

Incentivising Social Science Perspectives in the SADC Water Sector

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Addressing the governance challenges facing the water sector necessitates expertise from a diverse set of interdisciplinary backgrounds. Creating a balance between technical, natural and social science is critical to developing relevant and impact driven solutions for the water sector.

SADC AND WATER

- The Southern African Development Community (SADC) contains 21 international river basins to which one or more SADC member states are riparian, which results in hydrologic linkages across all of SADC's national borders.
- Some of the most economically developed Southern African states have limited water resources, which may constrain future economic development.
- There are pronounced developmental differences in SADC. Some countries are more able than others to mobilise the necessary human, financial and technological resources to address water scarcity and related human welfare needs.
- Social challenges such as population growth, urbanisation, climate change, refugee movements, and diseases such as cholera, malaria, tuberculosis and Aids riddle the region.

All these issues will affect and be affected by the way in which water is managed.

Thus **"Governance issues form the central obstruction to sound and equitable water sharing and management"**.

(UN World Development Report 2: Water a shared responsibility: 2006)

WHAT IS BEING DONE?

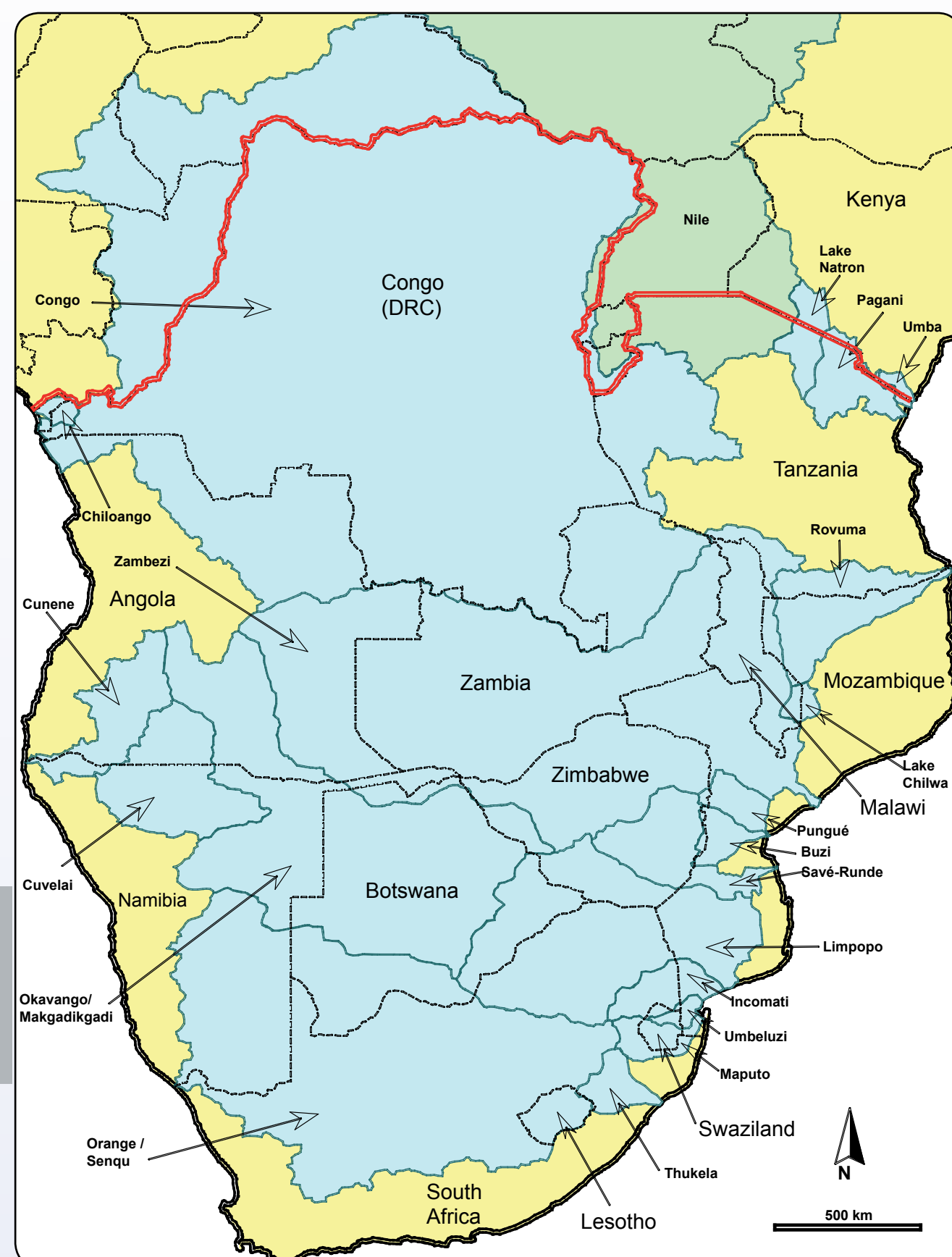
Traditionally the technical and scientific communities have been called on to respond to the concerns of the water sector.

Emerging challenges and complexities are demanding more integrated levels of ingenuity and expertise from a diverse set of disciplines.

Socio-political relevance of technical solutions need to be determined in order to achieve impact

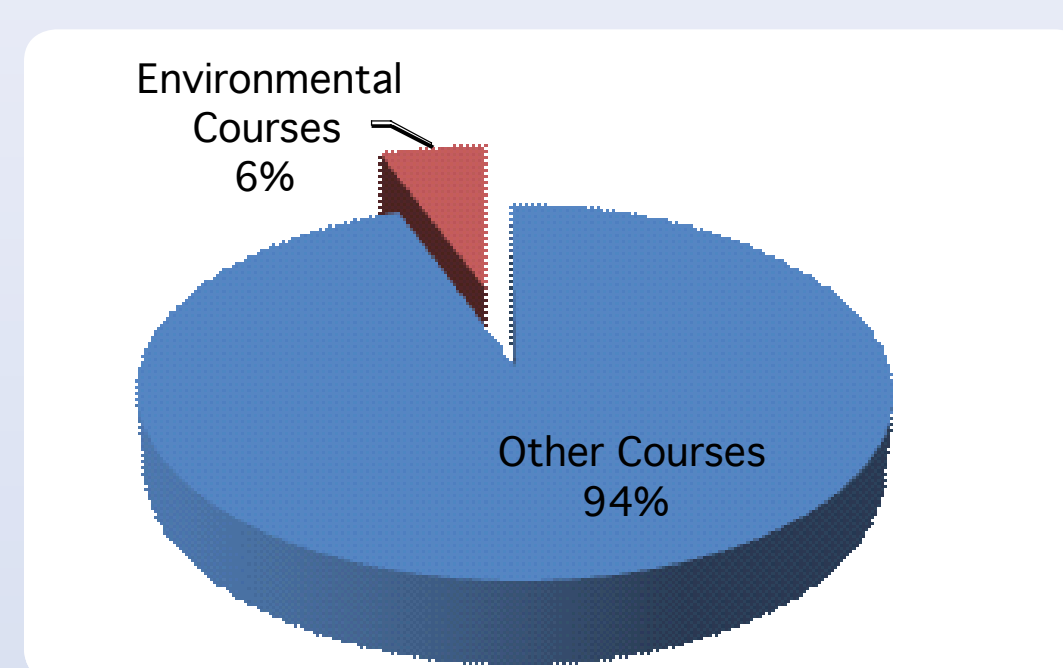
Thus the need for social scientists, equipped with skills, understanding, experience and passion for governance issues in the water sector, is recognised. Presently, however, there are very few social scientists working in this field.

Map 1: Shared River Basins in Southern Africa (red line demarcating SADC boundary)



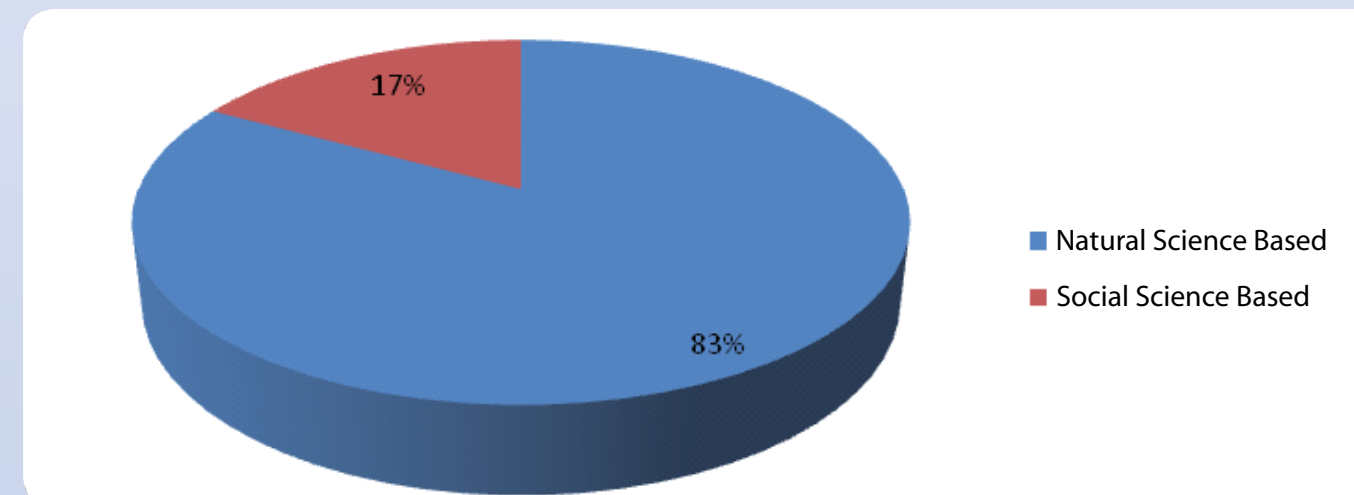
WHY ARE THERE SO FEW SOCIAL SCIENTISTS IN THE WATER SECTOR?

GRAPH 1. PERCENTAGE OF ENVIRONMENTAL COURSES OFFERED IN SOCIAL SCIENCE DEGREES AT THREE SOUTH AFRICAN UNIVERSITIES



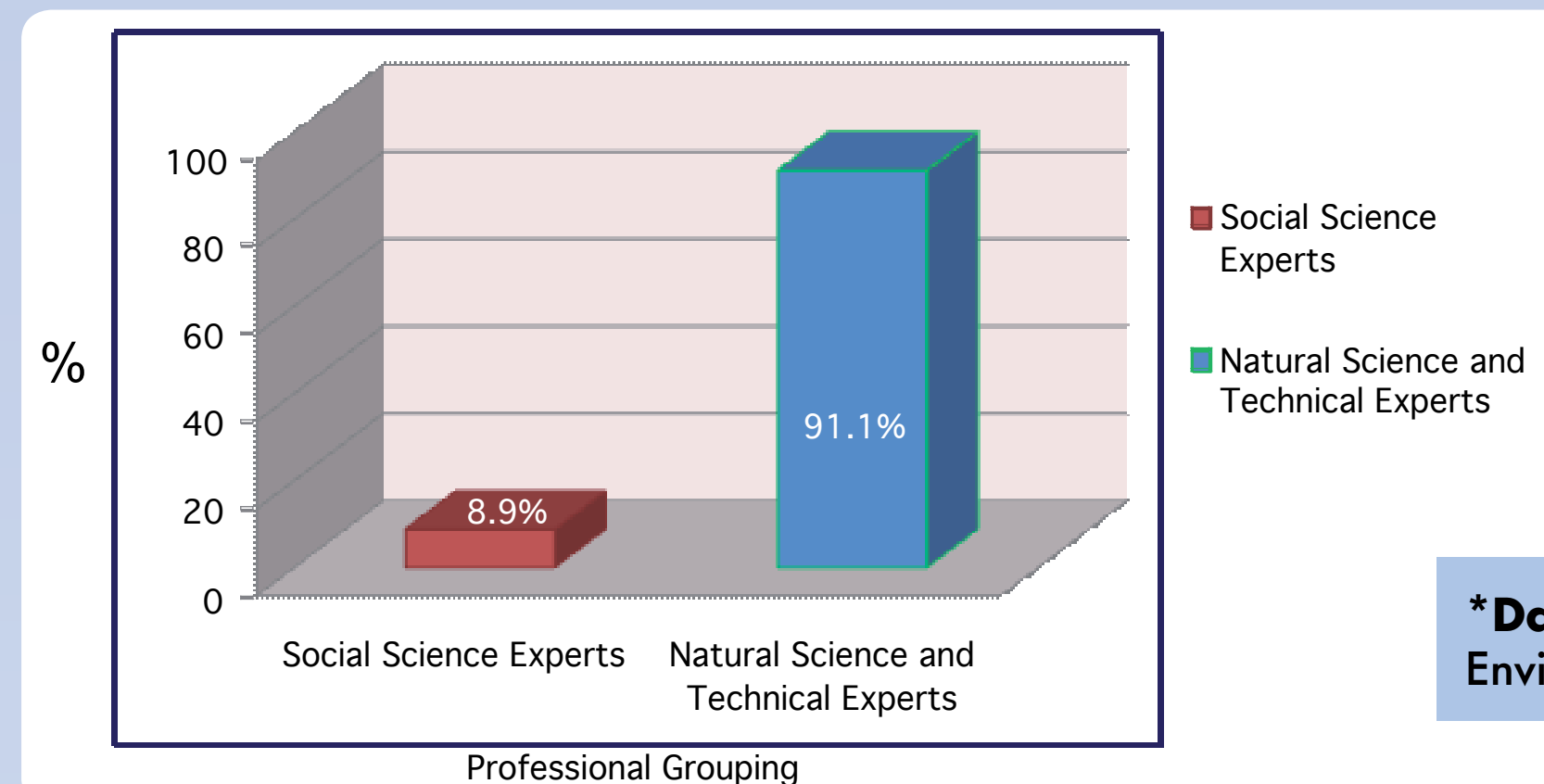
Universities are not equipping social scientists with skills to grapple with environmental issues. Graph 1 indicates the percentage of environmental courses offered in social science degrees (Political Science, International Relations, Sociology, Anthropology and Philosophy) at three major South African universities. The data was derived by reviewing the curriculum modules and content at undergraduate level for these universities.

GRAPH 2. WRC WATER RESOURCE MANAGEMENT: RESEARCH PROJECT PORTFOLIO 2007/08



Funding agendas in the water sector favour natural science projects over social science projects. Of the 229 currently funded projects by the Water Research Commission (as listed in the Research Project Portfolio for 2007/08), 83% were identified as primarily natural science based.

GRAPH 3. A REPRESENTATIVE SAMPLE OF THE RATIO BETWEEN SOCIAL SCIENCE AND NATURAL SCIENCE/TECHNICAL EXPERTS WITHIN AN ENVIRONMENTAL UNIT IN A SOUTH AFRICAN RESEARCH INSTITUTION*



Arguably, there is an organisational bias favouring natural scientists and technical experts in environmental research institutions.

*Data pool: CSIR Natural Resources and the Environment, March 2009, Researchers only

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Additional sources available on request.

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WHAT IS THE PROBLEM WITH THIS DEFICIT OF SOCIAL SCIENTISTS?

Institutions will increasingly struggle to produce issue relevant, impactful and sustainable solutions as they are not adequately equipped to tackle issues of governance, trust building, and institutional development. A greater presence of social science expertise in the water sector can therefore level the playing field.

WHY LEVEL THE PLAYING FIELD?

The justification for increasing social science capacity in institutions

Social science has an embedded social consciousness

Social scientists have unique expertise in cultural, behavioural and societal nuances, as social science reveals subjective, objective, inter-subjective and structural aspects of society. In simple terms, it measures the social developments of society and simultaneously finds emerging drawbacks.

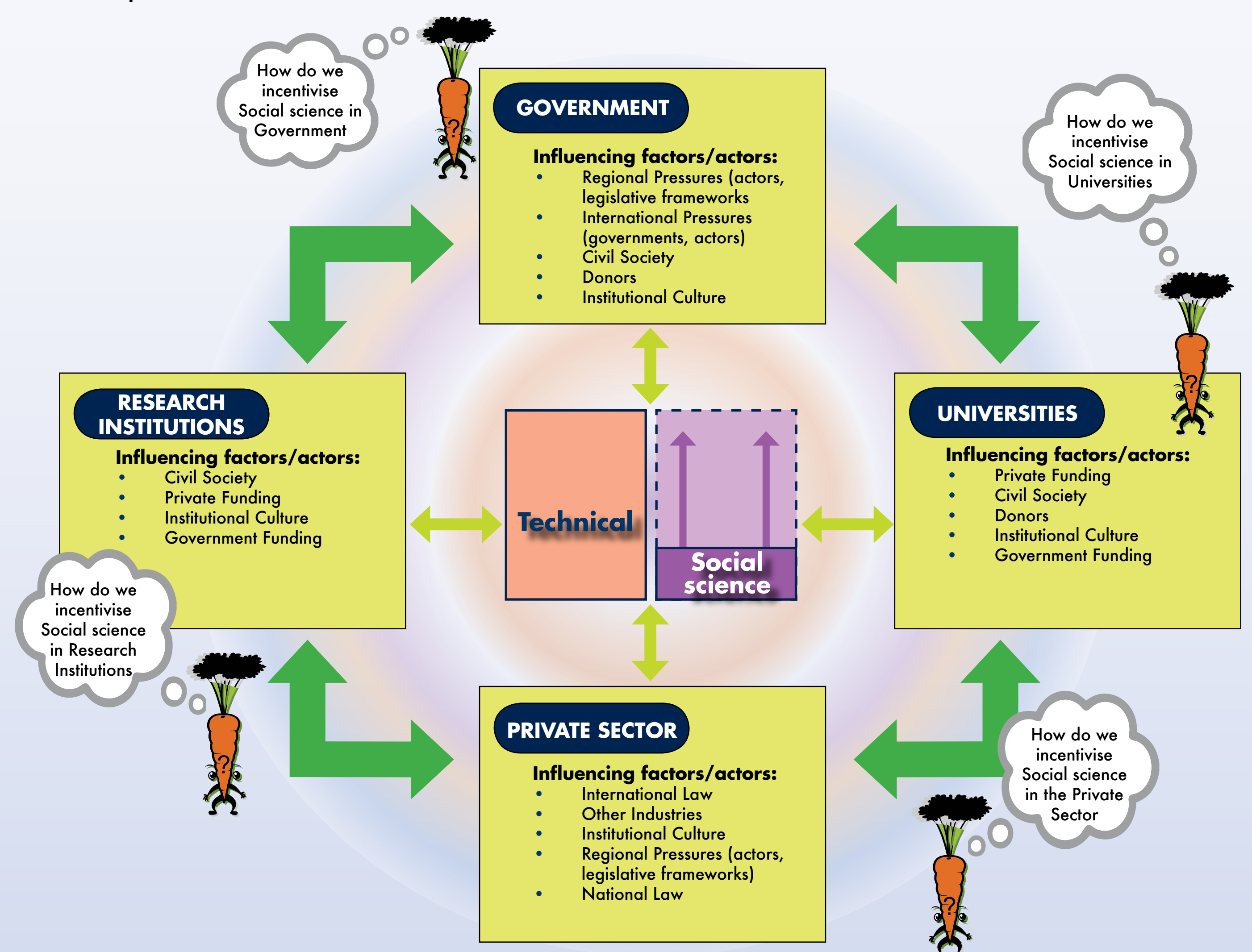
Social science has a familiarity with social and institutional capacity building mechanisms e.g. Knowledge of different policy models and approaches.

A primary goal of social science is to influence public policy by generating practical knowledge that can help policy makers make informed decisions. It therefore fosters institutional change.

Social science research strives to produce findings that alter the economic welfare of individuals, households, and communities, largely through improvements in total factor productivity (TFP). TFP is broadly defined here to include effects on the productivity of households, government, and the private sector.

UNDERSTANDING THE COMPLEXITIES OF INSTITUTIONAL CONTEXTS

Creating a social science presence in institutions requires an understanding of the complex interdependencies between institutions and research.



SUGGESTED INCENTIVES FOR ATTRACTING SOCIAL SCIENCE

- GOVERNMENT:**
 - Define opportunities for students and young professionals to be exposed to the water sector
 - Policy
 - Funding
 - Sustainable knowledge transfer and succession planning
- UNIVERSITIES:**
 - Define opportunities for students and young professionals to be exposed to the water sector
 - Introduce social science methodologies into undergraduate and postgraduate natural science syllabi
 - Introduce environmental modules at undergraduate and postgraduate level in social science fields
 - Cross-disciplinary exchange
 - Build in environmental components into student discussion forums, seminars, workshops
 - Succession planning
- PRIVATE SECTOR:**
 - Define opportunities for students and young professionals to be exposed to the water sector
 - Provide bursaries and funding opportunities within the social sciences
 - Create space within organisation strategies for social science mainstreaming (economic surplus benefit)
 - Succession planning
- RESEARCH INSTITUTIONS:**
 - Define opportunities for students and young professionals to be exposed to the water sector
 - Consciously build interdisciplinary teams
 - Social science mentoring in technical institutions
 - Social science internships
 - Strongly motivate to funding organisations for the need for the social science perspective
 - Create space within organisational strategies for social science methodologies
 - Succession planning

One possible way to assist in the incentivising of social science in the water sector and to facilitate sustainable knowledge transfer could be ...

A 'Forum of Young Scholars in SADC Transboundary Water Governance'

Aims:
 1. Build a community and network of young professionals, who have an interest in dealing with water issues from a social science perspective.

What's unique about this forum?
 • It has a specific focus in that it looks at water in terms of its transboundary and governance dimensions in SADC.

2. Create opportunities for younger and more experienced water professionals to interact and share knowledge.
3. Increase the social science literature output on water issues.

This forum is an ideal way of grooming, supporting, mentoring and encouraging young social scientists who are either in the water sector or considering it as a career option.

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