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Sharing our Experience

Report of a Discussion Meeting on International Capacity Building by UK Learned Societies on the 2nd June 2009 at the Royal Astronomical Society, London.

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A broad spectrum of the UK's top learned societies gathered at the Royal Astronomical Society's headquarters on the 2nd June 2009 to share their experiences of capacity-building programmes for developing countries, to examine the scale and status of such programmes within learned societies, and to discuss potential benefits of coordinated action in this area. The meeting was arranged by an informal inter-society steering group: Liz Bell (The Physiological Society), Natasha Bevan (UK National Commission for UNESCO), Mike Cruise (Royal Astronomical Society), Beth Taylor (Institute of Physics), and Peter Willmore (Committee for Space Research). The meeting was convened in follow up to the substantial interest generated by the Physiological Society's discussion paper on capacity building:

<http://www.physoc.org/site/cms/contentCategoryView.asp?category=478>

A. PRESENTATIONS

1. Liz Bell, Physiological Society - Introduction and Meeting Objectives

Liz Bell told how she was invited to a World Bank Forum on capacity-building in Washington in February 2007. The other invitees consisted of various scientists and politicians, aid agencies, almost every sort of scientific organisation, but fewer learned societies. Aid agencies had realised they need to improve the science base in developing countries in order to tackle other problems, and she realised at the meeting that while learned societies can provide support they are often overlooked in development programmes.

Following the World Bank meeting, the September 2007 Meeting of Learned Society Representatives at The Royal Society briefly discussed this issue. The meeting agreed that learned societies of every discipline are perhaps in a unique position to contribute to this agenda. They are quite different from the many other ways in which science is organised, whether through Government funding agencies, universities or science based industries. In essence they are clubs of scientists, whose raison d'être is to capacity build their disciplines, and in some cases having been doing this very successfully for a few centuries. As clubs, they are often not overly hierarchical, and are naturally organised as extended networks of scientists with strong links at

grass-roots level. Many of the older ones, founded centuries or decades ago to serve their immediate scientific communities, have naturally extended towards having an international membership, and have been quietly supporting budding scientists in the developing world before the main international aid agencies woke up to the importance of this. Such programmes have not been developed by sometimes remote policy makers, but have the advantage of having been driven by the expressed needs of their membership.

Learned societies have the potential to help in capacity building at many levels. As well as being able to directly respond to local scientists needs and develop initiatives at grass-roots level, they also often have relevant experience of advising on science policy at Governmental level. Learned societies and their members know how to set up and run scientific journals (many of which are still closely connected to the societies that created them), work with the publishing industry, run events on topical research issues, provide networking and career development support, train students, work with schools and universities to encourage young people to study and take up careers in science, and engage with the media and the general public on crucial issues of public concern. The Royal Society conducted a survey of some current capacity building initiatives in learned societies in 2007. This indicated that because of lack of funding, many learned society international capacity building programmes, though successful, have remained small. Our potential has not yet been realised!

She also noted that an American academic, Caroline Wagner, had recently published a book *The New Invisible College* (<http://www.carolinewagner.net/about.html>) which Professor Calestous Juma FRS has described as a “forceful assault on the traditional edifice of science policy”. Wagner had said that international agencies had mistakenly tried to take the existing western model of “big science” and apply that to the developing world – but this had taken the western world 200 years to develop (with learned societies having been a very important part of the development process), and supporting smaller, more organic, networks of scientists would be more useful.

The convergence of learned society thinking in this area and the issues identified by Wagner are striking. The time may now be ripe for learned societies to consider how their unique club of scientists model, historically responsible for developing much of what we take for granted in science, can be energised to provide comprehensive support for networks of scientists in developing countries.

Learned societies have many small initiatives, but no overall co-ordinated agenda or effort. The main objective of this discussion meeting was therefore to look at some of the learned societies existing experience, collectively brainstorm what might be done better, and consider how to take this forward with policymakers. It was possible that there will be another World Bank Forum on capacity building in December 2009 which this meeting might feed into.

2. Beth Taylor, Institute of Physics (IOP) - Capacity Building in Schools

Beth Taylor said that the IOP's Physics for Development Programme is tiny, arbitrary and reflects members' interests and although it is the right thing to do a more strategic approach is required. The aims of the programme are to promote and support physics in furthering scientific knowledge and providing economic and social benefits. One element is the Rwanda schools project, which involved providing experimental equipment to schools in Rwanda and training teachers there. Taylor explained that the experimental side of physics is necessary to fully understand theory but that this had been missing from the schools in Rwanda due to a lack of equipment and the knowledge of how to use it effectively. Another exciting project was Lab in a Lorry in Angola – an interactive mobile science laboratory staffed by volunteer practising scientists and engineers. The aim of Lab in a Lorry is to give young people aged 11-14, who would not normally have access to such lab facilities, the opportunity to do experimental science in the way it actually happens. The IOP is also sending a member of staff to help with the organisation and educational programme

of the British Council Girls in Science Camp in Zanzibar. The aim of this event is to encourage Muslim girls to consider further education in science subjects.

She added that the barriers to capacity-building programmes had been found to include:

- Funding.
- Inadequate infrastructure/transport.
- Lack of basic educational resources.
- Lack of awareness/stability.
- Devotion of time.

Taylor added that capacity in developing countries needs to be created if all of the Millennium Development Goals are to be attained.

3. Peter Willmore, Committee for Space Research (COSPAR) - Capacity-building at Professional Scientist Level

Willmore explained that in 1999 COSPAR decided to establish a new programme of capacity-building workshops to encourage the use of space data for scientific research in developing countries. An important asset here is that COSPAR (like all international unions) has a vast pool of member scientists, including many in developing countries on whom grass-roots activities can be based. In 2004, this programme was made into a "line item" with a budget of around £45,000 – a level able to fund one and a half workshops per year.

Having decided that primary and secondary education was too large a problem to tackle effectively, the organisation decided to concentrate on tertiary-level and research training/professional development.

Archives of data from space missions now exist, which present an opportunity to do world-class research:

- The archives are readily accessible via the internet.
- The data-analysis software is available free of charge.
- They provide a potential lead-in to guest-observer programmes and scientific collaboration.

The major users of these archives tend to be from the USA, Japan and Europe, with few from developing countries. Reasons they are not more commonly used in the developing world include a lack of awareness, a sense that space data is for people who build space missions ("they wouldn't make the best available to just anyone would they?"), and a poor internet connection. Willmore said that one of the biggest problems in the developing world is the same as that of inner-city schools in the UK – one of aspiration and attitude, and that these are easier to change than physical circumstances.

The workshops consist of highly practical training including a major project, based on proposals by a scientist from a developing country, and on a current space mission producing exciting results, with a large public data archive. They are located at a major centre in a developing country and 30 "students", eight or nine lecturers and one or two support staff take part. COSPAR typically pays 50-60% of the workshop costs and the host country 20-25%. By the end of 2009, 300 young scientists will have gone through a workshop, and based on follow-up surveys 40% are working in the field three years later.

COSPAR has also been very conscious that workshops come and go, they need to be linked to something longer-term to be sustainable. They therefore also have a fellowship programme,

instituted in 2008 to enable workshop participants to turn their workshop experiences into joint research programmes by visits – typically one month in duration – to research labs. The International Astronomical Union with which COSPAR collaborates closely, has a somewhat similar programme of International Schools for Young Astronomers and exchange visits. It is currently considering a large – ten times the scale – expansion of these activities.

4. Stephen Huggett, London Mathematical Society (LMS) - Capacity-building in Mathematics

Young mathematicians in Africa tend either to leave mathematics or to leave Africa. One of the major problems is the small size of postgraduate classes, and the resulting sense of isolation. The LMS has a project making a lasting impact but achievable with a small amount of money. It is based on mentoring African research teams.

The programme pairs up an African mathematician with one based in the UK, who acts as a mentor, for example by co-supervising a research student, becoming a member of the research group, and helping in publishing research. The idea is to change perceptions and aspirations and to make mathematicians in Africa feel part of the international mathematical community.

The first round of the programme led to three partnerships, in Cameroon, Ethiopia and Ghana. A further six came about as a result of the second round, and a third has recently been advertised. The money for this pilot project came from the Nuffield Foundation and the Leverhulme Trust. Experience is showing that these mentoring partnerships need care taken in the setting up, but that they are then highly valued. This successful project is sharply focused and extremely resource efficient.

5. Hans Hagen, Royal Society (RS) - Building capacity in Tanzania and Ghana

From his personal 13 years of experience of field work in Africa, Hagen argued that African research should concentrate on endemic issues in order to develop its science base. This could provide a competitive niche, it would be easier to publicise findings and showcase the role of science in tackling regional problems. Focusing on in-country training would provide a solid base for the gradual upgrade of infrastructure.

Hagen said that the Royal Society's capacity-building portfolio is demand-driven and focused on extensive consultation with African partners. The RS's International Grants section engaged in a consultation exercise, determining that: the programme should be a long-term engagement, but immediately relevant; that funding should be responsive to needs and developed gradually; and that sustainability needs to be at the heart of the project.

From 2006 the RS conducted stakeholder meetings, and identified national research priorities in Ghana and Tanzania. Follow-up meetings took place in 2007 with delegates from Ghana and Tanzania and representatives from organisations including the Department for International Development and the Wellcome Trust. The national research priorities were identified as agriculture (including animal health), water and sanitation, basic human health research (including medicinal chemistry), and energy and climate change.

The RS aimed at designing a scheme focused on skills transfer through integrated workshops and seminars, and on providing assistance in developing and maintaining centres of excellence. A major problem was establishing first contacts to facilitate new collaborations. Small networking grants of up to £10k were provided to develop future collaborations. The Leverhulme – Royal Society Africa Awards have also just made their first 6 awards, and aim to strengthen the research and training capacity of Higher Education Institutions (HEIs), providing funding for travel and subsistence, research equipment and research expenses.

6. Mike Cruise, Royal Astronomical Society (RAS) - Guiding Principles in Capacity-Building

Cruise said that the RAS's capacity-building is delivered either through individual members travelling abroad, or in partnership with other organisations – hence the RAS has very little control over it. Although most members are excellent “ambassadors” for the organisation, there was still some concern that an inappropriate initiative might rebound on the Society's reputation. The International Committee of the Society therefore discussed and drafted up a set of guiding principles which has been agreed by their Council of Trustees.

He suggested guiding principles for capacity-building programmes, including:

- Scientific content.
- Building for the future.
- Universal access (no racial, religious etc biases!).
- Informed consent.
- Value for effort.
- Effectiveness (clear objectives and formal evaluation).
- Emphasis on evidence based study and experiment.
- Involvement of non UK partners should involve junior as well as senior staff and gender parity.
- Favour long term intervention with continuing support rather than short term, time limited actions.
- Be welcomed at both national and local levels and grounded in real local needs.
- Take account of local infrastructure.

He added that astronomy is a powerful way of introducing people to the scientific method, giving the example that for many people being able to predict when a solar eclipse or other event occurs is often the first scientific prediction that many people see that is then verified. Then when they come in contact with other scientific programmes addressing environmental, agricultural or health issues, they have greater faith in the utility of a scientific approach. Astronomy can be taught anywhere with the minimum of equipment and teaching tools, all that is needed is a sky. And African villages benefit from very clear access to the skies!

7. Kate O'Shea, UK Collaborative on Development Sciences (UKCDS) - The UK Landscape for Capacity Building

O'Shea explained that the UKCDS was set up by a Government Select Committee, involves a partnership between 5 Government Departments, 5 Research Councils and the Wellcome Trust, and has been tasked with reviewing the strategies and co-ordination of international development. Capacity building is sometimes described at different levels (individual, organisational etc) but is in reality much more complex. Funders are becoming more responsive to the need for developing local research, higher education and innovation capacity, not just exporting research from developed countries. Capacity building is rising up the DFID agenda, but there is not one person or group involved, it is embedded across DFID research. There is a greater focus on relevance, impact and getting research into use. The DFID budget for research has increased, but administration has to be kept as cost effective as possible, so it tends to be given out in large chunks.

The Wellcome Trust, unsurprisingly, tends to focus on health and biomedical research, with increasing emphasis on capacity building. This has included an African institutions initiative, the Health Research Capacity Strengthening Initiative or HRCS (Kenya, Malawi and South Africa) with DFID and a biomedical research careers programme. It took a great deal of time and local consultation to develop processes for the management of the HRCS initiative to ensure that it was nationally led and embedded in local institutions. The Research Councils remit focuses them

on the UK, but they have some joint schemes with DFID. Trusts and Foundations have programmes worth looking at e.g. Leverhulme, Gatsby and Gates (which focuses on agriculture and health and is currently funding the NAS African Science Academy Development Institute). Europe also offers some opportunities e.g. FP7 will have a forthcoming health call building sustainable capacity for health research in Africa. The EC has some support services (INCO – Nets, Caast Net) which aim to improve the ability of African researchers to bid into the Framework Programmes.

O'Shea summed up by saying that key issues in capacity building include:

- Driven by real need (whose agenda?).
- Sustainability.
- Partnerships (equitable).
- Learning and Monitoring & Evaluation.
- Co-ordination.
- Collaboration.
- Get away from colonial approach.
- Get away from donor/recipient concepts.
- Benefit in diversity and complexity.

The UK CDS has a Research Capacity Strengthening Group and will be re-launching its website in the Autumn of 2009. O'Shea invited the learned society network to feed into this.

8. Additional Short Presentations

Liz Bell said that the Physiological Society has supported capacity building for a number of years. Many of the schemes the Society had in place were devised a number of years ago, and in response to the collapse of the Soviet Union, for example the Centres of Excellence Scheme aimed at supporting institutions in Eastern Europe. In 2007, the Society judged that it was time to review its international activities. It was agreed that the main principles of the Society's international policy should be to: maintain established relationships with outside groups and societies; set up links with groups or societies with whom it had formerly had little contact; and help develop resources and good practice in areas where physiology teaching and/or research suffer from lack of resources. Long term development activities include international workshops in developing countries, and travel grants supporting Society members going abroad to places where they are needed and overseas physiologists visiting the UK. The Society's International Guests Scheme helps leading physiologists from the international scientific community attend the main annual conference in the UK. The Society has recently set up new International Senior and Junior Research Grant schemes (which support physiological research overseas, through financial support and interaction with a sponsoring member of the Society), and the David Jordan International Teaching Fellowships which enable the recipients to visit an institution of their choice to develop or acquire teaching methods of benefit to the teaching of physiology in their home institution. The Society also provides free access to its journals for people in developing countries. These initiatives, although very successful for the individuals concerned, have tended to be small scale due to funding constraints. Much more could be achieved if external donor support was available. She also mentioned the Society's involvement with the Bioscience Federation's (BSF) "portal" to the Gates funded AWARD Program (African Women in Agricultural Research and Development) which provides mentoring and other support for women scientists. The Society will identify mentor physiologists in the UK where AWARD Fellows need them, and provide free registration at Society conferences for the Fellows.

Paul Amuna of the Nutrition Society emphasised that the role of learned societies should be to help grow local groups. Core needs of such groups include research grants, travel fellowships, postdoctoral fellowships, salary support, professional training, improved undergraduate and postgraduate courses, mentoring, opportunities for exchanges of students etc. The Nutrition

Society has identified a list of appropriately qualified nutrition professionals in developing countries, giving them a sense of belonging, and access to course accreditation, peer review, benchmarking and reviewing links between training, research and preparation for practice. Paul stressed that UK institutions train many graduates for other countries, a key opportunity is to maintain contact with these and follow up over many years, something that can be facilitated by membership of a learned society which can provide a framework for continuity and promote professionalism. Where strong links continue with trainees, long term partnerships have proved successful e.g. one such partnership won a Gates Foundation grant. Another partnership grew organically to become the leading nutritional conference in Africa and led to the formation of the African Nutrition Society. If you can identify people who already have links to Africa, and start the process of communication and bringing them together, you can go far. Much can be achieved on very small amounts of money. He added that the Nutrition Society is starting an African-based academic journal as there is a huge contribution to be made in developing robust academic writing skills. There seems to be a lot of enthusiasm for this amongst young scientists. He concluded by saying that we should see our graduates as ambassadors, and should help them to make the next step of forming local groups and providing scientific leadership.

Raymond Clark of the Society of Environmental Engineers (SEE) suggested that scientists and engineers from developing countries seeking to gain chartered status is itself a capacity-building exercise. The SEE is a small society, but a member of the Engineering Council. It keeps a Register of Chartered Environmental Engineers. Many international candidates apply for this, paying the fees themselves, but getting in return a formal accreditation of their professional competences which help further their careers in their home countries. Access to internationally recognised professional qualifications is important to people from developing countries, but can be blocked by bureaucratic hurdles. A case in point was the problem of some candidates getting visas, the FCO don't seem to recognise the importance of UK accreditation. The SEE is not alone in providing such professional accreditation, some other societies have even bigger international programmes e.g. the Institution of Civil Engineers which runs exams in developing countries for aspiring candidates for chartered engineer status.

Shane McHugh of the Royal Academy of Engineering (RAEng) said that engineering is a key enabler of the Millennium Development Goals. He suggested that a model that other learned societies could follow is the Africa – UK Engineering for Development Partnership, which aims to build the capacity of engineering institutions in Africa and includes the African Engineers Forum. It is a 2 year project to gather baseline data and evaluate demand, bring engineers together to develop consensus on key technical areas, advise on interaction with the policy community and business, and facilitate stakeholder discussions via workshops. This is a way of assessing long term capacity building needs. There is a huge brain drain problem in Africa, learned societies can help address this by creating a local professional structure for engineers to stay. The has published a collection of essays *Engineering Change: Towards a Sustainable Future in the Developing World* highlighting the ways in which engineering could improve the quality of life for poor people in Africa.

Jane Westwell of the Society for General Microbiology said that the Society has 5000 members worldwide, and provides a range of grants supporting young microbiologists for international development, including Fellowships for young scientists to visit other centres for a few months. Grants are not restricted to any particular geographical region. The Society's experience was that small sums spent on research, teaching and other projects, could develop good networks. Other small initiatives have also yielded good results, e.g. funding books for libraries. She concluded by emphasising that small is beautiful.

Munir Hussein of the Physiological Society described how his university, Bradford, has got interested in working with the Society to develop capacity building initiatives. This aims to build on one of the university's core strengths, training students, and might provide a whole series of integrated courses for physiology from undergraduate through Master's and PhD levels. He noted that MSc qualifications are highly desirable overseas, very good value for money in terms of UK

funding, and that the graduates tend to return home. These graduates then need long term mentoring support in their home countries. So a new capacity building programme in physiology might involve scholarships for African students to attend Bradford and other UK universities, and then funding for them to participate in the activities of the UK learned society (e.g. funding for membership and travel to conferences etc) and to set up their own local professional networks back home. Some useful lessons might be learned from the long and successful experience of the Commonwealth Scholarship Programme. This would take significant donor funding to achieve, a big issue was that it was very unlikely, with all the different donor agendas, that one funder would pick up the tab for the whole programme.

B. ADDITIONAL INFORMATION

In addition to these presentations, papers on the capacity building programmes of the British Ecological Society (BES) and the Institution of Civil Engineers (ICE) were circulated. BES support has included a Building Capacity for Ecology Fund to help establish or develop networks of ecologists in developing countries that lacked a well developed society or ecology institute, overseas bursaries and fellowships, and travel grants for ecologists from developing countries to attend BES meetings. The Building Capacity for Ecology Fund received significant levels of funding from the society, £400k was committed over a 5 year period, but the Society could not afford to continue the scheme long term. ICE provides engineering education (Technician to Chartered Engineer), training and continuous professional development, helps set international standards e.g. the International Standards for Construction Procurement, and strengthening scientific and engineering institutions within developing countries. The Strengthening Professional Engineering Associations Project (SPEAP) was a DFID funded ICE project (completed in 2002) which focused on building capacity in developing country professional qualifying bodies to raise professional standards in countries including Malawi, Mozambique, Tanzania, Uganda, Bangladesh, India, Nepal, Pakistan and Kenya. Building on this, ICE is currently engaged with: the World Federation of Engineering Organisations; establishing an Institution of Engineers in Rwanda; a UK National Commission for UNESCO funded baseline study to assess engineering capacity and capability in Rwanda; collaborating with the RAEng and the African Engineers Forum in the Africa-UK Engineering for Development Partnership; membership of the International Secretariat of the DFID funded Construction Sector Transparency Initiative; and working in partnership with the NGO Engineers Against Poverty on a procurement research project.

C. COMMENTS IN OPEN DISCUSSION

- Funding bodies have tended to disburse money in large scale grants, in the belief that this has more impact and to save on administrative costs. This isn't necessarily better than giving out lots of small grants. There was a concern that big programmes often come at a price of being inflexible and strait-jacketed by the agendas of the funding organisations; Flexible small scale programmes can be much more effective in addressing real local needs.
- Real change is effected by committed individuals, and is an organic, bottom up process heavily based on personal relationships. "Small is beautiful" programmes and grants can often best suit these enthusiasts.
- Keep things local and sell it at the level of individual scientists to engage creative people who want to get involved.
- If small programmes are effectively co-ordinated with each other they can have big national impacts.
- Bodies such as the Leverhulme Trust and Nuffield Foundation have shown in the past that they are happy to provide money to capacity-building projects led by learned societies as they know it will be spent responsibly.
- There may have been issues with developing country national governments preferring to receive large blocks of money for scientific development, which then get diverted to

address other pressing issues. Funding small programmes at scientist level can get around this.

- Learned societies have a big stock of trust with all players in the scientific system which can be built upon, as they are organisations created by scientists for scientists, without the taint of overt commercial interest or governmental politics.
- Support shouldn't just be on regional problems but also on fundamental science.
- Developing countries have some hard choices to make, but these decisions should be made by the countries under discussion and not by remote policy makers in the UK.
- Relevant local policy makers, including national ones in the countries concerned should be engaged in any programme design as early as possible to get them on board and benefit from their insights on broader national/regional priorities.
- The RAS principles on capacity building were applauded by participants, so it was agreed these would be made widely available.
- Addressing endemic regional problems is a useful focus for developing country programmes, but developing country scientists should also be helped to engage with leading international research agendas.
- North-South knowledge transfer should be a two way process and help local developing country institutions build up solid portfolios.
- Many existing donor funded development programmes focus on building research and institutions. This is not a bad thing as scientists need labs and jobs, but to be sustainable, such programmes have often been too short term and have not considered participating individuals long term career development support needs. This is the area where learned societies should be able to access funding for the long term support of local networks and their integration into international networks. As long term clubs of scientists, this is what learned societies do best.
- The best initiatives start small and are allowed to evolve to meet real local needs. Donors should have funding programmes that can cope with flexibility, diversity and small applications. The former British Council grant-in-aid funding for small programmes addressing individual country needs, and not driven by a rigid UK central agenda, was an example where this was once achieved very well.
- Policy makers and funders need to wake up to the need to support professional networks as the supporting “glue” for their research programme and institutional/centres of excellence investments. Mentoring opportunities are particularly important. No need to hand this over to the international consultants who often hang around major donors. With external funding, the learned societies, not for profit organisations which plough any extra funding they have back into supporting science, are the perfect contractors for this.
- An important exception to this was in the important area of knowledge transfer and commercialisation of scientific results, vital to building economies in developing countries. This is not a traditional area of expertise for learned societies or their member scientists, Appropriate consultants with expertise in intellectual property management could be a boon here.
- In developed countries there is a very close relationship between learned societies and the universities in which the majority of their members work. But the quality of universities in some developing countries is of great concern, with poor teaching, and research not an obligation for staff. Universities need this breadth to keep and develop staff and attract good students, and thereby help stem some of the notorious brain drain from developing countries. Good universities make excellent nodes and hubs for learned society type networks and should be properly supported by donors in their institution building programmes. Centres of excellence and government research institutes are also important, but do not have the same breadth of overall impact on local scientific systems.
- In terms of how best to encourage the growth of local networks, there was a significant consensus that supporting the development of local sister (where one already exists and just needs to be built up) and daughter (where one has to be created from scratch) learned societies was perhaps the most productive way forward. Even if each learned society only adopted one learned society in one developing country each, much could be

- achieved. Learned societies do not currently have the funding resources to achieve this on their own. What could be ideal is if some powerful donor instituted a programme, where individual societies could bid to support the development of learned societies in one or more other countries.
- The point was made that building such links between the UK and developing countries was also vital in supporting scientific disciplines that have been in slow decline in the UK, fresh ideas from developing countries, and partnerships with their scientists, could help the UK from becoming deficient in these skills.

D. SUMMING UP AND FURTHER ACTION

Attendees were divided on the best scale of project to attempt, with many favouring a number of smaller programmes that may remain independent from pre-determined funding body agendas, and others wishing to focus on the possibility of larger-scale high-impact proposals, possibly by combining learned societies' efforts and submitting a joint application for funding. There was also a debate on the ideal content of learned society capacity-building programmes – whether they should concentrate on an individual nation's research priorities, such as agriculture or health, contain a strong element of blue-skies research, or focus on supporting the underpinning professional scientific networks. There was a strong consensus that societies should focus on providing the latter, as it corresponds to their core business and societies are not primarily research funding organisations.

It was agreed that the steering group that organised this meeting, plus some additional volunteers, would meet again to discuss possible follow up actions. This group met on the 17th June 2009 at the Institute of Physics in London. The additional members of the group are: Paul Amuna (The Nutrition Society), Hans Hagen (The Royal Society), and Stephen Huggett (London Mathematical Society). The following actions were agreed and copied to all 2nd June registrants:

Media

- SciDevNet kindly published an article on the 2nd June event (<http://www.scidev.net/en/news/developing-world-beckons-uk-learned-societies.html>)
- This should be followed up with other articles, letters etc as this capacity building agenda develops.
- The Institute of Physics drafted an article for their society members magazine. This was circulated to all 2nd June participants to adapt for their society membership magazines if they wished.

Web Presence

- The offer from the UK Collaborative for Development Sciences (UKCDS) to host a web page highlighting the activities of learned societies in capacity building was accepted. This will be kept it simple for UKCDS with a summary webpage linking to documents etc on individual society web pages. It was felt that it is very important that societies present what they are currently doing to get joined up and spread the word. The UKCDS webpage will be a good start.
- The Guiding Principles that RAS have developed for ethical capacity building should be promoted to any society thinking of developing capacity building programmes. It will be prominently displayed on the new UKCDS webpage.
- Some existing good practice in allowing reduced rate or free access to journals for developing countries by societies could be highlighted on the webpage. UK National Commission for UNESCO will contribute some examples from their recent survey.
- The report of the 2nd June meeting should be made available on the webpage and the link circulated to interested policy makers as these are identified.

Lobbying

- Plans need to start to be developed to lobby policy makers to open more doors for learned society involvement in their programmes. An important link could be with Caroline Wagner, an academic interested in these issues in Washington, with a view to making some sort of joint input to the forthcoming World Bank Forum on Capacity Building in Washington (scheduled for December 2009).
- A follow up event might be held towards the end of 2010 to enable policy makers/politicians to discuss these issues with learned societies.
- The case needs to be made to funders that societies can mediate between their large pots of money and practitioners, ensuring that development money is responsibly spent.
- Societies need to get their members in developing countries to work with their own governments to help influence powerful funders and to increase recognition within governments of the vital role that SETI and learned societies/professional networks play in/for development.

Possible New Activities

- Learned societies are good at bottom up stuff, personal relationships and committed individuals, and supporting research processes. Programmes should be kept as local as possible and at the level of individual scientists. New collaborations can most usefully focus on networking opportunities, training and skills to provide the supporting "glue" for institutions and projects currently supported by funders.
- The most appropriate niche for learned society activities might be to support the development of daughter and sister societies in target developing countries to create local professional support networks, sensitive to the needs of individual countries and subject areas, and avoiding any potentially misguided "one size fits all" approach. The relevant international scientific member body of ICSU should be involved where possible. Some of the existing models presented on 2nd June, e.g. the Mathematicians Mentoring Programme, might be used to refine the suggested template put forward in the appendix of Liz Bell's original concept paper.
<http://www.physoc.org/site/cms/contentCategoryView.asp?category=478>
- It may be worth while working together to draft up a proposal for a pilot programme demonstrating learned society core capacity building principles, which might be submitted to a private funder e.g. Gates or Gatsby, which may have more initial flexibility to take on new models than state funding organisations. It is important to work very closely with local partners to draft any such proposal, asking them what help they need to support local networks.
- Funders probably wish to avoid too much re-invention or creation of schemes, and to avoid paying more "middle men" to deliver programmes. Therefore, societies might also look to see how they can add value to existing programmes in a cost effective way.

APPENDIX 1

2 JUNE MEETING REGISTRANT LIST

DR PAUL AMUNA

Council Member (International Membership)
The Nutrition Society

SIR JOHN BALL FRS

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NATASHA BEVAN

Senior Programme Secretary (Natural Sciences)
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Member of the External Relations Policy Committee
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PROFESSOR JULIET BRODIE

President
British Psychological Society

PROFESSOR GEOFFREY CAMPBELL PLATT

President
The United Kingdom Federation for Food Science and Technology

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