

'Getting science heard' and 'being real, relevant and impactful' are rhetoric that scientists are faced with on an ongoing basis. But how does one successfully cross the science-policy divide? Shanna Nienaber and Nikke Funke explore the options.

he pressure to achieve impact is related to three main issues. Firstly, the South African water sector faces many challenges that need to be addressed through effective policy development and implementation. Thus, sound evidence, based on researched consideration of issues and solutions, is an important input to policy development and implementation.

Secondly, impact is often related to fulfilling a personal desire to

'make a difference' with our work. Thirdly, pressure to achieve impact stems from the more pragmatic issue of funding. Funding agencies, organisational leadership and policymakers need scientists to prove that the science we produce makes enough of an impact to merit further funding in future.

This emphasis and pressure around achieving impact has led to a policymaking discourse known as evidence-based-policymaking (EBPM), which aims to align science and policy to generate responses that are relevant, real and impactful to the multiple challenges, needs and issues facing society today. This rhetoric has become prominent in many countries, and is evident in many of our government departments in South Africa.

Traditionally, the EBPM discourse has constructed policy development as follows:

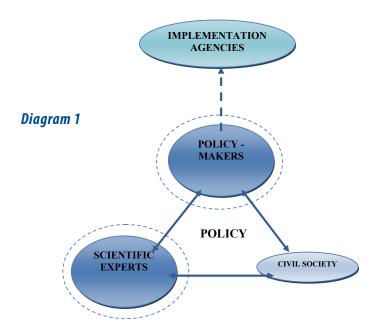


Diagram 1 illustrates that policy is seen as the result of interaction between three groups of actors. Official policymakers formulate policy, with the support of inputs from civil society and scientific experts. Once formulated, this policy is handed over to implementation agencies (which serve official policymakers) to be implemented. Significant to this conceptualisation is the reality that science is seen to have a privileged place in terms of input to policy. It is seen as something removed from broader civil society.

However, despite the obvious value of incorporating robust evidence into

policy, and over a decade of research about EBPM, there is an ongoing lack of scientific evidence being utilised in policymaking processes. Achieving impact with science is proving to be easier said than done.

RESPONDING TO THIS PROBLEM

ur research suggests that inadequate evidence uptake into policy occurs due to simplification and misconstruction of the complex environment in which evidence input into policy takes place and plays out. To remedy this, it is necessary to have a more detailed and

holistic understanding of the multiple actors, linkages and power relations in the policy process.

Diagram 2 essentially poses a challenge to the traditional EBPM policymaking construction by suggesting that there are not three, but two complex groups of actors who formulate policy: official policymakers and civil society/nongovernment actors.

What are the implications of this recommended reconstruction of how to interpret policymaking? Research no longer holds a privileged position in the policymaking process. It is recognised to be part of (rather than distinct from) the many civil society inputs into policy. Those actors interested in water policy issues all have differing amounts of power and ability to influence and thus have to compete and collaborate to 'be heard'.

APPLYING THE COMPLEX POLICYMAKING MODEL

The development of policy in democratic South Africa is a complex process. Successful policy development necessitates that a variety of very different actors are all given a platform to voice their ideas and needs. All these actors need to develop positions on the issue, work together to develop the policy, make compromises when there are

BUSINESS
POLITICAL
PARTIES
NON
GOVT
ACTORS
RESEARCH
ORGANISATIONS

COMMS/
MEDIA

Diagram 2

COURTS

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COURTS

"Research no longer holds a privileged position in the policymaking process."

Institutional weaknesses – Department of Water Affairs

- High rate of staff turnover results in an overstressed government departments.
- Loss of staff members means that existing knowledge is not being transferred to new recruits.

Result:

This negatively impacts on the department's ability to implement water policy mechanisms, such as water licensing.

Lack of inter-sectoral coordination

- Although water- and land-use are linked to each other, they are administered under different legislation and line departments.
- The DWA has very little control over land-use activities.

Result:

This fragmentation results in a lack of holistic planning and management when it comes to land-use activities (such as agriculture, mining, construction) that impact on water quality and quantity. The effects are serious environmental problems such as acid mine drainage and eutrophication.

Lack of stakeholder participation

 No strong culture of participation in South African government processes exists and where stakeholders do participate, some have considerably more power than others.

Result:

This may be one of the reasons why the catchment management agencies, which are based on the principle of stakeholder participation, are for the most part not yet functioning actively.

Implications for scientists

- Scientists can find it very frustrating to engage with a government department that is not functioning effectively. A problem also exists with relationship building and knowledge transfer because of the high staff turnover.
- It is difficult for scientists to communicate research findings aimed at addressing cross-cutting problems of land- and water-use to policymakers from different sectors if the different sectors do not cooperate with each other.
- Scientists will find it difficult to influence policy in a situation where many actors are competing to make their voices heard and get their interests onto the agenda.

IMPLEMENTATION

SOUTH AFRICAN

CHALLENGES FACING

conflicts of interest, and in reality need to 'jostle to be heard'.

When analysing a policy development process and outcome it

opment process and outcome it is critical to be aware of issues of representation. Who was present and who was not? Similarly, issues of 'voice' or 'quality of consultation' need to be considered. It is one thing to be present in a debate; it is another thing to have a voice that will be listened to, considered and respected. This relates closely to issues of power.

The development of post-1994 water policy in South Africa is an excellent way of illustrating the complex spectrum of actors competing to be heard in a policy debate. In many ways this policy development process is considered to be highly successful as a large number of stakeholders, legal practitioners, environmental scientists and politicians agreed on a set of world-class, highly-progressive water principles to accommodate environmental protection and socioeconomic development priorities.

espite the fact that the water policy developed in South Africa is considered to be world class, a number of challenges to implementation remain. These also have implications for scientists trying to influence policy implementation (see table above).

NATIONAL WATER POLICY

RECOMMENDATIONS FOR FUTURE PROGRESS

Despite the obvious challenges and complexity around this issue of impact and evidence uptake into policy remains an important aspiration. There is no clear cut solution as to how the science-policy divide can be bridged. This being said we leave you with a few last reflections about how to begin to overcome this divide both in out minds and in practise.

 Building relationships and networks with actors in the

- policymaking arena is critical to achieving impact. Only by building alliances can research interests hope to tip delicate balances of power in their favour.
- Scientific research must recognise that it does not necessarily hold a more privileged position than any other actor in civil society. It is not isolated from others in the policymaking process.
- Building relationships, networks and trust to bridge the science policy divide is a timeconsuming process. Research organisations need to create space and career incentives for scientists to pursue this task.
- Stakeholder engagements, integration and networking needs to be included in research from its planning phases in order to foster commitment, understanding, co-operation and trust.
- Scientists and other civil society actors need to work at deepening their understanding of the complexity of the policymaking arena and process.

"It is one thing to be present in a debate; it is another thing to have a voice that will be listened to, considered and respected."