DST SCIENCE WORKSHOPS ON HUMAN AND SOCIAL DYNAMICS

Proposal for a workshop on

Linking knowledge producers and marginalised communities

Proposed Date: 15 November 2013

Proposed Venue: Tsogo Sun hotel Cape Town

Hosted by: Education and Skills Development programme at the Human

Sciences Research Council and the Cape Peninsula University of Technology

Purpose of DST SCIENCE SEMINARS

The Department of Science and Technology (DST) Science seminars are designed to better ensure that research feeds into active policy processes, and to serve as a vehicle for disseminating policy-relevant research results, sharing expertise and experience, facilitating policy dialogue, and building the capacity of researchers and policymakers in ways that bear on public policymaking.

The Science Seminars aim to:

- disseminate scientific research findings and transmit a body of new knowledge (through an interactive process of critical dialogue and collegial critique) to the social sciences and humanities research community (rather than the policy community);
- provide an arena for high profile researchers, including researchers from rural-based universities;
- to present and discuss new and ongoing research, identify research gaps, and suggest new research agendas in the social sciences and humanities (SSH) with a view to forging closer links between the research communities in these fields;
- reinforce the visibility of SSH research to the higher education and science council sector; enhance wider public understanding of the SSH, including the value and status of both individual and team-based research;
- Strategically promote, develop, and coordinate collaborative and interdisciplinary research within and between HEIs and Science Councils.

Background to the proposed seminar

Since 1994, DST has promoted the role of universities in innovation and competitiveness through a focus on industry interaction, particularly with firms in high technology formal sectors. In contrast, higher education policy makers have tended to promote community engagement, equity and social development. A wide range of projects have long existed in which universities cooperate to promote local development in fields such as water, conservation of indigenous species or regional development.

Recently, there is growing potential for convergence and alignment between these two policy tracks (Kruss 2010). DST policy has recognised the need to be more inclusive of people and activities in the informal economy, the need to take into account other forms of knowledge, and the need to understand the complex social and cultural dynamics that influence the adoption and diffusion of innovation.

At the same time, across the higher education system, there has been a shift towards institutionalization of a broad concept of community engagement and social responsiveness as integral to academic scholarship, to the core missions of teaching and research, and linked to economic and social development.

A range of strategic initiatives, funding programmes, development projects and networking interventions have been rolled out over the past five years by DST-related agencies. One example is the pilot Community University Partnership Programme, initiated in four rural universities. In 2012, DST partnered with the OECD (2012) to problematize the emergent concepts of grassroots innovation, bottom of the pyramid innovation, inclusive innovation, and so on, and to promote the notion of innovation for inclusive development. In all these policies and plans, universities and science councils are assigned key roles as knowledge producers, to partner with communities, particularly to the social and economic benefit of marginalised and rurally-based communities.

Formal policy has the potential to overcome the disjuncture between the innovation and higher education spheres, but in practice there remains contestation, misunderstanding, and resistance to change. Community engagement practitioners tend to focus on philanthropic community service projects, with little awareness of the potential for knowledge intensification and innovation that can lead to inclusive development. Universities are often expected to take on social development roles that are not well suited to their knowledge generation role.

Some would argue that there is an incompatibility between the drivers of science systems and the drivers of local technology demand at a much lower level within marginalised communities (Diyamett 2008). Hence universities should focus on innovation and expanding the 'knowledge frontiers' appropriate to local conditions, and the task of generating the lower level technology typically required in local communities should be left to other research institutes. Here the case is made that universities should not be reduced to acting as development agencies. In contrast to such a position, others argue for a more holistic approach, in which universities are involved in the full spectrum of knowledge and technology capability building (NACI 2009, Jamison 2009, CEPD 2008).

Where there is agreement on broad developmental goals and roles, there are few proven strategies of how to achieve them. There is a reported lack of best practice models that can support interaction between academics and marginalised communities to transfer technology and research. The challenges of interaction are myriad, including power imbalances between academics and community members, differing knowledge bases, and the need to build trust, and the reality that local power relations and shifting political conditions often undermine hard won gains.

The workshop aims to draw together researchers in universities and science councils with policy makers in the higher education and innovation spaces. The purpose is to debate the role of knowledge producers in different types of universities and science councils in promoting innovation with marginalised communities. Researchers will present their new work, and all participants will grapple with the policy implications of the emerging evidence.

Emerging research

There is a small emerging research base in South Africa and globally that attempts to problematise and understand innovation and inclusive development, defined as

> ....development that marginalized groups take part in and benefit from, regardless of their gender, ethnicity, age, sexual orientation, disability or poverty. It seeks to address the deepening inequality across the world that has arisen despite unprecedented economic growth (http://www.undp.org/poverty/focus_inclusive_development.shtml).

The research and policy task is to identify the kinds of innovation and innovation systems, and the kinds of roles required of knowledge producers, to contribute to inclusive development.

We propose to include research groups on the programme, who can contribute complementary insights for policy-oriented debate.

HSRC research has mapped the scale and patterns of interaction of academics in diverse types of universities with a range of external social partners, from firms to communities to government and civil society. This research identifies the policies, structures and mechanisms that promote interaction with communities, in relation to the core knowledge generation role of universities (Kruss et al 2012).

Research in the HSRC is exploring how universities interact with marginalised communities to use their knowledge in ways that promote innovation to enhance livelihoods (here we refer to the work of Gastrow and Kruss). This draws on a conceptual framework that proposes the study of innovation in informal settings in order to understand how to transform marginal innovative activities into sustainable innovations that have wider impacts and stronger links with the formal sector (IDRC 2011, Cozzens and Sutz 2012, Kraemer-Mbula & Wamae 2010). The evidence suggests that in South Africa, these cases make up a very small minority of the forms of interaction typically found in universities. In-depth case studies provide insights into the mechanisms and strategies that facilitate and constrain such interaction.

Rural universities are distinctive in their histories and their roles in relation to their isolated spatial location and direct proximity to the most marginalised communities. There are a number of research initiatives investigating these roles. Research at Fort Hare problematizes whether community engagement at a rurally-based university is distinctive (here we refer to Minkely and Thakrar), and research at the HSRC aims to inform the development of a rural innovation strategy (here we refer to Jacobs and Hart).

Much of the path-breaking work on innovation and social inclusion is emerging from Latin American countries. Dr Valeria Arza of CONICET and CENIT/UNTREF in Argentina has conducted research on university-industry linkages in relation to developing the national system of innovation in developing countries (Arza 2010). She has extended this work to study interaction between knowledge producers and marginalised communities in Argentina (Arond et al 2012). In particular, she is contributing research on socio-technical studies of technology and knowledge networks in agricultural production (Arza and van Zwanenberg, 2013 and van Zwanenberg and Arza, 2013).

We propose to draw on this emerging research base to grapple with the big policy question: how to foster interaction between universities, science councils and marginalised communities in ways that will promote innovation towards inclusive development.

Aims and objectives of the workshop

The workshop aims to focus on the interaction between knowledge producers and marginalised communities, and proposes to generate evidence-based advice to guide the implementation of South African policies on inclusive development and social innovation.

The workshop is an opportunity to present research that allows us to reflect on the critical questions: What are the ideal roles of South African universities, what are the conditions that facilitate and constrain the realisation of those roles, and what are the strategic interventions that can promote more effective interaction to the benefit of marginalised communities?

The aim of the workshop is to address the following objectives:

1) Debate the roles that different types of universities can play in innovation for inclusive development
2) Examine the nature of interaction with marginalised communities in distinct types of university
3) Identify mechanisms through which universities can enhance the livelihoods of marginalised communities
4) Discuss policy interventions through which universities can promote innovation for the public good
5) Provide a comparative perspective on research into social innovation and inclusive development in Argentina
6) Bring together researchers and policy actors in the higher education community engagement, social innovation and development spaces to determine what further research is required, and how current research can be coordinated

Conclusion

The value of such a workshop is that it can bring together researchers, policymakers and knowledge producers to evaluate current research, draw out policy implications through a dialogic process, and inform the research agenda going forward.

Proposed Programme

RAPPORTEUR: Sean Morrow

Chair: Joyce Nduna, CPUT

08:00 - 08:45	Registration, Tea & Coffee

08:45 - 09:00	Introduction and welcome

08:45 - 09:00   Welcome and background to the workshop
Dr Joyce Nduna, CPUT and Sagren Moodley DST

09:00 09:30	**Session 1: Context and Background**

09:00 - 09:20   Setting the scene: the role of diverse types of university in innovation for inclusive development
Dr Glenda Kruss, Education and Skills Development, HSRC

09:20 – 09:30   Discussion: Q and A

09:30 – 11:00	**Session 2: Linking universities and communities to promote livelihoods**

Chair: Professor Francis Petersen (University of Cape Town and NACI)

09:30 – 09:45   What are the enablers of academics' interaction with marginalised communities to enhance livelihoods?
Mr Michael Gastrow and Bongani Nyoka (HSRC)

09:45 - 10:00   Understanding knowledge networks from the bottom up in rural district municipalities: spaces for intervention
Dr Peter Jacobs and Tim Hart (HSRC)

10:00– 10:15   Technology stations and service learning as structured mechanisms to promote livelihoods of marginalised communities
Ms Jacqui Scheepers, Cape Peninsula University of Technology

10:15-10:25   Discussant: Prof Francis Petersen (University of Cape Town and NACI)

10:25 - 11:15   Discussion: Q & A

11:15 – 11:30	TEA

11:30 – 12:	Session 3: A comparative perspective from Argentina

Chair:	Gillian Marcelle, University of Witwatersrand

11:30 – 12:00	Transformative alternatives: opportunities and conflicts in socio-technical transitions. Case studies from Argentina
Or	
	'Innovation in informal settings but in which direction? The case of small cotton farming systems in Argentina'
	Dr Valeria Arza, CENIT/UNTREF, Buenos Aires, Argentina

12:00 – 12:30	Discussants: Imraan Patel, DST Dr Rasigan Maharajh, IERI, TUT

12:30 – 13:15	Discussion: Q & A

13:15 – 14:00	LUNCH

14:00 – 15:30	Session 4: Universities, innovation and the public good

Chair: Prof Frikkie Booysen, University of Free State

14:00 - 14:20	Social innovation and inclusion: the role of universities in rural health innovation systems Dr Erika Kraemer-Mbula, Dr Lindile Ndabeni and Dr Rasigan Maharaj (IERI, Tshwane University of Technology)

14:20 - 14:40	Making science, technology and innovation relevant for poor communities: the role of science councils in water management Prof. Gillian Marcelle (University of Witwatersrand)

14:40 – 14:50	Discussant: Dr Jeffrey Mabelebele, Higher Education South Africa

14:50 – 15:30	Discussion: Q & A

15:30 – 16:00	Session 5: Closure

15:30 – 16:00	What are the policy implications for government and universities? What directions should new research take? Discussion led by Dr Temba Masilela (DCEO Research, HSRC)

Participants

Research groups working on aspects of higher education, innovation and inclusive development will be invited to contribute to the programme in various ways, including:

- Institute for Economic Research on Innovation, at Tshwane University of Technology – teams led by Rasigan Maharaj and Erika Kraemer-Mbula
- Science, Technology, Innovation and Society research programme at Wits Business school, University of Witwatersrand - team led by Gillian Marcelle on "social dimensions of innovation" (NRF funded Human and Social Dynamics of Innovation)
- Department of Economics, University of Free State - team led by Frikkie Booysen on social innovation
- University of Free State - team led by Melanie Walker, Chair in Higher Education and Human Development
- Centre for Higher Education Transformation – team led by Nico Cloete on higher education and economic development in Africa
- Centre for Research on Science and Technology (CREST), university of Stellenbosch – team led by Johann Mouton on uptake of research for development
- Economic Policy Development, HSRC – team led by Peter Jacobs and Tim Hart on rural innovation`
- CSIR Built Environment group

Agencies in the national system of innovation that conduct and use research to inform their strategic work in the sector or with individual universities will be invited to participate, including:

- Higher Education South Africa, Research and Innovation Strategy group
- Council for Higher Education, particularly the working group on Community Engagement for the 20 year Review of Higher Education
- South African Higher Education Community Engagement Forum
- National Advisory Council on Innovation, Innovation for Development programme
- Southern African Research and Innovation Managers Association
- National Research Foundation, Community Engagement programme
- DST/NRF Community University Partnership Programme
- Technology and Innovation Agency Technology Stations programme

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