HOUSES OF PARLIAMENT
PARLIAMENTARY OFFICE OF SCIENCE & TECHNOLOGY

Use of Scientific and Technological Evidence within the Parliament of Uganda

Executive summary

Dr Chandrika Nath, Adviser, Parliamentary Office of Science and Technology, UK.

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Background

Science and technology are increasingly recognised as crucial issues for the Parliament of Uganda – as illustrated by the setting up of the Parliament's first Standing Committee on Science and Technology in 2002.

In 2008, to strengthen its handling of Science, Technology and Innovation (STI), the Ugandan Parliament entered into a collaboration with the UK Parliamentary Office of Science and Technology (POST) and hosted an initial brainstorming session for what has become known as the 'POST Programme'.

To inform the activities of this Programme, the Parliament of Uganda, POST and the Ugandan National Academy of Sciences (UNAS) conducted research into how parliament currently handles STI. The findings are set out in this report. Its intended audience goes beyond the POST Programme, as our research has brought to light issues that are important to other stakeholders and that extend beyond STI.

Methodology

The methodology for our research (conducted during the 8th Parliament (2006-2011) consisted of:

- an expert analysis of 17 STI-related policy briefings produced by parliamentary researchers;
- a survey of 121 MPs from across parliament in the first quarter of 2009;
- semi-structured interviews with 7 MPs, 9 staff from the Department of Library and Research and 3 clerks;
- a focus group with the Standing Committee on Science and Technology, including 5 MPs and the Committee Clerk; and
- desktop research: analysis of the number and type of briefings produced by the Department of Library and Research and of selected parliamentary debates on various topical STI issues (namely atomic energy, plastic bags and the use of the pesticide DDT in malaria control).

This report

This report provides:

- an overview of how effectively the Ugandan Parliament has handled STI to date;
- suggestions on where there are gaps in Parliament's handling of STI; and
- possible options for addressing those gaps.

It sets out our findings for:

- overall handling of STI by parliament;
- the Standing Committee on Science and Technology;
- the Parliamentary Research Service within the Department of Library and Research; and
- the Parliamentary Library within the Department of Library and Research.

The findings indicate the 'state of play' at the time the data were collected (i.e. the first quarter of 2009, when the POST Programme had just begun). Interviews with 12 library and research staff in early 2011 on the impact of the POST Programme indicate that the majority of staff feel that the programme has had a positive effect on their and their department's understanding of STI issues. It could, therefore, be beneficial to repeat some of the elements of this baseline study (such as the policy briefing review) to assess progress since the data were collected. However, due to the long timescales required for capacity building activities to have an impact, the findings presented in this report are still broadly relevant in the 9th Parliament. Note that the programme of POST support comes to an end in mid-2012. The Parliament of Uganda therefore needs to identify its own ways of addressing current gaps, building on lessons learned from the POST programme.

Context for research

Although there are many barriers to progress, the profile of STI has increased in Uganda in recent years.

- **There has been an increase in spending on research and development**: total spend rose from USh. 31,870 million in 2003/04 to USh. 82,249 million (0.24 per cent to 0.45 per cent), and the number of published articles authored or co-authored by a Ugandan scientist or engineer has increased tenfold from about 30 a year in the early 1990s to more than 300 per year.[1]
- **The Cabinet approved Uganda's first National Policy on STI in** 2009. It sets out strategies to overcome key issues affecting the STI sector in Uganda, such as low levels of coordination and inadequate infrastructure, as well as providing guidance in diverse areas such as intellectual property rights, traditional and emerging technologies, and public awareness of STI.
- **Since 2002, there has been a Standing Committee on Science and Technology,** but there are also a number of other committees whose work has an STI element, for example the Standing Committee on HIV/AIDS and the Sessional Committees on ICT, Physical Infrastructure, Natural Resources, and Agriculture, Animal Industry and Fisheries.
- **Parliament is increasingly required to handle policy relating to STI across a wide range of areas**, from environment and energy through to public health and education. However, of 93 bills passed by the 8th Parliament, only 8 had a particular focus on STI, and of 23 bills still pending at the end of the 8th Parliament, 7 were for STI. It is possible, therefore, that bills requiring a greater understanding of STI take a longer time to get passed.

Key findings

Parliament-wide issues

[1] Brar S., Farley S.E., Hawkins R. and Wagner C.S. (2011) *Science, Technology and Innovation in Uganda: Recommendations for Policy and Action,* World Bank, Washington, USA, Annex 1.

Key observations

- Our survey of MPs indicates widespread enthusiasm for science and technology, with over 90 per cent saying that they are interested in STI. This finding applies across MPs of both genders and all educational backgrounds.
- There is widespread willingness among surveyed MPs to take action to improve the Ugandan Parliament's handling of STI.
- Two-thirds of surveyed MPs say that there is a need for more parliamentary debates on science issues and that debates should be more evidence-based.
- However, this positive attitude does not always translate into action: STI do not get much attention on the floor of the house, and debates are poorly attended.
- There is a lack of clarity in the coordination of STI within parliament, according to those MPS who were interviewed.

Underlying factors

- On the whole, MPs have low levels of scientific literacy, although the majority still consider themselves 'well informed'.
- Most MPs do not think that science and technology are relevant to daily life.
- There are limitations in the availability of information on STI for MPs.
- In some cases, MPs find it difficult to distinguish reliable scientific evidence from unreliable evidence.
- Institutional mechanisms for sharing information within parliament – such as order papers – are weak.
- The Standing Committee on Science and Technology has low visibility.

The Standing Committee on Science and Technology

Key observations

- It is widely acknowledged that parliamentary committees on science and technology have a role to play in national development.
- Since its inception, the Standing Committee on Science and Technology has been active in monitoring, evaluating and assessing activities in public institutions and other bodies engaged in national science and technology development.
- The Committee plays a key role in raising awareness of key STI issues within parliament, through workshops and seminars and, since 2008, the POST/UNAS led scheme to pair scientists and MPs.
- However, in terms of reports produced and debates generated, the Committee's visibility in parliament is in fact fairly low.
- One-third of surveyed MPs think that the Committee does not have enough input into parliamentary debate. However, one-third hold the opposite view, and one-third have no opinion.
- The Committee has an extremely broad mandate compared to committees in other countries, and progress in areas such as the scrutiny of bills with an STI component has been limited. Some would like to see more activity in this area.
- Although the Committee has good links with stakeholders such as UNAS, UNCST and other institutions, there is room for improvement in its visibility outside of parliament, for example in terms of media coverage and information available online.

Underlying factors

- The Committee functions on limited resources: there are low levels of staffing, funding and space for meetings, for example.
- Committee members have a wide range of other commitments which often take priority over the work of the Science and Technology Committee.

- There is a need to forge stronger links with other parliamentary committees in Uganda.
- A lack of clarity in the handling of STI means that the Committee's role is not fully exploited.
- Unlike many of its international counterparts (for example in the UK House of Commons), Ugandan parliamentary committees do not conduct formal inquiries, which are a good way for committees to raise their profile and increase impact.

The Parliamentary Research Service

Key observations

- MPs see the Parliamentary Research Service (PRS) as a key resource: over half of our surveyed MPs claimed they visit at least once a month for information on STI. Their preferred method of communication is face to face.
- MPs praise the high levels of motivation and dedication of research staff.
- The main concerns of MPs related to the turnaround time for research requests and the need for more scientific expertise in the Division.
- The quality of reports produced by the PRS varies significantly. Reviewers identified a number of common areas for development, including a need for greater objectivity, better exploitation of available sources of information (such as online resources) and improved understanding of the basic scientific principles underlying issues being debated.

Underlying factors

- Staff have limited access to information on science and technology.
- There are limited resources in the Parliamentary Library, staff have difficulties in accessing in-country information on STI and have poor links with the external STI community.
- There is a need to improve researchers' information literacy skills and to improve their knowledge of current STI.
- At the time of writing, there was no central repository for storing reports.
- There were few members of staff with a background in science and technology or academia.
- Researchers face the challenge of having to address a broad range of topics in their work.
- The high workload and stress levels of staff are exacerbated by low staffing levels and possibly by duplication of efforts and a need for more effective information-sharing practices.
- There is limited time for quality control of reports, such as internal and external peer review.
- There are few mechanisms through which staff can obtain constructive feedback on research from MPs.

The Parliamentary Library

Key observations

- Library users praise the motivation and dedication of Library staff.
- MPs regard the Library as a key source of information on STI.
- Although over half of MPs say that they visit the Library for STI information at least once a week, this figure seems high, and it cannot be verified as the Library only holds limited information on usage.
- Users say the Library lacks STI-related materials. In particular, they feel, it should have more up-to-date publications such as newsletters and policy-relevant briefings from key institutions. STI develop quickly, so books are not necessarily the best source of information.
- Users and librarians are not accessing the full range of online resources that are available. It is possible that such resources are largely academic and not directly relevant to the requirements of parliamentarians and staff. However, there may also be a lack of awareness of what resources are available.
- There is some evidence that, owing to developments such as information literacy training, the availability of information on STI has improved since our research started.

Underlying factors

- Library staff sometimes have difficulty identifying reliable sources of information on STI.
- MPs often expect answers to their questions to be found in books and are not aware of online resources.
- Staffing levels and high workloads can affect productivity.
- Some interviewees say there is limited space in the Library.
- Some interviewees say internet connections are not adequate for staff to make full use of online resources when needed.

Possible ways forward

Below we list some possible ways of addressing current gaps in skills, knowledge & resources, and processes within the Parliament of Uganda, as identified by this study. Rather than see these as a blueprint for the way forward, we suggest the Ugandan Parliament, its staff and donors view it as a prompt for discussion, bearing in mind the ODI's principles for parliamentary strengthening. The conclusions section of the full report gives details of gaps identified, and of where POST, UNAS or other partners have already undertaken some activities to address these gaps. It should be noted that the programme of POST support comes to an end in mid-2012. Parliament therefore needs to identify its own ways of addressing current gaps, building on lessons learned from the POST programme.

Skills gaps

- Conducting training for MPs on oral communication (focusing on STI);
- Conducting training for MPs on information literacy and scientific method;
- Conducting training for clerks in effective report writing;
- Conducting training for staff on information literacy, summarising skills and science communication (already undertaken);

Knowledge and Resource gaps

- Conducting science induction sessions for new MPs;
- Producing an briefing paper on "science in the new parliament" for new MPs;
- Conducting further research into quality of scientific evidence used in debate;
- Holding workshops and seminars to boost interest of STI in parliament (already underway);
- Recruitment of short term interns from academic community (under exploration);
- Pairing of MPs and scientists to enhance links between Ugandan staff and external stakeholders in science and technology MP (already underway);
- Improving display of hard copies of STI related newsletters, periodicals and other publications in parliamentary library, as well as investigating options for electronic access;

Process gaps

- Increase range of information available online about activities of Science and Technology Committee;
- Forge closer links with journalists e.g. through Ugandan Association of Science journalists;
- Seek advice from secretariats of Science and Technology Committees in other parliaments on best practice and scope of Committee mandate;
- Explore options for a centralised electronic repository to promote more effective sharing of information;
- Investigate demand for online catalogue for Library;
- Review options for peer review/quality control mechanisms for internal reports.