

Workshop report: Where's the evidence? How to inform policy and processes for improved energy access in Nigeria

On Thursday June 7, 2018, Dr Temilade Sesan, a current INGSAs Research Associate, hosted an energy policy workshop in Abuja titled 'Where's the evidence? How to inform policy and processes for improved energy access in Nigeria.' The workshop was the first of two planned for the one-year duration of her INGSAs research project titled 'Strengthening the contribution of scientific evidence to household energy policymaking: The case of Nigeria'. The immediate objectives of the workshop were to open up lines of communication among energy researchers, practitioners and policymakers, and to establish a platform for jointly framing the perception of scientific evidence among these stakeholder groups. In the short to medium term, the findings from the workshop are expected to provide a reference point for engaging with the process of developing the National Energy Master Plan (NEMP) and the National Renewable Energy and Efficiency Policy (NREEEP), both of which are still in draft form. A longer-term objective of the workshop (as well as all the other components of the project) is to foster mutual trust and respect among different stakeholder groups in the energy sector, particularly between academic researchers and other suppliers of scientific evidence on the one hand and policymakers and practitioners on the other.

The workshop was divided into two main parts: a series of talks by a selection of energy and policy experts (three in all), followed by a question-and-answer session with participants; and a breakout session which required participants to share their experiences of applying evidence in decision-making situations on the job. The first talk, by Professor Willie Siyanbola of the Centre for Energy Research and Development, gave a broad overview of the inputs involved in the development of Nigeria's Science, Technology and Innovation policy, and highlighted the ways in which the application of scientific data and wide-ranging stakeholder consultation helped to improve the process. The second talk, by Dr Victor Osu of the Rural Electrification Agency, described the operationalisation of the country's rural electrification strategy (which is itself informed by a raft of energy-sector policies) and its impacts on household energy access in poor, remote communities.

The third talk, given by Dr Sesan, was aimed at getting participants to engage with some of the established scientific evidence on household energy poverty and access. The range of reactions to the talk – from surprise, to agitation, to skepticism – was itself evidence of the need for such engagement. Perhaps the most useful insight that emerged from the interactions following the talk was the realisation that there was far greater sensitivity in the room to 'lighting' energy poverty – the inadequacy of access to electricity among poor households – than there was to 'cooking' energy poverty. Even more problematically, some participants exhibited a tendency to conflate the two phenomena, in the process obscuring the peculiarity of the problems (and solutions) associated specifically with the latter. One of the more contentious pieces of evidence highlighted by the speaker was the finding, more or less established in the academic literature, that improved electricity access is not in itself a panacea for energy poverty. This assertion apparently goes against the grain of the popular wisdom among energy practitioners, and it took

a bit of back-and-forth to unpack the assumptions inherent in the belief that improved electricity supply will solve all the energy access problems of poor communities.

In reality, many studies have shown that increasing electricity supply to poor communities does not alleviate the most morbid aspects of energy poverty. This is because poor people find it extremely expensive to cook with electricity, and so they are more likely to keep cooking with the solid biomass fuels (wood, charcoal, etc.) that are responsible for millions of deaths around the world every year. The implications of this point are made weightier by its interconnections with SDG 7 (gender equality) and SDG 13 (climate action): exposure to the deadly smoke from biomass fires is greatest among women and girls; and the soot from those fires has been identified as a major contributor to global warming. Erroneously subsuming cooking energy solutions under electricity access therefore risks ignoring the realities of millions of women and girls (whose experiences of energy interventions often differ from those of men in the same context) and risks missing opportunities to address the unique threats to climate change presented by 'dirty' cooking. These observations underscore the need to get sound scientific evidence, which is often counterintuitive and nuanced, into mainstream policy and decision-making arenas. As explained later in this report, the next phase of the current project will be concerned with how this can be achieved practically in the context of household energy policy in Nigeria.

The second part of the workshop – the interactive breakout session – was designed to elicit participants' responses to the following prompts:

- What factors do you consider when choosing between (technology, project, policy) options? Can you rank those factors in order of importance?
- What sources do you consult when choosing between (technology, project, policy) options? Can you rank those sources in order of importance?
- What experiences have you had with scientific evidence / advice in the past? Were they good? Bad? Neutral? Give examples
- What would make you more likely to gather and apply scientific evidence in the future?

Participants were divided into three groups, representing the different stakeholder groups present: government departments (the Energy Commission of Nigeria, the Federal Ministry of Science and Technology, the National Bureau of Statistics, the Nigerian Electricity Regulatory Commission, the Rural Electrification Agency, and the Senate Committee on SDGs); local businesses and non-governmental organisations (Consistent Energy, Nigerian Alliance for Clean Cookstoves, Policy and Legal Advocacy Centre, and the Nigerian Academy of Science); and international civil society organisations (UNESCO, Power for All, GIZ, and the World Bank). This segmentation proved to be a useful exercise, as there were notable differences in the decision-making patterns reported by the three groups.

Although the main aim of the exercise was to tease out the factors involved in energy policymaking by government actors, the convener found it useful to broaden the scope of the discussion to include decision-making processes around technology and projects. This

expanded definition of policymaking presented an opportunity to contrast decision-making processes in the public domain with those of private actors, potentially revealing characteristics that might be unique to the former.

In response to the first question about the factors that they consider when faced with important policy decisions, the points raised by government actors include: the degree to which a proposal aligns with international agreements to which the country is a signatory; availability of funds with which to implement the policy; the degree of difficulty and complexity associated with implementation (so-called 'low-hanging fruit' are often prioritised); availability of local capacity to implement the policy; and the geographical spread / reach of the policy (the more diverse the beneficiary population, the better. This last point has proven to be critical in the context of Nigeria, with its highly diverse – and not always cohesive – population).

The second question inquired about the sources that government actors look to for guidance when making policies. The sources identified include: relevant laws and policies already in existence; development priorities expressed by the incumbent administration; best practices identified from other countries and contexts; and feedback from pilot projects. The last two sources in particular can be considered forms of evidence; indeed, as will be apparent from the responses of non-governmental actors discussed below, pilot projects appear to be highly favoured as a way to test the validity of policy (as well as technology and project) proposals. Tellingly, however, there was no specific reference to scientific evidence in any of the responses given by government actors. Instead, generic/mainstream sources of information such as the Internet, market surveys, newspaper articles, and official reports featured heavily on the list.

	Green group	Technology	PROJECT	POLICY
		Tech	Project	Policy
Factors		COST CAPACITY (Human) TECHNICAL SUSTAINABILITY: (Implementation) AESTHETICS	COST TIMESPAN Objective 2 Impact 1	International Commitment Funding low hanging fruit Capacity Geographical Spread / reach
Sources		Internet Reports of mkt Survey Newspaper OEM brochures CERTIFICATES	Organisation's website Reports Internet	Existing laws Policies Focus of govt in Power Int'l best practice Success Results of Pilot Project
Experiences		use of coal based for Energy Policy	model set up for renewable resources	with Energy policy in the past
EVIDENCE IN THE FUTURE	FOR Decision Making	POLICY Formulation	FOR Record Proposals	FOR REFERENCE

Figure 1. Summary of the responses of government actors to questions raised during the interactive breakout session

The responses of government actors to the questions about the experiences they have had with applying scientific evidence in the past, and their expectations for the future, were much vaguer (and seemingly beside the point) – suggesting that they have not had a lot of engagement with scientific evidence either way. This thesis requires further testing, however (perhaps through key informant interviews with special advisers and others working in similar roles), as it is not clear whether those in attendance at the workshop were best placed to respond to those prompts.

The international non-governmental organisations in attendance seemed more familiar with the idea of drawing on scientific sources when making policy decisions: in addition to authoritative sources such as government websites and national statistics, the participants cited ‘international publications’ and ‘journal papers’ as valid sources of information. Notably, though, there was no indication that they had any actual experience of using data from those sources: their responses to the question regarding the nature of their past experiences using scientific evidence seemed, like those of the government group, to be largely off the mark. However, those in this group were very clear on the qualities they expect of scientific data, namely, reliability, transparency, and accessibility. Overall, therefore, while it was difficult to tell the extent to which the household energy interventions of international NGOs in the country have been guided by scientific evidence to date, this group appeared to be better primed for engaging with the notion of evidence-informed policymaking than did the government actors.

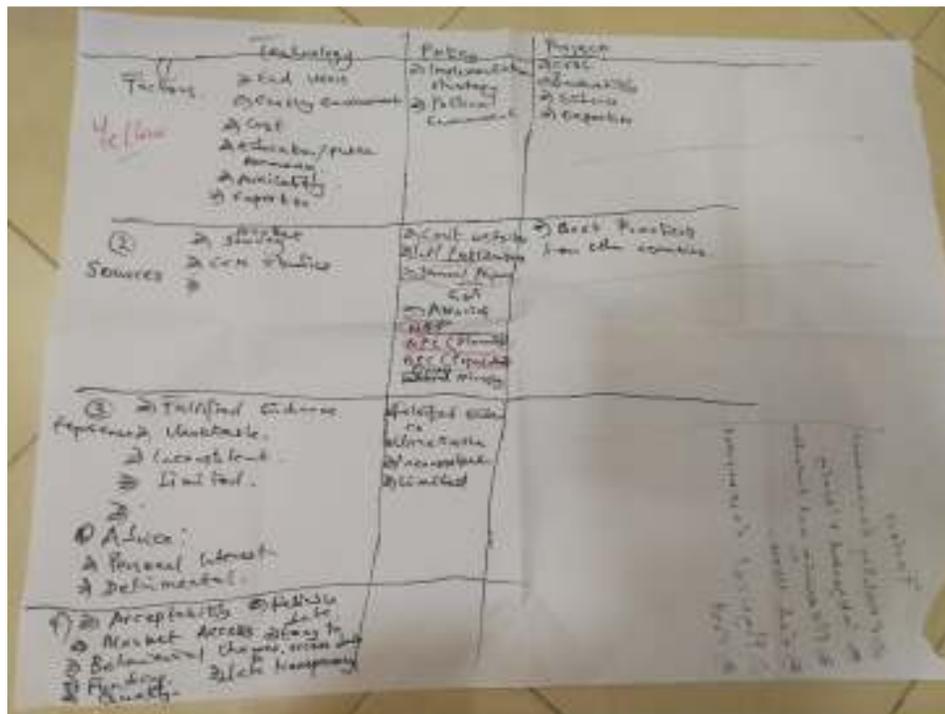


Figure 2. Summary of the responses of international NGOs to questions raised during the interactive breakout session

The group of local businesses and NGOs had in common with the government group a predilection for looking to pilot projects for evidence of what works. They seem to have learnt this from their experience of working in the local context: the Nigerian Alliance for Clean Cookstoves, for instance, decided to change tack after they realised that presenting government actors with facts and figures was largely a futile exercise. They began scoring some wins with policy makers only after they started implementing pilot projects and showing them to government actors as proof of concept. These organisations now proclaim the mantra that 'seeing is believing,' especially for government actors – and the latter agree. While this group listed scientific sources such as the 'existing body of knowledge' and 'stakeholder consultation' among their reference materials, it was clear that the emphasis in practice is on getting the attention of policy and government actors through 'show and tell' tactics.

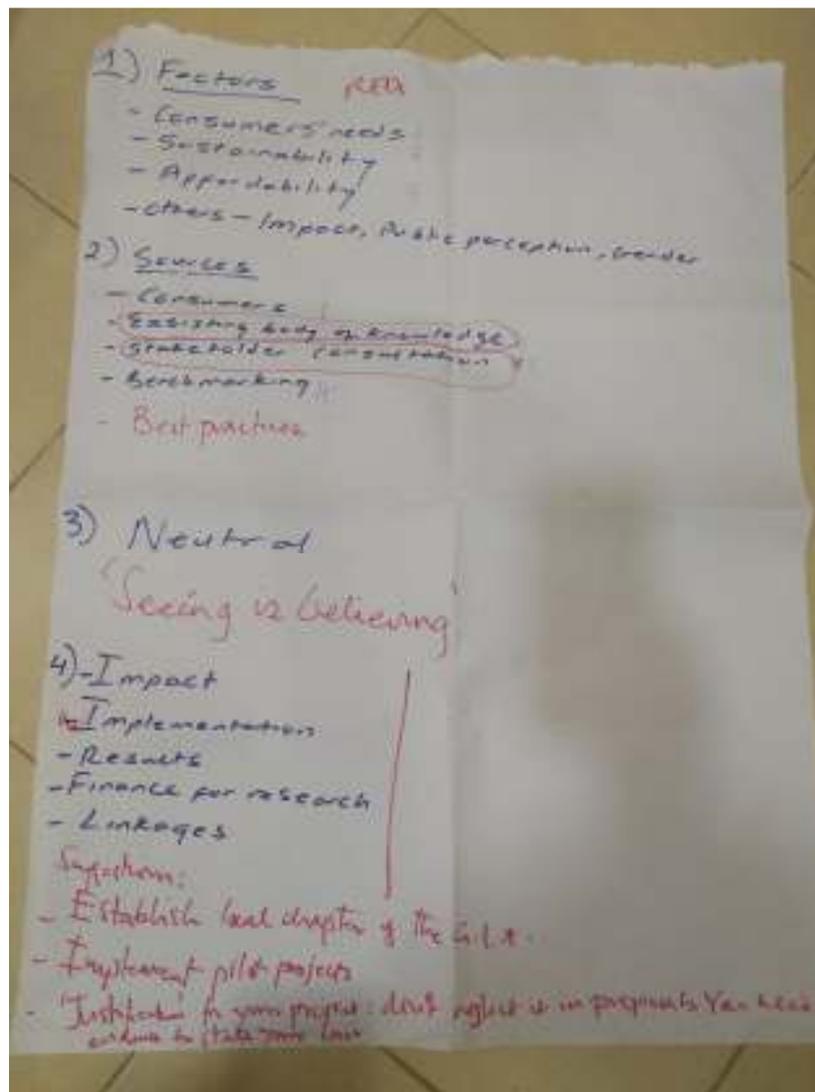


Figure 3. Summary of the responses of international NGOs to questions raised during the interactive breakout session

The experience reported by the local NGOs perhaps captures the key learning from the workshop: the prospect of influencing / informing policy in the household energy sector might at first seem unlikely, but it can be done if the approach and execution are right. As an example, a mid-level official from the Energy Commission of Nigeria cited an instance in which UNDP staff worked closely with senior management to overhaul gender-blind hiring policies and practices at the commission, with the result that female scientists and managers began to be systematically integrated into the commission's workforce at rates that were previously unheard of. This raises the question: how can the present research project get policy makers to productively engage with the evidence on household energy poverty and access, however incrementally? Very fittingly, this question was raised during the workshop by a participant from the Policy and Legal Advocacy Centre in Abuja. She thought some of the evidence on household presented by Dr Sesan had shock value, and – given her experience working as a policy advocate – she was keen to discuss how the key messages might be crafted and targeted to effect relevant policy changes. This point was made in another way later in the meeting by Professor Siyanbola, when he commented on the need to pay attention to how we communicate science to non-scientists who happen to be in decision-making roles. All this links to the idea, articulated in the literature on scientific advice, of employing storytelling techniques in presenting evidence to policymakers (e.g. Davidson 2017¹, Jones and Crow 2017²).

In this vein, and in line with the objectives that the project set out to accomplish, the next phase of the research will include the following components:

- A comprehensive review of the draft NEMP and NREEEP, to identify aspects (especially in relation to household energy) where existing scientific evidence could make a contribution;
- One-on-one interviews with key informants in relevant agencies (starting with the Energy Commission of Nigeria and the Federal Ministry of Science and Technology), expanding on the questions raised during the breakout session and scrutinising relevant aspects of the NEMP and NREEEP;
- A short documentary that tells the story of household energy poverty in Nigeria and makes a case for incorporating specific pieces of evidence into the draft policies;
- A policy brief that aims to sensitise government and private actors to the gaps between household energy policy and people's realities, and the role that scientific evidence can play in narrowing this gap;
- Use of the documentary and policy brief produced to engage relevant government actors at the Energy Commission of Nigeria, the Federal Ministry of Science and Technology and beyond;
- Documentation of the process of engaging government actors in the ways described above, the outcomes of this process, and the implications for scientific advice and policy studies.

¹ Davidson, G. (2017). Storytelling and evidence-based policy: lessons from the grey literature. DOI: 10.1057/palcomms.2017.93

² How can we use the 'science of stories' to produce persuasive scientific stories? DOI: 10.1057/s41599-017-0047-7