Strategic Framework: Human and Social Dynamics in Development

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INTRODUCTION

The study of human and social dynamics is one of five key themes in South Africa's Ten-Year Innovation Plan, approved by the Cabinet in 2007. The Department of Science and Technology (DST) subsequently developed a concept paper setting out, in broad terms, the focus areas for innovation and research. This strategic framework marks the next step in the process, outlining an approach to give impetus to research in human and social dynamics to create a better life for all.

The objective of this Grand Challenge is to increase and deepen research to improve scientific understanding and practice in a range of fields, while contributing to the development of evidence-based public policy that improves the human condition. Such research, informed by the active participation of civil society, is intended to be relevant for the needs of South Africa, our region and our continent.

This document describes the principal beneficiaries and drivers of this process, and outlines types of intervention that are within our immediate grasp. It is intended to contribute to the development of a science plan by the research community.

1. WHY HUMAN AND SOCIAL DYNAMICS ARE A PRIORITY FOR SOUTH AFRICA

The phrase "human and social dynamics" refers to humanity's behaviour and development in the face of continuous change. This includes the Social Sciences and the Humanities. Such dynamics are at the core of virtually every major challenge facing South Africa and the African continent – from improving education and skills to reducing crime; from curbing the spread of HIV/AIDS to developing a sustainable approach to energy; and from reducing xenophobia to building more inclusive communities; and extends to the creative arts. The concept paper describes the interlinked nature of these challenges.

To respond to these developments, and to improve the way our society works, we need to better understand social behaviour in all its forms. To increase the contribution of the social sciences and the humanities to evidence-based policy-making will require a new approach. This is true for several reasons, among them:

- The "value proposition" may not be evident. South African society has been encouraged to appreciate the worth of engineering, but not so of social science or the humanities.
- Understanding these dynamics, and linking them to policy design, is by definition a long-term process that transcends electoral cycles.
- Social change is largely a consequence of civil action a point that is not always appreciated in policy development.
- Substantive progress in this area requires a strong partnership between government, the research community and civil society.

The Human and Social Dynamics Grand Challenge seeks to overcome these hurdles. By 2018, the expected outcomes of this process include:

 A much-expanded base of research and knowledge, providing internationally accredited research into the humanities and social sciences in a fast-changing world;

¹ The Ten-Year Innovation Plan, produced by the DST, lists five Grand Challenges, namely: Farma to Pharma (becoming a world leader in biotechnology), space science and technology, energy security, global change science with a focus on climate change, and human and social dynamics.

² Concept Paper: Human and Social Dynamics Grand Challenge.

- Evidence-based public policy initiatives that have helped to improve the human condition; and
- Recognition of South Africa's unique positioning in opening up exciting possibilities of research in both the humanities and social sciences.

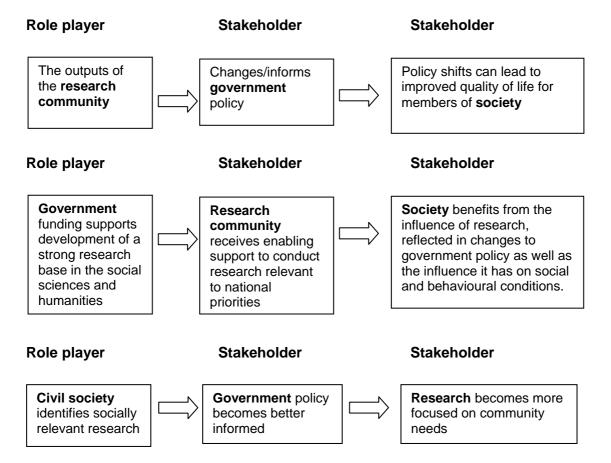
2. STAKEHOLDERS AND ROLE PLAYERS

The study of human and social dynamics is ultimately aimed at understanding and improving the human condition, leading to real improvements in people's lives. The strategy seeks to address the ways in which this challenge can be met in a national, structured research portfolio.

Society, government and the research community each have major interests in the success of this strategy. Each is both a *stakeholder* that will benefit from advances in this area, as well as a *role player* that is essential to drive the process of increasing research that is relevant to South Africa's current and future needs.

In other words, to advance our understanding of human and social dynamics, and bring this analysis to bear on improving the lives of all South Africans, these stakeholders and role players must work in partnership.

At the risk of oversimplifying the argument, the illustration below emphasises the importance of the relationships between government, researchers and society.



Government

Expanded research in these fields will benefit government by supporting informed and socially-grounded policy-making. A structured research agenda can better inform and lead to improved policy in education, health, and a myriad other areas which are touched by the humanities and social sciences. Government is therefore a key stakeholder.

Government is also a driver of this process, as the funder of first resort, exerting a major influence on the research agenda to ensure its relevance to national development goals in an open-handed fashion.

The public sector plays a crucial role, particularly in areas where there has been market failure (no private investment in R&D). Government can play a leading role in boosting and directing research in education, philosophy, psychology, anthropology, sociology and other fields, like the creative arts, that are not typically considered capable of yielding strong *commercial* returns, but which are crucial for improving the *human* condition.

By ensuring that research is carried out in consonance with the priorities of the Medium Term Strategic Framework (MTSF), for example, government can help to direct the research agenda to promote more inclusive economic growth, enhance the nation's education and health profile, improve safety, and build a more equitable and creative society.

This effort will involve government authorities at national, provincial and local level.

While the state has an interest in research that can improve policy and interventions, particularly those targeting MTSF priorities, it must allow the research community to determine what research needs to be done both to address these challenges and search out possibilities that lie beyond the social world. At the outset, government will need to convene a consultative mechanism to help prepare the research agenda. This could follow similar lines for policy formulation to those of a Green Paper, and include a survey instrument that allows all interested parties to have a direct influence. The consultation process will not be a Green Paper but will allow for inputs from the research community.

A shift is also required to ensure maximum effectiveness of public funds. Parliamentary grants, block grants, and core and ring-fenced funding that science councils and universities receive should be reprioritised in line with nationally agreed development priorities. More strategic use must be made of the shareholders' compacts agreed between the boards of science councils and the minister with administrative responsibility for these councils. Such a shift will help to align the research agenda of these institutions with those of the Ten-Year Innovation Plan, in particular the area of human and social dynamics. It is important that high-level, ministerial coordination is strengthened at the national level, across all sectors and science councils, to improve planning and governance oversight.

The DST also advocates the strengthening of the research-policy interface to reinforce evidence-based policy-making. This is essential given the complexity of policy-making in the field of human and social dynamics, which requires interdisciplinary solutions that integrate knowledge from a range of areas.

In support of this goal, researchers need to respond to policy priorities, and keeping in mind our society's evolving research needs, to understand the human condition in all its forms.

Society

As a stakeholder, society will benefit from expanded research in humanities and social sciences at two levels. First, by having a greater say about what constitutes social research that creatively addresses the needs of communities; and second, from strategic government interventions that improve people's lives.

As a role player, civil society needs to give voice to developing a relevant research agenda to serve South Africa's needs by becoming organised and asserting leadership through a variety of forums. For example, civil society organs can help to identify relevant research areas, or refine existing ones, in the areas of health and education as informed by people's daily experience. Society will play a crucial role in participative efforts to find solutions through civil society bodies, nongovernmental organisations, community organisations, the media and so on. This includes the private sector, which can play an important role through sponsoring innovative corporate social investment initiatives that draw communities into dialogue.

Civil society organisations and businesses will need to work with government and the research community to convene consultative forums. At the outset, government and civil society should work in partnership to hold a series of national conferences, drawing in a wide range of organisations and interested individuals to set up this dialogue.

Research community

As a stakeholder, the research community will benefit from greater direction, responding both to the needs of government and society to further South Africa's broad developmental policy objectives. In addition, the research community will benefit through the strengthening of professional practice, leading to more innovation and creativity, a general increase in knowledge and research capacity, and the development of new bodies of knowledge. This will benefit the entire research community, including universities and research organisations.

The research community will play a leadership role from the outset, mapping out the science plan in accordance with government and society's needs. At the same time, a balance needs to be struck. The strategy aims to ensure both "policy-relevant" research and what is known in the research environment as "Mode One" research – in other words, research geared to generate new forms of knowledge, with intellectual capital as the output rather than policy advice or commercial value. South Africa's own experience with social change uniquely positions it to add to the store of new understandings within both the humanities and the social sciences.

3. STRATEGIC APPROACH

Human and social behaviour are fundamental to what makes South Africa tick. To strengthen our democracy, and to account for rapid and large-scale changes in our society, we need to understand these dynamics. This requires a partnership by government, society and the research community, all of whom have a direct interest in the success of such research. There are three primary outputs:

- Research that promotes better policy
- Pursuit of Mode One knowledge
- Public dialogue and engagement.

For science and technology to interface with human development and social transformation, the DST will work in partnership with the research community and civil society to put in place a system that:

- Promotes research knowledge and skills
- Involves all stakeholders concerned with the issues under discussion
- Ensures that science-based technologies and research results are implemented and reach the ultimate beneficiaries

- Facilitates the translation of theory and results into layperson's terms for greater understanding, ease of application and wider dissemination in the public domain
- Monitors the impact of programmes using indicators developed by researchers.

Focus areas

Over the past 15 years, underlying socioeconomic trends in South Africa have resulted in changes in demographic patterns, reflected in the massive growth in the number of households; a dramatic increase in the economically active population; restructuring of the economy, with new sectors gaining prominence and redefining labour needs; and large-scale migration that has changed the economic, political and social profile of many communities. The study of human and social dynamics is intended not only to help us understand such trends, but to bring about real-life social improvements to build a more prosperous and caring society. A multidisciplinary research programme is needed to track broad trends, including understanding the movement of our society from its apartheid past towards a socially cohesive, non-racial nation.

There are four broad focus areas in this Grand Challenge:

- The dynamics of human and social behaviour
- · Science, technology and society
- Social cohesion and identity
- Societal change and the evolution of modern society.

The dynamics of human and social behaviour

This research area focuses on multidisciplinary examinations of changes in the behaviour of people and societies over time. It is aimed at increasing our understanding of changing social dynamics; the role of science and technology in stimulating growth and development; and research for improving scientific practice in human and behavioural fields.

Science, technology and society

This theme addresses the relationship between innovation and economic growth. It aims to ensure that research serves society in a relevant, responsible manner. The core areas include ensuring researchers' compliance with fundamental ethical principles; scientific advice and governance; promoting women in science; and increased understanding and appreciation of the social impact of technological innovation.

Social cohesion and identity

How can South Africa's young democracy create a united society from a past characterised by deep racial, social and economic divisions? This area of study can contribute to our understanding of the "glue" that holds the nation together, exploring issues such as how better to achieve reconciliation and social cohesion, and ways to manage social diversity in a durable, confidence-inspiring and constructive manner.

Societal change and the evolution of modern societies

This theme covers the growth and evolution of society and the nature of social change. It is concerned with large-scale transformational trends, such as globalisation, environmental change and scientific advances.

Instruments for implementation

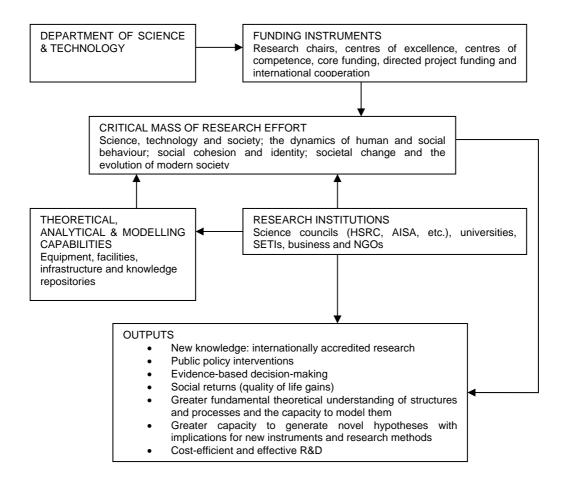
The primary instruments of implementation will be a science plan, with a structured research agenda backed by government; resources to grow the research base, including support for university libraries; greater community engagement; and focused research efforts, such as longitudinal studies that can help us understand the underlying factors in human, social and behavioural development. These modes of implementation will run through existing institutional research infrastructure:

- The universities and science councils, such as the Human Sciences Research Council (HSRC) and the Council for Scientific and Industrial Research (CSIR)
- The National Research Foundation (NRF)
- The centres of excellence
- The South African Research Chairs Initiative.

Unlike the other Grand Challenge areas of the Ten-Year Innovation Plan, there is no need to set up a new science council or new universities to address these issues. The challenge is about using the existing institutions in new ways to address the challenges facing South African society.

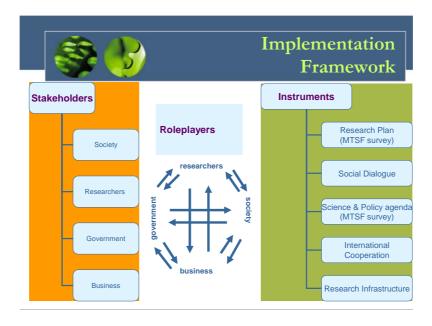
As the framework is implemented, it is expected that all participants in this process will have clear enabling conditions, including well-defined expectations, schedules, roles and responsibilities. Figures 1 and 2 overleaf attempt to illustrate this.

FIGURE 1: The road to human and social dynamics outputs



The implementation of the strategy will be based on the partnerships as shown below.

FIGURE 2: Beneficiaries and role players in implementation



Social sciences and humanities faculties and departments at universities, and science councils such as the HSRC, the NRF and the Africa Institute of South Africa will need to steer their programmes in line with the goals and objectives of the human and social dynamics science plan.

Mechanisms will be needed to achieve such a shift. The DST already has channels for directing and resourcing research activities. These include grant funding through the NRF, parliamentary grant funding to the HSRC, the South African Research Chairs Initiative and the centres of excellence.

Figure 3 shows the activities expected over the initial three years of implementing the Human and Social Dynamics Grand Challenge.

FIGURE 3: Implementing the human and social dynamics in development strategy

 Finalise National Research Work Programme 	o March 2010
(requires proposals from research institutions)	
 Finalise Social Dialogue Work Programme 	 March 2010
(requires proposals from research institutions)	
 Finalise Science and Policy Work Programme 	 March 2010
(requires comments from research institutions)	
 Implementation 	From January 2010

The work programme will be implemented through a mix of instruments (research chairs, centres of excellence, centres of competence, core funding and international cooperation). The DST will support interdisciplinary approaches to increase the quality and scope of research. At the outset, this will require:

- Networks involving academics, science councils, government, civil society, industry and other interested parties. The focus will be on exchanging information, identifying lessons learnt, promoting good practice and monitoring developments.
- National conferences, seminars, workshops and work groups to foster debate.
- An expanding knowledge base, supported by dedicated policy-related research correlated to targeted projects, methodological development, surveys, longitudinal studies and impact assessment studies.
- Awards and other flagship actions to recognise outstanding achievements.

The goals in the humanities and social sciences are to:

- Mobilise a critical mass of research effort in each area of study
- Establish and resource key infrastructure and knowledge repositories
- Promote responsible research and its application
- Step up the science/society dialogue.

The study of human and social dynamics will require multidisciplinary applications in a wide range of fields. A long-term view on the range of possible research fields and interventions will emerge as the research community develops a science plan. This section points to types of interventions that have already had an impact, and on which the science plan can build.

Structured research agenda

South Africa requires a relevant, structured research agenda directed not only to meeting national needs, but to addressing human and social dynamics throughout Southern Africa, the African continent and beyond. While the focus areas described above suggest some

obvious areas for scientific inquiry, the ultimate research agenda needs to be determined by the research community in partnership with government and civil society.

This effort is of long-term national importance, and goes hand in hand with strengthening South Africa's human capital and skills levels, and growing the pipeline of capable young people working in science (broadly defined) and in technology.

The idea is not only to direct research at particular problems, but to enhance overall capacity in the social sciences and the humanities to improve the human condition, building new knowledge areas and multidisciplinary links. Above all, this implies strengthening research capacity in the universities.

As noted earlier, government's role in encouraging research in these areas is important, because the private sector is more inclined to have an immediate appreciation for the value of an engineer, than for professionals in these fields.

A structured research agenda in the context of human and social dynamics would interface with the other Grand Challenges identified in the Ten-Year Innovation Plan. For example:

- Energy security The study of human and social dynamics cannot discover new power sources, but it can help researchers understand how to change energy consumption patterns, with a concomitant impact on demand.
- Global change science with a focus on climate change The current international carbon trading regime was formulated based on the economic considerations of the developed world. The study of human and social dynamics can help develop approaches that are more relevant to reducing greenhouse gas emissions in Africa, and which enable sub-Saharan nations to respond effectively to the onset of climate change.
- Biotechnology Research can help us uncover the range of practical uses of indigenous plants and associated therapies to expand knowledge about biotechnology, as well as to better understand the spread and containment of those diseases most associated with poverty.
- Space science and technology Society should be aware of the benefits of high-tech applications in communications and satellite imagery, for example in the area of land use. Community programmes facilitated through the human and social dynamics focus area can play an important role in strengthening engagement, which will feed back into and enrich the research programme.

Longitudinal studies

Studies of social phenomena conducted over long periods of time are known as longitudinal studies. South Africa needs a work programme for longitudinal studies in the humanities and social sciences for the simple reason that it is not possible to make policy based on a shortterm view of social dynamics. Such studies enable researchers to chart long-term trends and to avoid an overemphasis on short-term phenomena.

South Africa is currently making an important contribution to global understanding of early childhood development through one such study. Birth to Twenty,3 conducted at the University of the Witwatersrand, is the largest and longest-running study of child and adolescent health and development in Africa, and one of the few large-scale longitudinal studies in the world. It tracks the lives of 3 273 children born between March and June 1990

³ http://web.wits.ac.za/Academic/Health/Research/BirthTo20/

in Soweto, Johannesburg, following Nelson Mandela's release from prison. These children were enrolled into a 20-year birth cohort study following them and their families.

The original emphasis of the study was on determinants of health, psychological adjustment and educational achievement. The current focal points are sexual risk and practice, the influence of future orientation and family support on educational achievement, and risks of educational failure and dropout. This study has already resulted in a wide range of research that has been considered in policy design, particularly as it relates to early childhood development.⁴

This demonstrates the importance of humanities and the social sciences in monitoring and analysing development patterns to inform policy decisions.

We can also appreciate the value of a properly constructed longitudinal studies programme by considering a missed opportunity. What if such a programme had been launched in 1994? Evidence of long-term social shifts in the transition from apartheid to democracy would have been invaluable, yet few if any studies have covered this period.

Such a programme could have helped us to understand not only negative social trends, which often make the headlines, but also positive long-term trends. For example:

- Why does South Africa continue to experience peaceful elections with exceptionally high voter turnout?
- In a society characterised by a violent racist past, and where the economic and social fault lines still remain largely defined by race, why have there been no race riots?
- What has been the impact of integrated urbanisation, particularly as young people move out of townships into the cities or nearby suburbs?

In other words, a well-constructed programme of longitudinal studies can help us understand what makes South Africa tick.

A plan for public engagement

The DST intends to elicit the widest possible participation in implementing the Human and Social Dynamics Grand Challenge. To this end the department will publicise its approach and elicit active participation in the constituencies referred to below. The DST aims to encourage the participation of public institutions in the establishment, implementation and success of this programme. The goal is to increase participation of organisations within the National System of Innovation, and to share experiences and learning.

The DST proposes to host a series of **stakeholder dialogues** over the lifespan of the programme. These dialogues will be designed to ensure participation in and the creation of a high-level oversight governance structure, drawing in government, public entities such as the National Development Agency, civil society bodies and the research community. Representatives of United Nations agencies and Official Development Assistance institutions will also be canvassed to support and contribute. The dialogues will allow for a review of projects underway, and help to secure sustainable partnerships and the resources required to complement DST funding.

The DST will also convene a series of **role player seminars and workshops** bringing together public higher education institutions, public research institutions (the science

States, such as the Perry Preschool Project (http://www.highscope.org/Content.asp?ContentId=219).

⁴ For an international view of childhood development drawing on various longitudinal studies, see Engle, P., et al. "Child development in developing countries: 3 strategies to avoid the loss of developmental potential in more than 200 million children in the developing world." www.thelancet.com, Vol 369. January 20, 2007, 229-242. There is also a large body of longitudinally conducted research aimed at disadvantaged children in the United

councils), non-governmental research organisations and private-sector laboratories. This grouping collectively represents the primary research constituency in human and social dynamics and is a major part of the National System of Innovation. A core objective of these seminars will be to ensure maximum levels of participation.

It is expected that the DST will convene these role player forums using the existing public higher education institutions. Such an active partnership will also facilitate greater alignment with the other DST programmes, such as the South African Research Chairs Initiative (SARChI) and the department's human capital strategy. Working with the institutions in this way also provides an opportunity to reach out to younger researchers and faculty members.

Community engagement/community-driven development

South Africa gives voice to its needs through civil society. The vehicle may be a community organisation, another type of forum, or a newspaper. Civil society cannot be a passive observer in the process of deepening research into human and social dynamics. In fact, its voice is needed to inform such research and to make it meaningful in the daily lives of the country's citizens. Without such community inputs, there is a risk that research and its outcomes will be disconnected from people's lives.

Government, universities, businesses and civil society organisations all have a role to play in promoting active engagement with communities. There are already examples of such initiatives around the country. For example:

- Universities have in some instances engaged with society on research and technology. The Council on Higher Education has hosted a workshop on Institutional Research: Transforming Information into Knowledge.
- The Development Bank of Southern Africa, which coordinated inputs on an "Education Roadmap", has sponsored several community forums at which participants can hear about the process that informed the Roadmap and voice their opinions about improving the public school system.
- Some private-sector corporate social investment initiatives, such as those sponsored by Tongaat Hulett and Standard Bank, identify projects in dialogue with local communities.

Government needs to recognise the importance of a stronger dialogue with society. Such platforms can help the country to manage its challenges. Examples include:

- The World Conference against Racism, Racial Discrimination, Xenophobia and Related Intolerance, which took place in Durban in 2001.
- The National Economic Development and Labour Council, where government, business, labour and community groups come together on a national level to discuss and attempt to reach consensus on social and economic issues.

At the international level, there are lessons to be learnt from efforts such as the Smart Communities initiatives in the United States (www.smartcommunities.org). These initiatives are based on local partnerships of government, business, educational institutions and civil society in response to rapid social, economic and technological change. Examples of such communities include the following:

 When businesses in Silicon Valley, the world's leading high-tech centre, sought to expand their technical workforce, they discovered that local schools were failing to provide the most skilled and best prepared new workers. In response, they launched an initiative to increase engagement among area businesses, universities, schools and communities with the goals of raising skills levels, facilitating shared learning, increasing local recruitment and so on. Technology projects to enhance the quality of life and interaction form the leading edge of this initiative.

 San Diego State University launched its International Centre for Communications to examine the emerging relationship between communications and community. The centre's study, "San Diego in the Global Village," reviewed the efforts of cities worldwide to respond to this technology revolution-and prompted San Diego to undertake an ambitious programme to become a technological "City of the Future."

South Africa can develop similar community-university partnerships that increase community engagement, access to information and access to training, while synthesising information received from the public and improving the overall quality of life. The DST is rolling out a pilot programme at five rural universities (University of Fort Hare, Walter Sisulu University, University of Zululand, University of Venda and University of Limpopo). These rural universities are important organs of civil society, and partnerships with local communities can play a direct role in reducing poverty.

To mobilise participation, it will be important to emphasise that the dynamic study of the humanities and the social sciences will play a vital role in nation-building, *ubuntu*, reconciliation, conflict resolution, justice and social equity.

Conclusion

This strategic framework opens the door for implementing the Human and Social Dynamics Grand Challenge. Progress in this area depends on building an innovative partnership between government, civil society and the research community. Beginning practical work on this strategy now will improve the lives of all South Africans immediately and, as importantly, explore pathways to a future which is marked by prosperity, equality and a better, more creative, life for all.