

Communicating Science: Mission Impossible?



Professional information providers often wonder whether and how their work finds its way to political level decision-making. Nikki Funke and Ernita van Wyk from CSIR Natural Resources & the Environment provide some insights.

Water resource and other environmental and related social issues have become so complex that there is increasing pressure for science to serve society via the decision-making needs of elected officials. But how is this to be achieved, especially when we perceive the scientific and political worlds to be divergent in terminology, values and objectives?

For the most part, scientists do not make much of an effort to communicate their findings to politicians. When scientists do communicate with government, their attempts are

often limited to providing politicians with complicated scientific reports. These are sometimes incomprehensible to non-specialists and may not be user friendly or adequately integrated for decision-making. Thus, while scientists do try to communicate sometimes, they tend to make assumptions about the palatability of their products to a political recipient.

The apparently obvious answer to this problem would be for scientists to package their information more effectively. While this seems to be sound reasoning, attractive, glossy, easy-to-read reports have

unfortunately not always made a significant impact at the political level. So, for example, important initiatives such as the River Health Programme have been presented to political decision-makers with much effort, yet have reportedly not had the desired impact in terms of being internalised into political policy- and decision-making processes.

Given this situation, how can South African scientists make a bigger impact at the political level, over and above appropriate packaging of scientific products? While this is a complex problem with many

elements that need to be analysed in more detail, preliminary research has shown that part of the solution may be a combination of more effective communication techniques and relationship-building between scientists and politicians.

WHO SHOULD COMMUNICATE SCIENCE?

The scientific community needs to understand the political workings of different government departments and how to best communicate its findings if it wants successful science communication to take place. The question is whether *scientists* are the best people to be doing the communicating and liaising with government.

Natural scientists, especially often seem to have trouble with translating the every-day jargon they deal with into terminology that is understandable to non-scientists. Also, many of them have more than enough to do by focusing on their research and simply do not have the time or motivation to try and “sell” their work to politicians as well.

It might therefore be good to employ a number of “integrators” at scientific organisations, in other words, people who understand the mindsets and goals of both natural scientists and politicians and will thus be able to mediate and provide a “messaging service” between the two groups. Such integrators would need to have a good basic grasp of the science they want to communicate and, at the same time, have a thorough understanding of the political process and how to effectively feed into it. The advantages of making use of integrators are that translating scientific language into non-scientific language and communicating and relationship-building would form part of these specialists’ full-time job descriptions – thereby relieving many scientists of a sometimes unwelcome burden.

While integrators could therefore play an important role in bridging the science-politics divide, there is also a case to be made for individual scientists who are interested in communicating their science to politicians or even building professional relationships with the latter. Such a situation also has its advantages because it enables politicians to interact directly with scientists without having to deal with an intermediary first.

Whoever ends up doing the communicating needs to keep in mind a few important points when addressing or interacting with politicians.

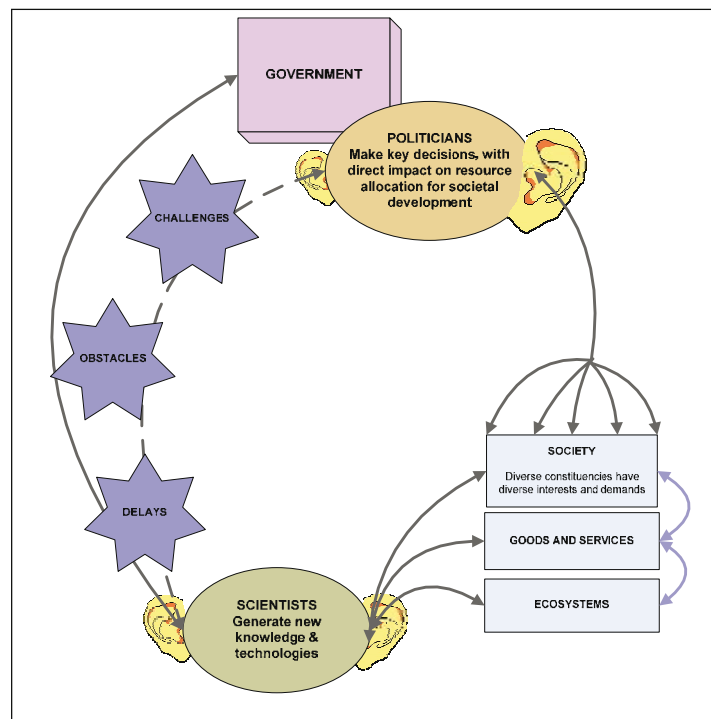
WHAT IS THE MESSAGE?

When communicating to politicians, scientists need to be clear about the nature of the message they want to convey. One tactic is to inspire fear or a notion of high risk in politicians regarding a particular issue to try to bring about a change in their thinking and perhaps even their behaviour. Another tactic is simply to present them with important information.

Government reportedly responds well to two communication tactics: “fear” or “fact”. The first tactic involves scientists informing politicians of the consequences that will ensue if they do not actively try to address a particular problem, for example, climate change. When presenting information in this way, scientists should make use of scenarios to show politicians what might happen if no effort is made to solve the problem at hand.

The second tactic is less threatening, and merely informs politicians of particular research initiatives in a factual yet accessible manner. Here it is important for scientists to grasp their audience’s attention by presenting their research in a way that will ensure their listeners are interested.

Scientists need to be aware of when it is appropriate to use which tactic and need to present their information accordingly. In addition, they also need to take care not to dispute each other’s findings in public if they want to successfully communicate their research to politicians.



The science-decision making communication loop.



Information needs to be packaged correctly for decision-makers to find it useful.

A lack in agreement could create the impression of disunity and could also convey the message that scientists are not sufficiently confident about the work they are producing.

WHERE TO COMMUNICATE THE MESSAGE

Scientists could use several approaches to effectively communicate their research to politicians. This might subsequently increase the chances of their research being understood and internalised by those in power.

Firstly, they could brief politicians on the research they are currently doing by hosting seminars or round-table discussions.

Secondly, scientists could invite politicians to their organisations to look at some of the projects they are working on. A demonstration of how technologies such as water purification systems function is particularly effective as this is a clear and tangible example of how science can help improve the lives of ordinary people. By supporting such technologies politicians would be seen to be endorsing important products that have the potential of changing the lives of many South Africans.

This, of course, would also be of benefit to their political careers. Politicians are reportedly also fond of public 'ribbon-cutting' opportunities,

which make them feel that their status and power are being acknowledged by the scientific community and also serve to make them feel more personally involved in particular projects.

Thirdly, scientists could try to make an impact at high profile events, such as the annual Stockholm World Water Week, by raising some of the key issues they feel need to be researched. Politicians are sensitive to the issues discussed at such events and are likely to take notice of new ideas and priorities, specifically those they deem of high social and political importance.

Fourthly, learning alliances could be formed between scientists and politicians as they may provide an ideal forum for these two groups of people to learn more about each other's worlds and to learn to communicate with each other more effectively. These alliances are an effective way of bringing together people with differing opinions and of getting them to agree on certain commonalities to solve existing problems.

Finally, scientific organisations could host knowledge fairs and invite scientists, members of the public and politicians. Such fairs should be made fun and informative and are an ideal place for scientists to communicate their research in an informal way while simultaneously encouraging visitors to provide them with feedback.

HOW TO BEST GET THE MESSAGE ACROSS

Here are some useful tips for scientists doing oral presentations to politicians:

- ◆ Use minimal text on slides when doing Power Point presentations. This makes it more likely that the audience will listen to you rather than try to take in large amounts of information presented to them on the slides.

- ◆ Be excited and passionate about what you are presenting. This has a contagious effect on the audience, who are likely to become excited about your presentation too.

- ◆ Think of an appealing name for your concept: something that is striking and easy to remember. Also explain the concept's functioning and relevance in short, simple and concise sentences to make politicians feel they are capable of mastering the science you are communicating to them.

- ◆ Learn to link the scientific concepts you are presenting to ideas that are important and relevant to politicians, for example, development, equity and redress. It may help to consult recent political speeches – often posted on departmental websites – to determine which terminology is currently widely used in government circles.

- ◆ Make use of many visuals (maps or graphics). Also, if possible, include photographs of yourself being involved in making science work for society, for example, by participating in a community development project. This shows politicians that you, as a scientist, are committed to changing the lives of ordinary people, something which they see as very important.

- ◆ Build trust between yourself and your audience. Find that which you have in common to illustrate your ideas. Also, while you might be the "expert" on the topic, try not to talk down to your audience (i.e. lecture style). Rather engage in a conversation where they might feel confident enough to ask questions, even the silly ones.

The points mentioned above are practical tips that scientists can employ when communicating their research to politicians. It is probably advisable, however, that they be employed within the context of a science organisation's official

communication strategy, rather than on an *ad hoc* basis, if they are to effectively contribute to scientists' efforts to influence politicians. In many cases, it has proven worthwhile for scientists to do more than merely communicate their findings, but try and impact on decision-making processes by building lasting relationships with politicians.

BEYOND COMMUNICATION

A number of tips can be given to scientists on how to build on their interpersonal relationships with politicians:

- ◆ Identify some interests you might have in common with government officials, and use these to get to know them better on a professional level.
- ◆ Build a web of relationships. This will ensure that when people and positions shift, contacts will not



Ribbon-cutting events and workshops can be a good way of sharing information.

necessarily be lost, but instead influence will be gained regardless of where people move to.

- ◆ Choose carefully which politician/s you want to build a professional relationship/s with. What is important here is that this person should be someone with both *will* and *means* to help

you achieve maximum impact.

Communicating science effectively to politicians and making sure it is integrated into both policy and political decision-making is of the utmost importance if scientific research is to make a tangible difference to the lives of ordinary South Africans. 

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