International Development and Inclusive Innovation

The challenge

With global income massively polarised, access to basic services a pipe dream for many in the developing world, and the rising powers internationalising, it is a critical time to examine how inequality can be addressed through innovation. Current approaches to international development tend to be aid-based which have proven incapable of kick-starting growth. Rather we need a new paradigm centred on sustainable, innovation-based growth.

Yet traditional forms of R&D and industrial innovation have been top-down, elitist and centred on the global North, and so failed to address the needs of marginalised people. Research across the Open University has shown that embedded and distributed models of innovation can be generated that are more inclusive of the social groups who need to benefit from the innovation, making marginalised groups actors in the innovation process and yielding genuine benefits. We call this ‘inclusive innovation’ and the broadest aim of the International Development and Inclusive Innovation programme is to explore how inclusive innovation might work to improve societies. Given the pervasiveness of inequality, this agenda is a global one that affects both ‘developed’ economies and LMICs, as well as linking regions through flows of people, finance, ideas and technologies.

This agenda of promoting innovation and addressing inequality is established in global policy circles as an aspiration, but lacks evidence and an analytical framework to support implementation. This is partly because industrial innovation and social change are generally studied in different ‘silos’, a divide Open University researchers have fought to overcome. This programme of work is framed to a significant degree by the Sustainable Development Goals (UN 20141), as they are likely to attract substantial research funding over the next decade. The Goals explicitly focus on issues central to the PRA and for which the OU is extremely well-placed: ‘inclusive and equitable education’, ‘affordable energy’, ‘inclusive and sustainable economic growth’ (see EU 20132), ‘resilient infrastructure’, and ‘sustainable consumption’. We will examine these challenges in a range of problem-driven and fundable sectors and geographic regions.

Fostering inclusive innovation

In line with the SDGs inclusion is taken to mean addressing the basic needs of poor and marginalised groups or those whose capabilities are severely constrained. It is also based on the acknowledgement that the marginalised are themselves innovators and not simply ‘users’ of externally targeted innovations. While this is an extensive agenda we have focused on sectors where the impacts are likely to be greatest, particularly health, education, agriculture and infrastructure. But how is inclusion related to innovation? Our understanding of Inclusive Innovation comprises two linked processes:

1. **Innovation for inclusion** – this is how new forms of innovation can generate inclusion of marginalised populations to address their basic needs. Cheaper generic vaccines, locally appropriate agricultural and sustainable energy technologies, or new uses for ICTs in education are examples of this. But innovations are also more than technical. For

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1 http://sustainabledevelopment.un.org/focussdgs.html
2 http://ec.europa.eu/research/participants/portal/doc/call/h2020/common/1617601-part_1_introduction_v2.0_en.pdf
example, new models of investment that proactively target poorer communities require novel thinking and organisational arrangements, which are innovatory.

2. Inclusion for innovation – this recognises that marginalised populations can and do innovate, but their capabilities need to be developed to do so much more effectively. Access to healthcare is a prime example of this. In addition to flexible formal education, access to learning-by-doing, and in a globalised world to forms of learning that enable cross-cultural understandings are vital. To succeed, innovators must be able to understand and engage with people holding different values.

The International Development and Inclusive Innovation programme will further contribute to the Inclusive Innovation agenda in the following ways:

- Global – innovation creates connections between people and places, through flows of ideas, finance and technologies. As such it urges us to take a truly global approach to innovation which links activities in the global North with those in the South and vice versa, as well as important and emerging ‘South-South’ linkages;
- Intersectional – social and technological innovations are not ‘neutral’ but play into existing social and political systems. We will study the intersecting gendered, racialized, and class-based dynamics of inclusive innovation;
- Sectoral – inclusive innovation occurs (or could occur) in many sectors but we have focused on those of greatest importance to global welfare, and hence where there is greatest opportunity for external funding and where we have a track-record;
- Environmental – ‘green growth’ is increasingly seen as the solution to both the global recession and the problems of climate change, but such innovation must be inclusive since the developing world dominates global emissions.

**Thematic areas**

The themes we are interested in are as follows:

**Theme 1. Infrastructures for inclusion**

To support a future global population of 9 billion an estimated US$5 trillion/year needs to be invested in global infrastructure. This business-as-usual approach would maintain investment in conventional, emissions-intensive technologies, endangering future growth. Hence, investment must be greened to avoid eroding the benefits from new green developments. Additionally, achieving inclusion depends on closing the digital divide that limits access to the digital economy to the more affluent sections of society. Set against these demands the entry of the Rising Powers on to the global stage is a disruptive presence. In Africa and Latin America some countries are experiencing high growth on the back of commodity exports to Asia, but future growth could be dampened by their poor infrastructure. Africa is seen increasingly as a global market for infrastructure where investors are drawn from both the global North and South.

Objectives:

- To understand the drivers, modalities and impacts of Rising Power-funded infrastructure investments in LICs;
- To understand how the mobility of people and ideas enables such projects and the ways in which the infrastructure, in turn, enables new claims for inclusion;
- To develop robust systems for cybersecurity which work with local capacity and builds public awareness;
- To design politically robust pathways for infrastructure development respecting sustainable development objectives and environmental constraints at global level and for selected countries.

**Theme 2. Agri-food innovation**
The United Nations’ Sustainable Development Goals have set out to “End hunger, achieve food security and improved nutrition and promote sustainable agriculture” (Goal 2) and “Ensure access to affordable, reliable, sustainable and modern energy for all” (Goal 7) by 2030. This Theme will deliver the evidence and conceptualisation to underpin these agendas. As opposed to assuming that innovation aimed at efficiency and access improvement in developing countries will come from the technologically more developed global ‘North’, this Theme will explore new approaches to fostering innovation that originate at the grassroots, involve the poor in production, and are relevant to the demands and needs of the poor.

Objectives:
- To examine what changes in market conditions, organisational settings and institutional infrastructures are necessary for innovation in agri-food and energy sectors;
- To examine whether the policies and practices in agri-food and energy sectors significantly address the inclusion, the demands and needs of those at the Bottom-of-the-Pyramid;
- To examine south-south innovation or local innovation, which are becoming more important in meeting innovation needs of low-income consumers but are currently ‘below the radar’.

**Theme 3. Innovation, governance and health system strengthening**

The Ebola crisis has thrown into sharp relief the absence of effective health systems, the vulnerability of (particularly) nursing staff, and the need to address the extreme disconnect between local health systems and local capabilities to diagnose and treat viral infections and other illnesses. The OU is an international research leader in analysis and policy linking industrial innovation, regulation, and more inclusive health systems. This Theme builds on this base to tackle the huge challenge of improving health system performance for LMICs’ most disadvantaged populations and contributes knowledge to Sustainable Development Goal 3 to “Ensure healthy lives and promote well-being for all at all ages”.

Objectives:
To tackle through world class research, dissemination and policy impact, three key interacting health system failures:
- Dysfunctional health system organisation and market structures;
- Limited capabilities of local industry to innovate to support the health system;
- Weak regulatory and governance capabilities including a disconnect between global and local health initiatives.

**Theme 4. Educational innovation, inclusive learning and knowledge production**

One of the 17 SDGs is to “ensure inclusive and equitable quality education and promote life-long learning opportunities for all” (UN, 2014). To achieve this requires opportunities for participation in quality formal education, professional training and learning opportunities to be available to all within societies to enable development of knowledge, skills and human capabilities. This Theme will establish how learning opportunities can be reframed to address issues of equity, diversity and social justice, and transform societies across three challenging areas: (i) the centrality of teachers: our work in teacher education seeks to understand and measure the process of pedagogic change within and across institutions and the role of ICTs in mediating this; (ii) the role of language and cross-cultural communication both in developing and constraining opportunities in knowledge production and innovation across levels and participation in global supply chains; (iii) the need to equip learners and their stakeholders in educational institutions, civil society and business organizations with the learning capabilities to address issues of global and local sustainability, thus fostering inclusive development.
Objectives:
- Fostering educational innovation within and across institutions, which promotes high quality and equitable learner attainment at scale, and the role of ICTs in mediating this;
- Enhancing inclusion in education and knowledge production and participation in local and global economies through understanding the role of language, cross-cultural communication, and social learning in product development and innovation processes;
- Developing theoretical frameworks and empirical case studies for how civil society, business organizations and educational institutions can harness learning for more inclusive development.

Theme 5. Facilitating inclusive practice through innovative supply chains and consumer behaviour interventions

To address ‘ethical’ practice through emerging innovative supply chains and consumer behaviour interventions that might lead to inclusive development in the global South and marginal areas of the North. This feeds directly in Sustainable Development Goal 12 – “Ensure sustainable consumption and production patterns”.

Objectives:
- To promote sustainable and ethical consumption and business practices;
- To enhance cross-cultural and cross-national understandings of consumption and production practices;
- To develop more sustainable and inclusive supply chains.

Theme 6. Theorising and evaluating inclusive innovation

Emerging models of inclusive innovation have not been theorised from the viewpoint of evolving frameworks of global and social justice, nor measured and evaluated for their impact on satisfying human needs and/or increasing human capabilities. Inclusion as such describes processes of equalising social relations so that people avoid being marginalised and deprived. This Theme builds on recent theories of innovation to answer a key question: how can innovation substantially connect to human needs and capabilities (e.g. life, health, imagination etc.) as a basis for reducing social exclusion in development and promoting freedom? Is global and social innovation delivering improvements to life quality for all – or are some groups in danger of being forgotten, left-behind or made less resilient to adverse shocks and changes.

Objectives:
Through world class research and policy impact, this WP will:
- Reflect on and link specific cases of inclusive innovation to develop integrated typologies of innovation-justice-development (e.g. infrastructure, agri-food innovation, health innovation systems, etc);
- Combine and advance mixed-methods approaches to measure inclusive innovation;
- Evaluate the impact of inclusive innovation on people’s life-quality and capabilities.