the African Conservation Tillage Network.

The University allocates to NRI each year significant seed funding for research activities, stemming from funding received in respect of RAE2008. Over the last five years, funding allocated to the Development Studies Cluster, under the management of the Head of the Livelihoods and Institutions Department, has averaged £65,000 per year. In addition, staff are able to bid competitively for further seed funding for research activities. An example is the £18,000 awarded to **Nelson** and **Martin** for dissemination of findings of previous research and consultancy projects on the impact of sustainability standards, and development of further work in the area. Both lines of funding are allocated against clear research objectives, activities, targets and indicators. Progress and achievements are monitored through quarterly and annual reports.

NRI staff benefit from access to the Medway Drill Hall Library, a comprehensive university library shared with the University of Kent and Canterbury Christchurch University; wide access to major academic journals in electronic form; and also the Greenwich Academic Literature Archive (<http://gala.gre.ac.uk>) an open-access repository storing published and non-published outputs of research-active staff in the University.

e. Collaboration and contribution to the discipline or research base

NRI social scientists have contributed to the discipline of development studies and to interdisciplinary collaboration with agricultural, food, veterinary and environmental sciences, through partnerships with a range of academic and research organisations in the UK, Europe and across the world. In the UK these collaborations have included:

- the Universities of Manchester, York and East Anglia, and the LSE, within the DFID-funded Research Consortium on Improving Institutions for Pro-Poor Growth (2005–10)
- the University of Leeds on the DFID/ESRC-funded project on Governance Implications of Private Standard Initiatives in Agri-Food Chains (2007–10)
- the University of East Anglia on the DFID/DSA Policy Forum on International Development in the Face of Climate Change (2008)
- the University of Edinburgh on the impact assessment of the Ugandan Stamp Out Sleeping Sickness Campaign (2008–09)
- the Institute of Development Studies on the impact assessment of Fairtrade in cotton (2009–10).

In Europe, through our membership of AGRINATURA, we collaborate regularly with CIRAD (*Centre de coopération internationale en recherche agronomique pour le développement*) and Wageningen University. **Morton** gave an invited lecture at the “Living Partnership” event of the Bayreuth International Graduate School of African Studies in 2009 and served as a PhD *Opponent* at Lund University in 2012. **Marr** has recently been appointed Visiting Professor at the Catholic University of Peru, and acts as external examiner of the MSc Development Finance Programme at the University of Reading, UK.

NRI has hosted visiting scholars from Arizona State University (2008), the University of Jyväskylä, Finland (2009) and the Center for Agro-food Economy and Development, Catalonia (2013).

Internationally we have contributed to reviews of projects or programmes of the Consultative Group for International Agricultural Research, and a recent Strategic Overview of Livestock Research in their programmes. We have a wide network of active partnerships with universities in developing countries, including:

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<p>Universidad Nacional de Rosario, Argentina Université de Parakou, Benin Universidade Federal do Bahia, Brazil Kwame Nkrumah University of Science and Technology, Ghana University of Nairobi, Kenya University of Malawi, and Lilongwe University of Agriculture and Natural Resources, Malawi Universidade Eduardo Mondlane, Mozambique</p>	<p>Federal University of Agriculture, Abeokuta, Nigeria University of Pretoria, South Africa University of Dar es Salaam, Tanzania Makerere University and Gulu University, Uganda Hanoi University of Science and Technology, Vietnam University of Zimbabwe.</p>
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We collaborate with a number of regional bodies and networks, including the Forum for Agricultural Research in Africa, the African Forum for Agricultural Advisory Services, COMESA, RUFORUM (the Regional Universities Forum for Capacity Building in Agriculture) and Rimisp – Latin American Center for Rural Development.

Our contributions to the Intergovernmental Panel on Climate Change and the International Assessment of Agricultural Science and Technology for Development have been outlined in Section b) above. We have also authored published policy documents for FAO, UNDP, UNEP, Oxfam, CONCERN and the Technical Consortium for Building Resilience to Drought in the Horn of Africa.

Quan was commissioned to write a Science Review for the UK Foresight Project on Global Food and Farming Futures. **Morton** was an invited Resource Person for the Bangladesh Workshop of the Foresight Project on Migration and Global Environmental Change.

A number of staff are members of the Editorial Boards of academic journals, including:

- **Marr** – *Iberoamerican Journal of Development Studies, Economics*
- **Martin** – *Experimental Agriculture*
- **Morton** – *Tropical Animal Health and Production*
- Ben Bennett – *Food Chain*.

Scrieci has edited a Special Issue of Mitigation and Adaptation Strategies for Global Change. Several staff undertake refereeing duties for journals including *World Development*, *Journal of Development Studies*, *Global Economic Change*, *Human Organization*, *Ecological Economics*, and *Food Security*. **Quan** and **Morton** are members of the ESRC Peer Review College. **Morton** is a member of the Commonwealth Scholarships Commission's Panel of Academic Advisers, and has reviewed projects proposals for the Nuffield Foundation and Netherlands Co-operation. **Morton** (2003–2009) and **Nelson** (2009 –) have both served on the Council of the Development Studies Association. **Wellard** was awarded a prize for the Best Article in the *Journal of Agricultural Education and Extension* for 2013.

NRI social scientists have participated in high-level conferences, including: the Annual Meeting of the American Association for the Advancement of Science, San Diego 2010; the Second International Conference on Climate, Sustainability and Development in Semi-arid Regions, Fortaleza, 2010; The Micro-Credit Summit, Kenya 2010; the World Conference on Conservation Agriculture, Brisbane 2011; the Second European Research Conference on Microfinance, the Netherlands, 2011; the Seminar of the European Association of Agricultural Economists, Uppsala, 2012; the Third European Research Conference on Microfinance, Norway 2013; and the World Bank Annual Conference on Land and Poverty, 2013.