Chief Scientific Adviser to DFID : introductory hearing : Minutes of evidence, Wednesday 23 March 2005, Professor Gordon Conway, Chief Scientific Advisor and Mr Dylan Winder, Head, Central Research Departments's Communications Team / House of Commons, Science and Technology Committee.

House of Commons

Science and Technology Committee

Chief Scientific Adviser to DFID: Introductory Hearing

Minutes of Evidence

Wednesday 23 March 2005

Professor Gordon Conway, Chief Scientific Adviser and
Mr Dylan Winder, Head, Central Research Department's Communications Team

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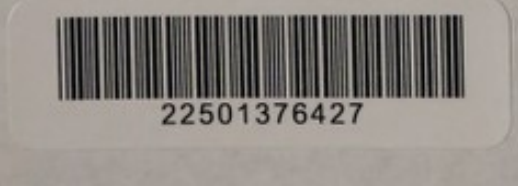

Oral evidence

Taken before the Science and Technology Committee

on Wednesday 23 March 2005

Members present:

Dr Ian Gibson, in the Chair

Dr Evan Harris
Dr Brian Iddon
Mr Robert Key
Mr Tony McWalter
Dr Desmond Turner

Witnesses: **Professor Gordon Conway,** Chief Scientific Adviser and **Mr Dylan Winder,** Head, Central Research Department's Communications Team, Department for International Development, examined.

Q1 Chairman: Thank you very much for coming. We feel you are partly a creature of this Committee's deliberations. I believe this is your first time in front of a Select Committee. It is much more fearsome than committees of Congress, I hope! We are going to ask you some questions. We know you have only just started the job and we do not suspect you have got all the answers yet, but you have identified some of the problems. What attracted you to this job? Were you headhunted?
Professor Conway: Thank you for the invitation to appear and for you being indirectly responsible for me having gainful employment. What really attracted me was that at the Rockefeller Foundation, where I had been for the last seven years, we were primarily a research organisation trying to develop technologies in particular for addressing the Millennium Development Goals. The great attraction of working for DFID is the scale is much larger. You can actually begin to put these into practice and really make a difference. That was what attracted me as much as anything. I applied and I was interviewed. I believe there was then a short-list, several people were interviewed and I got the post.

Q2 Chairman: I am fed up with trivia. Before I go back canvassing assiduously to get back here just give me the vision.
Professor Conway: My objective is to demonstrate over the next three years that having a Chief Scientific Adviser really adds value to what DFID does in the sense of raising the level of expertise and the stature of scientists within DFID and making sure that science and technology is taken into account in policy making. I am a great believer in evidence-based policy, but some other parts of the world do not think so highly of that. I think my vision is to help to create a department in which the natural and social sciences come together in a complimentary and integrated fashion to help countries achieve the Millennium Development Goals.

Q3 Chairman: And you feel that never happened before, do you?
Professor Conway: The standing of science and technology has not been as high as I personally would have liked to have seen in recent years.

Q4 Chairman: What was top of your list when you started? When you were shaving that morning when you got the job, what did you think? We know that one person makes very little difference to the world. What would it be for you specifically?
Professor Conway: What happened that first morning was that the Permanent Secretary came in with the terms of reference and went through them with me.

Q5 Chairman: Did anyone say to you, "You may think that, sonny, but don't try it"?
Professor Conway: No, I do not recall that being said.

Q6 Chairman: It was probably put in much more delicate terms.
Professor Conway: I do not even recall that. The first issue was the Tsunami. I think the next day I was helping the Permanent Under-Secretary of State to prepare for the Kobe meeting and what we needed to do at DFID and what the UK needed to do. It was a very interesting example of the way in which a chief scientist can work. I can elaborate on that now or later.

Q7 Chairman: We will come back to that. So you decide your own priorities in general, do you?
Professor Conway: Yes.

Q8 Chairman: And you do not feel inhibited?
Professor Conway: I do decide my priorities, but every now and again somebody says, "This is something you should do". Last week the Secretary of State wanted me to go with him to the Derbyshire G8 meeting and the day before he said, "I really want you to be there as head of the delegation for this event". Quite often things simply happen a couple of days beforehand and I comply.

Q9 Chairman: So you are very excited by the position, I guess.

Professor Conway: Yes.

Q10 Dr Turner: It is a great personal pleasure to see you sitting in that chair and equally a pleasure that we may have had some hand in it. How long is the appointment for? Given that we were very critical of the handling of S&T in DFID and your job has got a very wide remit, it is a very challenging post, are you happy that three days a week is going to be enough to address the demands properly or are DFID simply exploiting you and getting five days work out of you for the cost of three?
Professor Conway: The appointment is for three years, which I think is a reasonable length for a contract.

Q11 Dr Turner: Renewable, I hope.
Professor Conway: It does not say renewable but it could be. I am three days a week. I guess on average I am working about three and a half at the moment. I suspect that we will have a conversation about this at some point. There is no doubt that a job of this kind takes a great deal of time, not just when you are in the office doing something, but you do lie awake at night thinking about some of the issues. I am not sure I can charge for lying awake at night. It is a very demanding job. I went to South Africa just three weeks ago and that was a full week in South Africa, Saturday night to Friday night. My guess is that the amount of time I will be spending eventually is something of the order of four days a week. As you may know, I am Professor of International Development at Imperial College and so I have one day as an academic and I think that is important.

Q12 Dr Turner: Looking at your departmental structure, you report directly to the Permanent Under-Secretary rather than to the Secretary of State. I want to probe your relationship with the Secretary of State. How often do you meet directly with the Secretary of State? Do you feel that the Permanent Secretary of the Department is fully signed up to the importance of science in DFID?
Professor Conway: I report to the Permanent Secretary, that is Mr Suma Chakrabarti, and I have direct access both to the Secretary of State and the Permanent Under-Secretary of State who you met last week. I meet with either the Secretary of State or the Permanent Under-Secretary of State every week on average. I met with the Secretary of State either on my own or in a group at least twice last week and once already this week, so it is quite frequent. The Permanent Secretary is very supportive of my being there. We have frequent conversations about what we are doing. As evidence of his commitment and the commitment of the senior team at DFID they have appointed a head of cabinet for me who has had 20 years of experience in DFID and is very knowledgeable about the ways of the Civil Service and I think is proving to be invaluable to me. I think if the Permanent Secretary had not wanted me to be a success he would not have appointed somebody like that to help me.

Q13 Dr Turner: What resources do you have at your command? You have a budget of £1 million for horizon scanning, but is that enough? Do you have any funds at your call that you can use to commission research in your direction to underpin the work of the Department?
Professor Conway: The £1 million would cover research studies of various kinds. The view is that I have a remit right across DFID and that I have an influence on how funding is provided for particular things that I think are important. There is an example at the moment where I have talked to the Central Research Department about putting some of their money into a particular activity. We will see how that works into the future. The Director Generals of each of the three divisions and the Permanent Secretary are quite insistent that if I want to have something done then there will be funds for it within reasonable limits. You will have to come back to me on that at another date.

Q14 Dr Turner: One of the traditional problems of the British Government, as I am sure you are well aware, is the tendency of departments not to join up properly. An awful lot of DFID's work obviously relates closely to that other department, principally the DTI. Two examples come to mind. One example is the question of developing world agriculture and trade conditions and the other is energy in the developing world. If the developing world develops using carbon fuels we are in grave difficulty. Both of these relate very closely to the DTI. What scope do you think you will have for advancing development interests in those two areas?
Professor Conway: Let me say, first of all, that I have been building relationships with the chief scientists across government, some of them I have known before anyway and that includes the DTI, of course, Defra and the Ministry of Defence, all of whom are people I either knew before or have got to know. That cross-linkage at the level of chief scientist is happening. In terms of the specific issues you have raised, I have not got very far into those yet but I would expect to do so. When I went to South Africa we got together the various British interested parties, if that is the right phrase. The British Consul, the Foreign and Commonwealth Office, the DTI and I all sat and talked about the various things we were doing. We actually all wear rather different hats so we go at the issues rather differently. In some areas there is a great deal of potential overlap that we need to work on and one, of course, is climate change. For example, the person from DTI who was there in South Africa was talking about various kinds of energy systems that are being developed in the United Kingdom that could be of value in South Africa but also pointing out there are a number of South African energy devices that could be of use in the United Kingdom. On the agriculture and trade point, I have not got into that, but you are quite right, it is a crucial issue. It affects, in particular, of course, African countries that are exporting horticultural goods, cut flowers and so on to the UK.

I have had a discussion with some scientists who are working on these issues. I have not talked to the DTI about this yet but I will do so.

Q15 Dr Iddon: Professor Conway, when we carried out our investigation into your Department we felt that there was a weakness in applying science throughout the Department; "a weak scientific culture" is the way we described it in the report. Could you just tell us what you feel ought to be done about that and how you would personally try to permeate science throughout the Department so that it is taken into account in future?
Professor Conway: One of the first things I have been doing has been to spend a lot of time going to the different parts of DFID. I have spent many hours going from one unit to another getting to know people and talking to them and I am trying to extend that now to the Country Offices. I have done South Africa. I am expecting to go to Rwanda and the Democratic Republic of Congo in June and then to India and China. Interestingly, a lot of people come up to me and say, "I don't know if you knew that, but I'm a scientist". There are more scientists in DFID than you had perceived when you wrote your report. We have started to do what you asked us to do and that is to identify who the scientists are. We have done it so far for one group, which is the livelihoods group, which is a total of about 110 people. Of the people who have undergraduate degrees, half of them have got science; of those who have got Masters degrees, it is about a third, and of those who have got PhDs, it is about half. So the proportion of scientists is relatively high. I think one of the issues is that the people who come into DFID tend to find themselves by and large managing programmes and managing projects. They tend not to have a lot of time for sitting and thinking about an area of substance in terms of their science and what needs to be done about it. One way to move forward—and this is pure hypothesis at this point—is to identify some people who are a bit like myself, in other words who are scientists in a particular field and who have more time to think about the substance of the subject and to make recommendations on the substance. That is not to say there are not scientists in DFID who could do that, it is just that they are very pressed to make sure that contracts are let, that projects are undertaken and that programmes are brought forward. I think it is still too early for me to come up with a concrete answer to that. I do think that the standing of scientists and technologists need to be raised within DFID and their voice needs to be better heard.

Q16 Dr Iddon: You mentioned that you are beginning to tour the Country Offices. Do you detect that there is a culture of scientific achievement in the projects that the Country Offices are running, or does it need stimulating?
Professor Conway: I have only been to the South Africa office and one of the staff there is primarily concerned with the environment, but she has science and technology within her remit. I went at the invitation of the Minister of Science, but she had organised an extremely valuable set of meetings. We worked from morning to night meeting with scientists, engineers and technologists. She clearly had no difficulty in accessing those individuals and she was greatly respected by the scientists who we met. I think there is a distinction we have to draw between science specifically in relation to the Millennium Development Goals, in other words medical science in relation to infant mortality, maternal mortality or HIV Aids or agricultural science in relation to agricultural development. I think the DFID staff are fully aware of the role of science and its importance in achieving the Millennium Development Goals. If you take science and technology as a whole then I do not think there is that understanding and that is something we are going to have to work on if we are going to focus rather more on capacity building in science and technology. That is where there is a business gap at the moment.

Q17 Dr Iddon: How will you maintain the link between the office in London and all the Country Offices, of which there are quite a few?
Professor Conway: I do not have an answer to that yet. Obviously in theory I could spend the next few years travelling round to every office. The South Africa trip was extremely successful. If I did that with every office we would then have the links. I think as people get to know me I will find that I am being asked about issues. For example, the offices in south-east Asia at the moment, Vietnam, Cambodia and so on are asking me about avian flu. They know I am there now and so they will say, "I've got this problem. What can you say?" In terms of the more formal linkages, I will have to decide on that, I am not sure.

Q18 Dr Iddon: Are people from the Country Offices ever brought here to a conference or a seminar to get the feeling of the culture in the Department?
Professor Conway: They certainly come back quite frequently. I think what you are suggesting is probably a good idea. I think what you are implying is that it might be useful if, from time to time, we had a session on science and technology in relation to the Millennium Development Goals and the goals of the Department as a whole to which field staff were invited. That is one of the things I have been half thinking about. I think it is a good idea.

Q19 Dr Iddon: In the terms of reference for your position it says, "... maintain an appropriate system of peer review for and evaluation of DFID scientific activities". Could you perhaps tell us whether you have detected that that has occurred in the past and perhaps tell us whether it is a good idea and whether it will occur in the future?
Professor Conway: I do not think it has occurred in the past in the way that you are describing it. I think in principle it is a good idea. I would hope to encourage that. I have not thought again yet about how that will happen. One has to balance the amount of time that is spent on evaluation and peer review with the amount of time that is spent getting

programmes off the ground. Two big programmes are being evaluated at the moment, one on natural resources and the other on engineering and I am looking forward to reading those and to getting a sense of where the programmes maybe could have been improved if there had been more peer review. I think out of that I will get a better sense as to what one might do practically to ensure that that happens without overburdening the system.

Q20 Mr Key: Professor, does DFID have a role in sponsoring blue skies research?
Professor Conway: It is a very interesting question. There is no doubt that in some areas it does. You have to define what you mean by blue skies and that gets difficult. For example, in the support for microbial science some of the funding goes quite far—I hate this analogy but I cannot think of anything else—back up the chain. You are talking about quite fundamental work on molecular biology in terms of relationship and of what compounds stop the HIV virus from entering a cell. If you take a particular problem like microbial science and you drive it back, then DFID will do some blue skies research. If DFID is approached and told "I have got a wonderful idea and maybe 10 years from now it could be useful," I think DFID in general says, "We have got a real problem right now and that is our priority".

Q21 Mr Key: Do you have a budget with sufficient flexibility to accommodate that?
Professor Conway: No, I do not and I do not think I will have. What we are looking at is your proposal for a development research board. There is a small group at the moment consisting of myself, the Chief Scientific Adviser, Sir David King and the Head of the Research Councils, Keith O'Nions and we are discussing this issue right now.

Q22 Chairman: We will come back to that in more detail later.
Professor Conway: It is clear that if you developed a research board it would help to tackle that issue.

Q23 Mr Key: Is there a European Union dimension to this as well? Does the EU aid budget include any blue skies research or other research capability?
Professor Conway: I do not think the development funding of the EU has blue skies capability. There is both the EU research activity and there is the creation of a European Research Council which would have that capacity, but I am not sure how much of that would be development related, in theory it should. I am still not yet familiar with the EU in this respect.

Q24 Mr Key: I would like to ask you about your approach to horizon scanning. How are you going to integrate that work within the mainstream of DFID work?
Professor Conway: In part I need to spend more time talking to Sir David King who is undertaking Foresight studies. He has got one at the moment on infectious diseases. It comes under a different title but it is horizon scanning. He has got some other ideas that he wants to pursue and I want to talk to him about these before we start to embark on horizon scanning. It is about trying to identify issues that are going to come up in the next four or five years that you want to get a handle on now. One area that I have started to push a bit on is nanotechnology and I could talk about that at great length at some point. There is no doubt that nanotechnology has enormous potentials for developing countries and the poor, but it has all kinds of issues associated with it. Whether you call it horizon scanning or not I am not sure, but I would expect to have some funding for looking at that problem into the future.

Q25 Mr Key: Finally, Professor, a couple of years ago this Committee visited the Center for Disease Control in Atlanta Georgia where we saw a lot of activity including forecasting of avian flu progress around the world. Are you networked into the American system, specifically the national Centers for Disease Control?
Professor Conway: I am not simply because of a lack of time at this point. I am fairly sure that Stuart Tyson is. I suppose the extent of my networking with them is to read their pieces on the Internet. They are some of the best that you can get. It is an extraordinarily fine organisation. I visited it in the past under my previous hats so I know some of the people there. I would hope to get involved with them.

Q26 Dr Harris: I would like to ask you about capacity building in developing countries. How do you think we should be helping countries who have very poor science and technology infrastructure at least to identify their needs for more capacity in science and technology?
Professor Conway: It is a subject I am very interested in. In my previous role as Head of the Rockefeller Foundation we were part of a consortium of Rockefeller, Ford, Carnegie and MacArthur, it was called the Partnership for Higher Education, which spent about $100 million in the first five years. At Rockefeller we were particularly involved in the development of Makerere University and I have seen that university transform itself in the last five years, not only more broadly but specifically in the area of science and technology. I think there are two aspects to this. One is the development of higher education as such and the science and technology component of it. My guess is that DFID is not going to be spending a lot of direct bilateral funding on that. Its priorities will still remain primary education into the foreseeable future because that is where the greatest need is. A great deal of DFID money goes through multilateral organisations including the World Bank. The World Bank has got quite good experience now of supporting higher education in Africa. I would hope to be able to influence the World Bank through our role as stakeholders in working on higher education.

Q27 Chairman: Let me ask you about the World Bank. They have got a new head, have they not, called Wolkowicz?
Professor Conway: I am not sure they have a new head. I think they have a new proposed head.

Q28 Chairman: You would oppose him, would you not, given half a chance?
Professor Conway: I did not say that. I simply said he is a new proposed head, which is a factual statement.

Q29 Chairman: You will know of his record.
Professor Conway: I have read the things he has done and said, yes.

Q30 Chairman: He is not the kind of man you would hire to help and be part of your team, is he?
Professor Conway: I am learning to be a civil servant. You could have asked me that question last November when I was President of the Rockefeller Foundation and I would have given you an answer.

Q31 Chairman: I will let you off the hook.
Professor Conway: I am sorry, Dr Harris, I was trying to talk about the second part of higher education and that is the issue of centres of excellence. There is support for universities and then there is support for centres of excellence, both of which are in the Commission for Africa report. Two weeks ago I was in South Africa and I was invited to the NEPAD Science and Technology Committee meeting. I was the only outsider that they allowed in. They have identified 12 to 14 themes with centres of excellence in them. Some of those centres of excellence are of interest to DFID because they are very closely allied to the Millennium Development Goals. One way of strengthening science and technology capacity in Africa is through centres of excellence. There is a very good example of the biosciences centre in Kenya, which is a NEPAD flagged centre of excellence, which is already helping scientists both in the national agricultural institutes and in the universities.

Q32 Dr Harris: In those countries where science and research has a low profile how do you think we and DFID and you can help give science a voice in policy making, particularly evidence-based policy making?
Professor Conway: I think this is going to be increasingly through dialogue. Where these countries are developing their poverty reduction strategies, that is the point at which you have dialogues between the officials within the Government and the officials in DFID and I think it is going to be important at that stage that we have discussions about the role of science and technology both in the short term and in the medium term to achieve their poverty reduction goals. That is what I would hope to see happen.

Q33 Dr Harris: Our Committee report commented on the fact that the poverty reduction strategy papers often did not really deal with the need for science and technology and there may be two reasons for that that we can deal with. One is that they do not think to do so and we can help them work on that and, secondly, they put in those papers what they think developed countries want to hear, which is not the relatively boring stuff like science technology, and that is why some of the really boring stuff that is vital, like water and sanitation, does not really get a look in. What can we do to change that?
Professor Conway: I would commend to you the speech that the Secretary of State made yesterday at the Royal Geographical Society as part of World Water Day in which he announced a major increase in our funding of water both bilaterally and multilaterally, a doubling of our funding and a quite specific statement that we would engage on the issues of water as they are formulating their poverty reduction strategy plans. In other words, there is now a quite explicit statement that we should engage on sectoral issues. Water would be one example and I would expect that science and technology would be another and, of course, the two come together in some respects.

Q34 Dr Harris: Let us consider evidence-based policy making in countries. For example, when a South African leader says they are not convinced that HIV causes Aids or an African country rejects food aid because it is GM, what role do you think DFID has to ensure there are home grown scientists capable of giving better advice or at least creating a civic society that challenges that in these countries?
Professor Conway: I think we have an important role. I am not sure how far we can go. I think it is important that DFID provides support to scientists, whether they be in Government or in universities or in civil society, who are making important statements about issues such as HIV Aids or agricultural development and I think we can do that. The challenge of actually building up that capacity in those countries, in other words ensuring that there are more scientists and technologists employed in those various bodies, is probably something that is too big for us, but it is something that I think the multilaterals could do more of and I would want to urge them to do it.

Q35 Dr Harris: Is not part of the problem that scientists in those countries might have the same problem that they have in this country, that is, they are afraid to speak out against the views of their political masters?
Professor Conway: I think that is true. I do think that is where an outsider can be important. I have played that role a bit in Uganda. I have had senior agriculturalists say to me "When you meet the President would you try and persuade him about this or that" and I have done that.

Q36 Dr Harris: We criticised the research strategy in our report because of the lack of input from developing countries themselves. Do you have any mechanisms that you can think of to put in place to ensure that science and research in DFID is demand-led and from the recipient countries themselves? For example, the strategy that you are developing for those countries, what is their input going to be?

Professor Conway: As you know, I am beginning to prepare this science and innovation strategy and hopefully I will have that done by the autumn. Interestingly, while I was in South Africa the South African Department of Science and Technology requested the opportunity for one of their staff to play a role in this and we are going to explore that. I would hope to take preliminary ideas on this when I travel. In fact, when I went to South Africa this time I said my primary reason for going was to get their inputs into what we should be doing. In several instances we did have some very lively discussions about what I should be doing and I would hope to continue to do that. In particular, I think we may be able to engage with middle level staff within the departments of science and technology and get them maybe to come to Britain or get people from my office to go to those countries and have those dialogues.

Q37 Dr Harris: Finally, is it your plan that DFID should devote more money to the Country Offices and more funding to S&T capacity building in the future? If so, how will you ensure that the Country Offices have enough scientific staff to do that role properly?
Professor Conway: I think in the first instance what we will be doing is responding to the Commission for Africa, particularly in terms of support for centres of excellence. I think in the Country Offices we need to have a better understanding of what potential centres of excellence exist, for example, in Africa and to get the staff involved in identifying those and beginning to work with those centres. In some cases we already know them but in other cases we are less aware of them. In some cases they may not be where you think they are. For example, I was asking in South Africa about where the centre of excellence in statistics was. I was assuming they were going to say South Africa and they did not, they said Makerere University is the best centre for statistics in Sub-Saharan Africa and I thought that was interesting; in other words, they had a clear view about centres. That will be true in some areas and in others I think they will need some help and push to find where these centres are.

Q38 Chairman: EU funding for international development framework programmes, have you got a view about the strategy that is being used there?
Professor Conway: Not yet. I am fully aware that getting to understanding the EU and what it does will take a fair bit of time and for the moment I have put it on a middle burner, if that is the right phrase. I have met the representative on agriculture at the EU, I have met the Commissioner for Environment and the Commissioner for Development at the G8 meeting on Friday. What I want to do is to go to Brussels and try and find out a bit more about what they do and how they do it and what is the role of S&T, but that will not be a simple one day job.

Q39 Chairman: Perhaps you will talk to some of the scientists in this country who have been involved in some of the programmes and hear some of the problems they are having.
Professor Conway: That is a good suggestion.

Q40 Mr McWalter: I want to ask some questions about this whole idea of the Development Sciences Research Board because I have been pushing that idea. Do you see yourself as having any responsibility for helping to tackle problems faced by the UK development scientists, such as the lack of recognition given to excellent development sciences research by the research assessment exercise?
Professor Conway: I have had experience. I was the Vice Chancellor of the University of Sussex and Chair of the Board of Institute of Development Studies and, of course, oversaw the Science Policy Research Unit at Sussex as well. At Imperial College we have quite a number of scientists who work in the development area, both natural and social scientists. I think there is inevitably a problem with a peer reviewed system that tends to focus on disciplines rather than cross-disciplines. I know that the RAE does have now a cross-disciplinary committee on development. There is a natural tendency for all of us—it may be less for MPs—to retreat into our narrow confines. It is actually a question—and excuse me using a social science phrase—of transaction costs. If you burrow down in a particular area the transaction costs are very small because you do not have to talk to anybody, you just do your own thing. If you are trying to do development science or environmental science, which are very closely allied, you have got to work with other people and that takes a lot of time. It makes it less easy to get a five or a five star, which is what is driving the universities at the moment. Imperial College at the moment is completely driven by the need to have a staff that is entirely five and five star. So there is a real hurdle to be overcome there.

Q41 Mr McWalter: I talked to people at Warwick University who do some fantastic work in this area as well and their view very strongly was in a sense you could be writing yourself off if you go into the development side and that is partly because the problems that they are seen as tackling are not seen as at the frontiers of knowledge when in a sense they are.
Professor Conway: I agree with that. My experience is that in the Seventies and Eighties I was a member of something called the joint ESRC/SERC committee. The SERC has transmogrified into other bodies since. That was a committee that was set up by the two research councils to work at the interface of natural and social sciences. It ran for 15 years or more. Professor Howard Newby, who you probably all know, was the head of that committee and it was extraordinarily productive in producing a range of programmes that brought natural and social sciences together. In fact, out of that I created a Masters Degree in Environmental Technology at Imperial College which has now been running for 30 years and has 150 students a year on it. So it is

possible to bring together research councils in such a way that they focus on across-disciplinary activity, provided with funding and visibility and then make a difference and that is what I am hoping we might be able to get out of this proposal of yours.

Q42 Mr McWalter: We have got this idea that there is going to be an advisory Development Sciences Research Board. Is that not more just a way of kicking into touch and a talking shop? If you want real funds for real individuals or teams of PhD students to do something about Mozambique and the railways (which is one of the issues that first got me into this sort of thing) you need engineers, you need people who understand about the landmines and you need people to look at how that structure can affect the economy and access to health and education services. You need, also, to understand cultural resistances and conflicts, sometimes. There is that whole list of problems which looks to me absolutely classically as a wonderful problem, but you need somebody to be shoving money in the direction of the people who are going to be taking on a problem like that. If it is waiting for all the different research councils to all get together and say "That's not such a bad idea", we know what happens: it is too complicated and it does not get done.
Professor Conway: I think the phrasing there is meant to cover the range from, on the one hand, a better co-ordination of what the research councils do at the moment right the way through to a fully fledged large, semi-independent research board. Where we will end up on that, I do not know. Obviously, a fully independent research board is going to cost money and that means trying to get extra money in the 2006 spending commitments. We do have, at the moment, two agreements. One is a concordat with the Medical Research Council which has been very productive. We are working on a number of programmes in Africa, at the moment, to do with health, and the Secretary of State has just announced a joint programme with the Economic Social Research Council of a total of, I think it is, £13 million. Is that right?
Mr Winder: Yes.

Q43 Chairman: Mr Winder, you have been sitting there very passively, but please feel free to answer.
Professor Conway: That £13 million will be shared between the two, which in particular will enable both developing country institutions and universities to bid as well as UK institutions. So we have got a bit of a precedent, and I would like to see that on a much larger scale.

Q44 Mr McWalter: As would this Committee, as you know. We have suggested £100 million, but it is also interesting that the £13 million is still going to be targeted. We all know that medicine and agriculture are DFID's real strengths, and also if we go to bodies concerned with development we often find that economics is their real strength, perhaps sometimes to the exclusion of other strengths. The effect of this is to marginalise a whole series of other activities which it is really important are looked at from that wider issue of the problem, rather than: "I am in this discipline and I can do this". It is that problem-orientated research which I think the current structures make very, very difficult.
Professor Conway: I personally fully agree with what you have just said.

Q45 Mr McWalter: So are we going to get our £100 million? How much clarity do you have to go down that path?
Professor Conway: I am not sure. I think all I can say is watch this space. I understand what you are saying and I am personally very much in sympathy.

Q46 Mr McWalter: We have also heard that, possibly, some of the research councils that, as it were, think that they have got a lot of ownership of these issues, like say the Medical Research Council, might be the very ones who have been most opposed to a Development Sciences Research Council because, in a way, they have got programmes, they do £40 million worth of work a year, they think they know where they are coming from and they do not really want to have these issues generalised in this way.
Professor Conway: I have met with Sir John Lawton who is the Chief Executive of the Natural Environment Research Council—

Q47 Chairman: He has just left his position.
Professor Conway: He has or is just about to leave. I think that is right. I have met with Sir Colin Blakemore, the Head of the Medical Research Council. They are both very similar, and those are the only two so far, but I am meeting with the head of the BBSRC, and so on, over the next few weeks. I think they are all sympathetic to the idea and I think they are all, in principle, in favour. I think you will find that like most heads of institutions they want to know where the money is coming from.

Q48 Mr McWalter: Sir John, for instance, is very strong on the need for a geological survey and for the consequent effects, both of identifying water resources and of conserving water resources from damage through inappropriate drilling, and yet he cannot get geologists at the sharp end in the way that anybody with any sense would think needs to be done. A Development Sciences Research Board/ Council would still have access to MRC and NERC and all the others. One of the interesting things is they do work very well together once they start working together. I do not think we would want to see that as an exclusive preserve rather than a co-operative principle. Who is going to be on this working group of this board?
Professor Conway: At the moment it is myself, the Chief Scientist and the Head of the Research Councils. What we have done is to ask—

Q49 Mr McWalter: A bit exclusive, is it not?
Professor Conway:—the staff of OST and DFID to come together to come up with a set of terms of reference and then, on that basis, we will put

together a smaller committee to go forward. The responsibility lies with the Chief Scientist, with Sir David King. It is not my committee.

Q50 Mr McWalter: Is he strongly supportive of this idea? Or is he sceptical?
Professor Conway: I think we are at a very early stage of the discussions.
Mr McWalter: Thank you, Chairman.

Q51 Chairman: You saw we had a debate last week because you were there (I saw you lurking in the background). What did you think of the Government's response? Did it show it was educated, or ignorant? How did you conceive it? Be very careful—be in your civil service mode, if you like!
Professor Conway: I think it was a good response. I think my one criticism of the response was that there were not enough concrete examples of what DFID has been doing. They are all there; there are some wonderful stories that DFID can actually tell about agriculture or health or even water, but they were not there in the reply. It was not the reply a scientist would have written. In other words, if it had been given to me to write it would have been somewhat different.

Q52 Mr McWalter: One of the representations made to us by the Institute of Civil Engineers, for instance, was that even when these good things happen there does not seem to be somehow or other the lessons taken from that understood and then applied and developed; it is almost as if everything starts all over again. I thought that was a very powerful claim that they made, which we did not have time to go into last week.
Professor Conway: Dylan is head of communications for the Central Research Department. I know that there are some new steps afoot to make this happen.
Mr Winder: It is an area that we recognise needs a lot of improvement. I think the way in which the existing research programmes were managed in the past by separate departments meant that the knowledge solutions for the DFID programmes are very different. We did struggle when we first joined up to try to actually understand what was going across the different programmes, and the different ways in which those programmes were commissioned out. Now we have a much more common approach to commissioning and we are developing this within the new research funding framework. We are trying to develop a much better system which will generate information across the programmes and, really, put our information in the international domain and influence other international donors in doing the same with their research information. We are also trying to work much more effectively with heads of professions to make sure that our advisory groups are learning from the experiences being funded by DFID research, so there is a common wealth of understanding building up. The heads of profession are very keen to work with us on that. I do think it is an area which we have had problems with in the past but we are really trying to address it into the future.

Q53 Chairman: How would you look at the state of the research in British universities at the minute, in terms of international development? You have referred to the RAE, so you can keep off that. Do you think we are finding vice-chancellors are serious about it or not? Is it well down their radar scale or what?
Professor Conway: I think one, first, needs to recognise that probably the standing of development research, both natural and social sciences, is higher in this country than anywhere else in the world. I suppose only the French come anywhere near it; there is virtually nothing like this in the United States, for example. However, I think it is under threat for the reasons that were just enunciated recently. I think from my own experience it does depend on the vice-chancellor. Vice-chancellors can provide really strong leadership if they want to; they can either say: "Oh, I'll go along with the pack" or say: "I want that to happen", and it will happen. When I was at Imperial College Lord Flowers was director and I can assure you that if he wanted something to happen it happened. That is how we got the Centre for Environmental Technology there. I think there is a serious threat to development science, both natural and social science, in British universities.

Q54 Chairman: Why do you think that is? Because vice-chancellors are offered taster work (?).
Professor Conway: Some maybe, but I think most of them are being driven by the economic and financial requirements of the post, and all of you know the pressures which British universities are under. I think in that situation you find some things become marginalised because they are not the things that are either pulling in the money or pulling in the students, or whatever it happens to be.
Chairman: Before the Prime Minister takes us to the country there is a report due out about universities and what they could be doing in these kinds of areas.

Q55 Dr Harris: I am grateful to you, Chairman, for allowing me a further question which is around evidence-based policy, which we probed earlier, and I would like to probe you a bit further. This Committee has expressed on a number of occasions how important we think it is to agree with the Government in their agreement that policy making should be evidence-based where that is possible, and that there should be attempts to establish that. Can you just explain from your own history how you ideally would like to ensure that you can demonstrate that your department's policy, at least in your areas, is evidence-based and that that is independently assessed rather than you just saying it is. Or the Minister saying it is.
Professor Conway: Most of my experience of this comes from the Rockefeller Foundation where we were heavily involved in the development of evidence-based policy, not just in this area but in

others. For example, we were working on affordable housing, on employment, on public schooling, and in each of those situations we were trying to see what worked and what did not work. We even went to the extent of having experiments. For example, you would take two housing estates (to transform it into a British context) and you would have one kind of childcare system in one place and another kind of childcare system in another and you would evaluate them over five years. There were organisations in the United States that could do that kind of evaluation. In fact, we helped to get the Treasury interested in that kind of organisation and that is now being set up here in the United Kingdom. If you take the development issues, one of the examples would be the treatment of HIV Aids, where, again, what you are interested in is a kind of operations research in which you are studying the treatment protocols for HIV Aids and trying to see which ones work and which ones do not; which ones lead to resistance to anti-retrovirals, which ones produce greater adherence to the drug regimes and so on and so forth. It is that kind of approach; it is a scientific approach that is conducting experiments in one sense or another and looking for what works and what does not.

Q56 Dr Harris: There is another area, is there not? There is general policy making where you can get someone to do a review of the available evidence as to whether the policy works. I am not talking about operational research or even pure scientific questions, like, for example—I do not know—whether there was any evidence that screening migrant populations for TB had any impact whatsoever on our rates of TB in a cost-effective way. Do you think there is a role for the ESRC, for example, in those non-technical questions where you do not have to do clinical trials? Do you think there is a role for the SRC, if they were agreeable and a good proposition came forward, to look at the policy to see what the evidence base was, and would you be willing personally, at this point, in principle, to co-operate with such an arrangement?
Professor Conway: I think that is a very good idea. I will be meeting the Chief Executive of the ESRC fairly soon and I want to ask him what his approach is to evidence-based policy. We clearly, in the United Kingdom, need that—at least the development issues.

Q57 Mr McWalter: One aspect of our report, and indeed of the work of this Committee, is we try to join things up a bit, and the Chairman has already referred to the fact that we are looking at what can be, in some ways, a rather desperate state of science and engineering in UK universities. We want to see kids at school realising that if you do a degree in chemistry you might actually be able to help people have access to water and other such connections. Do you see that DFID could do something to help us with the need to develop some of these skills, both to motivate potential students and, indeed, to get their potential students to be doing some of the work that this country and indeed the world needs?
Professor Conway: I think that is a very interesting challenge. When I went to South Africa we talked a lot about this because, as you probably know, there is a real paucity of black scientists and technologists in the universities and in government. We went to a high school in one of the townships and looked at the way they were being taught science and technology. There is a real challenge in taking those kids and turning them on to science and technology, particularly in the way that they were doing it. I think that is a major issue. There is an issue of role models too. The teachers talked to me frankly about what are the role models for young kids in the townships. They tend not to be people in white suits. I think that is a big challenge. How much we can do about it I am not sure, but I think it is something that has to be addressed. There is, I am afraid, often in developing countries, a perception that success is becoming a lawyer or a financier rather than becoming a scientist.
Mr McWalter: That is true here as well.

Q58 Dr Iddon: Do you think there is enough co-ordination between the individual donor countries? It always seemed to me when I travelled to East Africa or India that individual countries, perhaps, for their own selfish interest, in those days, were just doing their own thing and there was parallel work going on, duplication and waste of effort. Have we improved over the last decades, do you think? Or is there much improvement that is still needed?
Professor Conway: I think there is improvement at the moment, particularly because it is led by DFID. DFID is playing a major role in getting better donor co-ordination. At the moment, I think I am right in saying, we are working on a partnership with the French Government in which we can both work together in Frankfort, West Africa. DFID has been very keen on this notion of a more harmonious approach and a more joined up approach between the various donors. My understanding is that there is some success in that regard. I agree with you; in the past it has certainly been a very serious problem. It is an overload of those countries.

Q59 Dr Iddon: Our report was critical of the money that we put into the European Union international aid effort, and we did not think we were getting the best out of that. Will you be trying to improve the record of the European Union? I know you are only one person out of many.
Professor Conway: As I have said earlier, I want to spend some time trying to understand the European Union and its programmes. Whether I, personally, can make a big difference I have some doubts, but it may well be that one can begin to see ways forward in collaboration with other member countries.

Q60 Chairman: Gordon and Dylan, thank you very much for coming. I know it is early days but we have thrown the gauntlet down and here you are, and big challenges. I am sure the Science and Technology Committee—who knows what will happen after 5 May, probably?—will always be there to support your efforts in these challenges. I can almost bet you

will need more staff and you will need more permanent jobs paid at a higher level than perhaps they are, but we will see. I am sure the next Committee will take up the cudgels and make sure this work carries on. Thank you very much for coming, thank you for your enthusiasm and, please, get stuck in!

Professor Conway: Thank you for your support, sir.

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