



INGSA/ASSAf Workshop for African Scientists

‘Enhancing capacities in providing science advice to governments’

Hermanus, South Africa, 26 & 27 February 2016

Workshop report and evaluation

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1. Summary

This report reviews the design, planning, delivery and outcomes of the INGSA/ASSAf workshop on ‘Enhancing capacities in providing science advice to governments’, which took place on 26/27 February 2016 in Hermanus, South Africa. It concludes with some lessons for future INGSA workshops and related activities. The report has been written by James Wilsdon, vice-chair of INGSA, who was one of the workshop’s facilitators.

In line with INGSA’s goal of strengthening capacity for science advice, particularly in developing countries, this was its first capacity building workshop. Organised in close partnership with ASSAf (Academy of Science of South Africa), it took place immediately prior to a larger IAP (Interacademy Partnership) conference on science advice, and the IAP General Assembly.

Additional partners and funders of the workshop were: ICSU (INGSA’s parent body); Department of Science and Technology, South Africa; Ministry of Foreign Affairs and Trade, New Zealand; Wellcome Trust; and the Royal Society. We would like to express our gratitude to all of these organisations for their support.

2. Preparations for the workshop

Initial planning began in the early part of 2015, when ASSAf offered to work with INGSA to co-host the event.

A programme committee was set up, comprising:

Sir Peter Gluckman (Chair) Chief Science Advisor to the Prime Minister of NZ and Chair of the INGSA Development Group; **Prof Roseanne Diab**, Executive Officer of ASSAf; **Prof Romain Murenzi**, Executive Director of TWAS; **Prof Julie Maxton**, Chief Executive of the Royal Society London; **Daan Du Toit** and **Cecil Masoka** of the South African Department of Science and Technology; **Prof Aggrey Ambali**, Head of Science and Innovation Hub, New Partnership for African Development (NEPAD); **Prof Mahama Ouedraogo**, Head, African Union Office of Science and Technology; **Prof James Wilsdon**, University of Sheffield and Vice-Chair, INGSA Development Group.

A series of objectives for the workshop were agreed:

- a) To enhance the capacities of individual African scientists in providing science advice to national governments and international bodies;
- b) To create an African network of science advice to government stakeholders that can serve as a platform for sharing best practices, and deliberating on challenges and solutions in the African science advisory landscape;
- c) To develop and share science advice principles and guidelines contextualised to Africa’s STI sectors.

On 22 September 2015, ASSAf issued a call for applications to attend the workshop, which was widely circulated across African science, national academy and science policy networks. ASSAf also made direct approaches to a handful of individuals with relevant experience, to encourage them to apply.



ASSAf call for application. See also http://www.assaf.org.za/index.php?option=com_content&view=article&id=229:call-for-applications-2015&catid=58&Itemid=224

The call had a five-week deadline of 30 October 2015, and was open to all researchers residing and working on the African continent. It made clear that priority would be given to those who:

- Have a science background (broadly defined to include natural and applied sciences, social sciences, humanities, engineering, health and medical sciences);
- Are affiliated to institutions of higher learning, academies of science, government/statutory/private research/advisory institutes;
- Can demonstrate the policy relevance of their area of research or professional expertise.

More than **400 applications** were received by the deadline date, and almost 200 more followed in the days afterwards. This gives some indication of a level of unmet demand and interest in these debates across Africa's research communities, which we hope INGSA can help to address.

3. Participants

A review panel was appointed by ASSAf to sift the applications and identify a shortlist of around 45 names. These were then invited to attend the workshop, with all of their travel, hotel and related costs covered by INGSA and its partners. Participants were also given the option of staying on for the IAP science advice conference, which followed afterwards.

In total, there were **51 attendees** at the workshop:

- **36 participants**, drawn from **14 Africa countries**: Cameroon, DRC, Egypt, Ethiopia, Ghana, Kenya, Malawi, Nigeria, South Africa, Sudan, Tanzania, Uganda, Zambia and Zimbabwe;
- The remaining **15 attendees were facilitators or observers**, from INGSA, ASSAF, DST, ICSU, UNESCO, Royal Society and the JRC.



Group photograph of participants and facilitators at the INGSA-ASSAf workshop, Hermanus, 26-27 February 2016.

Participants brought a diverse mix of disciplinary and professional backgrounds, with examples including:

- *Research Scientist, Scientific and Industrial R&D Centre, Zimbabwe;*
- *Associate Professor in Genetics, University of Pretoria, and former co-chair, Global Young Academy;*
- *Executive Secretary of the Uganda National Academy of Sciences;*
- *Lecturer and researcher in forestry at Copperbelt University in Zambia;*
- *Associate professor of veterinary epidemiology at Addis Ababa University;*
- *Professor of analytical chemistry at the University of Lubumbashi (DRC);*
- *Research Scientist at the Nuclear Chemistry and Environmental Research Centre, Ghana Atomic Energy Commission;*
- *Lecturer and researcher in the Department of Food Science and Technology, Federal University of Agriculture, Abeokuta, Nigeria;*
- *Associate professor of physical chemistry, Cairo University, and co-chair of Egyptian Young Academy of Science;*
- *Senior conservation professional and consultant to the government of Cameroon;*
- *Member of the executive committee at Sudanese National Academy of Sciences, and of the Technical Advisory & Ethical Research committee, Federal Ministry of Health;*
- *Senior Lecturer, School of Public Health and Family Medicine, University of Cape Town;*
- *Programme Officer at the Department of Gender, Ministry of Gender, Children and Social Protection (MoGCSP) Accra, Ghana.*

In terms of gender diversity, of the 36 participants, **22 (61%) were male** and **14 (39%) were female**. Of the 15 facilitators and observers, 8 (53%) were male and 7 (47%) were female.

4. Agenda and approach

At the planning stage, it was agreed that the workshop would be case-study based, with few formal talks, to encourage interaction and learning through facilitated group discussion.

An initial set of seven draft cases was developed by the core INGSA team, and reviewed by ASSAf and the workshop programme committee. Four cases were then selected for use in the workshop and were developed further. These are semi-fictionalised accounts of realistic policy dilemmas, designed to highlight important questions, tensions and opportunities for scientific advice in different settings and situations. Copies of the four cases used – *Nicoteria*, *Panderia*, *Swamperia*, *Carboneria*.

The agenda (shown below) began with a welcome dinner on the evening 25 February and ran through two full and intensive days, ending with a final dinner on 27 February.

THURSDAY, 25 FEBRUARY

18:30 – 20:30 Welcome dinner, hosted by ESASTAP 2020 (Strengthening Technology, Research & Innovation Cooperation between Europe & South Africa), Arabella Hotel

DAY ONE: FRIDAY 26 FEBRUARY

08:30 – 08:45 Welcoming Remarks
Prof. Roseanne Diab, Executive Officer, ASSAf

08:45 – 09:30 ASSAf Orientation and introductions

09:30 – 09:45 Dr Thiambi Netshiluvhi, Director (Senior Specialist): Policy Analysis and Advice, Department of Science and Technology
Overview: Africa's Science Advice Landscape

9:45 – 10:45 Prof. Sir Peter Gluckman, Chair of INGSA/Chief Science Advisor to Prime Minister of New Zealand: *'Principles of Science Advice'*

10:45 – 10:55 Group Photo Session

10:55 – 11:15 MORNING BREAK

11:15 – 12:30 Case Study One: *Nicoteria*
Plenary discussion

12:30 – 13:30 LUNCH

13:30 – 14:00 Dr Heide Hackmann, Executive Director, International Council for Science:
'Social Science and Science Advice'

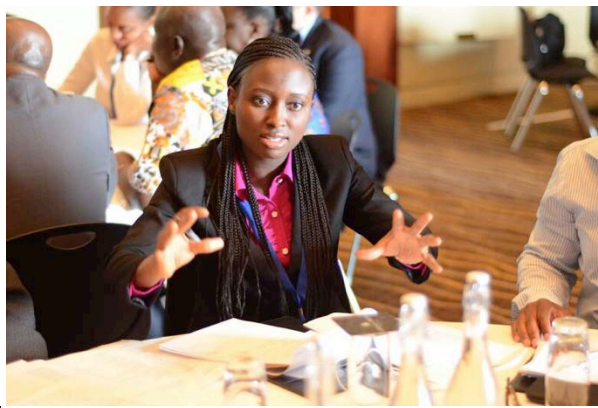
14:00 – 15:30 Case Study Two: *Panderia*
Plenary discussion, followed by group table discussion

15:30 – 16:00	AFTERNOON BREAK
16:00 – 16:45	Case Study Two: <i>Panderaia</i> . Continued group discussions.
16:45 – 17:15	Prof. James Wilsdon, Co-Chair INGSA and Professor of Research Policy, University of Sheffield: ' <i>Structures of Science Advice</i> '
17:15-17:30	Wrap up and reflections on Day One
18:30-21:00	Dinner hosted by NZ High Commission and ASSAf

DAY TWO: SATURDAY 27 FEBRUARY

08:30 – 09:00	Coffee	
09:00 – 09:10	Welcome back.	Recap of Day One and look a
09:10 – 09:50	Dr Flavia Schlegel, Assistant DG, Natural Sciences, UNESCO: ' <i>Science and the sustainable development goals</i> '	
09:50 – 10:30	Case Study Three: <i>Swamperia</i> Plenary discussion	
10:30 – 11:00	MORNING BREAK	
11:00 – 12:30	Case Study Three: <i>Swamperia</i> Continued group table discussion.	
12:30-12:50	Plenary discussion on: ' <i>The Role of Academies in Science Advice</i> '	
12:50 – 13:30	LUNCH	
13:45 – 15:45	Case Study Four: <i>Carboneria</i> Plenary followed by table discussions and roleplay exercise.	
15:45 – 16:00	AFTERNOON BREAK	
16:00 – 17:00	Concluding reflections, facilitated by James Wilsdon and Peter Gluckman: ' <i>Summary, lessons and principles. What next?</i> ' Followed by presentation of certificates to participants.	
19:00 – 22:00	Braai Dinner	Venue: Laughing Waters, Arabella Ho

The first case was discussed in plenary, to ensure the entire group were engaged and confident with the format. The remaining three cases were discussed in groups, with support and input from facilitators, and conclusions were presented back in plenary. The cases were sequenced so as to increase in complexity over the course of the workshop, with optional extra elements, such as roleplay. At the Hermanus workshop, only the final case included a roleplaying element, which was positively received, with participants taking on the role of various stakeholders in a complex debate over biochar.



Group work and plenary feedback



The final role-play exercise, with participants representing different stakeholders and Sir Peter Gluckman playing the part of the President of Carboneria.

In the last part of the workshop, there was an opportunity for reflection on what participants had gained from the two days, how they could apply some of these insights in their work and advisory roles, and what more INGSA could do to strengthen training, capacity and networks for science advice across Africa.

Participants expressed enthusiasm for the idea of an INGSA-Africa chapter that could carry some of these opportunities forward, and volunteers to lead this were invited to contact INGSA and ASSAf after the meeting. Finally, certificates were presented to participants, to reflect their successful completion of the workshop training programme.

5. Feedback from participants

Evaluation forms were given to all participants, and 29 completed forms were returned. All of these expressed satisfaction with the workshop and 19 rated it as 'excellent'.

Participants were particularly positive about the case-based approach; the range of topics covered; and the approach taken by the facilitators.

Areas for improvement highlighted included: adding an extra day to make the agenda less intense; and allowing participants more free time to network.

To supplement the information on the evaluation forms, we also conducted more in-depth interviews with four participants after the workshop. Their comments included:

"There's an expectation that we as younger scientists will get involved in policy, but one very quickly realizes that there are certain things that you don't understand about this world, that there are certain skills that you're not trained in as a natural scientist. So I came to this workshop to learn more about the structures of science advice, about how different countries approach it. But also how those who are experienced in the field see their roles as advisers. And that's exactly what I got. A lot of what I heard are things that I've read about – the idea of being an honest broker, rather than a lobbyist, for example – but the workshop was incredible in giving me a far clearer sense of the structures and principles of science advice."

Bernard Slippers, Associate Professor in Genetics, University of Pretoria; former co-chair, Global Young Academy; founding member, South African Young Academy of Science.

"Science advice is high on the agenda in South Africa. But how to do it well is something that we need to focus on more. How to we get those who are working at the cutting edges of science into the policy process. For me, the INGSA workshop was a great opportunity to explore how young scientists can operate and advocate in the science policy arena. Taking a more structured approach to science advice – its principles, its content, its methods – is hugely important...INGSA has real potential to become the go-to network for training, so that academies and others can turn to it in developing the skills of the next generation of scientific advisers. Together we can grow and multiply the number of scientists who are engaging with policy and who are trained in how to provide advice. What this workshop shows is that science advice is a skill and it can be taught. There's a ready audience out there who want to learn and want to participate."

Tolu Oni, Senior Lecturer, Division of Public Health Medicine, University of Cape Town; Co-chair, South African Young Academy of Science

“In Egypt, and across many African countries, science advice doesn’t play a major role in policy, in government. I hope this can change. The atmosphere is changing: we’re seeing a new presidential advisory council being appointed in Egypt...I like to think that we can lead a real shift. INGSA can make a real contribution here, by training people more systematically in the principles and frameworks of science advice, and preparing people to play a role in future.”

Sameh Soror, Assistant Professor and Director, Centre for Structural Biology Research, Helwan University, Egypt. Co-chair, Global Young Academy.

“I found the last two days to be a real eye-opener in terms of getting information and knowledge from people who are actually practicing science advice, like Peter, who is adviser to the PM of New Zealand, using his own experience. The methods that were used, keeping people interactive, were very interesting. The case studies resonated with experiences in a lot of countries, so were very engaging. And then there was a lot of opportunity for networking, which is hugely important. In Africa, we are seeing scientists getting more involved in policy debates at an earlier stage in their career, in part because of the young academies. I think INGSA can play a strong role in terms of capacity building and training of younger scientists. We need more honest brokerage in Africa, and I hope INGSA can help us to achieve that.”

Voster Muchenje, Research Professor at the University of Fort Hare (UFH). Co-chair, South African Young Academy of Science

6. Follow-up activities

Immediately after the workshop, an **email list** was set up, and has been used actively by participants and INGSA. All participants have also been added to the **INGSA membership database**, and several have been invited to participate as speakers or rapporteurs at the next INGSA international conference, in Brussels on 28/29 September 2016.

The most significant outcome has been a decision to move ahead with the **establishment of INGSA-Africa**, as a continental/regional chapter of the wider network.¹ Five participants have volunteered to form an initial **steering group** for INGSA-Africa: Christian Acemah (Uganda); Oladoyin Odubanjo (Nigeria); Tolullah Oni (South Africa); Sameh Soror (Egypt); and Renee Street (SA). Prof Mohamed Hassan has agreed to assist as mentor and patron.

We will invite the chapter’s steering group to nominate a member to sit on INGSA’s main steering group. INGSA’s office and ICSU’s Regional Office for Africa will provide ongoing support to INGSA-Africa as it develops.

These plans were shared with participants in a letter on 10 March 2016 (see over), and INGSA’s office will remain in regular contact with the group, with a view to creating a loose “alumni network” of those who have completed workshops.

A Guardian article by James Wilsdon on 8 April 2016 announced the establishment of INGSA-Africa to a wider audience: <https://www.theguardian.com/science/political-science/2016/apr/08/a-new-network-for-science-advice-in-africa> (see over).

¹ <http://www.ingsa.org/ingsa-news/new-south-african-capacity-building-workshop/>

10 March 2016

Dear Participants

Thank you for your very committed engagement in the INGSA capacity building workshop in Hermanus a few days ago. Thank you also for your comments and feedback, which was most positive in helping us continue to learn and improve our capacity learning workshops.

As discussed we have established the INGSA-Africa chapter of the network. Christian Acemrah (Uganda), Oladoyin Odubango (Nigeria), Tokuluh Ooi (SA), Sameh Soror (Egypt) and Renee Street (SA), have volunteered to form the steering group for the chapter and Prof Mohamed Hassan has agreed to assist as mentor and patron. We will invite the chapter's steering group to nominate a member to be on INGSA's own steering group. The INGSA Office and ICSU will provide ongoing support to the Chapter.

We envisage that the steering group will develop ideas to progress INGSA in Africa and to build the network within Africa, both from graduates of this workshop and others that are in the planning stage. We will establish a specific website for the Chapter. In the meantime I am sure that both the steering group and ourselves will be grateful for your ideas on how to take matters forward.

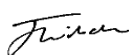
Over the next few weeks we will prepare a manual for the four cases in case you would wish to use them in your own countries. We would only wish that you acknowledge their source and encourage those you interact with to join the INGSA network.

We will be in contact again within a few weeks.

With best wishes



Peter Gluckman
Chair, INGSA Development Group



James Wilsdon
Vice Chair, INGSA Development Group



INGSA operates under the auspices of ICSU. The INGSA secretariat is currently hosted by The Office of the Prime Minister's Chief Science Advisor, New Zealand
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A new network for science advice in Africa

There are plenty of reasons to be upbeat about the prospects for science and research across Africa. The next challenge is to bring more of that evidence and expertise into decision making.



Four researchers who attended the science advice training workshop in Hermanus, South Africa in February 2016. From left to right: Vorster Muchenje, Tolu Oni, Bernard Slippers and Sameh Soror. Photograph: James Wilsdon

Last month, some of the brightest talents and most exciting advances in African science were on display at the Next Einstein Forum. This landmark meeting, initiated by the African Institute of Mathematical Sciences, and held in Senegal, brought together almost 1000 researchers, entrepreneurs, businesses and policymakers from across Africa to celebrate and support the continent's most promising early-career researchers.

Follow-up letter sent to workshop participants on 10 March 2016.

Guardian article on INGSA-Africa, published on 8 April 2016

Following the positive response to the Hermanus workshop, a second African workshop is planned for **Senegal in March 2017** (mainly for Francophone participants), with support from the Government of Quebec and Wellcome Trust. **Remi Quirion, Chief Scientist of Quebec**, will lead the facilitation team for this workshop. Additional workshops have been proposed for **Addis Ababa** and **Cairo/Alexandria**, and INGSA's office is now in discussion with potential partners for these, with input also from the INGSA-Africa steering group.

7. Lessons for INGSA

This was the first full capacity-building workshop INGSA has run (although a joint event with Future Earth/ICSU at Lake Como, Italy in May 2015 allowed us to pilot certain aspects). Overall feedback from participants, and from those who attended the workshop from ASSAf, DST, ICSU, UNESCO and the Royal Society, has been hugely positive.

So it seems appropriate to consider the Hermanus workshop as a success. But there are plenty of lessons to draw, which we can use to further improve the design and delivery of future events. These include:

- **The importance of a strong, effective local partner.** ASSAf's contribution to the planning and delivery of the workshop, and to the recruitment and selection of participants, was crucial. Particular thanks to Prof. Roseanne Diab, Dr Siyavuya Bulani, Phyllis Kalele, Kholani Mbhiza and the rest of the ASSAf team, who did an outstanding job of coordinating the logistics and practical arrangements. ***Any future workshops will need a similarly impressive and efficient local partner.***
- **The case-based approach works well.** Participants were very positive about the use of case studies, and the emphasis on group discussion, rather than lots of keynote or plenary sessions. But developing properly-contextualised case studies requires a significant investment of time. We also need to consider the variety of teaching materials and methods we use. Rather than using purely fictional cases, future workshops might benefit from a mix of fictional and actual cases. ***INGSA's office and network needs to invest in producing more such materials, ideally making them openly available online for wider access, teaching and capacity-building.***
- **Experienced facilitators can help to ensure a high-quality of discussion.** Ultimately it is the participants who make or break an event like this, as so much relies on their insights, energy and enthusiasm in group discussions. But having one or two facilitators who can set the scene, and support the groups with advice based on first-hand experience, is also important in ensuring a high quality of discussion. Ensuring a greater diversity of facilitators, in terms of nationality, gender, ethnicity, discipline and sector is also key. ***As a priority, INGSA needs to invest in 'training the trainers' so we have a larger group of facilitators who are ready, able and willing to lead future workshops.***