



science
& technology
Department:
Science and Technology
REPUBLIC OF SOUTH AFRICA



HSRC
Human Sciences
Research Council

Innovation for Inclusive Development and Economics: Interpretations and Policy Implications

Seminar 1 Report

**Developmental, Capable and Ethical State Research
Division**

Report prepared by

**The Human Sciences Research Council
(HSRC)**

to

**The Department of Science, Technology and
Innovation
(DSTI)**

DATE: 1 October 2024

Prepared by Ntombizodumo Mkwanazi and Charles Hongoro

Contents

1. Background	3
2. IID Book Description	4
3. Purpose and Objectives of Seminar	5
4. IID and Economics: Interpretations and Policy Implications.....	5
4.1 HSRC Opening Remarks	6
4.2 DSTI Opening Remarks.....	6
4.3 The Keynote Address: IID and Economics-Interpretations and Policy Implications ...	9
5. Conclusion.....	12

1. Background

In October 2015, the Human Sciences Research Council (HSRC) was awarded a contract by the then Department of Science and Technology (DST) (now the Department of Science, Technology and Innovation- DSTI) for the hosting of Government Cluster Policy Workshops (GCPWs) and to build upon the previous DST Human and Social Development (HSD) contract awarded to the Research Use and Impact Assessment Unit (RIA) of the HSRC in 2011. The contract had two connected components:

- GCPWs, which focused on the research and policy needs of government and held with the Director-Generals of the Social and Economic Clusters, and
- Science seminars, which essentially highlighted research at historically disadvantaged universities (HDIs), facilitated dialogue across departments and faculties, and addressed policy concerns.

The three-year contract that started from 1 April 2015 to 31 March 2018 has since been renewed several times to meet the contract deliverables, including an additional one in the form of a book. The HSRC committed to publishing a book on Inclusive Innovation for Development (IID). The book emerged from the realisation that, while the concept of IID has become increasingly prominent in academia, research, and innovation policy circles, it is fraught with contestations around its conceptualisations and how it is constructed and framed. It was, therefore, imperative to unpack the concept of IID and what it means in a country such as South Africa, which is characterised by endemic poverty, deepening inequalities, and high levels of unemployment. It was envisaged that the multi-pronged South African perspective of the book would offer a critical analysis of IID in South Africa that would enhance the understanding of this phenomenon with respect to theory and practice. The book provides a fact-based understanding of IID and its opportunities and challenges. This information should be of great value to policymakers/ decision-makers, innovation practitioners, researchers, government officials, and postgraduate students in the field of innovation.

The book was published by AOSIS Publishing, a South African-based open-access publisher that focuses on scholarly and academic publications. AOSIS Publishing operates on an open-access model, making their publications freely available to readers worldwide. This is in line with DSTI of enhancing public access to outputs that it finances. Readers can read, download, copy, distribute, print, search, or link to the full texts of the books or use them for any other lawful purpose without asking prior permission from the publisher or the authors, provided that the work is appropriately cited. The book is available online:

<https://books.aosis.co.za/index.php/ob/catalog/view/384/559/7586-1>

2. IID Book Description

Science, technology and innovation (STI) are generally accepted as major drivers of growth and can help address poverty and directly improve the well-being of different groups in society. However, many countries are facing the challenge of attaining economic growth that is socially inclusive and equitable. Under certain circumstances, STI can reinforce social exclusion and inequalities. *Innovation for inclusive development and transformation in South Africa* explores discourses around directionality and the importance of IID to address policy questions that explore the relationship between IID with inequalities in income and opportunities.

The book contributes to the understanding of IID and its application in low and middle-income countries, and it uses a specific example to demonstrate technical and contextual factors that affect its impact. Most studies on IID have been done in developed countries, and the intention of this book is to fill this knowledge gap and raise an understanding of the enablers and constraints of its application.

This book is based on a series of chapters that are authored based on a systematic review of relevant literature, empirical work on local innovations and a series of policy dialogues on IID, which the HSRC conducted in the last 10 years. This book has been written by various scholars who understand the various notions of IID and how it can possibly be applied and the relevance of such knowledge for policy, programmes and

practice. The book's target audience is academics and specialists in the field of various notions of IID.

3. Purpose and Objectives of Seminar

The HSRC, in collaboration with the DSTI, convened this hybrid seminar as part of a two-seminar series that will focus on different aspects or chapters of the book. The principal of these seminars was to showcase the book. More specifically, the seminar sought to address the following purposes.

1. **Knowledge Dissemination:** This will allow for the sharing of valuable insights, research findings, and best practices related to IID with a wide audience, including policymakers, practitioners, academics, and students.
2. **Promoting Awareness:** To create an opportunity to raise awareness about the importance of IID and help generate interest and stimulate discussions on topics related to innovation, social equity, economic growth, and sustainable development.
3. **Influence and Impact:** To inspire and guide decision-makers to adopt innovative approaches that prioritize inclusivity and social impact, leading to positive societal changes.
4. **Networking and Collaboration:** To provide an opportunity to connect with like-minded individuals, experts, and stakeholders who are interested in IID. Such connections can foster collaborations, partnerships, and knowledge-sharing initiatives that can further enhance the impact of your work.
5. **Advocacy and Policy Influence:** To serve as a platform for advocating for policy changes and interventions that promote equitable, inclusive and sustainable development.

Overall, these seminars on IID can contribute to advancing knowledge, promoting social change, and shaping how we think about and approach development challenges. They allow the sharing of ideas, inspiring others, and contributing to creating a more inclusive and prosperous society.

4. IID and Economics: Interpretations and Policy Implications

The first hybrid seminar was convened on 7 August 2024 at the CSIR Convention Centre in Pretoria from 14h00-16h00. Professor Mario Scerri, the author of Chapter 2, titled Innovation for Inclusive Development and Economics: Interpretations and Policy Implication, presented a keynote address. Professor Charles Hongoro, the Strategic Lead at the Developmental, Capable and Ethical State (DCES) Division at the HSRC, who is one of the book's editors and a co-author of Chapter 1, chaired the session. There were 57 attendees; 33 attended physically, whilst 24 attended virtually. Professor Narnia Bohler-Muller the Divisional Executive at the HSRC offered opening remarks and shared what she considered to be critical issues to thinking about IID in theory and practice:

4.1 HSRC Opening Remarks

Professor Narnia Bohler-Muller raised several critical issues about IID:

First, she shared that Science, technology and innovation (STI) are major drivers of growth and can assist directly in addressing poverty and inequality. However, it is important that STI promotes inclusion and not exclusion – hence the emergence of IID.

Second, the 2030 Agenda, positioned STI as the key means of implementation of SDGs and ensuring that no one is left behind.

Third, the *2019 White Paper on Science, Technology and Innovation (STI) sets out the long-term policy direction for South Africa's use of STI to accelerate inclusive economic growth, make the economy more competitive, and improve people's daily lives (DST 2019)*. All this aligns with South Africa's development goals as set out in the National Development Plan (NDP), which aims to eliminate poverty and reduce inequality by 2030.

Fourth, the notion of Inclusivity is especially prominent in SDGs 4 (Quality, Education), 8 (Decent Work and Economic Growth), 9 (Industry, Innovation and Infrastructure), 11 (Sustainable Cities and Communities), and 16 (Peace, Justice and Strong Institutions). Therefore, the attendant question is how South Africa is in all these areas, given our history and development pathway.

4.2 DSTI Opening Remarks

Dr Tshepang Mosiea, the Chief Director of IID at DSTI focused his input on the successful partnership with the HSRC and hailed the IID book as one of the milestones. Dr Mosiea discussed the inequalities that result in economic exclusion, their characteristics, and the role of government in addressing them, the HESTIL review and creating an enabling environment for IID.

Inequalities are seen across racial lines, across geographic areas, i.e., urban and rural, between poor and rich, and by income groups, and in how some have access to services and others do not.

Public servants as implementers of government programmes and policy interventions should at all times understand the current socio-economic conditions of citizens, households, and municipal areas in terms of access to services, employment status, income sources for households, health conditions, etc. The following is a direct quotation from his speech.

"Innovation for inclusivity is an important theme in the Decadal Plan ... how to use innovation to drive socio-economic impact and inclusive economic development and address inequality...and achieve social justice."

4.2.1 Characterisation of Exclusion in South Africa

The existence of a legacy of ineffective social capital that manifests in blocked pathways of upward mobility that leaves large numbers of people trapped in poverty is consistent with the patterns of inequality identified by **the International Monetary Fund (IMF)**. Using six charts, the IMF (2020) **characterised inequality** in South Africa as follows:

- **Income inequality** has remained high and decoupled from the average for emerging economies.
- **Income distribution is skewed** towards the **richest 20%, which holds over 68%** of the income, while **the bottom 40% share only 7%**.
- There are significant **spatial disparities in the poverty demographic**, with the incomes per capita of the richest provinces (Gauteng and the Western Cape) being twice as high as those of the poorest provinces.
- The **stagnant growth** over the past decade has effectively derailed measures for addressing inequality.
- The **high rate of unemployment**, particularly among the youth, is a major factor behind economic exclusion.
- There are **indications that fiscal policy has been effective in reducing inequality**; however, this is being constrained by the country's high level of indebtedness.

4.2.2 HESTIL Review Feedback

Dr Mosiea shared a summary of the HESTIL review feedback which is narrated below.

- **Decadal Plan** emphasises focus on creating an enabling environment for innovation to achieve inclusivity through procurement of locally developed techs, commercialisation of publicly funded IP, use of innovation to achieve a capable state, modernise existing economic sectors and drive inclusivity agenda in new sources of growth exist.
- **Innovation for inclusivity agenda** on the Decadal Plan **has been guided by the HESTIL review panel input and feedback from experts.**

- The **main challenge raised by HESTIL** on the Decadal Plan proposed initiatives for inclusivity; was **how to achieve Level 6 of inclusivity** as described in the **Heeks et al. 2013 Ladder for innovation for inclusivity**;
- **Level 6 – Post structural inclusivity** is when the **discourse is inclusive**, and the **state is inclusive itself** and in all its **policies!**
- As such, the **DSI and the systems, including sector departments, civil society, industry, research institutions, and academia, have been challenged through the DP to create an enabling environment for the inclusion of the marginalised in the economy and a policy environment that facilitates inclusion.**

Dr Mosiea shared Heeks et al. 2013 ladder of exclusion, which has six levels;



Source: Heeks et al. 2013

4.2.3 Creating an Enabling Environment for IID

- Innovation for Inclusive Development is about **changing livelihoods for youth entrepreneurs, women**, and people with disabilities, improving access to market and income opportunities for grassroots innovators, and efficiently using scientific knowledge and tools to provide evidence-based decision support to improve service delivery.
- Existing government initiatives **supporting innovation for inclusive development include:**
 - **Public and private sector support programmes** for youth innovators; entrepreneur support programmes for funding, technical, tooling, incubation point of view.

- Programmes from **SEDAs, SAB foundation, the DTI** and the DSI Grassroots Innovation Programme, **m-Lab, Innovation Hubs, DBSA Innovation Challenge** etc.
- Many of these initiatives lack funding and are fragmented and uncoordinated, which minimises the impact.

The Decadal Plan proposes strengthening systems or innovation for inclusive development and local innovation systems. Furthermore, an enabling environment for the innovation for inclusive development across all spheres of society and government should be driven through partnerships, support infrastructure, **innovative funding mechanisms** and instruments, policy reviews and reskilling **of young people in future digital skills demanded by the 4th IR** be implemented in **partnerships with industry, private sector, government, NGO' and civil society.**

4.3 The Keynote Address: IID and Economics-Interpretations and Policy Implications

Professor Scerri's keynote address focused on the background, definitions and interpretations of IID.

4.3.1 Why there is an increase in the IID interest

Shifting values

Prof Scerri argued that the post-WWII saw the formal recognition of human rights and rules based global order. However, there is still evidence of violations in the name of 'culture', alleged historical territorial imperatives, informal institutions, and ideology

Strategic paths

He provided a historical overview of the objectives-driven economic reforms and the theory of the 'trickle-down' approach assumed by the South African government post-1994. The emphasis then was on the development of deliberate policies and programmes of inclusivity. However, the focus was and still is on human capital instead of human capabilities. He expressed concern that the concept of human capital seems prominent in the broad version of the national system of innovation. He argued that focus should be on human capabilities the characteristics of which are shown in the figure below

Figure 1 Human Capabilities in the 21st Century



Source: IERI 2014

4.3.2 South African Focus

Apartheid and Its Aftermath I

He highlighted the period starting in 1910 which saw the start of the unique 'post-colonial' state in Africa (Afrikaner nationalism against British imperial capital). During that inter-war period, there was state-led industrialisation. The Apartheid regime saw the development of a sophisticated national system of Science and Technology (military-industrial complex) set within a progressively impoverished national system of innovation (the logic of apartheid ideology)

Apartheid and Its Aftermath II

Prof Scerri noted the enduring effects of 'separate development', the Group Areas Act, and repeated forced removals represented legal exclusion of the majority. The enduring structural exclusion of most of the population from human capabilities development (education and the engagement in the formal economy) is a major challenge. To date there has been insufficient redress with the post-apartheid economic geography and 'urban planning'. The entrenchment of various ethnic formations (imagined communities) and its impact on the integrity of the national economy/ national system of innovation remains a challenge.

4.3.3 *The Origins of South African National Systems of Innovation (NSI)*

A comprehensive overview of the origins of the South African National System of Innovation was given, including the bifurcation of Afrikaner nationalism, the economics of partitioning and separate development which saw creation of homelands and Bantustans, and the implications of all this to the system of innovation.

4.3.4 Post-apartheid National Policy: Environment Rapture/ Continuity

The talk focused on the adoptions of neoliberal policies (GEAR, AsgiSA, JIPSA) and thinking in South Africa which had a huge influence on the National Development Plan. He argued that the targets set in the NDP are unlikely to be achieved without structural change to the economy.

4.3.6 Target Implications of the NDP

- The financial sector is probably the least 'productive' sector in terms of the relationship between growth and employment.
- The projected increase in employment in the informal and domestic work sector is particularly worrying, given the low wages, precariousness of employment and the generally poor conditions of work which characterise this sector.
- Strong reliance on the SMME sector for the creation of the majority of jobs – implications for the prospects of decent work given the generally poor conditions of work in the SMME sector and the planned easing of the regulatory framework for labour in this sector.
- The education and training implications of the projected employment goals are a lock-in into a low-level human capabilities base, subject to a rapid rate of obsolescence.

4.3.7 The Ministerial Review (RSA, 2012b)

He summarised the findings of the Ministerial review of 2012 as follows:

- Accepts the failure of the SA NSI in uplifting the socio-economic conditions of the population
- Proposed supra-ministerial coordinating body
- Incorporation of civil society organisations in a new 'quadruple helix' partnership
- Restricted to the narrow version of the NSI
- Limits its recommendations to post-school education
- Attests that the 'fundamentals' of the schooling system are appropriate for the NSI and that the breakdown is in delivery

4.3.7 Policy Implications for Human Capabilities

Given the historical policy trajectory of South Africa he made the following key observations:

- Human capabilities development as both the instrument and the objective of growth and development.
- The family is the location of human capabilities development, and the sustained structural integrity of the average family is necessary for human capabilities development.
- The public sector is the sole guarantor of the sustained structural integrity of the family unit regardless of individual income or wealth
- The needed erosion of the separation between economic policy and social policy

- Labour market conditions need to be managed to ensure an ongoing relevant life-long learning
- Revisit the provincial map of the democratic South Africa

4.3.8 Implications for Innovation Policy

Regarding innovation Prof Scerri made the following key observations:

- That South Africa needs to follow the Scandinavian model
- The focus should be on life-long learning
- That employee driven innovation be formalised as policy
- An increasing role of the state in procurement or provisioning (questioning the tender)
- Engender efficiency: address market concentration, collusion and rent seeking behaviour
- Secure state employment contracts and the implications for human capabilities formation

5. Conclusion

The seminar provided scholarly, policy and practical contributions to IID and was a successful networking event as it was attended by the scholars from University of Pretoria, the University of South Africa, Tshwane University of Technology, CSIR, HSRC and DSTI. Other online attendees included colleagues from the AURUM Institute and Innovate in Durban, and others. The DSTI and the HSRC are going to convene another hybrid seminar in October 2024 to showcase other book chapters.