

Title: The politics of global assessments: the case of the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD)

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The politics of global assessments: the case of the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD)

Ian Scoones

The IAASTD – the International Assessment of Agricultural Knowledge, Science and Technology for Development – which ran between 2003 and 2008, involving over 400 scientists worldwide, was an ambitious attempt to encourage local and global debate on the future of agricultural science and technology. Responding to critiques of top-down, northern-dominated expert assessments of the past, the IAASTD aimed to be more inclusive and participatory in both design and process. But to what extent did it meet these objectives? Did it genuinely allow alternative voices to be heard? Did it create a new mode of engagement in global arenas? And what were the power relations involved, creating what processes of inclusion and exclusion? These questions are probed in an examination of the IAASTD process over five years, involving a combination of interviews with key participants and review of available documents. The paper focuses in particular on two areas of controversy – the use of quantitative scenario modelling and the role of genetically-modified crops in developing country agriculture. These highlight some of the knowledge contests involved in the assessment and, in turn, illuminate four questions at the heart of contemporary democratic theory and practice: how do processes of knowledge framing occur; how do different practices and methodologies get deployed in cross-cultural, global processes; how is ‘representation’ constructed and legitimised; and how, as a result, do collective understandings of global issues emerge? The paper concludes that, in assessments of this sort, the politics of knowledge needs to be made more explicit, and negotiations around politics and values, framings and perspectives, need to be put centre-stage in assessment design.

Keywords: science, knowledge, politics, participation, agriculture, assessment

Introduction

Global assessments have become all the rage. The International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) is one of many, coming on the back of the IPCC (International Panel on Climate Change), the MA (Millennium Ecosystem Assessment), the World Commission on Dams, the Millennium Project’s Millennium Development Goal Task Forces, among others. The IPCC even won the Nobel Peace Prize in 2007, the first assessment to do so.¹ All of

This paper has been produced as part of the on-going work of the Citizenship, Participation and Accountability Development Research Centre based at the Institute of Development Studies, University of Sussex. A longer version appears as IDS Working Paper 313 (<http://www.ntd.co.uk/idsbookshop/details.asp?id=1062>). I would like to thank colleagues in the ‘local-global’ working group, together with Jan Aart Scholte, for feedback on earlier versions of this paper, and Stephen Biggs, John Gaventa, Marcia Ishii-Eiteman, Janice Jiggins, Beverly McIntyre, Erik Millstone, Marcelo Saguier, and Rajesh Tandon, who provided detailed comments on different drafts. I would also like to acknowledge the comments of two anonymous reviewers for this paper. Finally, I would particularly like to thank the many people who were involved in the IAASTD process in different capacities I have discussed with over the last few years.

these attempt to combine ‘expert assessment’ with processes of ‘stakeholder consultation’, in what are presented as global, participatory assessments on key issues of major international importance. Such assessments contribute to a new landscape of governance in the international arena, offering the potential for links between the local and the global, and present ways of articulating citizen engagement with global processes of decision-making and policy. For some these are new regimes of governance, defining new relationships for international politics (Miller 2007, Mitchell *et al.* 2006). In many respects such assessments respond to the critiques of the top-down, northern-dominated, expert assessments of the past and make attempts to be both more inclusive and participatory in their design and process, offering new opportunities for mobilisation and the articulation of alternative knowledges in the global policy domain. But to what extent do they meet these objectives? Do they genuinely allow alternative voices to be heard? Do they create a new mode of engagement in global arenas? How do local and global processes articulate? And what are the power relations involved, creating what processes of mediation, inclusion, and exclusion?

Taking the case of the IAASTD, this paper explores these issues through a focus on the underlying knowledge politics of a global process. Four intersecting questions, at the heart of contemporary democratic theory and practice, are posed: how do processes of knowledge framing occur; how do different practices and methodologies get deployed in cross-cultural, global processes; how is ‘representation’ constructed and legitimised; and how, as a result, do collective understandings of global issues emerge? Drawing on a detailed analysis of the IAASTD process between 2003 and 2008, the paper argues that in such assessments the politics of knowledge need to be made more explicit, and that negotiations around politics and values must be put centre-stage. The black-boxing of uncertainty, or the eclipsing of more fundamental clashes over interpretation and meaning, must be avoided in order for processes of participation and engagement in global assessment processes to become more meaningful, democratic and accountable. Following Mouffe (2005), the paper offers a critique of simplistic forms of deliberative democratic practice, and argues there is a need to ‘bring politics back in’.

The International Assessment of Agricultural Knowledge, Science and Technology (IAASTD)

The overall purpose of the IAASTD, which concluded with a final plenary session in Johannesburg in April 2008 and the publication of the final reports in 2009 (IAASTD 2009a), was ‘to assess agricultural knowledge, science and technology in order to use it more effectively to reduce hunger and poverty, improve rural livelihoods, and facilitate equitable, environmentally, socially and economically sustainable development’.² No one could argue with that of course. But how was this ambitious aim to be realised?

The IAASTD was announced during 2002, and was initiated on five continents in early 2003 with a series of consultation meetings. Since then five regional reports and

¹ The Nobel Foundation. Nobel Peace Prize 2007, http://nobelprize.org/nobel_prizes/peace/laureates/2007/index.html (accessed, 23 June 2009).

² IAASTD. What is the International Assessment of Agricultural Knowledge, Science & Technology, IAASTD? http://www.agassessment-watch.org/docs/IAASTD_on_three_pages.pdf (accessed, 23 June 2009).

one global report were produced, all contributing to a synthesis and summaries for decision-makers for each continental and the global report. A total of 400 authors were recruited to write the reports, and an overall framework was hammered out in a series of meetings,³ a process overseen by a complex governance structure (Scoones 2008).

This process has been overseen by a complex governance structure. According to the IAASTD website (www.agassessment.org):

The IAASTD has an inter-governmental governance structure, which resembles that of the Intergovernmental Panel on Climate Change (IPCC), but contains a Bureau similar to the Millennium Ecosystem Assessment (MA) Board of Directors. The geographically based multi-stakeholder Bureau is, comprised of 30 government representatives [Sub-Saharan Africa (6); Latin America and the Caribbean (5); Central and West Asia and North Africa (4); North America and Europe (9); and East and South Asia and the Pacific (6)], 22 representatives from civil society [the private sector (6); non-governmental organizations (6); consumer groups (4); and producer groups (6)], representatives from 8 institutions, and 2 co-chairs. The co-sponsoring agencies serve as ex-officio members of the Bureau. The Plenary (i.e. the Panel of participating governments) elected the government representatives of the Bureau, with each region selecting its own members, taking into account areas of expertise and gender balance. Decisions are taken by the panel of participating governments and the Bureau, where appropriate. The Plenary is comprised of representatives from the member states of the 7 co-sponsoring agencies. At the first Plenary, the governments approved the scope, goals, structure (global and sub-global assessments), governance and management structures, budget and timetable for the IAASTD. At the conclusion of the IAASTD process, the Panel will be responsible for accepting the Full Report and for subjecting the Global and Sub-Global Summaries for Decision Makers to a final line-by-line approval in a session of the Plenary. The IAASTD has a distributed Secretariat with the major component being in Washington DC and other components in FAO (Rome), UNEP (Nairobi), and UNESCO (Paris). The Secretariat provides management and oversight of the project, as well as liaising with governments, civil society organizations and the Bureau to ensure project implementation. Other members of the distributed Secretariat include staff located at the Sub-global Management Entities. The intergovernmental process ensures ownership by governments, while the integrated Bureau allows the full range of stakeholders to meet as a single body creating opportunities for constructive exchanges and building consensus. (IAASTD 2009b)

A key role was played by the Secretariat, and particularly the co-chairs. They had to guide, cajole and facilitate the process. This was a major learning process, and one that involved some difficult decisions being taken. According to informants, heated debates took place over overall scope, framing, and what was an acceptable contribution from the beginning. The assessment overall was directed by Robert

³ Global authors' meetings were held in Turkey (November 05), Bangkok (May 06), Costa Rica (November 06), and Cape Town (June 07). Africa report meetings were held in Nairobi (January 06), Dakar (June 06), Addis Ababa (November 06), and Cape Town (June 07).

Watson (formerly Chief Science Advisor at the World Bank, now Chief Scientific Advisor at the UK's Department for Environment, Food and Rural Affairs). He has been the inspiration and driver behind the assessment, bringing his experience from the IPCC and MA to bear on this enterprise. Originally from the UK, and a chemist by training, he has had a high profile career at the forefront of science policy, particularly in the US, where he was an adviser to the Clinton administration.⁴ The co-chairs of the assessment are Kenyan Judi Wakhungu, director of the African Centre for Technology Studies in Nairobi, a geologist by original training and formerly Associate Professor of Science, Technology and Society at Pennsylvania State University and Swiss-born entomologist and World Food Prize winner, Hans Herren, who was director of the International Centre of Insect Physiology and Ecology (ICIPE) in Nairobi, Kenya from 1994 to 2005, and has since become the President of the Millennium Institute in Arlington, Virginia.⁵

The IAASTD had very substantial financial backing from a wide range of bilateral donors, UN organisations, and the World Bank, with a total budget of over US\$15m.⁶ With agriculture and technology rising up the development agenda again, many agencies saw this as an excellent opportunity to map out a way forward. A combination of a multi-stakeholder and an inter-governmental UN process appealed, as this offered the combination of inclusion and dialogue, including civil society and private business actors, as well as formal decision-making and buy-in by nation states. Was this perhaps the model for the future – picking the best of the IPCC and the MA and combining them in an approach to global decision-making that was at once scientifically sound, politically legitimate, and participatory?

A number of unique attributes are highlighted by the director, Robert Watson, including an advisory structure which encompasses governmental representatives as well as civil society; the 'inclusion of hundreds of experts from all relevant stakeholder groups'; an 'intellectually consistent framework'; a global, multi-scale and long term approach, resulting in 'plausible scenarios' to 2050; the 'integration of local and institutional knowledge'; and a multi-thematic approach, encompassing nutrition, livelihoods, and human health, linking science and technology issues to policies and institutions.⁷ As a multi-stakeholder process involving everyone from grassroots groups to scientists and representatives of large corporations, with the final product being signed by national governments, there has to date been no parallel. As such it provides fascinating insights into processes of participation and global engagement, and the implications this has for the contestation of global knowledge and the construction of global citizenship.

⁴ Robert Watson (scientists). Wikipedia entry, http://en.wikipedia.org/wiki/Robert_Watson_%28scientist%29 (accessed, 23 June 2009).

⁵ African Centre for Technology Studies, Governing Council's Profiles, <http://www.acts.or.ke/about/council/profwakhungu.pdf> (accessed 23 June 2009); Hans Rudolf Herren, Wikipedia entry, http://en.wikipedia.org/wiki/Hans_Herren (accessed 23 June 2009)

⁶ The formal hosts were the United Nations Food and Agriculture Organisation, the Global Environmental Facility, the United Nations Development Programme, the United Nations Environment Programme, the World Health Organisation, and the United Nations Educational, Scientific and Cultural Organisation. The UK Department for International Development was also a significant backer of the assessment.

⁷ See <http://www.agassessment.org>.

Tracing the local and the global: shifting spaces for rural citizen engagement

In tracing the linkages from the local to the global, some qualifications of these terms must be added up front. This shorthand can, as the paper will show, be potentially misleading. In discussions around the IAASTD, 'the local' is sometimes described in terms of the assessment regions, demarcating sub-Saharan Africa, a massive, diverse continent, as 'local'. The term 'local' is often used to conjure up reference to 'local people' or 'local – or indigenous - knowledge', often referring to poorer people that NGOs have worked with in the field, rather than the 'local' sites in Washington, Rome, or London, and their own very particular, culturally-located indigenous knowledges. Discussions with different people thus present 'the local' in very different ways, highlighting the contested nature of the term.

But, whatever the interpretation, 'the local' is of course always mediated and subject to fluid interpretations. In certain strands of NGO discourse, it is seen to represent the good, more progressive alternative, in contrast to the perceived problems with global, modern, and western versions. Thus, 'the local' is constructed in opposition to 'the global', but with a definite ideological and political complexion. In the same way, 'the global' is seen in different ways. For some it is simply international – issues that cut across nation states; yet for others it represents a particular form of (globalised) capitalist relationship, most associated with North America and Europe. For some involved in the IAASTD, the global was thought about as the centre – the location of the secretariat and decision-making with a Washington DC address. This 'centre of calculation' (cf. Latour 1987) is seen by some as the hub of the networks of knowledge and power around which other perspectives must revolve.

Thus in tracing global and local linkages all these versions – and more – must be taken account of. This is not just a geographical tracing (from particular places to the world), or one of levels (from the small-scale to the large), but one of social relationships (from the less connected/networked to the more), interconnectedness, power, and politics (from less to more powerful and influential). This, in turn, presents some important methodological and interpretive challenges. What follows is based on a number of sources, including around 30 interviews with IAASTD participants, detailed analyses of the available documentation on the IAASTD and related websites, including each of the drafts of the reports, along with all reports from the consultation meetings, as well as numerous presentations and supplementary papers prepared for these.⁸ In particular the analysis has sought to gain insights into the overall 'narratives' and 'framings' of the assessment – what stories are being told and what assumptions are embedded in the statements being made? And what, indeed, are the stories that are not being told, or are being side-lined, discredited, or obscured?

The IAASTD, as with the other global assessments, is seen by its proponents as a brave attempt at engaging a diverse group of stakeholders on a key topic with major global ramifications. In this regard it is a major departure from previous models of global expert decision-making, where attempts at dialogue and debate were largely absent and processes were open only to an exclusive, expert elite. In this way, the IAASTD chimes with a central theme of the more optimistic strands of the literature on globalisation and civil society. These suggest that, with the opening up of opportunities for engagement at the global level, and the increasing connections between local level actors and issues and those in global arenas, the opportunities for

⁸ Some of this work was carried out by Saul Butters who sorted, collated, and extracted material from a vast array of web material and through the different drafting stages.

participation and influence increases through a 'global civil society' (Edwards and Gaventa 2001, Keane 2003, Archibugi 2008). With this opening up, processes become more complex and require increasingly sophisticated forms of mobilisation by activists and movements in order to engage (Tarrow 1994). But the net result is a pluralisation of knowledges, claims and inputs into cosmopolitan global contexts, resulting, it is argued, ultimately in a more democratic and accountable system of governance and policy-making (Held and McGrew 2002, Heater 2002).

The IAASTD could be seen as one avenue for such new styles of engagement, knowledge production and claim making; and indeed the rhetoric associated with it suggests that this is in part the wider aim. A vision of cosmopolitan diversity and democratic decision-making is portrayed, governed by rules and procedures allowing rational decisions and objective science to prevail. A closer look at the processes and practices of the IAASTD, however, reveals some major limits to such a vision. In particular it highlights, following Fischer (2000), the important contemporary tensions between professional expertise and democratic governance, and, as Jasanoff and Martello (2004, 5) argue, that, with the of reassertion of local knowledge claims in global environmental processes, 'the construction of both the local and the global crucially depends on the production of knowledge and its interactions with power'. Tracing these knowledge-power interactions is thus central to any understanding of local-global engagements. The aim of this paper to go beyond the well-rehearsed rhetoric of participation, inclusion, and citizen engagement and ask what have been the practice, experience, and underlying politics of the IAASTD?

In order to explore these questions, the paper now turns to two areas where substantial debate emerged: the use of scenarios to define alternative possible futures and the role of genetically-modified (GM) crops.

Framing the future: the use of scenario modelling

Different scenarios of 'plausible futures' had been used extensively in the Millennium Ecosystem Assessment which was undertaken between 2001 and 2005, again under the leadership of Robert Watson. The MA offered four scenarios of the future – Global Orchestration, Order from Strength, Techno-garden and Adapting Mosaic⁹ – around which possible options and trade-offs were constructed. A number of those involved in the MA, including Watson, had thought that this approach had allowed a searching analysis of alternatives, opening up alternative thinking and bringing together natural and social science perspectives in an overall assessment. For these reasons, the use of scenarios was seen as a central tool for the IAASTD from its inception.

A number of key players in the IAASTD thought the scenarios work could, in this case, be taken a step further including a more quantitative assessment of options. Making use of the quantitative models developed by IFPRI, notably the IMPACT (International Model for Policy Analysis of Agricultural Commodities and Trade) model looking at the impact of different agricultural development options (Rosegrant *et al.* 2001), the idea was to extend the MA approach and ground it in some hard numbers. With this in mind Mark Rosegrant from the International Food Policy Research Institute (IFPRI, one of the CGIAR Centres based in Washington DC) and colleagues from the UN Food and Agriculture Organisation in Rome were drafted in

⁹ Millennium Ecosystem Assessment. Guide to the Millennium Assessment Reports, <http://www.millenniumassessment.org/en/index.aspx> (accessed, 23 June 2009).

to come up with some ideas, and funds from the Australian government were made available explicitly for this work.

At the Rome meeting in 2005, Rosegrant, together with FAO colleagues Monica Zurek and Prabhu Pingali, laid out his ideas in a series of powerpoint presentations.¹⁰ This took the four MA scenarios and showed how options could be evaluated using the IMPACT model and data from each of the IAASTD assessment regions. It was an ambitious vision, one led by a technical, quantitative framework which defined limits and possibilities. At the Bangkok meeting of May 2006, the IAASTD Scenario Working Group reported on progress, proposing a series of chapters of the final report on the scenario work. These defined in turn a framework (involving drivers, plausible futures, and models), a series of storylines to 2050, and an analysis of scenario outputs.¹¹

As a core part of both the global and regional reports, the scenarios work became hotly debated from the beginning. Many feared that the scenarios, and particularly their quantitative incarnations, were narrowing the framing of the assessment, excluding other alternatives through the assumptions being made in the process. The scenario group was heavily dominated by the IFPRI modelling expertise, but others found the approach intimidating and exclusive, so dense and complex were the models that underlay the computer runs. Indeed, the peer reviews of the scenarios work were heavily critical. One participant (personal communication, August 2008) commented,

Many of us considered that in any truly ‘scientific’ assessment, the IFPRI models would not have been used at all, given the technical weaknesses identified, and given that there are more advanced models available that are better able to handle distributional impacts, gendered impacts, and energy flows/ecosystem service issues; and that do not rest on outmoded assumptions of neo-equilibrium economics . . . and so on.

All regional groups were expected to engage with the scenarios work, but this proved difficult for the Africa group as it was deemed that only those with certain expertise should get involved. As a consequence the role of the scenarios in the Africa work became highly contentious. As one author observed,

In the Africa group we had intensive debate about the scenarios. Where did they come from? Did they apply to our contexts? Many of us did not like them, but the process imposed them. We had our own scenarios group, but there are not many of us who have expertise in doing scenarios so it was run by the Washington group.¹²

For others among the NGO/civil society groups, the whole process was geared to exclude their perspectives and alternatives. Benny Haerlin, the Greenpeace

¹⁰ See Presentations at the 18–22 July Scenarios Workshop, Rome, Italy by Mark Rosegrant, IFPRI: Scenario development for IAASTD and Monica Zurek and Prabhu Pingali (FAO): The Global Scenarios of the Millennium Ecosystem Assessment.

¹¹ IAASTD Scenario Working Group. Status. May 3 Bangkok meeting. www.agassessment.org/docs/Rosegrant-Scenarios-final.ppt (accessed, 23 June 2009).

¹² Interview, University of Zimbabwe, 2006.

representative on the Bureau, commented in a note from the Montpellier meeting in 2005 posted on the NGO website tracking the process:

In addition to our ongoing criticism of the ambiguous character of this scenario exercise (between science, fiction and dire presentation of political assumptions as scientific findings) working on the further development of the scenarios seems to be one of the big challenges for NGOs in this context . . . (Haerlin 2005)

The critique of the scenarios work continued, although the group continued to operate. By the time of the Bangkok meeting in 2006, the scenario names had changed, but not a lot else. Mapping on to the MA scenarios, the four scenarios were now: policy and markets (global orchestration), local learning (adapting mosaic), green technologies (techno-garden), and self sufficiency/sovereign interest (order from strength). The IMPACT and IMAGE models were used in particular to run some of the quantitative analyses, but many remained unimpressed by the computer wizardry.

The Greenpeace representative on the Bureau recognised their potential value, commenting:

They are extremely fashionable now in international and government circles and play an increasing role in informing decision makers at this level. They certainly do have merits with respect to widening the horizon of participants as to how the world may look like in 20 to 50 years time, i.e. beyond the time limits of serious predictions.¹³

As he noted in 2005, much was up for grabs, and he argued to his NGO/civil society constituency the importance of engaging with the scenario process:

Selecting and nominating ‘broadly forward thinking persons’ who could make a critical and constructive impact especially on this last meeting [of the scenario group] will be crucial. A lot of the methodology seems to be still open to discussion, especially the question what can be seriously modelled by computing available quantitative data (see indicators) and which parts should be ‘narrative’, i.e. just described in a qualitative manner.¹⁴

Participants from the NGO community argued that the use of quantitative scenario models was excluding and narrowing, and not open to rigorous debate by multiple stakeholders. They argued that alternative perspectives – including alternative quantitative representations – could be offered if the conceptual frame of the scenarios had been appropriate to their experience. According to one commentator (personal communication, September 2008), they offered ‘twenty-first century critiques of twentieth century tools and assumptions’, including offering alternatives based on advanced quantitative approaches. By contrast, the original modelling team argued

¹³ Benny Haerlin (to complement the official minutes of the meeting) Report on the 2nd meeting of the IAASTD Bureau in Montpellier, May 24 - 28th 2005, 31 May 2005. http://www.agassessment-watch.org/docs/montpellier_report.pdf (accessed, 23 June 2009).

¹⁴ Benny Haerlin (to complement the official minutes of the meeting) Report on the 2nd meeting of the IAASTD Bureau in Montpellier, May 24 - 28th 2005, 31 May 2005. http://www.agassessment-watch.org/docs/montpellier_report.pdf (accessed, 23 June 2009).

that, for legitimacy and authority, the use of well-tested models and their scenarios was critical, as this gave a grounding that was objective and clear.

This division, not surprisingly, has persisted, with the dividing lines often clearly drawn between different camps. In the writing groups and in the review process this equally became evident. What was rigorous evidence for making a case? Were data required or were case studies sufficient? In their attempt to develop an evidence base for their arguments from the beginning the NGO community requested readers of the website (and numerous listservs supporting a variety of causes) to send in ‘success stories’ of sustainable agriculture to expand the ‘grey literature’ source material accepted under the IAASTD principles and procedures.¹⁵ The hope was to influence the argument through examples and grounded experience, rather than abstract reasoning, quantitative analysis, and the formal literature.

How was this debate dealt with in the end? After much debate, the scenarios work was dropped from the final chapter outlines. While the final drafts showed echoes of this earlier work, a different framing had emerged which rejected the narrow assumptions of the proposed scenario models, much to the disappointment and annoyance of the scenario group leaders. Many IAASTD participants argued that developing scenarios could prove useful, but only if agreement could be achieved on the up-front framing. This had been achieved for the MA, but remained highly contested for the IAASTD. As one informant (personal communication, September 2008) put it: ‘It was more than a quantitative versus qualitative exchange It is a pity from my viewpoint that there was not a different groups of people doing the scenario work as it could have been done in a different way’.

The failure to achieve agreement on the scenarios work highlighted the tensions inherent in the process – both between different knowledge framings and different practices of knowledge-making. The hope had been that scenarios work would offer a focus, bringing diverse contributions together. The intensely contested knowledge politics meant this convergence did not happen. The end result is, as many have commented, a bit of fudge: what someone described as a ‘lowest common denominator’ analysis, with bits of everything mixed up in an ‘unsavoury cocktail’.¹⁶ For some this is the consequence of attempts at consensus when the politics of the process are not made explicit and controversies, dissent and debate are not surfaced and explicitly addressed – or even identified. For others this is an inevitable outcome of an intensive and inclusive deliberation, which unavoidably surfaced political sensitivities, but which had to be finally cast in a language that allowed diverse governments to sign off on the document. Yet in the debates around the quantitative scenario modelling, dissent and objection were possible and, although untidy, the final result, perhaps contrary to initial expectations, was not the one the most powerful would have wished. Thus, through the assessment, power relations, conflicting views, positions, and interests had to be confronted – from the peer review discussions around the scenarios to the fraught scenes at the final plenary when the US delegation fought to water down conclusions.

Confronting controversy: GM crops

¹⁵ ‘Real-life experiences - can you contribute? In order to achieve as wide a consensus as possible, Greenpeace is encouraging the inclusion into the assessment of the experiences of farmers and NGOs working in related fields in the developing world.’ From Farming Solutions web page, available from: <http://www.farmingsolutions.org/intro/content.asp?id=2>.

¹⁶ Interview, London, June 2007.

Perhaps the biggest controversy that dogged the IAASTD process was that surrounding GM (and specifically transgenic) crops. When the assessment was being proposed in 2002, this was a raging debate particularly in Europe and across NGO and civil society groups around the world. While some from mainstream scientific institutions and biotechnology corporations dismissed this uproar as a diversion, one that was not based on sound understandings of science and one that resulted in the undermining of poverty reduction and development by withdrawing new scientific and technological opportunities, it was a debate that would not go away.

Many in the NGO community feared that the IAASTD was simply going to be a front for the backers of GM crops and that the enlistment of NGOs and civil society groups under an umbrella of participation and consultation was going to provide an illegitimate justification for recommending GM crops be central to future agricultural R&D strategies globally. Given the keen interest of some important industry players, as well as some major GM advocates within the CGIAR system for example, this was, given the timing, probably a justified fear. For example the pro-biotech, industry-funded website run by the ISAAA argued that the IAASTD would provide a scientific assessment of biotech crops, and so perhaps ‘proof’ of their utility (ISAAA 2006).

Among the NGO groupings, there was much debate as to whether this was simply a process of cooption. The launch of the agassessment-watch website, with regular inputs from Greenpeace and PANNA, was an indication of the caution, as were the comments made by a number of key players in the international NGO community about the IAASTD. For example, in a presentation to the UK’s Department for International Development in 2003, Patrick Mulvany of the UK Food Group presented a civil society perspective, and, while welcoming the initiative, offered some important cautions.¹⁷

Following the report of the steering committee and the subsequent first plenary session in Nairobi,¹⁸ alongside the 30 government representatives, six members of NGO/civil society groups had accepted invitations to be on the Bureau of the assessment (including Greenpeace International, the Pesticide Action Network, and Practical Action), and so were central to the overall governance. But so had representatives from ‘industry’ (including Syngenta and Unilever), ‘consumers’ (including the Center for Science in the Public Interest and Consumers International), ‘producers’ (including International Federation of Agricultural Producers and the International Federation of Organic Agriculture Movements), and ‘institutions’ (including the Third World Academy of Sciences, the World Conservation Union (IUCN), the CGIAR, and CAB International). This group of 60–30 government, 30 non-government – was not an easy group to convene, let alone get to agree on anything. A co-chair of the assessment reflected,

¹⁷ Mulvany, P. The role of agricultural science and technology in reducing hunger, improving livelihoods and increasing economic growth: CSO views. Presentation at the Linnean Society, 25 March 2003 http://www.ukabc.org/iard/NGO_DFID_Ag/sld001.htm (accessed, 23 June 2009); see also UK Food Group, Views from international CSOs participating in the Dublin Meeting, World Bank consultative meeting about a global agricultural science and technology assessment, Dublin, 6-8 November 2002, http://www.ukabc.org/iard/Dublin_final.pdf (accessed, 23 June 2009).

¹⁸ IAASTD. Final Report of the Steering Committee for the Consultative Process on Agricultural Science and Technology, An Assessment of Agricultural Science and Technology for Development, 12 August 2003, http://www.agassessment-watch.org/docs/final_report.pdf (accessed, 23 June 2009). IAASTD. Report of the First Plenary Meeting of the IAASTD, 30 August – 3 September 2004, Nairobi, Kenya, http://www.agassessment-watch.org/nairobi_minutes.html (accessed, 23 June 2009).

This was a difficult time. No one trusted anyone else. X kept walking out. It was very disruptive, and we could not make much progress for a while. We had to be patient. The GM issue was a diversion. We had to get down to the real issues.¹⁹

While the GM debate continued to be discussed, and remained often the ‘elephant in the room’, the overall framework and approach of the assessment cast the debate much wider. Indeed, by framing the overall debate in relation to broader questions of agricultural knowledge, science, and technology (AKST) within a loose framework that looked fundamentally at outcomes relating to poverty reduction and environmental management, a much larger – some would say poorly focused – discussion could take place. This was framed not in terms of whether GM crops are somehow ‘good’ or ‘bad’, but what combination of technologies make sense given the diverse future requirements of different people’s needs in different parts of the world. Thus the overall framing, and the decentralised process, managed, at times, to get away from the narrow perspective of the GM debate dominating discussion at that time by either firmly pro or anti camps. Debates centred on whether new GM crops met the exacting IAASTD goals on the basis of well-documented evidence. The challenge, of course, was that much talk of new biotechnology application in agriculture, by the science establishment and the corporates alike, is one of prospect and promise. The evidence from the field is weak and limited. The argument presented is that ‘if only companies are given the freedom to operate, then all sorts of panaceas for the world’s ills will be unleashed’. This is countered by the argument that current evidence does not stand up to scrutiny, and a highly precautionary stance must be applied to future options. Wider questions of corporate control, intellectual property and biosafety were also introduced as arguments against a simple endorsement of GM crops. A stalemate therefore quickly emerged, with fundamentally different framings competing with each other.

The sense among Bureau members interviewed was that the GM issue was not the one to confront; yet it persisted through the writing and reviewing process with attempts by different groups to insert elements of their positions. The final global synthesis report ended up quite equivocal and is reflected in the summary which states,

A problem-oriented approach to biotechnology R&D would focus investment on local priorities identified through participatory and transparent processes, and favour multifunctional solutions to local problems. These processes require new kinds of support for the public to critically engage in assessments of the technical, social, political, cultural, gender, legal, environmental and economic impacts of modern biotechnology.²⁰

The sub-Saharan Africa summary for decision-makers was even more circumspect:

¹⁹ Interview, Sussex, September 2007.

²⁰ IAASTD. Executive Summary of the Synthesis Report. IAASTD Intergovernmental Plenary in Johannesburg, South Africa, 7-11 April 2008, http://www.agassessment.org/docs/SR_Exec_Sum_280508_English.htm (accessed, 23 June 2009).

Genetic engineering is considered by some to have important ramifications for productivity, but some of its uses and impacts are hotly contested. Contamination of farmer saved seed, and threats to biodiversity in centers of origin, are key concerns with respect to biotechnology and genetic engineering in particular. The environmental risks and evidence of negative health impacts mean that SSA's [sub-Saharan Africa's] ability to make informed decisions regarding biotechnology research, development, delivery and application is critical²¹.

There are different interpretations (inevitably) of this final outcome. Some view this as a fudge, a failure to address the issues; while others view this as a sensible way forward, one that parks an unhelpful debate and moves on. Certainly the private sector company representatives involved in GM technology found it unacceptable and stormed out of the process in late 2007 before the conclusion, provoking a storm of controversy, and much frustration among certain writing teams who had been subject to foot-dragging delays over months.²² A representative of CropLife International, a biotech industry umbrella body, indicated that this decision was prompted by 'the inability of its members to get industry perspectives reflected in the draft reports' (*Nature* 2008). In a clearly heart-felt opinion piece for the *New Scientist*, Syngenta scientist Deborah Keith (2008) explained why she, along with other industry representatives, walked out:

Despite our active participation, the draft IAASTD report does not adequately represent the contributions of plant science to sustainable agriculture. . . . The decision was not taken lightly, given our commitment to agricultural development and sustainability. But there was blatant disregard for the benefits of existing technologies, and for technology's potential to support agriculture's efforts to meet future crop needs. I think this was in part because the differences between various participants' perceptions about these technologies, and the scientific facts, were not maintained and highlighted. Sadly, social science seems to have taken the place of scientific analysis.

Of course this sort of naive appeal to a particular set of 'scientific facts' and a dismissal of what she calls 'social science' has been typical of many interventions by the biotechnology industry over time, but the impasse that this created, with the industry lobby unable to countenance a compromise framed by interests other than their own, proved a big, and late, stumbling block, allowing certain governments to pull back from the process and back their industry lobbies.

²¹ Markwei, C., Ndlovu, L., Robinson, E and Shah, W., Sub-Saharan Africa Summary for Decision Makers, Final Plenary Johannesburg, April 2008. Food, Agriculture and Natural Resources Policy Analysis website, http://www.fanrpan.org/documents/d00522/IAASTD_summary_decision_makers.pdf (accessed, 23 June 2009).

²² CropLife America News Release, 'CLA finds IAASTD report 'seriously lacking', criticizes failure to recognize modern agricultural practices', April 14 2008, <http://www.croplifeamerica.org/viewer.asp?pageid=246> (accessed, 23 June 2009) and CropLife International (2008). See also *Nature* (2008), *Nature Biotechnology* (2008), Stokstad (2008), and a commentary on the media response to IAASTD at Bioscience Research Commentary Project (2008).

Although approved by 57 countries, the final document remained unsigned by the US, Canada, and Australia, with the UK, in the end, signing up.²³ Objections are contained in the annexes of the agreed documents. The Canadian government, resorting to a similar argument about ‘objectivity’, complained that ‘there remain a number of assertions and observations that require more substantial, balanced and objective analysis’.²⁴ Many in the NGO community believe that the real reason for the reluctance of certain countries to sign up was the pro-GM position of key governments and their unwillingness to back a document that, if not explicitly anti-GM, is certainly not gung-ho in favour.²⁵ This is apparent, for example, in the US objection noted in the Annex to the Global Summary for Decision Makers: ‘the USA does not believe that there is sufficient balance in reflecting the use/range of new technologies, including modern biotechnology in Key Findings 10 and 11’.²⁶

Despite the failure of some governments to sign up, the conclusion of the final plenary session and the majority agreement of the final document by governments from across the world was the scene of exuberant celebrations by the NGO grouping who had worked so hard to influence the process. The press releases highlighting particular passages of the final document emphasising how ‘the old paradigm of industrial, energy-intensive and toxic agriculture is a concept of the past. The key message of the report is that small-scale farmers and agro-ecological methods provide the way forward’.²⁷ In numerous press interviews, you-tube clips, and podcasts, Watson himself argued that ‘business as usual is not an option’.²⁸ In an explicit attempt to broaden the debate about agriculture beyond production, Executive Director of the UN Environment Programme, Achim Steiner, stated at the opening of the inter-governmental plenary in April 2008:

Agriculture is not just about putting things in the ground and then harvesting them . . . it is increasingly about the social and environmental variables that

²³ House of Commons written ministerial statements, June 9 2008, International Development, http://www.publications.parliament.uk/pa/cm200708/cmhansrd/cm080609/wmstext/80609m001.htm#column_6WS (accessed, 23 June 2009).

²⁴ IAASTD (2008). Global Summary for Decision Makers http://www.agassessment.org/docs/Global_SDM_050508_FINAL.pdf (accessed, 23 June 2009).

²⁵ Phone interview, UK, 2008.

²⁶ IAASTD (2003). Global Summary for Decision Makers, http://www.agassessment.org/docs/Global_SDM_050508_FINAL.pdf (annex, note 2) (accessed, 23 June 2009).

²⁷ IAASTD Watch (2008) ‘A new era of agriculture begins today International agriculture assessment calls for immediate radical changes, 15 April 2008, available from: <http://www.agassessment-watch.org/docs/Civil%20Society%20Statement%20on%20IAASTD.pdf>. Also press release from Greenpeace (2008). This line was picked up in a range of press commentary at this time (see Scoones 2008).

²⁸ See for example: IAASTD Report (2008), <http://www.youtube.com/watch?v=B-0B4Z-7A4s> (accessed, 23 June 2009); The Guardian (2008) ‘Clearly we have not achieved our goals’, April 15 2008 <http://www.guardian.co.uk/environment/audio/2008/apr/15/vidal.food.shortage?popup=true> (accessed, 23 June 2009); The Guardian (2008). UN body urges agriculture reforms to stave off food crisis, April 15 2008. <http://www.guardian.co.uk/environment/2008/apr/15/food.unitednations1> (accessed, 23 June 2009).

will in large part determine the future capacity of agriculture to provide for eight or nine billion people in a manner that is sustainable. (Steiner 2008)

But was this change of tune and the promotion of a integrative, holistic vision really local voices finally being heard in the international arena? Was this the genuine success of an inclusive, deliberative process? Or was this rather another type of selective, global expertise getting the upper hand – through hard work, diligent campaigning, and the deployment of alternative forms of elite expertise? The next section looks at the interaction between diverse sources of expertise in the IAASTD process, and the way such knowledge-making in turn constructs notions of citizenship.

Experts and citizens

The assessment process has seen diverse forms of expertise becoming engaged. What has this revealed about the relationships between experts and citizens, and how have diverse forms of citizenship been practised in such local to global engagements? NGO activists engaging with the IAASTD have laid out some of the challenges. Marcia Ishii-Eiteman from PAN North America reflects,²⁹

Key to the success of the Assessment, from a civil society viewpoint, will be the extent to which it accurately reflects the voices, experiences and priorities of small farmers around the world, and provides an analysis of corporate industrial agriculture's failings as a strategy to reduce hunger and improve rural livelihoods. This in turn depends upon our abilities as sustainable agriculture and social justice movements to put forward authors who will critically assess the impacts of powerful public institutions such as the World Bank and the World Trade Organization as well as the private sector on the generation, access and use of knowledge, science and technology. To the extent that the Assessment reflects the knowledge and concerns of small farmers, it will provide civil society organizations (CSOs) with an important advocacy tool for specific campaigns as well as for the long-term movement towards social justice and equitable and sustainable development.

At the same time, as Romeo Quijano, PAN Philippines' representative on the Assessment's Advisory Bureau, argues:

We must always be acutely conscious of the fact that the balance of forces are stacked largely in favour of the dominant corporate model of agriculture. The discussions on hunger and poverty hardly go into the realm of power relations and the underlying socio-political and economic forces that are major determinants of what kinds of AKST (Agricultural Knowledge, Science and Technology) are generated, distributed, used and accessed and who are the main beneficiaries.

. . . a major challenge is how to correctly inject and project the grassroots perspective in the Assessment, given the fact that most progressive farmer and

²⁹ Ishii-Eiteman, M. (2005). The IAASTD: Advances and Challenges for Civil Society, http://www.panna.org/resources/gpc/gpc_200508.15.2.13.dv.html (accessed, 23 June 2009).

peasant organizations are not participating in this exercise. We should aim for maximum articulation and public dissemination of the core issues being discussed, and carry out a broad and intensive public awareness campaign on the issues being debated. The civil society organizations that are participating formally in the Assessment -- as authors and members of the Bureau and design teams -- must continuously reach out to peasant groups who are left out of the process and strive to reflect their perspectives on the key issues.

Here an explicit perspective is laid out about how to link local and global processes through the intermediation of civil society representatives. The talk is of 'injecting grassroots perspectives' and 'reaching out to peasant groups', while at the same time quite clearly specifying in advance an agenda about what progressive views should be -- regarding industrial agriculture, trade regimes, and so on. This, as NGO players involved in the assessment admit, is a highly positioned mediation role, one that potentially carries much power and influence, and, with it, responsibility. In interviews, such individuals argue pragmatically: if we don't do it, no one will. They argue that the choice to engage was strategic, with the aim, as explained above, to use the Assessment as a mobilisation tool in the future, to help push forward positions that they hold dear, in alliance with the 'progressive movements' who had been left out of the process, or who had chosen not to engage. The sense that the civil society groups were entering an open, deliberative space where rational negotiation of consensus would emerge was often far from their conception. This was a highly political setting, dominated by powerful groups, deploying powerful methods (like scenario models) which can act to undermine alternatives, and they needed to mobilise to deploy some form of countervailing power.

For many the choice to engage with a mainstream, World Bank-funded assessment, where the corporate sector, international research organisations and donors had a major role, was a difficult one. For many years -- and particularly around the GM crops issue -- a stance of confrontation had been adopted, with some agrarian movements -- notably La Via Campesina -- consciously avoiding direct interaction, and so the dangers of co-option, with formal inter-governmental processes such as this. While such movements remained on the outside of the IAASTD, there were many connections between movements and NGO players inside the assessment process. This presented some tense moments, especially over some of the major points of contention discussed earlier, but overall a sense of unity and purpose was maintained through a lot of hard work and some highly effective communication efforts. The politics of engagement was thus constructed through a continuously interacting 'insider' and 'outsider' balancing act. External pressure from campaign groups and movements helped keep up the pressure at the same time as persistent efforts from within by bureau members, authors, and reviewers sustained internal momentum. Although not organised systematically, these interactions proved highly effective in keeping the debate open, even in the face of substantial countervailing forces from corporate and government players.

Getting involved, and nominated as an author or reviewer, was critical. The nomination process which took place during 2004 was somewhat opaque, but, according to the guidelines, nominations from all key stakeholders -- from government to industry to NGOs -- were possible. With the first call for authors, PANNA in particular organised a wide call for people to get involved during mid-2004, both through listservs and direct approaches, arguing that the assessment offered an important opportunity for civil society engagement and awareness raising around

issues of corporate control and agribusiness interests, as well as highlighting the potentials for more sustainable forms of agriculture. The review of the drafts was seen as another key juncture for a wider civil society engagement. The Greenpeace Bureau member sent out a request to a wide network in September 2006. In a widely-circulated email, he comments,³⁰

The production of this first draft was, not surprisingly, a highly contentious endeavour, and in some cases chapter authors have not yet agreed on the contents or analyses put forth by co-authors. Thus you will find at this stage a mix of viewpoints, perspectives, arguments, assumptions and types of evidence put forth, as well as some contradictory findings, and a massive tension between the more conventional econometric, technocratic and production-oriented analyses, and those emphasizing environmental, social and political issues such as governance, equity, rights, ecosystem integrity and ‘services’, local and indigenous knowledge and rights, and the multi-functionality of agriculture.

The primary objective of the first review is to identify main gaps, flaws and contradictions in analysis, lack of referral to key bodies of literature, and to critique the presentation of controversial issues (e.g. impacts of conventional agriculture; the role of transgenic biotechnology in achieving ‘sustainability and equitable development’ goals; ‘scientific’ basis of policy formation (whose science, whose technology); relevance of LEISA [low external input agriculture], organic and alternative agriculture; IPR [intellectual property rights], trade, investments, etc.). We hope that reviewers will not hesitate to point out flaws in the draft (as well as any strengths), as this will be immensely helpful to those of us on the inside.

The issues around which there was an expectation that civil society groups would comment was clear – rights, governance, ecosystems, indigenous knowledge, organic/alternative agriculture, intellectual property, trade and so on. Through the Ag Assessment Watch site, PANNA in a call for ‘real reviewers’ has provided a guide for how to respond, offering editorial suggestions as well as requests to provide more input on particular themes.³¹

In international assessment processes of this sort much of the hard work comes in the review and editing process. Here the minutiae of textual differences are discussed, and a particular wording and pitch is required. A (perhaps) apocryphal story

³⁰ Subject: Call for review of UN/World Bank ag assessment (IAASTD), From: Benedikt Haerlin, To: GENET-forum, 1 September 2006, http://server1.netinf.ro/pipermail/mediu_ngo.ro/2006-September/006643.html (accessed, 23 June, 2009).

³¹ Pesticide Action Network North America (PANNA) (2006). A Road Map for Reviewers: a detailed outline of selected chapters of the first draft of the Global Report of the IAASTD, with commentary and unofficial notes provided in italics by Emily Adams and Medha Chandra. 4 September 2006, PANNA: San Francisco and IAASTD-Watch ‘Why and how to review the draft Assessment. Call for real experts: Some advice on why and how to review the 2nd draft of the IAASTD Why do reviews matter? What will happen to comments that are submitted? October 2007, <http://www.agassessment-watch.org/review.html?Page=Bureau&ItemID=7> (accessed, 23 June 2009).

suggested that the US government had employed a thousand people in the US Department of Agriculture and USAID to go through the final documents, picking up sections, paragraphs, even words which their negotiators would dispute in the final sessions before any text was agreed. Like UN treaties and conventions, the diplomatic process of square-bracketed disagreement and free text agreement was followed. Engagement at this level of detail was new for some of the NGO and activist participants, usually excluded from formal governmental negotiations, so they had to learn the tricks of the trade, and become involved in the fine detail. As one informant put it: ‘Our work is unrecognisable in the final version: the odd bit here and there, but often not the meaning’.³² Another (personal communication, August 2008) countered: ‘This is part of the re-shuffling of understanding that is the positive outcome of multi-stakeholder dialogues and efforts to create something new together’. The internal dynamics of author groups was critical, along with the capacity for effective, inclusive facilitation.

But to what degree does this sort of process allow for the ‘injecting’ of alternative, grassroots perspectives from farmers themselves? How does ‘the local’ get represented in ‘the global’? And what kinds of knowledge politics emerge? In discussions with a variety of participants in the assessment, a number of themes were raised.³³ First, everyone recognised that, because of the way the IAASTD was organised, ‘real’ farmers and their organisations did not really get a look in – whether at the early consultation stages in the regions (see Scoones 2008 for discussion of the Africa case) or subsequently. Some regarded this as a fundamental design flaw of the whole process, undermining the legitimacy of the effort as a whole; others saw this as a probably necessary consequence of convening such a process, but one which allowed space for representation by NGOs and other civil society organisations. For some this mediation role was not a problem: these were people who worked on the ground in different locations and so could reflect the concerns of farmers on the ground. Links between the NGO groups and wider agrarian or environmental movements, perhaps with a greater claim to local legitimacy, was often obscure. While the individuals involved in the intense writing, reviewing, and lobbying processes from NGOs were very much linked into these wider networks, the degree to which grassroots movement members engaged directly was limited. For this and other reasons, others saw the processes of intermediation and translation as problematic, as well as the claims made by NGOs to ‘represent’ others. Some industry and government participants, for example, claimed that GM crops were a concern to (northern) NGOs, but not farmers from the global south.³⁴

Second, some participants reflected on their own positionality – both as experts and citizens from particular places, and how their origins, ethnicity, gender, and experience was intimately bound up with their contributions as experts. As one African author, middle class university lecturer in Zimbabwe, trained in the UK, but originally from a rural home in a farming area, observed: ‘Yes I am an economist, but I also from Africa, and I am a woman. I have lived in these places, and experienced the life of farming in a dryland setting’.³⁵

³² Interview, Zimbabwe, November 2007.

³³ See the thoughtful commentary on the fraught knowledge politics at play by IAASTD insider Janice Jiggins (2008).

³⁴ In making such claims, of course, these commentators were offering an unreflective, alternative intermediary position, suggesting that their views were ‘better’ representations of developing world farmers than those of NGOs.

³⁵ Interview, May Zimbabwe, 2006

This explicit reflection on positioning was notably more evident among those I interviewed from Africa. They were after all involved in a regionally-specific contribution, which was by definition located. Others associated more with the global assessment and often northern researchers from international organisations emphasised their contributions as credentialed experts – as an expert on crop pests or forestry or soil and water conservation, for example. As one participant (personal communication, August 2008) put it:

Each of the authors are members of diverse networks, often reaching deep into truly ‘local’ communities, through previous field work experiences, and these were in my experience often mobilised to review particular paragraphs of draft text, clarify the key points of concern, highlight very local experiences and generally to raise within the process the issues of evidence, legitimacy and accountability. So do not underestimate the multiple flows of communication and representation at work!

Thus everyone acknowledges that their background and life experiences affect their contribution as an expert in such a process. Although often professing the importance of generalised, universal, global knowledge (say around the impacts of climate change) no one I interviewed was very keen to accept the idea that they, as participants in the IAASTD, were a global citizen – certainly part of a globally linked epistemic community, a network based on a focus on shared expertise and contribution to a particular debate, but not strictly an ‘emergent solidarity’ (cf. Ellison 1997) at a global level which could be talked about in terms of citizenship.³⁶

Yet, third, many participants of course are quintessentially ‘global’, not easily located in one particular place and comfortable and accomplished across them. For example, one of the co-chairs is an African, female scientist, educated in the US, head of an African research/policy institute and highly well-connected internationally. She is deeply committed to making the perspectives of Africa have a voice in the process, yet would never claim to be the legitimate voice of peasant Africa. Yet, can such people, part of the international research and policy elite, from their acquired positions of power and authority offered through their qualifications and expertise, provide this, and how, in turn, is their input legitimated?

There is of course much politically-correct talk associated with the IAASTD about southern perspectives and involvement, but in practice the southerners who get a look in are sometimes as elite – in their lifestyles, outlooks, and influences – as many of their northern counterparts. Does living behind razor wire in a smart suburb of Harare or Nairobi provide special access and insights? Or is this just another, of many different, ‘lived citizenships’ that are rather selectively added to the mix?

The aim was to involve a more diverse group of expertise than would be usual in a conventional approach, with a very conscious effort to be inclusive, but, in the end, it was deliberation on the basis of scientific evidence that would be the key. Interestingly, this is the view held both by ‘mainstream’ scientists and NGO representatives. For the former, ‘good science’ requires rigorous methodologies and systematic processes of international peer review, and the Assessment’s design is very much in line with this thinking.

³⁶ Although some commented that such an ‘emergent solidarity’ was increasingly evident among a sub-set of IAASTD participants by the final plenary in Johannesburg.

There was a strong commitment to the rigorous testing of evidence and, following Habermas (1994), the importance of building consensus through multi-stakeholder dialogue. Yet, this is not to say that politics, values, and moral positions were not discussed, often intensively, during author group meetings. Evidence had to be assessed in context, asking ‘what type of expertise and evidence having what voice?’ This was an inevitably partial, political, and value-laden exercise. Positionality and subjectivity is thus central to the assessment process, and with this comes politics, values, and judgements that go way beyond simple rational science and expertise, as discussed in Chapter 2 of the final global report (IAASTD 2009a).

Thus, in the discussion of the IAASTD, there is an interesting contradiction in the simultaneous talk of engagement and involvement of diverse, multi-stakeholder perspectives and its confrontation with the ideal of consensus and an appeal to a universalised objectivity of science and expertise: the ultimate global vision. This tension was often not addressed and resulted in some underlying challenges of knowledge politics and power relations not being confronted, with some major fudges resulting. Yet, in a more pragmatic tone, one participant (personal communication, August 2008) commented,

Perhaps for the first time, different constituencies had to wrestle with the evidence and experiences that inform a point of view. These could no longer be dismissed as simply differing ideologies or power gradients. We *all* had to put our trust in the IAASTD principles. The hard part was getting all contributors to be accountable to them.

The politics of knowledge in global assessments

So, what does the IAASTD experience suggest for the wider debates about democracy and participation in global arenas? The IAASTD reports, as we have seen, as many others of a similar ilk, present the bringing together of diverse knowledges as largely unproblematic. The emphasis is on neutrality and objectivity. For example, the guidelines state, ‘Assessment reports should be neutral with respect to policy, and deal objectively with scientific, technical and socio-economic factors’³⁷

But these assumptions are difficult to uphold under closer scrutiny. Further questions inevitably arise: whose expertise counts? How are cultural and institutional commitments brought into supposedly neutral expert statements and review processes? What overt and tacit routines legitimate and validate collective knowledge? What happens to other forms of knowledge and expertise – with different epistemological and ontological bases? These processes played out in different ways in different parts and at different moments in the assessment. Sometimes the knowledge encounters were productive and fruitful, challenging participants to reflect on assumptions and to include otherwise neglected perspectives. At other times, such engagements were less productive, being dominated by particular perspectives and interests.

While the explicit, formal design of the assessment was rather blind to the questions of knowledge politics, in practice in the author groups, the review process,

³⁷ IAASTD (2003) An Assessment of Agricultural Science and Technology for Development The Final Report of the Steering Committee for the Consultative Process on Agricultural Science and Technology, 12 August 2003. Principles and procedures governing an intergovernmental assessment on agricultural science and technology. Annex III, Page 7. <http://www.farmingsolutions.org/pdfdb/annexI-III.pdf> (accessed, 23 June 2009).

and the wider discussion around the assessment, there was intense reflection on knowledge, its validity, and the nature of expertise. As the examples discussed above have shown, contests over knowledge claims and the framing of issues have been very important. The end result allowed a plural set of perspectives to emerge, despite attempts to constrain the debates. This shows, at one level, a sensitivity of the process to such issues. But this was not explicitly part of the formal design, and a key lesson has been that such issues of knowledge framing need to be more centrally and explicitly considered from the start.

A key feature of such assessments is that they are in some way ‘representative’, investing as they do in large-scale – and very expensive – consultations. The website makes great play of the diversity of actors involved, and the Secretariat includes a number of southern researchers, activists, and others. Clearly, simple forms of representation – direct or indirect – are impossible at a global level. But how do global processes of this sort gain legitimacy for what they do, and how are representatives and representation constructed by the organisation itself, its sponsors, and the actors involved?

As discussed above, the formal process allows for representation by different groups according to strict quotas, with non-government and government, NGO, and business all carefully numerically balanced on the Bureau, for example. As an inter-governmental process, representation is also via states, with 110 countries involved and 30 government representatives from all regions on the Bureau. And in the public review process, the web commentary facility allows anyone with access to the Internet to have their say. This means representation, and routes to influence the process, can happen via multiple routes. The NGO/civil society grouping, for example, has been very active in mobilising participants, engaging in debate, and tracking the process through a dedicated website. Equally, the US government invested substantial resources in the review process, persistently trying to get its view across and objecting to alternative framings.

The NGO/civil society grouping is seen by the convenors of the assessment as a key route through which voices of poorer farmers across the ‘global south’ can have a say, thus bringing wider legitimacy to the process and its outcomes. But this is an awkward intermediary, bridging position. Some NGO groups argue that, despite the fact that they have no formal mandate to represent ‘poor farmers’, this is a legitimate role, one based on solid experience and dialogue with people in the field. Yet this position clearly comes with much baggage. It is far from neutral. Indeed, there is a clear line on many issues, linked to some high-profile, strategic campaigning, something that critics see as more reflective of a middle-class, left-leaning, European/North American position than the legitimate voice of the masses. In the context of the IAASTD, whether on issues around GM crops or industrial agriculture, the positions of some NGO groupings have been voluble and consistent, something not necessarily reflecting the diverse and often conflicting views of poorer farmers across the world.

In debates about the role of ‘civil society’ in political processes, this is of course a long-running, and probably irresolvable, discussion. As many commentators point out, in addition to questions about representation, there remain important tasks in encouraging transparency and carrying out monitoring and review of formal processes to generate systems of accountability in governance arrangements, particularly at the global level.

What does this mean for ideas of citizenship, and particularly global citizenship? In terms of the forms of engagement with the process, we can see at least three

different forms of ‘emergent solidarity’ which might be termed ‘citizenship’ (cf. Ellison 1997, Leach and Scoones 2006). First, participants in the process have identified with their particular groupings. The NGO/civil society ‘group’ represents one set of transnational actors, operating across diverse networks. In this sense, they could be described as being part of a ‘global civil society’, and so perhaps global citizens. But this is not all. Often the same actors have engaged in other ways: as citizens more traditionally defined in relation to the nation state; as experts, part of wider ‘epistemic communities’ and associations (Haas 1992); and as cyber-citizens, engaging as individuals or groups on Internet discussions and responses through the Internet. Are all these engagements the practices of ‘global citizens’, reflective of an emergent phenomenon of ‘global citizenship’?

Informants, however, were almost universally dismissive of such an idea. The vision of global cosmopolitanism was far from their perspective. They self-defined in different ways, sometimes in relation to their expertise, sometimes their ethnic origin (although often beyond a country level, to the level of a continent, at least for Africa), and sometimes as part of a movement or campaign (for sustainable agriculture, against GM crops, and so on). Very often, of course, people identified across these categories, reflecting on how they would ‘put different hats on’ for different purposes. While recognising the importance of engaging in global processes and the important influence they have on today’s world, identities remained much more restricted, and very often hybrid and complex, rather than the apparently simple ‘global’ assignation (cf. Schattle 2008).

A key challenge for democratic theory in an era of globalisation is how collective perspectives, values and outcomes are negotiated across diverse cultural and institutional settings at an international level. Global assessments, such as the IAASTD, claim to do this through a process of expert assessment supported by stakeholder consultations. But how collective is the ‘collective vision’ that is exemplified in the final report? What have been the processes of exclusion, dissent, and controversy that lie behind an expert-approved ‘consensus’? What are the unwritten codes and practice that shape formal choices and decisions reflected in the final report? How have perspectives from particular places, including those drawing on more experiential knowledges, interacted with global ones, situated in particular centres of power?

As we have seen, the final global report, as well as the summary for decision-makers, has been at pains to include a diversity of views. For some this is a ‘lowest common denominator consensus – a 24 hour wonder’;³⁸ for others this is the result of effective inclusion, where controversies have been dealt with and compromise sought. The formal assessment process did not confront controversy head on, even if the micro-processes in author groups and review interactions certainly did. No procedures or mechanisms appeared to exist to either surface or deal with such debates and divergent views. The elaborate governance structure and procedural arrangements for the preparation of the reports created a particular style of public knowledge making. This was centred on the principles of inclusion and deliberation, but within severely circumscribed limits. A set of institutionalised routines allowed for the involvement of different interest groups or ‘stakeholders’; each had particular representation on the decision-making body of the Bureau and each was supposed to have equivalent input into the expert-led report production and review process, garnering a procedural accountability and, so it was hoped, trust and confidence in the authority and

³⁸ Interview, Salzburg, Austria, April 2008.

legitimacy of the process. This structured form of representation thus aimed at global coverage, covering all bases and creating a comprehensive, all-encompassing approach to knowledge making at the global scale.

But this formal arrangement was of course also complemented by more informal interactions and processes of alliance building and lobbying. As discussed in relation to the NGO/civil society grouping (and no doubt replicated among governments and private sector 'interest groups'), there was much manoeuvring to gain access and influence. Peer to peer relationships within the Africa writing group too allowed more personal connections to be made and informal networks to arise through the process which transcended often the 'interest group' categorisation of the governance structure to create forms of association around the regional, African position *vis a vis* the 'global' perspective.

This vision of multiple voices being heard in an open deliberative forum at the global level is certainly the ideal that many aspire to. In this sense, the IAASTD is seen as a potential for the realisation of a global deliberative democratic institution that numerous theorists and commentators have argued for (cf. Dryzek 2002). A key argument of the IAASTD is that, through engaging multiple stakeholders in an open debate about the future, an institutional form will develop, resulting in more robust frameworks for policy decision-making. This is an argument put forward by many involved in debates about institutional transformation, particularly when dealing with scientific debate and public controversy (cf. Miller 2007).

The ideal is a 'reflexive institution' which is inclusive and deliberative and allows multiple, culturally-embedded versions to be discussed, and a collective vision to be produced. It allows contrasting framings to be debated, and different political and value positions to be acknowledged. It also does not bury uncertainty, controversy, or dissent, but makes these explicit in interrogating alternative options (Voss and Kemp 2006). This is a tough call, especially for disciplinary and professional orientations built on particular forms of certainty and expertise, where ambiguity is threatening and admitting ignorance is unheard of.

Beyond the conceptual discussion of principles, discussion of what a 'reflexive institution' actually looks like is often vague, and certainly so at a global level. In many respects the IAASTD is seen by its proponents as an attempt at creating a reflexive institution, although not using this language. Many of the key design principles are there – inclusivity, openness, plurality of knowledges, and a commitment to democratic processes. But there have been notable limitations. These centre on two issues. First, the challenges of confronting uncertainty and controversy, and the expectation that these will be resolved by rational, objective, scientific debate among expert peers, and, second – and related – the obscuring of the very real struggles over knowledge, politics, and values in an attempt to construct the 'view from everywhere' by seeing this primarily in terms of representation of different interest groups. These two gaps, I would argue, have at times created a lack of reflexivity in the process; a lack of ability to reflect on positions, framings and politics, and so sometimes resulted in an inability to deal with the really tough issues and choices confronting the future of science and technology.

Conclusion

So what should be done? How can the politics of knowledge be made more explicit, and negotiations around politics and values be put centre-stage? How can we avoid black-boxing issues of uncertainty or more fundamental clashes over interpretation

and meaning? And how can processes of participation and engagement become more meaningful, democratic and accountable?

These are of course big questions at the centre of debates about democratic theory, and at the core of the concerns of this book. As Chantal Mouffe (2005) argues in a critique of the recent arguments for deliberative forms of democratic practice, there is a need to ‘bring politics back in’. In a withering attack of those who believe ‘partisan conflicts are a thing of the past and consensus can now be obtained through dialogue’ and the assumption that ‘thanks to globalization and the universalization of liberal democracy, we can expect a cosmopolitan future’, Mouffe (2005, 1–2) challenges this ‘post-political’ position:

Such an approach is profoundly mistaken and that, instead of contributing to the ‘democratization of democracy’, it is at the origin of many of the problems that democratic institutions are currently facing. Notions such as ‘partisan-free democracy’, ‘good governance’, ‘global civil society’, ‘cosmopolitan sovereignty’, ‘absolute democracy’ – to quote only a few of the currently fashionable notions – all partake of a common anti-political vision which refuses to acknowledge the antagonistic dimension constitutive of ‘the political’. Their aim is the establishment of a world ‘beyond left and right’, ‘beyond hegemony’, ‘beyond sovereignty’ and ‘beyond antagonism’. Such a longing reveals a complete lack of understanding of what is at stake in democratic politics and of the dynamics of constitution of political identities and, as we shall see, it contributes to exacerbating the antagonistic potential existing in society.

It is this absence of an explicit attention to the political that has been perhaps the Achilles heel of the IAASTD. A lack of recognition of antagonistic politics – over knowledge, identity and the construction of futures – means that the cosmopolitan, deliberative ideal that the IAASTD presents as its model, suppresses, diverts, and bottles up such tensions; or at least relegates them to off-the-record debates within text-writing and reviewing groups rather than making such issues central and explicit. How can this be addressed? On a practical level, a key lesson for the IAASTD – and similar assessment processes – is the urgent need inject some systematic reflexivity into the process, involving all parties. This is an explicit way of meeting the challenge of Mouffe and others of ensuring politics are central. As she argues:

. . . the belief in the possibility of a universal, rational consensus has put democratic thinking on the wrong track. Instead of trying to design the institutions which, through supposedly ‘impartial’ procedures would reconcile conflicting interests and values, the task for democratic theorists and politicians should be to envisage the creation of a vibrant ‘agonistic’ public sphere of contestation where different hegemonic political projects can be confronted. (Mouffe 2005, 3).

By highlighting the concept of ‘reflexive institutions’, and the governance processes required in this chapter, the challenge is to find ways that such design elements can be introduced into the procedures and practices of such assessments in ways that allow this type of explicit confrontation of politics, perspectives, values, and interests. While the design of the process, its governance, and institutional form can be criticised for lack of reflexivity, the behind-the-scenes negotiations over

framings, values, and politics have, as we have seen, been heated and continuous. However, a key starting point is to make the framing assumptions around diverse positions and knowledge claims more explicit: front-stage, not just back-stage. This of course does not mean that the examination of scientific issues should not take place; instead such reflexivity hopefully results in increased rigour, avoiding the dangers of false, fudged 'consensus'. Opportunities of bringing other actors and voices into such processes – including farmers themselves and wider organised movements – need to be seized. The politics of intermediation will always be a challenge, as not everyone can be at the table, but increasing diversity of debate and inclusivity of process is vital for the legitimacy and authority of assessment conclusions. Opening up both the inputs and outputs of the assessment process, including an acceptance that consensus and agreement may not be appropriate or desirable, can result in more effective, rigorous, and more widely accepted outcomes (Stirling 2005). The IAASTD has been an ambitious attempt to create such a space for cross-stakeholder dialogue on a critical issue at the global level. Compared to previous efforts at multi-stakeholder international assessments it has been more ambitious, more inclusive and more effective in many ways. It has inevitably been fraught and flawed, but there have been some important lessons learned, some of which have been highlighted by this paper. The challenge for the future – as new, different challenges emerge which require similar global responses – will be to develop new designs and processes that allow for even more effective, inclusive reflexive governance which build firmly on these lessons.

References

- Archibugi, D. 2008. *The global commonwealth of citizens: toward cosmopolitan democracy*. Princeton NJ: Princeton University Press.
- Bioscience Research Commentary Project. 2008. How the Science Media Failed the IAASTD. BSR Commentary, 10 April. Available from: <http://www.bioscienceresource.org/commentaries/documents/BSRcommentary10.pdf>
- Croplife International. 2008. Press Release. Science and technology are key to growing more food: CropLife Believes the IAASTD report falls short of goals by overlooking the potential of modern plant science. Croplife International. 15 April. Available from: <http://www.croplife.org/library/attachments/0889ff92-3ffa-41a6-91bd-9e01fc9993bb/2/2008%2004%2015%20-%20Science%20and%20Technology%20are%20Key%20to%20Growing%20More%20Food.pdf>.
- Dryzek, J. 2002. *Deliberative democracy and beyond: liberals, critics, contestations*. Oxford: Oxford University Press.
- Edwards, M. and J. Gaventa, J. eds. 2001. *Citizen global action*. Boulder: Lynne Rienner.
- Ellison, N. 1997. Towards a new social politics: citizenship and reflexivity in late modernity. *Sociology*, 31(4), 697–717.
- Fischer, F. 2000. *Citizens, experts and the environment: the politics of local knowledge*. Durham: Duke University Press.
- Greenpeace 2008. Press release: Urgent changes needed in global farming practices to avoid environmental destruction. 15 April. Available from: http://www.agassessment-watch.org/docs/greenpeace_15_april.pdf.
- Haas, P. 1992. Introduction: epistemic communities and international policy coordination. *International Organizations*, 46, 1-36.
- Habermas, J. 1994. *The theory of communicative action: reason and the rationalization of society*. Boston: Beacon Press.

- Haerlin, B. 2005. Report on the 2nd meeting of the IAASTD Bureau in Montpellier, 24–28 May 2005 [online]. 31 May. Available from: http://agassessment-watch.org/docs/montpellier_report.pdf.
- Heater, D. 2002. *World citizenship: cosmopolitan thinking and its opponents*. London: Continuum.
- Held, D. and A. McGrew, eds. 2002. *Governing globalisation: power, authority and global governance*. Cambridge: Polity Press.
- ISAAA 2006. IAASTD to conduct agri-biotech assessment. ISAAA CropBiotech Update, 7 April. Available from: <http://www.isaaa.org/kc>.
- IAASTD 2009a. *Agriculture at a crossroads. The global report of the International Assessment of Agricultural Knowledge, Science, and Technology*. Washington DC: Island Press.
- IAASTD 2009b. Governance and Management of the IAASTD [online]. IAASTD. Available from: <http://www.agassessment.org/index.cfm?Page=Governance&ItemID=5>.
- Jasanoff, S. and M. Martello. 2004. Introduction: globalization and environmental politics. In: S. Jasanoff and M. Martello, eds., *Earthly politics: local and global in environmental governance*. Cambridge MA: MIT Press, pp. 1–29.
- Jiggins, J. 2008. Bridging gulfs to feed the world. *New Scientist*, 2650, 5 April 2008, pp. 16–17.
- Keane, J. 2003. *Global civil society?* Cambridge: Cambridge University Press.
- Keith, D. 2008. Why I had to walk out of farming talks. *New Scientist*, 2650, 4 May, pp. 17–8.
- Latour, B. 1987. *Science in action. How to follow scientists and engineers through society*. Cambridge MA: Harvard University Press.
- Leach, M. and I. Scoones. 2006. Mobilising citizens: social movements and the politics of knowledge. *IDS Working Paper*, 276. Brighton: Institute of Development Studies.
- Miller, C. 2007. Democratization, international knowledge institutions and global governance. *Governance*, 20(2), 325–57.
- Mitchell, R., et al., eds. 2006. *Global environmental assessments: information and influence*. Cambridge MA: MIT Press.
- Mouffe, C. 2005. *On the political*. London: Routledge.
- Nature 2008. Deserting the hungry? *Nature*, 451, 223–4.
- Nature Biotechnology 2008. Off the rails. *Nature Biotechnology*, 26, 247.
- Rosegrant, M., et al. 2001. *Global food projections to 2020: emerging trends and alternative futures*. IFPRI 2020 Vision Book. Washington DC: International Food Policy Research Institute.
- Schattle, H. 2008. *The practices of global citizenship*. Lanham MD: Rowman and Littlefield.
- Scoones, I. 2008. Global engagements with global assessments: the case of the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD). *IDS Working Paper*, 313. Brighton: Institute of Development Studies.
- Steiner, A. 2008. Opening Remarks by Mr. Achim Steiner at the International Assessment of Agricultural Science and Technology for Development (IAASTD) Conference, Johannesburg, 7 April 2008. Available from: http://www.agassessment.org/docs/IAASTD_Opening_Remarks.pdf.
- Stirling, A. 2005. Opening up or closing down? Analysis, participation and power in the social appraisal of technology. In: Leach, M, Scoones, I. and Wynne, B., eds., *Science and citizens: Globalisation and the challenge of engagement*. London: Zed Press.
- Stokstad, E. 2008. Duelling visions for a hungry world. *Science*, 319, 1474–6.
- Tarrow, S. 1994. *Power in movement*. Cambridge: Cambridge University Press.
- Voss, J and R. Kemp, eds. 2006. *Sustainability and reflexive governance*. Cheltenham: Edward Elgar.

Bio

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