Report

Evidence and policy in South Africa's Department of Environmental Affairs

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November 2016

environmental affairs
Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Executive summary

Since 2008, South Africa's Department of Environmental Affairs (DEA) has made a concerted effort to enhance its systems for using evidence to inform how it diagnoses, 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:

- to improve the interface between science and policy
- to improve the sector's ability to identify priority evidence needs by working with others
- to ensure all sector policies are based on a robust and broad understanding of evidence
- to align its investment in research and development (R&D) with sector priorities in order to maximise the value of that investment
- to ensure 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 policy-making. Specifically, helping senior managers to answer two questions:

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

This report synthesises the organisational issues that influence how DEA works with evidence to develop, implement, monitor and report on environmental policies. It is based on the findings of five studies that were conducted as part of a programme of support to DEA between 2014 and 2016.[1] Many examples of good practice were unearthed in the studies – examples that deserve to be shared more widely. The report also identifies areas that were observed to be limiting DEA's ability to make better use of its evidence. It provides DEA with an opportunity to consider what areas it could further support to enhance its systematic and phased approach to evidence-informed policy-making and implementation.

'Evidence' in the policy context

DEA recognises four types of evidence that are needed for policy- and decision-making purposes:

- **Statistical and administrative data** paints a picture of where we are now. This might include trend data on greenhouse gas emissions or the performance of landfill sites, or information on regional water quality or the distribution of endangered species. DEA's example use of this type of evidence includes municipal-level data on chemicals and waste management, via the air quality reporting system, and via the Environment and Culture Expanded Public Works Programme process.
- **Analytical (research) evidence** can 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. DEA's example use of this type of evidence includes the South African National Biodiversity Institute's (SANBI's) work to develop biodiversity offsets for wetlands, the earth systems science approach to policy development in the Oceans and Coast theme and the trends analysis done for the South Africa Environment Outlook (State of Environment).
- **Evidence from citizens, stakeholders and players** informs policy-makers of what different groups of people value and what they consider legitimate. This type of evidence may be collected using research methods, but participatory processes of engagement are equally important. DEA's example use of this type of evidence includes consultation regarding standards for waste collection in municipalities for poor households; and the National Biodiversity Strategy and Action Plan and National Climate Change Response White Paper, which combined citizen, stakeholder and scientific evidence.
- **Evidence from evaluations** tells 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. DEA's use of this type of evidence includes the report on environmental governance in the mining sector, and the monitoring report for the National Strategy for Sustainable Development.

1 The studies were conducted as part of the VakaYiko project, funded by the UK Department for International Development (DFID) under the Building Capacity for the Uptake of Research Evidence (BCURE) programme.

All four types of evidence are 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.

DEA's approach to evidence-informed policy-making

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. The RD&E Framework (approved by the Ministers and Members of the Executive Council ('Environment MinMEC') in 2012) and the National Biodiversity Research and Evidence Strategy (approved by the minister in 2015) support DEA's principle of linking evidence needs to policy priorities. 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 would 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

There is a culture of planning and financing evidence use throughout DEA, as expressed in departmental annual performance plans, strategic plans and procurement plans. Such high-level prioritisation is important for DEA as evidence is needed for policy diagnosis, development, implementation and monitoring and reporting. The pressure to report on a quarterly and annual basis, however, risks skewing how evidence is sourced and used. While there is planning and resourcing for evidence in DEA, there is little detailed budgetary analysis of expenditure on the different types of evidence. This may make it hard for managers to know whether they are prioritising and spending their budgets for obtaining and using evidence cost-effectively. It may be helpful to develop a clear prioritisation framework against which to assess budget bids for evidence-related work.

3. A sectoral approach to the evidence base

DEA benefits from evidence and external strategic relationships with other departments, universities, research, industry, non-governmental organisations (NGOs) and international partners. The environment function cuts across sectors and has to achieve many of the goals through other departments and stakeholders. As environmental policy is a concurrent function,[2] the role of provincial and local governments, and their needs for evidence, should be taken into account from the beginning. It is important that any initiative to improve the use of evidence for environmental policy-making is not seen just as a DEA initiative.

4. An inclusive and participatory approach to evidence

A wide range of stakeholders have an interest in environmental policy-making. Their evidence is an important part of DEA's overall evidence base. Disagreement among stakeholders needs to be recognised as part and parcel of the policy-making process. Allocating sufficient time, resource and capacity to ensuring all voices are heard will help deliver policies that are both well informed by evidence and broadly trusted. There is participation within the sector's various policy processes, but the sector's complexity means different approaches to participation will be needed for different issues.

5. Sharing good practice

Evidence is highly valued within DEA, and there is a core group of people eager to help DEA take a strategic approach to its evidence base. Many examples of good practice have been identified. Senior managers have devolved responsibility for an evidence-informed approach to policy theme levels (branches or programmes). This encourages local experimentation and helps develop innovations that are well suited to each theme's individual context. Sharing good practice across themes will help build a stronger whole-department and sector-wide approach to evidence-informed policy-making.

2 Under the South African constitution, policies and regulations can be made *exclusively* by central government departments, or *concurrently* by central and provincial governments.

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 subsection describes the practices DEA uses for the four processes described in Figure 1 in terms of the RD&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 a close relationship between *scoping the question* and *assembling existing evidence*, as reviews of what is already known help improve how the issues are framed and how the specific questions are asked.

4.1.1 Setting the agenda for the environment sector

DEA is particularly strong in using evidence to scope the big policy questions 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), published in 2011. The process of scoping NSSD began 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 national and provincial levels and in some cities.

There is 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 and 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 the best available research and information would inform South Africa's position on future commitments under international treaties and the country's climate change policy.

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 was important to take a proactive approach to setting the agenda. This means allowing sufficient time to thoroughly consult a full range of stakeholders and communicate with them about the emerging agenda. 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 and Conservation – has a clearly outlined research and evidence strategy and a commitment to cutting-edge research for policy implementation in specialised fields. Other branches have not yet fully developed similar approaches or documented strategies or plans, though several are in progress.

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. Some are processes that are wholly led within DEA that identify questions of more immediate relevance. Others 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, coordinated by DST. This sets out six clusters where long-term research is needed and issues calls for proposals to address specific areas within each cluster.[7] A different example comes from the Oceans and 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 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 will recognise which questions can 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 are involved in key decision forums, such as working groups and the Ministerial Technical Advisory Body (MinTech), which help identify the main policy questions that need answering and the types of evidence required. For most external organisations, however, the engagement processes are less formal and less structured. Interviews noted that broad and inclusive participation was vital to ensure the policy questions were 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 all stakeholders are aware of what is already known about an issue, and that the questions subsequently asked are a priority. It also helps ensure 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 here.

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 players in policy development. Throughout the process, opportunities for civil society input were created, ensuring 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 United Nations Framework Convention on Climate Change (UNFCCC), the negotiation process aimed to ensure 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 to assemble 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 also 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 national and provincial levels and in some cities.

4.2.2 In the shorter term

Formal assessments are not, however, the only way of assembling existing evidence: this 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 such approaches. They can 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, the quality

7 See www.wasteroadmap.co.za/download/waste_rdi_roadmap_summary.pdf.

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 entered into it.

4.2.4 Ensuring evidence quality

Finally, the processes of assembling evidence need to ensure that its quality is as high as possible. This is easier in the longer-term, formal, assessment processes such as those already described. In these cases, there is good involvement with people who have a high degree of training (such as researchers and policy-makers) and with civil society and stakeholders. It is more difficult for shorter-term, responsive requests. In these cases, more emphasis needs to be placed on policy-makers' ability to assess the quality of the evidence themselves, and on the strength of their relationships with external organisations that can provide evidence and advice. DEA has a good complement of staff with scientific training, but this is not shared equally across all themes. In some instances, officials may need to assume the evidence external organisations provide 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 that task teams can use to determine the quality and acceptability of evidence. This would help avoid compromises regarding evidence, or the loss of good evidence, when team members have conflicting agendas.

4.3 Jointly interpreting the evidence to inform decision-making

The process of interpretation is a vital one to ensure 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: to conserve the natural environment, to address national priorities such as economic growth, job creation and poverty alleviation, and 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 the final decision is well supported. Different policy themes respond to these goals in different ways. Interviews found some themes may emphasise environmental issues and rely on evidence from the natural sciences. These 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 and Coast theme emphasises the goals of improving the ocean's economy, marine protection and marine governance[8] all at the same time.

Relationships between external evidence providers and policy-makers are not always strong when it comes to interpreting evidence. Interviewees noted that researchers were sometimes not invited to discuss the implications of their evidence. Some observed that their reports seemed to disappear into the 'black box' of policy-making and they were not given opportunities to discuss the evidence to ensure its full implications were understood. This was seen even when the research was done by a government entity with a specific mandate to provide evidence to use in the policy process. Interviewees from both DEA and external organisations recognised the importance of creating an enabling environment for knowledge-brokering activities to ensure 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 other departments. These include working groups and MinTech – the most senior forum in which technical aspects of the evidence are debated.[9] In some cases, the same organisations are involved: SANBI, for example, provides evidence to DEA policy-makers, but as a government entity its branch heads are involved in MinTech working groups. SANBI heads sit with MinTech and its chief executive officer 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 regarding evidence. One interviewee described the process of producing the White Paper on Integrated Pollution and Waste Management for South Africa (2000) 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

8 Operation Phakisa draws on the Malaysian Big Fast Results methodology. It is applied to particular areas of policy emphasis and brings together public and private sectors, academia and civil society to collaborate in detailed problem analysis, priority-setting, intervention planning and delivery www.environment.gov.za/projectsprogrammes/operationphakisa/oceanseconomy#criticalareas

9 After MinTech, policies proceed to MinMEC and to the Forum of South African Directors-General (FOSAD). 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 there is in MinTech. MinMEC's focus is more on coordination between national and provincial levels, and between departments.

feedback, in areas where affected stakeholders had easiest access, to ensure their involvement and engagement. Likewise, the study on sustainable development showed DEA had done well to coordinate its cross-cutting 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 shared more widely. 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 and different branches and levels of government. There was widespread recognition that an evidence-informed approach rests on an inclusive and participatory approach to policy-making. For South Africa, with its history of division, it is important to continue strengthening civic participation. However, DEA also recognises that policy teams 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, SAWS, SANPARKS and iSimangaliso to universities and NGOs. Many staff have a background in environmental science. Where they have postgraduate degrees, their understanding of what makes evidence robust is likely to 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 runs the risk of policy-making becoming too technocratic. A stronger emphasis on social science evidence (including citizen evidence, as noted above) could enhance how 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 and Coast – employs a significant number of in-house researchers. Others have to rely on external organisations. Public entities such as SANBI and SAWS are valuable originators of evidence, giving DEA free access to research outputs, data and other information. Two themes – Biodiversity and Conservation and Climate Change and 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 and Waste Management theme, for example, derives much of its evidence from CSIR. However, evidence such as that from CSIR and other research institutions 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 priority 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 the relevant evidence is more likely to be available when needed, sufficient time is given to research that may help anticipate future policy priorities and resources are allocated to supplementing incomplete or out-dated datasets. As noted, several of DEA's thematic programmes are making concerted efforts to develop their own evidence strategies, which will help in this regard.

6 Final overview observations

This report sets out the learning from a year of working with a single government department. It is based on a rapid yet informative set of studies, which uncovered the main factors that influence how it sources, handles and uses evidence. It is clear that the evidence, and the processes that use it, are intimately linked. It is not possible to talk about the evidence without talking about how policy teams within DEA work to frame the issues and scope the questions, assemble existing and new evidence and interpret the evidence to inform their decisions. Interviewees acknowledged that the best processes were participatory and inclusive and that this meant raising the quality of stakeholder engagements, whether those are between policy teams and scientific advisors, other government departments, industry associations or CSOs. Scaling up participatory and inclusive approaches would mean allocating sufficient resources to these engagement processes, and allowing enough time for all voices to be heard and any disagreements to be aired.

There are already many examples of good practice in how DEA officials frame the issues and how they source, assemble and use evidence. Across the department, individuals and teams continue to make significant efforts to improve DEA's approach to evidence-informed policy-making. 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 officials 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 government departments across the world, this is a large, complex and bureaucratic organisation. People find it hard to share what they have learned, unless this 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 the devolution of responsibility for implementing the RD&E Framework, so individual thematic programmes can tailor it to their own specific needs. This has benefits in that the programmes 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 people may miss out on savings that could come from a joint approach. Greater senior management ownership of the work on evidence approach could help build consistency across the organisation and ensure sufficient resources are available.

For this to happen, DEA could benefit from developing an approach to actively managing its evidence base, developing clear frameworks for prioritising spending on evidence and adapting and refining them over time. This may be a complex process, but it could ultimately give managers greater control over their resources and encourage them to manage their limited budgets more effectively. This approach, of developing evidence strategies and rolling implementation plans, is being actively piloted by two themes.

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 guidelines that will help underpin work to strengthen the department's use of evidence. These are set out in the third paper in this series, *Guidelines and good practices for evidence-informed polic-making in a government department* (Wills et al., 2016), but summarised here:

1. Use a broad definition of 'robust' evidence
2. Link evidence needs to policy priorities
3. Link an evidence-informed approach with business planning, reporting and budgeting
4. Adopt inclusive and participatory policy processes
5. Co-design and co-produce evidence and policy.

The project's work has also identified several areas where further improvement could be made 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 Guidelines 1 and 2, and would 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 would help ensure any new systems and processes put in place to improve the department's use of evidence are embedded in its normal business practices. Third, it is important to ensure an evidence-informed approach to policy-making is a **sectoral approach.** This is linked to Guidelines 1 and 2, but is focused on ensuring changes to how evidence is used in policy-making include all stakeholders in the environmental sector, particularly provincial and local governments. Fourth, and linked to Guidelines 4 and 5, South Africa's divided history and its continuing social, economic and environmental problems mean an evidence-informed approach to policy-making 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 and can adapt its processes over time.

Piloting some of these approaches and scaling up the ones that are effective should lead to a wide range of benefits for DEA as a whole, and help answer the questions set out at the beginning of this report. It could help DEA use evidence more effectively to meet its reporting needs, to anticipate 'hot potatoes' and to understand long-term trends. It could also help the department strengthen its understanding of how to deliver South Africa's goals for its society and economy, not only 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 being able to allocate resources for evidence against a transparent prioritisation framework could help DEA understand beter what it spends on evidence, and to do so 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. Embedding an evidence-informed approach across the department could help put in place the structures, skills and processes that – if they are used well – would support a more robust approach to diagnosis, planning, implementation, monitoring and reporting on DEA's policy-making.