Evidence-informed policymaking in practice: an overview from South Africa’s Department of Environmental Affairs

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This document is an output from a project funded by UK Aid from the UK Department for International Development (DFID) to support South Africa’s Department of Environmental Affairs (DEA) in its implementation of the environment sector Research, Development and Evidence framework. The views expressed and contained in it are not necessarily those of or endorsed by DFID and DEA, which can accept no responsibility for such views or information or for any reliance placed on them.
Executive summary

Introduction

Since 2008 South Africa’s Department of Environmental Affairs (DEA) has made a concerted effort to enhance its systems for evidence use to inform how it develops, implements and reports on policy. In 2012 DEA published a framework document outlining its approach to evidence: the Research, Development and Evidence (RD&E) Framework. This had five aims: i) to improve the interface between science and policy, ii) to improve the sector’s ability to identify priority evidence needs by working with others, iii) to ensure that all sector policies are based on a robust and broad understanding of evidence, iv) to align its investment in R&D with sector priorities in order to maximise the value of that investment, and v) to ensure that the sector has effective skills and processes around evidence. These aims remain relevant to DEA’s work, but the department recognises that more could be done to enhance its approach to evidence-informed policymaking. Specifically, senior managers can be assisted to answer two questions:

- Is DEA using evidence as effectively as possible to deliver across the full range of issues it faces?
- Is DEA’s planning and expenditure on evidence as cost-effective as it could be?

This report reviews the issues that influence how policymakers work with evidence to develop, implement, monitor and report on environmental policies. Many examples of good practice were unearthed in the study—examples that deserve to be shared more widely.

The report also identifies areas that we believe are limiting DEA’s ability to make better use of its evidence and which could form the basis for more detailed discussions.

‘Evidence’ in the policy context

DEA recognises four types of evidence that are needed for policy purposes:

- **Statistical and administrative data**, whose purpose is to paint a picture of where we are now. It might include trend data on greenhouse gas emissions, the performance of landfill sites, information on regional water quality, or the distribution of endangered species;
- **Analytical (research) evidence**, whose purpose is to explain causal relationships, enrich our understanding of complex issues or challenge received wisdom. This primarily includes evidence from engineering, natural science and social science research;
- **Evidence from citizens, stakeholders and role players**, whose purpose is to inform policymakers of what different groups of people value and what they consider to be legitimate. This type of evidence may be collected using research methods, but participatory processes of engagement are equally important;
- **Evidence from evaluations**, whose purpose is to tell us what has worked in the past, for whom, how and why. This includes evidence from detailed evaluations that can be conducted of a specific policy or programme.

All four types of evidence will be needed in different combinations at different times. Together, these constitute the departmental evidence base. They can be managed to ensure that even with limited budgets, DEA’s policy priorities are as evidence-informed as they can be.
Enhancing DEA’s approach to evidence-informed policymaking

There are five areas where specific efforts could contextualise DEA’s existing work on evidence.

1. A strategic approach to managing the evidence base
There is a strong tradition of using evidence to set the agenda for the ‘big’ policy challenges facing the environmental sector. However, short-term policy issues tend to drive the day-to-day search for evidence. This limits the extent to which officials can plan to improve the likelihood that evidence is available when it is required. A more strategic approach to managing the evidence base could help DEA balance long- and short-term demands for evidence more effectively. It will also help send clear signals to external organisations that could support DEA’s search for evidence.

2. A strategic approach to resourcing and planning the evidence base
Evidence is needed for monitoring and reporting as well as for policy development and planning. The pressure to report on a quarterly and annual basis risks skewing how evidence is sourced and used. However, there is little clarity about the departmental expenditure on the different types of evidence. This makes it hard for managers to know whether they are prioritising and spending their budgets for evidence cost-effectively.

3. A sectoral approach to the evidence base
It is important that any initiative to improve the use of evidence for environmental policymaking is not seen just as a DEA initiative. As concurrent function Department, the role of Provincial and Local Governments, and their needs for evidence, are to be taken into account from the beginning.

4. An inclusive and participatory approach to evidence
There is a wide range of stakeholders with an interest in environmental policymaking. Their evidence is an important part of DEA’s overall evidence base. Disagreement between stakeholders needs to be recognised as part and parcel of the policymaking process. Allocating sufficient time, resource and capacity to ensuring that all voices are heard will help deliver policies that are both well informed by evidence and broadly trusted.

5. Sharing good practice
Many examples of good practice were identified. Senior managers have devolved responsibility for an evidence-informed approach to theme levels. This encourages local experimentation and helps develop innovations that are well suited to each theme’s individual context. Sharing good practice between themes will help build a stronger whole-department approach to evidence-informed policymaking.
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A steering group participation consisting of officials from DEA, DPME, DST and the University of Cape Town (UCT) has guided us throughout. Particular thanks are due to the following:

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**Acronyms**

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<tr>
<td>APP</td>
<td>Annual Performance Plan</td>
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<tr>
<td>CBO</td>
<td>Citizen-Based Organisation</td>
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<td>CSIR</td>
<td>Council for Scientific and Industrial Research</td>
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<td>DEA</td>
<td>Department of Environmental Affairs</td>
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<td>Defra</td>
<td>Department of Environment, Food and Rural Affairs (UK)</td>
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<td>DFID</td>
<td>Department for International Development (UK)</td>
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<td>DPME</td>
<td>Department of Performance Monitoring and Evaluation</td>
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<td>DST</td>
<td>Department of Science and Technology</td>
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<td>HSRC</td>
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<td>LTMS</td>
<td>Long Term Mitigation Scenarios</td>
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<td>MinTech</td>
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<td>NBSAP</td>
<td>National Biodiversity Strategy and Action Plan</td>
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<td>NEMA</td>
<td>National Environmental Management Act</td>
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<td>NEMBA</td>
<td>National Environmental Management (Biodiversity) Act</td>
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<td>NGO</td>
<td>Non-Government Organisation</td>
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<td>NSSD</td>
<td>National Strategy for Sustainable Development</td>
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<td>RD&amp;E</td>
<td>Research, Development and Evidence Framework</td>
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<td>SALGA</td>
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<td>SANPARKS</td>
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<td>South African Waste Information System</td>
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1. Introduction and background to the report

What does it take for a government department to implement an evidence-informed approach to policymaking? Since 1997, the phrase ‘evidence-informed policy’ has gained traction throughout the developed and developing world. While it is not the only input, there is a general agreement that ‘more evidence’ that is ‘well interpreted’ and can subsequently be ‘used to inform policy’, are all beneficial to delivering positive change—though there is also a great deal of debate about what each of those phrases really means.

Government departments formulate and implement policy and report on progress for many different issues. They do this within a complex network of organisations including among spheres of government, citizen organisations, industry groups and academia. Departments such as Environmental Affairs (DEA) are faced with questions such as whether to allow building on wetlands that may be important for biodiversity, how to stimulate sustainable economic growth within natural sources dependent communities, or how to reduce waste going to landfill. There is a good deal of work being done to ensure that these issues and many more are well informed by evidence. However DEA deals with many different issues simultaneously, many of which may overlap with each other. Some issues may influence international issues while others may be focused on national concerns. Some may be led by DEA; for others DEA may need to influence other Departments that hold the main spending levers. There will be many other considerations. All of these issues will need evidence to inform the decisions that DEA must take. However the time frames and the types of evidence that are needed will vary considerably. This gives rise to three linked questions that are at the core of this document:

1. How can DEA, as a whole, be sure it is making most effective use of all the evidence that is available?
2. How can it be sure it is making most effective use of the resources it can spend on evidence?
3. How can it be sure it is using its resources, and its evidence, to deliver its policy priorities as effectively as possible?

There are two main audiences for this document. The first is people inside DEA and government in general. These might be senior managers with responsibility for policy development and delivery; planning, finance and budgeting; liaison with other departments; or monitoring and reporting on achievements. A second group is senior managers with transversal remits to support government (e.g. in the provision of research funding, in monitoring progress and reporting, in supporting the provision of specific types of evidence e.g. evaluation or statistical data). The second audience is people outside government.

This includes external organisations that provide evidence, such as universities and research institutions, who want to understand more about some of the specific pressures government departments face in sourcing and using evidence. It also includes people who support improvement of public sector performance such as civil society, private sector, consultants and donors.

The report is based on ongoing work, begun in mid-2014, by a team of researchers from the UK and South Africa and DEA policymakers in collaboration with the Department for Performance Monitoring and Evaluation (DPME) and the Department of Science & Technology (DST). Over a two-year period its intention is to help DEA understand and strengthen its use of evidence in its policymaking, implementation, reporting, monitoring and evaluation. **We report here on the first phase of the work, which reviewed existing good**
practice that already takes place within DEA and uncovered some of the broader challenges it faces as it seeks to build on what it already does.

A wide range of documents were consulted, and many people were interviewed, both within and outside DEA. The documents are listed in the references but are not referred to individually in the text.

1 A linked paper outlines how the team went about the analysis, setting out a series of questions that were answered in five separate studies. See Approaching Evidence by Shaxson et al.

2 The project team reviewed 148 documents and interviewed 55 people, both internal and external to DEA.
2. Evidence-informed policymaking in South Africa

2.1. The wider context

There is an increasing understanding of what evidence-informed policymaking means in South Africa, which reflects both the international debates around evidence and South Africa’s unique history and current challenges³. There are several overlapping formal and informal networks of government officials, academics, think tanks, private sector and civil society organisations that set out to improve evidence use.

This has helped create a very fertile ground for further work on evidence within government. The Department for Performance, Monitoring and Evaluation (DPME), and the Department for Science and Technology (DST) are at the forefront of work to improve the use of all types of evidence throughout the South African government at national, provincial and local levels. DST oversees the government’s approach to research and innovation via universities, research councils and various partnerships between research, industry and government. DPME, which sits in the Office of the President, oversees the collection and reporting of different forms of evidence about government performance. The work described in this paper has close links to both DST and DPME.

2.2. The Department for Environmental Affairs

DEA’s mandate is set out in legislation and policies including the National Environmental Management Act (1998) and the National Development Plan (2012). The National Environmental Management Act (NEMA) and subsidiary legislation on specific issues guides its day-to-day working. These issues include sustainable development, biodiversity and heritage resources, oceans and coasts, climate change and air quality management, and waste and chemicals management. DEA has a broad remit that encompasses not just environmental management and conservation, but also efforts to promote economic growth and employment, in response to South Africa’s pressing economic and social challenges. The Department has made significant contributions to both national and international debates around sustainable development, biodiversity, conservation, climate change, oceans management, air quality, chemicals and waste management.

Since 1994 and the end of the apartheid era, South Africa’s extraordinarily rich and varied natural environment has been an important part of government. Environmental management is a concurrent policy function in South Africa: policies are made, implemented and monitored jointly between the national department (DEA), provincial and local governments. Thus biodiversity policy around (for example) hunting threatened or protected species may be made at national level, but the process of granting and monitoring hunting licences is done at provincial level. As well as collaborating with the different layers of government, DEA benefits from close relationships with government entities such as SANPARKS (South African National Parks), SAWS (South African Weather Service), the iSimangaliso Wetlands Authority and SANBI (South African National Biodiversity Institute).

These are government-sponsored research institutes whose specific mandate is to inform policy with evidence. DEA also maintains relationships with Research Councils such as CSIR (Council for Scientific and Industrial Research) via a series of Memoranda of Understanding that fund the provision of evidence in response to specific requests. And it has relationships with national and international academic institutions, UN-funded organisations and others that contribute to DEA’s overall evidence base.

In 2008, the Department for Environmental Affairs and Tourism (as it then was), DST and the Council for Scientific and Industrial Research (CSIR) co-hosted a workshop to explore how to improve the science-policy interface. Drawing from the experience of Defra in the UK (which had spent the previous four years trying to improve its own approach to evidence), a small group of DEA officials set out to develop a framework for research, development and evidence across the environment sector. The intention was to set out the sector’s approach to evidence and to encourage specific activities to improve relationships between evidence and policy.

The resulting Environment Sector Research, Development & Evidence Framework (RD&E Framework) was approved by the Executive Ministerial body, MinMEC, in 2012. It “addressed the need for a common framework for the collection of evidence that can be used in support of environment sector policy decisions and for the achievement of sector priorities… it seeks to develop a more rigorous approach that gathers, critically appraises and uses high quality research evidence to inform policymaking and professional practice.”

It sets out five core aims:

1. To ensure a science-policy interface for the Environment Sector Plan (‘the sustained agenda’) and Outcome 10 (‘the change agenda’: see Box 1)
2. To improve the sector’s ability to identify priority evidence needs by working with others (National, provincial, local, private, civil society, NGOs, research institutions and academia)
3. To ensure that all sector policies are based on a robust and broad understanding of the relevant evidence
4. To align the sector’s research & development investment with sector priorities and maximise the value of that investment
5. To ensure that the sector has skills and effective processes for knowledge management, assembling and communicating evidence and sector priorities.

The RD&E Framework recognises four different but overlapping types of evidence, each of which has a particular purpose and all of which are essential to inform its policy development, implementation and reporting processes. These are:

- **Statistical and administrative data**, whose purpose is to paint a picture of where we are now. It includes demographic data, data on performance of key indicators,

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4 See Funke et al, 2009
5 RD&E Framework, p1.
6 Legal expertise may be needed to help develop or amend regulations, and to formulate legislation. We do not see this as a separate form of evidence, but as knowledge of how to use the evidence that already exists and define what other evidence may be required.
and administrative data that forms the basis of management decisions in government such as information on regional water quality or the distribution of endangered species;

- **Analytical (research) evidence**, whose purpose is to explain causal relationships, enrich our understanding of complex issues or challenge received wisdom. This primarily includes evidence from research;
- **Evidence from citizens and stakeholders**, whose purpose is to inform policymakers of what people value and what they consider to be legitimate. This type of evidence may be collected using research methods, but participatory processes of engagement are equally important;
- **Evidence from evaluations**, whose purpose is to tell us what has worked in the past, for whom, how and why. This includes evidence from detailed evaluations that can be conducted of a specific policy or programme.

The framework describes DEA’s overall approach to evidence, the environment sector priorities that needed to be addressed, the collaborations, partnerships and institutional arrangements that would enable this to happen, and the human capital and finance requirements. It sets out an implementation plan for 2012-2014 with detailed analysis of the specific issues that needed to be addressed. It also describes in some detail four linked functions that need to be in place for evidence to inform policy decisions in an effective way. These are

- Jointly **scoping** the questions that need to be answered, whether those are big agenda-setting issues or smaller, more focused questions;
- **Assembling** existing evidence to ensure that decisions are informed by a review of what is already known;
- **Procuring** new evidence where it is necessary: either using DEA’s own budget or by working with other organisations such as Research Councils;
- Jointly **interpreting** the evidence to inform decisions, ensuring that multiple viewpoints are taken into account.

**Figure 1** below shows how DEA conceptualised these functions:

![Diagram showing the conceptualisation of evidence functions](image)

Source: evidence for policymaking (DEA 2012, p16).
3. Strengthening DEA’s evidence-informed approach

Implementing a department-wide framework is not a simple matter. Government departments are complex organisations in which teams of people deal with multiple overlapping priorities, under pressure to deliver real change, keep within their budgets, manage relationships with each other and with key stakeholders and report on their progress. Inside, different teams will have developed their own priorities, relationships with stakeholders and ways of working. All of these will affect how individual teams source, use and interpret evidence to inform their policy development and reporting processes.

DEA worked to the RD&E Framework from 2012 onwards, but by 2014 it was apparent that more effort was needed to ensure that its approach was being implemented consistently across the department. While the intention was to devolve responsibility for the approach to individual policy themes, progress towards concrete outputs from the RD&E Framework (such as theme-level RD&E strategies) had been slow. Something different needed to happen to really embed this evidence-informed approach.

3.1. Analysing the main issues

A small team of people worked with DEA staff in 2014-15 to identify what influences DEA’s evidence-informed approach, to help it answer the three questions set out at the beginning of this paper. This was done by analysing the set of issues that shape how DEA staff implement the four processes of scoping, assembling, procuring and interpreting evidence for policy. These issues are:

- The external influences on DEA, including the way evidence is conceived of an used within the environmental sector as a whole and the external debates around evidence;
- How DEA is structured and how people work with each other to source and use evidence;
- The influence of DEA’s internal business systems and processes of planning, reporting and budgeting

These are described in detail in a linked paper: Approaching evidence: understanding the organisational context for an evidence-informed approach to policymaking.

DEA staff had already identified several issues they thought were key to improving the way evidence was sourced, assembled and used. These included how to help DEA improve citizen participation whilst ensuring that the policy development process was evidence-based, and how to use evidence to embed the goal of sustainable development across government. Five distinct diagnosis studies were conducted that, together, helped uncover the various external and internal influences on DEA’s use of evidence.

The studies drew from documentary analysis and interviews, both inside and outside DEA. While DEA’s policy themes five themes were studied (climate change & air quality, oceans and coast, biodiversity, waste and sustainable development), not all were covered to the same extent. Three of them were covered in greater depth for the specific studies on participation (Waste), on the external environment (Biodiversity & Conservation) and on promotion (sustainable development). This limited number of studies does not constitute a thorough diagnosis of all the issues facing DEA as it tries to improve its evidence-informed approach. There were many areas that could not be assessed by the small project team. However subsequent discussions with DEA staff did suggest that the studies’ conclusions were broadly representative of the issues facing the Department.
The rest of this document describes, in overview, what these five studies observed. The individual study reports are internal to DEA and the detailed evidence collected by the team continues to inform discussions with DEA staff. Instead of reporting on each of the five studies, we return to the approach used to set them up. First, we review current practices for scoping, assembling and interpreting evidence for policy. Next we discuss some of the wider contextual factors that shape an evidence-informed approach. Finally, we offer some summary observations.

The aim of publishing this document is not to lay bare what goes on in DEA, but to share understanding of the sorts of issues it is grappling with as it embarks upon a structured process to enhance its evidence-informed approach.
4. DEA’s experience of informing policy with evidence

This section reviews DEA’s current and previous practices of using evidence to inform its policies. Each section describes the practices DEA uses for the functions described in Figure 1 in terms of the R,D&E framework. To make analysis easier these are limited to three: jointly scoping the question, assembling existing and new evidence, and jointly interpreting evidence to inform decisions.

4.1. Jointly scoping the question

This section covers DEA’s activities to identify what the key policy questions are, whether those are ‘big’ questions about the state of the South African environment, or ‘smaller’ (but no less important) questions about specific regulations. The studies showed that there is a close relationship between scoping the question and assembling existing evidence, as reviews of what is already known help to improve how the question is asked.

4.1.1. Setting the agenda for the environment sector

DEA is particularly strong in using evidence to scope the big policy questions that set the agenda for the environment sector. Within the department this is known as ‘setting the agenda’ and includes (for example) the first National Strategy for Sustainable Development (NSSD) that was published in 2011. The process of scoping NSSD initiated with the National Framework for Sustainable Development that ran from 2003 to 2008 and involved analysis of long-term economic, social and environmental trends. Similarly, the State of the Environment Outlook reports (1999, 2006), whose purpose is to scope the priorities for environmental management and implementation, were compiled on the basis of interim reports setting out the evidence for different environmental issues. State of the Environment (Outlook) reporting is now well established in South Africa at both national and provincial levels.

There is a widespread use of high quality evidence to develop official policies that are promulgated in Parliament, such as the White Paper on National Environmental Management of the Ocean or the White Paper on National Climate Change Response (2011). These involved substantial efforts to gather technical evidence, use public participation and consultation processes, and engage at both national and international levels. A specific good practice example was the appointment of the University of Cape Town (UCT) (2006) to drive the Long Term Mitigation Scenarios (LTMS) development process, a national process of building scenarios of possible greenhouse gas emission futures. This ensured that South Africa’s position on future commitments under international treaties and the country’s climate change policy would be informed by the best available research and information.

Another good practice example is the development of the National Biodiversity Strategy and Action Plan (NBSAP). This involved strategic assessments of the key thematic areas, several Task Team workshops, two national consultative workshops, workshops in all nine provinces, workshops by NGOs and citizen-based organisations (CBOs), and two workshops where the South African Local Government Authority (SALGA) included municipalities from all nine provinces. A wide variety of evidence was used to help set the agenda for NBSAP.

Many interviewees noted that it is important to take proactive approach to setting the agenda. This means ensuring that sufficient time is allowed to thoroughly consult a full
range of stakeholders, and to communicating what that agenda is. Where this is done early it helps improve the quality of the evidence used to address policy problems. Taking this sort of forward-looking approach to the evidence base can be particularly important where there is no central repository of research. At least one branch—Biodiversity & Conservation—has a clearly outlined research strategy and a commitment to cutting-edge research for policy implementation in specialised fields. Other branches are in process but have not yet fully developed similar approaches.

4.1.2. Scoping specific policy questions

Many of these agenda-setting exercises give rise to specific policy questions that need answering with research or other forms of evidence. These questions are defined and collated in different ways. Others are processes that are wholly led within DEA that identify questions of more immediate relevance. Some are large formal exercises involving other organisations, which identify questions that may be relevant to DEA far into the future. An example of a large formal exercise is the Waste Research, Development and Innovation Roadmap, that is coordinated by the Department of Science & Technology (DST). This sets out six clusters where long-term research is needed and issues calls for proposals to address specific areas within each cluster. A different example comes from the Oceans & Coast theme. Promulgation of the Ocean Management White Paper gave rise to questions that fed directly into policies around (for example) estuarine management, the development of guidelines on coastal effluent discharge, and surveys of representative priority habitats.

The way individual policy questions are scoped depends on the relationships between individual policy teams and the different organisations that are able to provide the evidence. The closer the relationship, the more likely it is that both sides are able to get to the ‘right’ question: one that will directly inform policy discussions. Government entities such as SANBI are mandated to provide evidence into the policy environment through structured engagement processes. As part of this mandate, SANBI staff is involved in key decision forums such as Working Groups and MinTech which help identify the main policy questions that need answering and the types of evidence that will be needed. For most external organisations, however, the engagement processes are less formal and less structured. Interviews noted that broad and inclusive participation is vital to ensure that the policy questions are well specified. Where this does not happen, regulations may be drafted that fail to account for the point of view of one or more key stakeholders. Their objections may send the policy back to the drawing board—as has happened with regulations for Threatened or Protected Species legislation over the years.

4.2. Assembling existing and new evidence

DEA uses many different vehicles to assemble the evidence it needs: from stakeholder and civil society engagement processes to formal assessments and shorter-term, responsive research. As noted above, assembling evidence helps ensure that all stakeholders are aware of what is already known about an issue, and that the questions that are subsequently asked are a priority. It also helps ensure that the evidence on which decisions are based is of the highest possible quality. It is helpful to distinguish between longer-term and shorter-term processes.

4.2.1. In the longer term

The process of developing the White Paper on the Conservation and Sustainable Use of South Africa’s Biological Diversity is well documented in the paper itself. It shows how DEA acknowledged the value played by non-government role players in policy development. Throughout the process, opportunities for civil society input were created, ensuring that evidence from citizens was part and parcel of the assembly process. In a similar vein, a participatory, multi-stakeholder, consultative and iterative process led to the drafting of the National Climate Change Response Green Paper. Further research was subsequently commissioned on issues of climate finance, human resource and technology, adaptation, mitigation and governance, which fed into the policy development process. And when South Africa hosted the Conference of the Parties to the UN Framework Convention on Climate Change (UNFCCC), the negotiation process aimed at ensuring that all spheres of government, ordinary South Africans and all other stakeholders were offered the opportunity to participate in developing South Africa’s negotiating position.

Long-term, formal assessments of the state of different issues (such as the environment, or biodiversity or oceans) are a useful way of assembling existing evidence. The National Biodiversity Assessment (NBA) is a requirement of the National Environmental Management (Biodiversity) Act (NEMBA) to support the development and implementation of biodiversity policy and legislation in South Africa. It provides evidence on the state of, and trends in, South Africa’s biodiversity and ecosystems. It informs the regular processes of updating other documents such as the NBSAP, the National Protected Areas Expansion Strategy and the listing of threatened species. And as noted earlier, State of the Environment (Outlook) Reporting is now a regular process at both national and provincial level.

4.2.2. In the shorter term

However, formal assessments are not the only way of assembling existing evidence: it needs to be done on a shorter-term, more responsive basis as well. The extent to which fast turnaround reviews such as rapid evidence assessments are used in DEA is unclear, though one interviewee noted the need for more of these sorts of products. They would help prevent situations where last-minute and unreliable information is sourced because no other evidence is available.

Knowledge management is important but of variable quality in DEA. Information systems such as the South African Waste Information System (SAWIS) and SANBI’s Biodiversity Geographic Information system allow for easy access to this assembled evidence. However, where they rely on external organisations to input the evidence and the quality can be compromised. Interviewees noted that more could be done to improve understanding of why SAWIS’ evidence is important and to build trust within the waste sector to improve the quality of the evidence that is entered into it.

4.2.3. Ensuring evidence quality

Finally, the processes of assembling evidence need to ensure that the quality of the evidence is as high as possible. This is easier in the longer-term, formal assessment processes such as those described above. In these cases, there is good involvement with people who have a high degree of training (such as researchers and policy makers) and good involvement with civil society and stakeholders. It is more difficult for shorter-term responsive requests. In these cases, more emphasis needs to be placed on policymakers’ ability to assess the quality of the evidence themselves, and on the strength of their relationships with external organisations that can provide evidence & advice. DEA has a
good complement of staff with science training, but this is not shared equally across all themes. In some instances officials may need to assume that the evidence provided by external organisations is of sufficiently high quality. Broad-based training in how to assess evidence quality could help strengthen this assembling function. As one interviewee noted, this could be complemented by a framework or specific guidance which task teams can use to determine the quality and acceptability of evidence. This would help avoid compromises around evidence, or the loss of good evidence, when conflicting agendas arise between team members.

4.3. Jointly interpreting the evidence to inform decision-making

The process of interpreting the evidence is a vital one to ensure that policies are well informed by evidence. It allows everyone to explore, in detail, what the evidence really means in the current policy context.

DEA faces three conflicting pressures as it develops, implements and reports on policy. They are: pressures to conserve the natural environment, pressures to address national priorities such as job creation and poverty alleviation, and pressures to promote social justice. These may sometimes appear to conflict with each other, making the choice of what to do a difficult one. Both sides need to be able to use evidence to navigate complex discussions, consider trade-offs and ensure that the final decision is well supported.

Different themes respond to these goals in different ways. Interviews found that some themes may emphasise environmental issues and rely on evidence from the natural sciences. They may find it challenging to interpret how the evidence informs DEA’s social and economic goals. In other themes this may be less of an issue. For example, the work on Operation Phakisa under the Oceans & Coast theme emphasises the goals of improving the oceans economy, marine protection and marine governance all at the same time.

Relationships between external evidence providers and policymakers are not always strong when it comes to interpreting evidence. Interviewees noted that researchers are sometimes not invited in to discuss the implications of their evidence. Some observed that their reports seem to disappear into the ‘black box’ of policymaking and that they are not given opportunities to speak to the evidence to ensure its full implications are understood. This was seen even when the research was done by a government entity with a specific mandate to provide evidence to the policy process. Interviewees from both DEA and external organisations recognised the importance of creating an enabling environment for knowledge brokering activities to ensure that the evidence is jointly interpreted, but did not specify exactly what these might look like.

The process of interpreting evidence to inform decision-making does not just happen between DEA and its evidence providers. Approval processes for new or amended policies involve discussions of the evidence in forums that bring DEA together with provinces and

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8 Operation Phakisa draws from the Malaysian Big Fast Results methodology. It is applied to particular areas of policy emphasis and brings together stakeholders from public and private sectors, academia and civil society to collaborate in detailed problem analysis, priority setting, intervention planning and delivery. See [https://www.environment.gov.za/projectsprogrammes/operationphakisa/oceanseconomy#criticalareas](https://www.environment.gov.za/projectsprogrammes/operationphakisa/oceanseconomy#criticalareas)
other departments. These include Working Groups and MinTech, the most senior forum in which technical aspects of the evidence are debated. In some cases the same organisations are involved: SANBI, for example provides evidence to DEA policymakers, but as a government entity its branch heads are involved in MinTech working groups. The SANBI heads sit with MinTech and its Chief Executive Officer sits with MinMEC. This affords SANBI a privileged position in these high-level interpretation processes, and ensures a continuing focus on issues of biodiversity and the environment in discussions. The same is not necessarily true of other themes, where the organisations that provide the evidence are not government entities and do not participate at the same level.

Good practices were also identified in how DEA themes engage with external stakeholders around evidence. The process of producing the White Paper on Integrated Pollution and Waste Management for South Africa (2000) was described by one interviewee as having been "amazingly thorough", with a high degree of public participation and significant reporting back to stakeholders. The team developing Standards for Waste Collection in Municipalities for Poor Households held a series of workshops to provide feedback, holding them in areas where the affected stakeholders had easiest access to ensure their involvement and engagement. Likewise, the study on sustainable development showed that DEA has done well to co-ordinate its transversal remit, using participatory processes to interpret the evidence to good effect. However it remains a challenge to translate the principles of sustainable development into policy outcomes at scale.

4.4. Summary reflections

The studies found many areas of good practice across DEA that deserve to be more widely shared. These are particularly evident where time and resources have been allocated to lengthy consultation processes that involve a broad range of stakeholders including civil society, business, advocacy groups as well as different branches and levels of government.

There was a widespread recognition that an evidence-informed approach rests on an inclusive and participatory approach to policymaking. For South Africa, with its history of division, it is important to strengthen civic participation. However, DEA also recognise they are challenged to maintain these good practices where time and resources are limited.

4.4.1. Technical quality of the evidence base

There are consistent efforts to ensure the technical quality of the evidence. DEA has good relationships with a variety of organisations that provide high-quality scientific evidence, from government entities such as SANBI to universities and non-government organisations. Many staff have a background in environmental science. Where they have postgraduate degrees their understanding of what makes evidence robust will be good, though more could always be done to improve specific techniques. A current question for some themes in the department is whether they are too heavily reliant on the natural sciences and whether this

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9 After MinTech, policies proceed to MinMEC (the Ministers and Members of the Executive Council) and to FOSAD, the Forum of South African Directors-General. The move from MinTech to MinMEC or FOSAD represents the move between technical and strategic discussions. Within MinMEC there is less emphasis on technical aspects of policy development and reporting processes than in MinTech. MinMEC’s focus is more on co-ordination between national and provincial levels, and between departments.
runs the risk of policymaking becoming too technocratic. A stronger emphasis on social science evidence (including citizen evidence, as noted above) could enhance the ways they address the national goals of economic growth and increased employment via the natural environment. This may be particularly important for promoting the issue of sustainable development, where DEA could consider reframing sustainability issues through an economic and social perspective in order to gain more widespread support for its work in bringing about social, economic and environmental outcomes.

4.4.2. The importance of good relationships around evidence

Access to research and other forms of evidence is a prerequisite for an evidence-informed approach. This varies between DEA’s different policy themes. One theme—Oceans & Coast—employs a significant number of in-house researchers. Others have to rely on external organisations. Public entities such as the South African National Biodiversity Institute (SANBI) and the South African Weather Service (SAWS) are valuable originators of evidence, giving DEA free access to research outputs, data and other information. Two themes—Biodiversity & Conservation, and Climate Change & Air Quality, rely heavily on SANBI and SAWS respectively. As SANBI and SAWS are government entities, the evidence is effectively provided for free to DEA. Other Research Councils and universities also provide evidence. The Chemicals & Waste Management theme for example derives a substantial proportion of its evidence from CSIR. However, CSIR evidence needs to be resourced. All these organisations also help translate evidence into policy advice in the form of tools and guidelines, and are involved in the agenda-setting processes described above.

4.4.3. Communicating evidence needs to others

Interviewees also noted that developing a strategic approach to managing the evidence base would help align the research agendas of external organisations with policy’s needs for evidence. This could play a significant role in making sure that the relevant evidence is more likely to be available when it is needed, that sufficient time is given to research that may help anticipate future policy priorities, and that resources are allocated to supplementing incomplete or out-dated datasets. As noted above, several themes are making concerted efforts to develop their own evidence strategies, which will help in this regard.
5. What influences DEA’s approach to evidence?

The previous section showed the range of practices DEA uses to ensure its policies are informed by evidence. These practices are not fixed in stone: they change over time as people learn new skills, forget old ones, invent new techniques and build different relationships. Many of these changes happen in response to pressures and incentives within the policymaking system. These may emerge from the external policy environment, or from within the department itself. DEA should aim to design an evidence-informed approach that is sustainable over the long term. This means it is important to understand where the pressures come from and how they shape people’s behaviour around evidence. Many of these pressures overlap, sometimes reinforcing and sometimes working against each other. We have separated them out into three main sets of issues. These are: external, human resource, and business issues.

5.1. External issues

Departments operate in complex and changing institutional and political environments, whose history offers clues as to what types of evidence are considered important and how they are used. There are two main factors: the complexity of the evidence within the sector, and the wider pressures to use evidence more generally.

5.1.1. South Africa’s complex environmental sector

DEA's remit is environmental policymaking, but it is also the promoter of sustainable development policy across the South African government. The departmental remit has evolved over time, from a primary focus on conservation of the natural environment to a three-pronged focus on the environment, economic growth and employment creation. The studies found that while there may be academic agreement on how sustainable development is defined, in reality the way the concept of sustainable development is used in policymaking is ambiguous. There are three main arguments. The first is that sustainable development as a radical, revolutionary transformation of economic relationships to bring them in line with natural limits and ecological virtues. People holding this view advocate a systems approach to assessing sustainability and stewardship of the natural environment, wanting to challenge long-held beliefs and ideologies. The second is that of the stated commitment to sustainable development just as a realignment of the prevailing growth model and development path. People holding this view see economic growth as the driver of progress, while the environment is seen as a resource for human development. The third is that the environment is an economic opportunity. Rather people who hold this view do not focus on environmental limits and scarcity. Their emphasis is on new markets, new services and new forms of consumption.

These sorts of disagreements give rise to understandings of how to use evidence to advance sustainable development policies. They can translate into policy inconsistencies. A case in point is the environmental goal of reducing electricity consumption, which does not necessarily sit well with the fiscal goal of raising public sector income from the sale of energy.

A separate but related issue is that DEA does not have the spending firepower of some of the larger departments such as housing, transport or education. While it is able to influence some environmental behaviours directly through regulation and some taxation or levies, a great deal of its impact will come through its ability to use evidence to influence policy processes implemented by other departments. These might include minimising the environmental impact of mining, urban development or industry, building greener transport
systems or managing waste from the health sector. DEA is not responsible for how these policies are developed or implemented. It can only seek to encourage them to give equal priority to environmental sustainability considerations, and contribute to reviewing and evaluating what they have achieved.

There are two main implications for DEA’s own evidence base. First, DEA does not always have all the evidence it needs to help make policies for sustainable development in South Africa. Some of the evidence will be held by other departments, which do not necessarily share DEA’s goals. Second, there will always be a degree of contestation around what the evidence means for how policies should be developed, implemented, monitored and evaluated. Together, these indicate DEA’s need for participatory processes of policy development that are inclusive of all stakeholders: civil society, advocacy organisations, research institutions, business and industry, and other government departments. In fact, the need for enhanced participation already resonates strongly within the department. The second implication is that to understand these differences of opinion and how they interact with each other, DEA needs better links to evidence from the social sciences to complement the evidence it already sources from the natural sciences.

5.1.2. Other pressures on DEA to improve its use of evidence

As with all departments in South Africa (and indeed in much of the world), DEA is trying to design and deliver its policies with a restricted budget. This provides an ongoing pressure to collect and use evidence as efficiently as possible, for all types of policy issue. It is helpful to think of two particular challenges for the evidence base: policy ‘shocks’ and ongoing pressures.

There have not been any serious policy shocks to South African environmental policymaking in recent years. However, individual policy areas may well face sudden ‘hot potatoes’. One example is policy around hunting endangered species such as rhinos. This is a controversial topic that makes the Biodiversity and Conservation team’s work to develop or amend legislation difficult and lengthy. As noted earlier, it is forcing a rethink about what sorts of evidence are needed and how to improve the ways they are sourced and interpreted.

There are several ongoing pressures to make better use of evidence. One example is the National Evaluation System. While it does not look specifically at hot potatoes, it is helping departments look in depth at how they have delivered major policies in their sectors. Evaluations are jointly managed by individual Departments and the Department for Planning, Monitoring and Evaluation (DPME). They are reported to Cabinet, which monitors the resulting improvement plans on a six-monthly basis. The intention is that this will create a strong demand for all types of evidence. For example, the recent evaluation of

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10 A serious ‘policy shock’ would be an event that results in a complete rethink about how policy is made. For example, the 2001 epidemic of Foot and Mouth Disease in the UK caused a serious economic and social crisis in British agriculture, environment and tourism sectors, with the army being called in to manage the immediate response.

11 In contrast to the UK in the early 2000s, when Bovine Spongiform Encephalopathy (‘mad cow disease’) and Food & Mouth Disease devastated the British agricultural sector and thus agricultural (and environmental) policymaking.
environmental governance in mining (done jointly with DEA and the Department of Mineral Resources) highlighted the lack of quantitative data and the need to improve management of existing databases.

Another set of pressures on environmental policymaking in South Africa are climate change, biodiversity loss and low economic growth. These affects evidence use in different ways. For example, DEA is a major player in international negotiations around climate change. Interviewees noted that this creates a strong ‘pull’ on the evidence base, as these debates are often very technical. What guarantees DEA a seat at the top table is the quality of the evidence it uses to support its arguments. However, this can be challenging because responsibility for environmental policymaking is not completely centralised around DEA. A good deal of responsibility is devolved to provincial governments who consequently determine what evidence they need on what issues. Different provinces have different requirements for evidence, which means that there is some inconsistency in what evidence each province collects.

Within the national system of policymaking there are other pressures on how evidence is used. DEA and provincial governments are making serious attempts to improve the coherence of the national and provincial evidence bases for environmental policymaking. This is done within the frame of the Change and Sustained Agendas (see Box 1).

**Box 1: the Change and Sustained Agendas.**

South Africa’s National Development Plan and Medium Term Strategic Framework set out fourteen high-level Outcomes that guide policymaking across all government departments and all provinces. Each is divided into several sub-Outcomes, which set out the main policy priorities. This Outcomes Approach, also known as the Change Agenda, also shapes how progress is reported, which is done on a quarterly basis. Detailed progress indicators have been developed with clear technical specifications for what evidence should be collected and how it should be interpreted. Issues of quality and coherence around the evidence are discussed in quarterly meetings of Technical Working Groups. These groups are an important point of contact between DEA and the Provinces, helping improve the coherence of policy development and progress reporting. Their outputs are submitted to various high-level policymaking bodies for approval. Outcomes Reports are submitted to DPME (which oversees the Outcomes Approach) and ultimately to Cabinet. While a single department will lead on the reporting against one Outcome, responsibility for delivering each Outcome will be shared between several Departments, to promote policy coherence. DEA leads on the reporting for Outcome 10, for example, but it does this in close collaboration with the Departments of Energy, Transport, Agriculture, Water Affairs, and Mineral Resources.

As well as the Outcomes Approach, departments develop five-year Strategic Plans that give rise to Annual Performance Plans (APPs). These set out their legislative mandates and describe the wider policy agendas that are not all captured by the Outcomes Approach. This is known as the Sustained Agenda and it, too, is reported on quarterly (though reports are also sent to the Auditor General who assesses whether departments have achieved what is set out in their plans).

The studies for this project found that the both the Change and Sustained Agendas tend to emphasise short-term needs for evidence to fulfil quarterly reporting requirements. Two weak feedback loops were also identified: first between research and reporting, and the second between policy development and reporting. The danger is that, if budgets are limited, continuing needs for evidence are given insufficient attention. Interviewees spoke of the need to rebalance the evidence base away from a heavy emphasis on monitoring and
towards improve forecasting so that environmental policymaking retains its long-term focus, and anticipating the ‘hot potato’ issues mentioned above. They also emphasised the need to maintain support for foundational knowledge and long-term datasets.

There is ongoing work to improve the technical specifications of the indicators for each sub-Outcome. This is an effective way to strengthen the feedback loop between research and reporting on the Change Agenda. For the Sustained Agenda, strengthening the link between policy development and reporting is more difficult. Annual Performance Plans do not contain every single policy development activity—they focus on the key priorities and achievements needed to fulfil DEA’s legislative agenda. Because the Auditor General focuses on compliance with a plan rather than strategic direction, APPs may not always include policy processes where quarterly progress is uncertain or hard to specify. The challenge for the environment sector as a whole is to ensure that its evidence base is managed to meet as many of these different requirements as possible. DEA needs evidence to demonstrate quarterly progress as well as describe what might happen in the long term. It has to ensure that very detailed technical specifications of progress indicators are not developed at the expense of an inclusive approach that takes citizen perceptions into account. The evidence base must help policymakers anticipate ‘hot potato’ issues that could arise at short notice. But at the same time it needs to maintain the long-term datasets that are the foundation of our understanding of environmental change and sustainable development.

In summary, DEA’s evidence base needs to deliver against a very complex range of issues. But in all of the analysis above it might be easy to overlook the fact that ‘a department’ is in fact a collection of people with many different skills who work with each other in formal and informal ways. So how can we strengthen the incentives for everyone—working individually and in teams—to source and use evidence effectively? This is the topic of the next section.

### 5.2. Internal (human resource) issues

Policymaking departments are generally large and bureaucratic organisations. The processes they use to develop policies and to implement and report on progress need to be regularised for accountability and transparency. As we have seen above, this can pull the evidence base for all policies in different ways. There are four main challenges for DEA’s senior managers\(^\text{12}\). The first is to ensure that the evidence base is managed so that it meets as many needs as possible. The second is to build relationships that help people source and use efficiently and effectively. The third is to plan so that the necessary skills are available to promote an evidence-informed approach. The fourth is to ensure that resources are available to do all of this.

#### 5.2.1. Strategy and the role of senior management

DEA’s Research, Development and Evidence Framework is a radical attempt to structure the way DEA staff think about evidence more strategic. As well as research, it emphasises that policy requires statistical and administrative data, evidence from citizens and stakeholders, and evidence from evaluations. It speaks of the need to improve the science-

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\(^{12}\) Civil servants have different titles in different countries. By ‘senior managers’ we mean the top three or four layers in the hierarchy: the people who take strategic decisions.
policy interface and to maximise the value of investment in evidence by ensuring that evidence needs are closely aligned with policy priorities. It sets out what those priorities were for the sector in 2012, and the many different role players who need to be involved. It describes institutional structures that could be put in place to operationalize this strategic approach, and looks at the human capital and financial requirements. It is a thorough and strategic document with devolved responsibility for its implementation. However, its recommendations have been implemented unevenly across DEA since its publication in 2012.

It is interesting to note how the RD&E Framework was submitted and approved. Following the 2008 workshop, a small group of interested people worked informally to develop the approach and write the document that would finally be submitted. There were no formal structures for discussing this sort of departmental-level approach to evidence within DEA’s decision-making hierarchy. The group therefore worked ‘off the side of their desks’ with ad hoc engagements including the MinTech Working Groups and the DEA/DST Joint Working Committee. The team also ensured that RD&E Framework was included as deliverable in the Annual Performance Plan (APP). It was initially inserted into the APP at Branch level. When that was approved this ensured that it was then automatically included in the Departmental APP. Doing this alerted senior managers to the fact that it existed and that they would be required to read and approve it. At the same time, individual members of this group were attempting to apply the lessons from the RD&E Framework to their own policy themes. They drafted theme-level evidence strategies and worked to improve relationships across the science-policy interface.

Senior managers and MinMEC approved the RD&E Framework as a statement of intent. However, within DEA, the next step was not fully taken. This could have included setting up some form of governance—such as evidence committee—whose role would be to discuss and monitor how it would be implemented and how it would contribute to making the department as a whole more evidence-informed. There may be several reasons for this. For a start, the debate around evidence within government circles was not as well developed in 2012 as it is now. The Outcomes Approach was still being fine-tuned, and the National Evaluation System was in its infancy. Relationships between scientific research and policy development were overall reasonably strong. As noted earlier, although climate change and other global issues have strengthened the use of evidence in some themes, there have been no catastrophic policy shocks that might have led to a stronger focus on evidence across the whole department. In addition, DEA officials suffer from meetings fatigue. As the first part of this paper has shown there are many examples of good practice around evidence in DEA. The RD&E Framework was intended to consolidate these and encourage yet more good practice. It still stands as a statement of intent for DEA, but because it has not driven specific changes we cannot say yet that DEA as a whole takes a strategic approach to its evidence.

5.2.2. Relationships around evidence

DEA staff rely on many different types of relationship to ensure that they have the evidence they need. Internally, as noted previously, some branches have teams that are dedicated to providing evidence. Others have teams that manage relationships with external organisations that provide evidence such as government entities, academia, think tanks, consultants, civil society organisations and advocacy groups.

There is a single overarching observation to understand relationships around evidence. It is that wide and early participation from all DEA’s different stakeholders is part and parcel of developing a departmental evidence base. Relationships with organisations that provide technical evidence are quite strong. If these are allowed to dominate policy development
processes, the danger is that DEA’s policies will become too technocratic. It is crucial to have evidence that is technically robust, but it is not the only consideration. The ways in which all stakeholders participate in developing and implementing policies is equally important, particularly where marginalised groups are affected. An inclusive approach builds trust between people, helping work through disagreements about specific issues and working to overcome the legacy of South Africa’s divided past. The language and location of participatory processes matter a great deal, especially for civil society. Getting all of this right takes time, effort and resources. DEA has many examples of good practice in implementing participatory approaches, but these have developed organically and have not yet been shared widely. There is no organisation-wide commitment to participation or guidance on how to do it well.

5.2.3. Capabilities, cultures and incentives for using evidence

The diagnosis did not focus on individual capacities but this section attempts to highlight key issues that emerged that may require future elaboration. Debates around evidence-informed policymaking sometimes talk of ‘a culture of evidence’ within an organisation, meaning how people value evidence and what they value it for. The review of DEA shows that it is not particularly helpful to think of a single culture of evidence use. There are many different ways evidence is valued and many different reasons for valuing it. DEA officials value evidence that is technically excellent and evidence that has emerged from participatory processes. The heavy emphasis on reporting means that evidence is sometimes valued more for how it demonstrates compliance with a plan than for how it helps shape the plan. Evidence from the natural sciences appears to be valued more highly than evidence from the social sciences, though this is changing as more emphasis is placed on achieving South Africa’s economic and social goals, as well as its goals for the natural environment. The review showed how these different “cultures of evidence” can reinforce or work against each other. For example, interviewees spoke of the danger that reporting reduced their appreciation of evidence to a situation where evidence is valued ‘only in so far as it confirms the desired picture’. In a department where natural sciences tend to dominate, this could result in a picture that focuses solely on the natural environment rather than social and economic issues. It could be balanced by strengthening participatory practices. These would involve others in working out what that desired picture might look like and ensure that evidence is valued for its ability to question and challenge current understandings.

Peoples’ incentives to use evidence are partly shaped by these “cultures of evidence”, and partly by the formal performance management frameworks. Besides the normal individual performance agreements and study schemes, there are few specific incentives for recognising the use of evidence, for specialising in working on evidence, and for retaining those skills. However in general in DEA, there is a high level of technical understanding of the issues, with many staff members having degrees in the natural sciences, sometimes to Masters and PhD level. However, interviewees stressed the need for more attention to be paid to building specific skills in sourcing and managing evidence. While some themes have hired people who specialise in evidence, some policymakers requested higher levels of training in specific areas. These included how to appraise the technical quality of complex research reports and how to understand the legal implications of their work.

Other incentives to use evidence come from the government-wide approach to monitoring and evaluation (M&E), which began in earnest in 2009. Since then, DEA has strengthened its focus on M&E. Dedicated units are being staffed at branch level to improve the quality of the evidence for monitoring the environment and for reporting purposes.

This section has briefly looked at the human element of working with evidence in DEA: the different “cultures of evidence” and people’s individual incentives and capabilities to work
with all forms of evidence. However there is one more set of issues that affect an evidence-informed approach. This is the set of business processes that influence how everyone in the department works.

5.3. Internal (business) issues

DEA is in the business of government: it uses public money to deliver a range of environmental, social and economic goods and services for South Africa’s citizens. Like any other organisation it has regular business processes and these play a key role in shaping its approach to evidence.

5.3.1. Planning, reporting and budgeting

We have already explored how strongly government-wide South African planning and reporting influence DEA’s approach to evidence. The third mandatory process is budgeting. Although it is part of the national planning process, it is not well synchronised with policy planning. The annual planning process begins in August of each year, with the submission of the Department’s first Annual Performance Plan (APP) to National Treasury and DPME by 31 August. Departments receive their final budget allocation letters from National Treasury in November, which allows them to produce the second draft APP. Following further consultation, the final APP is published and tabled in Parliament in March. DEA is therefore in a more or less constant process of planning and budgeting. This makes it difficult for senior managers to develop a strategic approach to planning for all the different types of evidence that will be needed, and ensuring that sufficient resources will be available.

DST conducts an annual survey of R&D (research and development) in South Africa, but this is primarily to monitor investments in R&D across government, academia, non-profit businesses and science councils. It does not ask Departments to provide detailed information on their expenditure on other forms of evidence. In fact, no departments are required to report (even in aggregate) what they spend on evidence. A very rough calculation, based on the Estimates of National Expenditure published by the Treasury, shows that DEA could have spent an average of 11% of its total budget on evidence-related activities over the past six years. Even within a margin of error, this could represent a significant percentage of its overall budget. The intention of the RD&E Framework is to align the investment in evidence with sector priorities and maximise the value of that investment.

Describing the different types of evidence, and linking them to budget allocations, could help DEA actively manage its evidence base across the whole department. There could be at least two ways to do this. One would be to distinguish between the four types of evidence already outlined in this paper: administrative and statistical data, research, evidence from citizens and evaluation evidence. Another, used by Defra in the UK, would be to differentiate between i) evidence that has to be collected by law (statutory evidence), ii) evidence to meet short-term priorities, and iii) evidence to meet long-term goals and foundational needs for the sector. Whatever the final decision, this should help managers do three things. First, it will help them spot gaps and overlaps in the evidence base. Second, it will help ensure that the evidence helps DEA meet all its policy goals, including that of inclusive policymaking. Third, it will help them identify where DEA may be possible to deliver greater value for money by strengthening its relationships with other evidence organisations.
6. Final overview observations

This paper sets out the learning from a year’s worth of working with a single government department. It is based on a rapid yet informative initial phase of learning about DEA, which uncovered the main factors that influence how policymakers source, handle and use evidence. It is clear that the evidence, and the processes that use it, are intimately linked to each other. It is not possible to talk about the evidence without talking about how policy teams within DEA work to scope the questions, assemble existing and new evidence, and interpret the evidence to inform their decisions. Interviewees acknowledged that the best processes are participatory and inclusive. This means raising the quality of stakeholder engagements, whether those are between policy teams and scientific advisors, other government departments, industry associations or civil society organisations. It means allocating enough resources to these engagement processes, and allowing enough time for all voices to be heard and any disagreements to be aired. Where policy issues are complex and involve many stakeholders, this can be a real challenge.

However, there are already many examples of good practice in how DEA sources, assembles and uses evidence. Across the department, individuals and teams continue to make significant efforts to improve its approach to evidence-informed policymaking. The RD&E Framework represents a concrete attempt to describe what such an approach looks like, what it hopes to achieve, and how it could be implemented. However, it is not a simple matter to make the necessary changes. DEA face many different pressures that shape how they work with evidence. External pressures such as the national planning and reporting processes may encourage a short-term focus on reporting compliance with a plan or a set of targets. A strong culture of technical excellence, particularly within the natural sciences, may lead to a technocratic approach to using evidence. This could be balanced by re-emphasising DEA’s stated ambition for development that is socially, economically and environmentally sustainable and of a more inclusive and participatory approach. Like most government departments (not just in South Africa) it is a large, complex and bureaucratic organisation. People struggle to share what they have learned, unless what they have learned relates directly to one of the mandatory processes of policy planning or reporting. They struggle with too many meetings with agendas that are too long for the time available. While the skill level around evidence in DEA is generally fairly high, more could always be done to improve people’s knowledge of specific techniques.

Work to strengthen DEA’s approach to evidence emerged from the middle of the organisation. Senior managers have encouraged responsibility for implementing the RD&E Framework to be devolved, so that individual themes can tailor it to their own specific needs. This has benefits in that the themes are more likely to develop something that is sustainable within their individual contexts. However it has potential costs. Learning may not be shared with other themes, and by working individually they may miss out on savings that could come from a joint approach. Greater senior management ownership of the work on evidence would help build consistency across the organisation and ensure that sufficient resources are available.

For this to happen, DEA needs to have a more detailed understanding of how much it spends on different types of evidence, and the space to discuss how to ensure that it spends its resources cost-effectively. It will be a complex process to define the categories and then work out how current spending patterns align with them. However, it will ultimately give managers greater control over their resources and encourage them to manage their budgets more effectively.

DEA has made a strong start, but strengthening an evidence-informed approach to policy is a long-term process. The VakaYiko project has identified a set of five principles that will help
to underpin work to strengthen the department’s use of evidence. These are set out in a linked paper, but summarised here:

1. Using a broad definition of ‘robust’ evidence
2. Linking evidence needs to policy priorities
3. Linking an evidence-informed approach with business planning, reporting and budgeting
4. Inclusive and participatory policy processes
5. Co-production of evidence and policy

The project’s work has also identified several areas where further improvement areas that could be carried forward in the short- to medium-term. First, there could be a stronger focus on taking a strategic approach to managing the evidence base. This links to Principles 1 & 2 and will help DEA make the most effective use of all the evidence available to it, to meet all its policy priorities. Second, DEA could improve its strategic resourcing and planning for evidence. This links to Principle 3 and will ensure that any new systems and processes that are put in place to improve the department’s use of evidence are embedded in its normal business practices. Third, it is important to ensure that an evidence-informed approach to policymaking is a sectoral approach. This is linked to Principles 1 & 2, but is focused on ensuring that changes to the ways evidence is used in policymaking include all stakeholders in the environmental sector, particularly Provincial and Local governments. Fourth, and linked to Principle 4 & 5, South Africa’s divided history and its continuing social, economic and environmental problems mean that an evidence-informed approach to policymaking must also be participatory and inclusive. Finally, DEA has devolved responsibility for implementing an evidence-informed approach to theme levels: it has consciously chosen not to try to impose a one-size-fits-all template onto the department. Linked to Principle 3, it is important that effort is put into sharing good practice around evidence so that the department as a whole can benefit.

Delivering this should lead to a wide range of benefits for DEA as a whole. It should also help answer the questions set out at the beginning of this paper. Doing this could help DEA use evidence more effectively to meet its short-term reporting needs as well as anticipating the ‘hot potatoes’ and responding to long-term trends. It should help the Department strengthen its understanding of how to deliver South Africa’s goals for its society and economy, not just its natural environment. A more inclusive approach to policy development builds trust between all stakeholders and can improve the social legitimacy of the policies that emerge from it. And understanding the detail of what it spends on evidence will help it spend more effectively and efficiently.

The final question is how this will all lead to the improved delivery of outcomes for South Africa’s citizens and its natural environment. There are three overarching questions for policymakers: are we doing the right things? Are we doing them in the right way? Have we stopped doing the wrong things? An evidence-informed approach can help put in place the structures, skills and processes that—if they are used well—will support a more robust approach to planning, implementation, monitoring and reporting on DEA’s policymaking.
This lists all the publicly-available documents consulted by the project team during the five studies. Several of DEA's own internal and draft reports were also consulted, but for reasons of confidentiality they are not listed.


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