

Institution: University of Chester
Unit of Assessment: 17a Geography, Environmental Studies and Archaeology (GDS)
<p>a. Context Policy communities and the broader public are the chief beneficiaries and users of the unit's research and our impact derives from work concentrated in the Environmental and Social Research Groups as described and exemplified below.</p> <p>Environmental Research Group Research by this group has had significant impact on the way in which people use energy in their homes, transport themselves and protect themselves from natural hazards. It has also fed directly into policy development in these areas and in the field of geoconservation.</p> <p><i>Sustainability</i> research includes direct engagement with community energy and carbon reduction initiatives. Supported by funding from The Higher Education Innovation Fund (HEIF), the Departments for Environment, Food and Rural Affairs (Defra) and Energy and Climate Change (DECC), our work has facilitated a 20% reduction in domestic carbon footprints in the village of Ashton Hayes, largely through behavioural change in energy and transport use, and thus directly benefited many of its 1,000 residents. Research (funded by Carbon Connections UK) into the feasibility of a community microgrid (Impact Case Study A) in the village has the potential to bring further direct benefits in terms of energy costs and security, together with further reductions in carbon emissions. Parallel work in Blacon (also funded by DECC) assessing the efficacy of various interventions in aiding reductions in household energy consumption, has directly benefited the 92 participating households and indirectly many others among the 16,000 population of this Chester suburb. Our work has been instrumental in Ashton Hayes' recognition as a model low carbon community exemplified by its receipt of awards from the International Visual Communications Association and the Energy Institute, has fed into local (Cheshire West and Chester Council) and national (DECC) policy making, and has influenced the work of the energy industry (SP Energy Networks (SPEN), EA Technology Ltd. (EATL)).</p> <p>Cox's research (Cox 1 – 4) into how cycling (technology and practice) is developing in its social context, conducted in collaboration with the European Cyclists' Federation (ECF) and the European Twowheel Retailers' Association and facilitated by a Leonardo Programme grant, has supported the development of EU cycling regulations. Cox has also worked with the City of Vienna through the ECF and the Scientists for Cycling Network, resulting in a successful Velo-City conference (1400 participants). Most recently, Cox has been invited by the Overseas Development Institute to contribute to a sustainable transport development strategy, extending the impact of his work beyond the EU.</p> <p>Burek's work (Burek 2, 3) on <i>Geoconservation</i> has evolved from an early concentration on the development of an internationally-accepted definition and public awareness-raising, to focus on influencing policy, especially within Wales and the other devolved nations.</p> <p>Miller, S and Degg's work on landslide <i>hazard processes and management</i> in the UK and Jamaica (Miller, S 1, 3) using digital analysis to assess susceptibility and effects has been communicated to policy makers and consultants. Miller has also investigated the effect of UK airspace closure in April 2010 on the travelling public and its implications for future travel (Miller, S 2). Research on flooding in the UK, funded by Defra, explored the relationship between flood risk, property-level protection and the challenge to property-owners of accessing affordable insurance (Cobbing and Miller, 2012).</p> <p>Social Research Group <i>Socio-economic aspects of international development</i> form an area of impact both in the UK and in Africa. Evans' work on conflict, post-conflict return of displaced people and reconstruction of their villages and communities, funded by a British Academy Small Research Grant (£4,959), has informed policymakers and practitioners engaged in peacebuilding and development in a region of West Africa, and has supported asylum claims from that region in western countries (Impact Case Study B). Healey's research has helped support the stay of asylum seekers and the integration of refugees in the UK. It has been used by refugee support organisations including the Employability Forum and London Tamil Sangam in their work. Most recently in her collaborative project 'Seeing</p>

the city anew: refugee experiences of Manchester', funded by the Manchester Geographical Society (£860), **Healey** and others piloted a participatory and creative methodological resource for research with refugees, while enabling participants to share their experiences of the city through photography and oral narratives.

b. Approach to impact

Developing relationships and working in collaboration with key users at community level and in the public and private sectors has been central to the unit's approach to achieve impact from its research. Infrastructural mechanisms to facilitate relationships between the UoA and users of its research include a consultancy model whereby such revenue largely goes into a University sub-account specific to the staff member concerned. S/he can then use this to fund further research or knowledge transfer activity. Internal and external grants and general funding from within the UoA are also used for networking activity outside the institution or to invite stakeholders to events within it. Recent examples include a colloquium for academics, policymakers and practitioners on arms control and peacebuilding in Africa, funded by the African Studies Association of the UK (£421), in March 2013; and a conference on food security in November 2013. UoA staff receive support with grant applications and contracts from the University's Research and Knowledge Transfer Office.

An important development enhancing impact across the UoA has been the appointment of a Business Translator from April 2013. She has helped to forge and consolidate links between UoA members and local/national government, businesses and third sector organisations through which academic expertise can be applied to issues facing communities locally, nationally and internationally. The postholder was set the ambitious target of visiting 100 stakeholders in the northwest before the end of 2013 to develop partnerships in the region.

Specific examples of developing working relationships with users to achieve impact include:

- **Alexander's** early work in Ashton Hayes was supported by £23,000 HEIF funding to develop collaboration with the village community and Parish Council through survey work and the provision of a dedicated information point in the Community Shop. This work led to contacts with the borough council, which invited him to join its Sustainability Commission of Enquiry in 2011, providing a direct route to influence policy. It also led to requests for collaboration from the power services industry to evaluate the potential of community microgrids (**Impact Case Study A**). Since 2008 **Alexander** has given 75+ invited presentations on his work in Ashton Hayes to community groups and national conferences. In response to requests for assistance, a DVD 'Toolkit' based on his work has been distributed to some 1,000 communities worldwide.
- Research by **Miller, S** on flooding and flood insurance has been undertaken in collaboration with the National Flood Forum (NFF). As Vice Chair of the NFF, **Miller, S** and his research have more broadly supported this national charity dedicated to helping and representing communities and individuals in the UK at risk of flooding.
- **Evans** has worked with a range of stakeholders, in the UK and the US, in giving policy advice and as an expert witness in asylum cases (**Impact Case Study B**).

c. Strategy and plans

Our future strategy is to build on the secure and expanding base offered by the two research groups and to extend our impact through further collaboration with stakeholders in relevant fields. Both groups have identified clear plans for developing impact over the next five years (2014 to 2018). These will be implemented both through group-level activity and through the annual Performance and Development Review process for individual members of staff. They will be further enhanced through the appointment of a lecturer in human geography/international development studies and a senior lecturer in physical geography in January 2014.

Environment Research Group

Low carbon community research will build upon the collaboration established with community groups and public and private sector organisations (**Impact Case Study A**). Further funding will be sought from local and national government and from business and industry. Key strands of research will focus on developing the concepts of community microgrids, and community energy services companies and on the potential of novel funding sources for their establishment and will be carried out in collaboration with colleagues in the power services (EATL) and distribution

network (SPEN) industries. The recent purchase by the University of an 'Eco-House', originally established as part of our DECC-funded work in Blacon, will facilitate further community engagement on domestic energy use and carbon reduction.

New directions for impact within sustainability and conservation include the effects of climate change on geodiversity, soil conservation and habitats, the implications of the Marine Act 2009 for Quaternary geoconservation and the development of environmental and conservation legislation by the devolved administrations. Within biological conservation, **Lawrence** has recently gained support from the Government of Trinidad and Tobago to undertake a three-year TEEB (The Economics of Ecosystems and Biodiversity) assessment of the Caroni mangrove swamp in Trinidad in partnership with the University of the West Indies and the United Nations Environment Programme. **Lawrence** will also act as a consultant to a recently funded GEF (Global Environment Facility) project to develop a mariculture system for sea cucumber in Marsa Alam, Egypt where work will include the use of assessment tools such as TEEB to highlight the value of ecosystem services to governments, commercial interests and consumers and support the sustainable use of ecosystems and wildlife resources.

Natural hazards research will focus on both the physical dimensions of the risk associated with multiple hazards in Jamaica and the factors contributing to varying levels of vulnerability in order better to inform hazard mitigation programmes on the island. In the UK research into building a 'flood resilient society' will continue.

Social Research Group

Evans' research will continue to inform UK and US thinking on the Casamance conflict in Senegal, its resolution and mitigation of its effects. This will be achieved through continuing engagement with the UK Foreign and Commonwealth Office and the US State Department. **Evans** is also working on developing collaborative research with Y Care International in support of their aid programmes with youth communities in Casamance, in conjunction with his wider research on livelihoods (in agriculture and, increasingly, mining) in the region. Recent research in Ghana by Miller, G will consider the challenges to health policy and practice posed by ageing populations in Africa, and will be fed back to the Government of Ghana. Developing from **Healey's** and **Evans'** research, work will continue with refugees in host countries by exploring the factors that influence their integration and what this means to the individuals involved, which will again be actively relayed to policymakers, agencies and non-governmental organisations.

d. Relationship to case studies

Alexander's innovative research into climate change awareness and behavioural change has transformed the way in which people around the world look at this issue, using a Cheshire village as a testbed for community carbon reduction (**Impact Case Study A**). **Evans'** work on West Africa's longest-running civil conflict shows the importance of long-term, field-based research in providing information and analysis to inform peacebuilding and development interventions in such situations (**Impact Case Study B**). While contrasting in their subjects and spheres of impact, both case studies illustrate our approach and both have a strong international dimension, respectively seeking to address the global need to build more sustainable communities and trying to reduce political instability and insecurity and their effects on livelihoods in the developing world.

The case studies also exemplify both proactive and reactive modes of building partnerships outside of academia. **Impact Case Study A** shows how users have progressively become involved in a fundamentally applied research project over the long term through necessity and collaborative funding bids. The result has been impact both 'inwards' on the community in question and 'outwards' onto wider policy agendas, private sector initiatives and communities in other countries. **Impact Case Study B**, meanwhile, shows how partnerships have accreted over time by disseminating research through policy fora (principally in outputs published by think-tanks and freely available online) and academic publications, both of which have elicited contact by policymakers, government and multilateral agencies and non-governmental organisations. More focused relationships have then developed, which will be used to elicit funding streams (for example from Y Care) for research with clear application going forward.