ECONOMIC AND SOCIAL RESEARCH COUNCIL

KEY FINDINGS REPORT

Reference: ES/H046569/1 (RES-051-27-0321)
Investigator/s: Professor Gerard George
Title: Resource Constrained Innovation and Inclusive Growth: A Research and Practice Agenda

1. Summary of Project Findings (circa 500 words)

Please summarise your main findings from the project. You are also invited to briefly indicate any plans for further research in this, or a related area.

For ESRC Seminar Series and projects under the Research Development Initiative please detail the outcomes of the activities carried out and provide information on the level of demand for participation.

My fellowship proposal outlined a ‘research and practice’ agenda, bringing innovation for inclusive growth to the forefront of management studies. I explored two thematic areas:

The Organisation of Innovation including business models, processes and open innovation: 12 published and 3 working papers, looking at innovation in developed world contexts and how processes could be improved to enhance firm performance and entrepreneurial outcomes.

Inclusive Innovation or Innovation under extreme resource constraints: 6 published and 6 working papers tackling how innovation occurs in contexts with limited institutional structures and resources.

Inclusive Innovation – I co-developed a theoretical framework and research agenda for inclusive innovation by critically evaluating extant theories and methodological issues as well as empirical regularities. We identified areas of future theory and research development and elaborated a synthesised view of inclusive innovation. Published in JMS, 2012 (56 cites in 2 years).

Resource Constraints in Africa Our fieldwork research and report explored performance effects of resource assembly in Africa, finding that social capital, primarily kinship or family ties, helped entrepreneurs raise resources, but at a cost. Using small firm data in Uganda, we showed that shared identity among the entrepreneur’s social network moderates this relationship, and, developed training programmes for Ugandan SME’s now being extended to Kenya. Published in the Journal of Occupational and Organizational Psychology.

Entrepreneurship within Communities - We explored social structure, affordable loss and entrepreneurship in Africa, using data from 1061 households in rural Kenya, find the
disintegration of social structure negatively impacts the decision to engage in entrepreneurship. Preliminary results indicate that energy provision has created over 20 new micro-enterprises, with the final survey due in late 2014. This paper is under revision in the Strategic Management Journal.

**Business Models** - I published my latest book ‘Models of Opportunity’ in 2012, and by linking research on business models and organisational design to the reality of building entrepreneurial firms it offers actionable advice for practitioners. The book has sold over 3,000 copies, and is being taught in Executive Education programmes such as: Vodafone, Unilever, BT, and the London Stock Exchange among others.

**Health** – A case study (published in APJM) examined GVK Emergency Management and Research Institute, an Indian public–private partnership (PPP), bringing emergency medical response to remote and urban settings. We showed how the organization established itself through institutional entrepreneurship and findings were disseminated to practitioners and scholars in China and India. In the Western context, we conducted a literature review of public-private partnerships, analysing over 1400 publications from multiple disciplines over a 20-year period, establishing that despite its significance, there is limited conceptualization and in-depth empirical investigation. We developed a multi-dimensional framework providing new directions for further research, testing PPPs across different countries and sectors. Further research will examine the performance of health PPPs, offering grounded empirical evidence on whether and how PPP arrangements may succeed in achieving benefits.

**Energy** – We analysed 500 interviews of those in serviced and non-serviced slums in India to understand infrastructure provision and poverty alleviation. Our approach establishes the centrality of the water and sanitation components of infrastructure in bringing about positive socio-economic change, and how gender sensitive and integrated infrastructure provision can reap educational and health benefits. Published in Energy Policy, World Development (under review).

Several working papers are in development, including work on India and China as sources of innovation, knowledge sharing in online communities within firms, and the delivery of healthcare services in India, all due in late 2014.

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### 2. Exploitation Routes (circa 250 words)

Please describe the process and activities through which you plan to ensure that your findings obtain the maximum potential impact. This can include both scientific impact and economic and societal impact.

I organised the Imperial Innovation Challenge in February 2014, based on the energy in Africa project. This project integrates Imperial faculties to take on global grand challenges in health, energy, environments and data security. External speakers included representatives from energy companies, venture capitalists, NGOs and renewable energy experts covering contexts including financing and social value.
We hosted a major one day conference on Innovation for Inclusive Growth to showcase the phenomenon and provide a forum to share opportunities and challenges. In 2011 we focused on improving healthcare access globally with over 100 delegates from across the healthcare sector, and speakers included Lord Nigel Crisp, House of Lords, Paul Thompson, Rector of the Royal College of Art, and representatives from the NHS among others.

During the fellowship, I have been appointed 'Editor in Chief' of the Academy of Management Journal (AMJ), a prestigious academic publication with impact factor of 5.91, the first editor from a non-US institution, which will continue to raise the profile of ESRC-funded research and reinforce the value of efficient practices for UK and international business. My work has generated over 9,500 Google Scholar and 2,500 Web of Knowledge citations.


On this theme, I have created Executive Education programmes for leading organisations: Vodafone, Unilever, BT, LSE ELITE, CLEPA, Telefonica, and Total among others, collaborating with them to develop innovation practices that are results-driven to transform the performance of executives and their business.

3. Potential use in a non-academic context (circa 250 words)

Please outline any anticipated or potential economic or societal impacts that you believe your project might have in future on the 'user' community.

**Energy for Development** - In partnership with the University of Southampton, the ambitious Energy for Development (E4D) is considering a co-operative society with the Ministry of Energy, to manage the trading centre microgrid. A location for the deployment site was decided, and a strategy was developed with local government officials and banks. In September 2013, the E4D team celebrated the Kitonyoni project’s first year in operation and an survey revealed a noticeable transformation in activities around the trading centre and the lives of the villagers, which generated useful data so the research team could replicate in East Africa. The project is now a beacon in Africa having many local and international visitors from Japan, Germany, UK, Zambia, the World Bank and other funding agencies.

**HIV Treatment Improvement** – A pilot project with UNAIDS and the Global Fund for pregnant mothers in India and Sub-Saharan Africa examines the HIV protection of new born babies via an injection given to mothers within hours of birth. A report was submitted to UNAIDS on redesign of service delivery issues. A working paper is under development.

**World Intellectual Property Organization** - This report was based on an extensive literature review and analysis of different forms of openness and appropriability regimes. Using its insights we aim to develop collaborative innovation and IP infrastructures: to explore the infrastructure and institutional costs of participating in international open collaborative networks, to pilot and
promote the development of collaborative innovation technologies as a platforms for open collaborative innovation and engagement across boundaries, and development of the role of public data to support and encourage collaboration for innovation, e.g. use of public data in stimulating provisions of new services from which IP may be developed.

4. URL

If your project has its own website/web page, please enter the URL here.

http://www3.imperial.ac.uk/people/g.george

5. Sector Coding

Please select the sector(s) from the list that best indicates where the findings of your grant will potentially be of most relevance to (delete those not applicable):

- Communities
- Energy
- Healthcare
- Innovation
- Social Services