



HOUSE OF LORDS

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Inquiry on

GOVERNMENT FUNDING OF INTERNATIONAL DEVELOPMENT R&D

Evidence Session No. 2

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Questions 10 - 16

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12.05 am

Witnesses: Professor Charlotte Watts, Rurik Marsden and Jenny Dibden

USE OF THE TRANSCRIPT

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Members present

Earl of Selborne (Chairman)
 Lord Cameron of Dillington
 Lord Mair
 Baroness Morgan of Huyton
 Baroness Neville-Jones
 Viscount Ridley
 Lord Vallance of Tummel
 Baroness Young of Old Scone

Examination of Witness

Professor Charlotte Watts, Chief Scientific Adviser, Department for International Development (DFID); **Rurik Marsden**, Deputy Director, Research and Evidence Division, DFID; and **Jenny Dibden**, Director Research Base, Department for Business, Innovation and Skills (BIS) and Head of the Government Social Research Service

Q10 The Chairman: Welcome to the second session. I apologise that we are a little later than you might have expected. You were present and will know that we had a very full session just now. We are being broadcast. For the record, would you introduce yourselves?

Rurik Marsden: I am Rurik Marsden. I am a deputy director working in the Research and Evidence Division in DFID.

Professor Charlotte Watts: I am Charlotte Watts. I am the Chief Scientific Adviser to DFID and I am the Director of the Research and Evidence Division at DFID.

Jenny Dibden: I am Jenny Dibden, Director of Science and Research at BIS. One of my responsibilities is the GCRF.

The Chairman: Thank you very much. Would any of you like to make an opening statement before we begin our questions?

Professor Charlotte Watts: I just wanted to say how pleased I am to have this opportunity to discuss this issue. Also to thank my colleagues and yourselves for the really interesting discussion previously. I am very much heartened by the positive comments that the panel had about DFID's research and a number of very important challenges for us moving forward that were flagged up, particularly thinking about the increase in ODA research funds and how we can work effectively across government departments to achieve substantial impacts with these research funds.

Jenny Dibden: Just a very short opening sentence reflecting on what I have heard today. Since we got the GCRF in November we have been absolutely focused on three things: one, the opportunity; two, the need for coherence; and, three, the need for control, both now with the GCRF and going forward, because it is a substantial fund that runs over many years. I look forward to the opportunity to tell you about the work we have been doing to look at opportunity, coherence and control.

The Chairman: Make sure that you do indeed tell us that. We look forward to that with interest. Let me ask my first question specifically addressed to Professor Watts. Welcome to your new job as Chief Scientific Adviser at DFID. What are your impressions of your first nine months in this role? How easy is it to influence policy-making? What is the main challenge of your role at present?

Professor Charlotte Watts: It is a great privilege and pleasure to be Chief Scientific Adviser. I have been incredibly impressed by the strengths of the department, in particular its focus on evidence. Getting Ministers and policymakers to pay attention to evidence has been much easier than I might have expected before I joined. What is impressive is that DFID prides itself on its use of evidence. Part of its standing in the world is that it has brought leadership, its ability to draw on evidence and to provide smart guidance. I think that is why DFID is very influential in the development space.

Evidence is embedded in DFID's systems through every business case, so there has to be discussion of evidence around every proposal to use taxpayers' resources. There has to be discussion of evidence—what does the evidence say about the issue and what does it mean about proposals that are then given to Ministers to consider? Similarly, in the audits and quality-control mechanisms within DFID there is attention to evidence—is evidence being used well and influencing the actions that DFID is taking? There is a strong culture of evidence that makes my job easier.

The challenges that we face were reflected somewhat in the previous discussions. We are in an ever-changing world. Some of the areas that DFID needs to respond to are very new and there might be a limited evidence base. We might be in a situation where we are very rapidly trying to synthesise what we know on a particular topic, be it ISIL, migration—these are some of the immense challenges that we face—so we are not in the position of saying, “Let's commission a three-year research project on this topic”, but saying, “What do we know from existing evidence?” and putting that into the domain.

Because of that, within RED—the Research and Evidence Division—we have a number of evidence mechanisms. We have the large research programmes that we commission, but also my predecessor developed a number of other mechanisms—rapid evidence syntheses, policy evidence mapping systems—so we can systematically say, “What do we know on this topic? What is the level of uncertainty?” and based on that, what might be the issues that Ministers need to consider when making their final decisions.

Viscount Ridley: I welcome your emphasis on evidence, it is absolutely crucial. I want to strengthen your arm by suggesting that you watch out not so much for evidence-based policy-making but policy-based evidence-making, which is a habit of some of the NGOs these days.

Professor Charlotte Watts: That is very important about my role. I am seconded as an academic. I have spent my life generating evidence. I see my role as supporting DFID to say, “Let us look at the evidence, both the evidence that we have generated and in the broader academic literature” and making sure that is feeding into the decisions that are being made in a neutral way. It is very much evidence-based policy rather than the other way round.

The Chairman: In the earlier session you heard Sir John explain some of the difficulties the first CSA had. Have these issues been resolved?

Professor Charlotte Watts: Having a role where I am the scientific adviser, but also managing a substantial research budget makes my role tenable. Without that, the risk would be that I would be side-lined and would not have that seniority. Because I have resources that I can direct to fundamentally creating new evidence on issues that are important to DFID or the broader development community, that makes my role effective and means I can really generate evidence that responds to the needs of DFID as an organisation and the broader development community. My role has been improved by that.

Baroness Morgan of Huyton: This is not trying to catch you out, I do not know the answer. Do you sit on the board of DFID?

Professor Charlotte Watts: I am a member of the Senior Leadership Group at DFID, so I am not on the EMC¹ level but I am a rank down, a director.

Q11 Baroness Morgan of Huyton: To put it on the record, what is DFID's annual spend on R&D? Can you give us some examples of the impact of this funding and the importance of it being within DFID rather than elsewhere, and a little more detail about monitoring the impact of R&D? My slight pushback after the last session and your introductions is where could it be better? There is always a danger of complacency. In the time you have been there where are you beginning to think, "There needs to be more on this or that"? Is there anything you want to flag up at this stage?

Professor Charlotte Watts: My annual budget for 2015-16 is £308 million. For the last few years about 3% of DFID's resources have been invested in research. It is a substantial investment. We have had lots of impacts. We have quantified some of those. We try to look at the rates of return on many of our investments, because particularly in discussions with Ministers and within an organisation when we are saying, "Do we fund research? Do we keep girls in school in Pakistan?", we need to be able to talk about the impacts that we expect to see from our research investments.

The sort of things that we have achieved with previous investments include, in health, new malarial drugs, so there are infant drug regimes for malaria, for example. Three hundred million treatments have been delivered in over 50 countries, directly saving lives by having these new medications. There are "mama" kits for pregnant women that have facilitated women coming to health facilities to deliver, again reducing complications at birth and infant mortality. In agriculture we are seeing a lot of impacts in some of our investments, some through CGIAR and some in other areas. It includes things such as vitamin-enhanced sweet potatoes which have helped about 10 million people avoid starvation and illness. In the energy space, which is an area that is growing for us in research, looking at building on mobile money to enable poor communities in Africa to access solar technologies, and testing a business model has enabled us to deliver clean energy to 340 households in Kenya, for example. There are combinations of technology and business models to reach scale.

We have impacts in areas that may be more on the qualitative side. A nice example recently from research that we did with partners in Uganda was looking at tax avoidance. There was a really interesting study that looked at who the high net worth individuals are in that country and worked with the local tax authority to track those people down. Through that

¹ DFID's Executive Management Committee. This committee provides strategic direction to the management of DFID operations, staff and financial resources. It is chaired by the Permanent Secretary. Its membership includes the 4 directors-general and the non-executive directors

research high net worth individuals were taxed and it generated about £2.5 million in six months from a small research programme. I hope that gives you a flavour of some of the different impacts.

Clearly there are things like Ebola where we brought together social science, epidemiological modelling and new diagnostic development in combination to contribute to the UK's response.

Baroness Morgan of Huyton: What could be better?

Professor Charlotte Watts: I see there is a real opportunity in my role in the division that I head. I head not only the research division but also the professional cadres, and the heads of profession and cadres are critical to ensuring that DFID has expertise in the right place. I also head the evaluation unit. The issue that I am looking at internally is how I make sure that those different parts of the organisation are joined up effectively, are on top of the evidence, using it and feeding into the system, but also the challenges are coming back and influencing the sorts of research that we commission in the future.

Q12 Lord Mair: My question is to Jenny Dibden. You heard my question in the earlier session about the GCRF—Global Challenges Research Fund—and how that would work. It is a substantial amount of money.

Jenny Dibden: It is.

Lord Mair: Can you tell us a bit more about that?

Jenny Dibden: As you know, it is a £1.5 billion fund over this spending review period and into 2021. We are taking our responsibilities very seriously. We were delighted to get it and see it as a real opportunity, but also as a challenge to ensure coherence in how we spend it and coherence with the spend of other bodies, including DFID. We have been doing a huge amount of work with DFID on coherence and control and with our delivery partners.

You will also have seen in the allocations booklet that we have allocated certain amounts of money to individual delivery partners, but there is a very substantial unallocated line which grows over time, which reflects the fact that we believe we need to build capability and capacity to be able to use this fund. That is one of the reasons why we have that sort of shape to our allocations.

On work we are doing now, our settlement letter from the spending review says this is a different sort of money and it is incredibly clear that we will account for it properly. The paragraph in our settlement letter runs through all the work we are doing with our delivery partners.

I am sure you will be aware of a number of things that are going on with the research councils—some were mentioned earlier and you may have seen some elsewhere—but also our other delivery partners, so the academies too. At the moment, the research councils have a number of calls out around GCRF, which are letting grants now, particularly around capability. You will see that some of those calls are truly multidisciplinary. We have talked a lot about the social sciences. I am a social scientist by background. If you look at those calls, you will see calls combining not only ESRC and AHRC, but there is one bringing in NERC as well.

The research councils are also working very much on how they build this fund over the future. Currently, they are consulting and doing a series of town hall meetings around the country. They put a call for evidence out on Friday to say, “These are the themes that we want to work on with this fund, do you think they are right?” That also builds on the work they are doing with the strategic advisory group, which was referenced in the earlier session. Not only does Charlotte sit on that, but I also sit on it as an observer.

The academies’ delivery plans are not published yet. You may have seen them as a fellow. The academies are very interested in using their fellows as part of the process of shaping the GCRF spend and ensuring that it is truly ODA and there is the proper control. They are very keen on working with a whole range of delivery partners, including the research councils, and there is joint guidance on ODA spend from all the delivery partners. The academies are interested in joining up the GCRF with Newton, because they are also our delivery partners.

Within BIS, I should mention that we are going through a process of bringing together the governance around our ODA spend. We have a very small amount of ODA spend, we also have the GCRF and Newton. We have decided that the Newton board should be combined with the governance for GCRF into an overarching BIS ODA board which the Minister of State for Universities and Science will chair—Jo Johnson. It will not only have BIS officials, both policy officials and finance, it will also have Charlotte, Treasury and as observers our delivery partners.

I hope that gives you a flavour of how we are operating. As well as Charlotte, we are working with a number of other departments. In the health space there is an oversight board around global health that we are attending. We have also been talking with Duncan Wingham on the UKCDS proposition and is there a role for that body to have some sort of coherence oversight.

Lord Mair: Professor Watts, you told us that you have roughly £300 million a year for research in international development?

Professor Charlotte Watts: Yes.

Lord Mair: What we are talking about with GCRF is, roughly divided over five years, another £300 million every year, so potentially am I right that there is double the amount of funds for research in the whole sphere of international development? At one level that sounds very good.

Professor Charlotte Watts: There is a substantial increase that provides a huge opportunity to bring the breadth of UK scientific expertise to development challenges in a very unprecedented way. There is one caveat: we know our budget for this year but are still waiting for confirmation of later years. That £300 million is what the landscape currently looks like.

Lord Mair: Is there a danger that the Treasury might say that now you have got this other £300 million a year through the GCRF they will reduce your funding?

Professor Charlotte Watts: There has not been any sense of that. The discussion has been very much aspirational, in terms of how we draw on other departments to have additional ODA to use on research.

Q13 Viscount Ridley: Given this new munificence, this Committee made a suggestion a few months ago that a proactive investigation into the use of GM insects to control tropical

diseases would be well worth spending money on. A few weeks later the Zika outbreak happened, rather proving our point, and yet our suggestion has fallen on rather stony ground. Can you enlighten us as to whether it is civil servants or politicians who have kicked this one into the long grass, to mix my metaphors?

Professor Charlotte Watts: I cannot speak on what has happened. I have been quite involved in the discussions on Zika² and what are the research and evidence gaps. Part of that is thinking about what might be the role of GM mosquitoes and we are interested in Wolbachia, which is a similar approach whereby a bacteria that lives in insect cells has the potential to lead to non-viable offspring and intergenerational effects on Aedes survival. In our thinking about investments on Zika we have been looking at who is funding what and where are the gaps that we should prioritise. My understanding on the GM mosquito is that there is already some funding from the Brazilian Government to test the mosquito in Brazil. We are very keen to see what the results of that research are. My feeling scientifically is that it is probably similar to the discussion we have been having about GM crops: there is a role for those approaches, but we must think about how that fits within a broader landscape of interventions around Aedes vector control. I am particularly interested in its role if you have small populations and whether it could crash populations, for example.

Viscount Ridley: Very specifically, we said Britain could play a role here, partly because we invented the technology, partly because there are pests in this country, but also because of the overseas territories. We could help this technology get off the ground in a very specific way. I will not press you any further.

Lord Cameron of Dillington: I am sorry—this will sound a rather aggressive question, but I mean it in the nicest possible way. Do you feel in control of your budget? Half of your budget³ goes to CGIAR and another half is coming in that is run by BIS⁴. In relation to the overseas development R&D budget, do you feel you are controlling it?

Professor Charlotte Watts: I feel in control of the budget I have within DFID. When I came in the discussion on CGIAR was one of the areas that I looked at closely because it is a large investment that we are making. What I see with CGIAR is some impressive investment and very high returns on some of the technologies that have come from those investments, but also issues around governance that DFID has been very active in challenging and addressing. Moving forward, I do see that CGIAR is becoming more efficient. With our own investments, we are carefully focusing on areas where we know what is going to happen with those funds, and it is directed at areas of investment where we will have most impact and meet a real development challenge.

On the broader cross-government ODA budget, I do not see that as my budget. Other departments have direct responsibility for their own ODA research spend. I see my role as saying how we share our experience—the expertise that we have—that we are in the right places and we are at the table for the decision-making processes, including being part of these governance boards.

² DFID CSA is a core member of HMG's Scientific Advisory Group in Emergencies (SAGE) on Zika chaired by the Government CSA.

³ Around 40% of DFID's agricultural research budget goes to CGIAR.

⁴ The Global Challenges Research Fund held by BIS is £1.5 billion over 5 years. This is a similar size to DFID's current £300 million annual research budget. BIS does not manage DFID's ODA funding.

Lord Cameron of Dillington: Do you have enough influence over the co-ordination of R&D research generally? You are working well with Jenny.

Professor Charlotte Watts: We have been joking that we see each other all the time. We are still developing the high-level coherence mechanism, but in practice there is a lot of discussion happening at the senior level and lower levels on how we really make this work, how we identify and ensure there are synergies, making sure that we share experience and lessons learned. It has been incredibly productive so far and we have had very open conversations. From the outset I think the critical issue has been that commitment to impact and quality of research in other government department initiatives.

Q14 Baroness Young of Old Scone: In the spirit of what might also be seen as a slightly hostile question, we have heard lots of praise for the way DFID carries out its research role—its inclusiveness and cross-disciplinary, cross-organisation partnerships. Why was BIS given the money to do this rather than DFID?

Jenny Dibden: Maybe we should start with the Zika example. The first call we did under GCRF was as part of the Zika response. We were able to do that because we have a fundamental bedrock of high-quality science that is funded out of BIS at the science base. What we are bringing to the party is the UK research and science base. That means we are part of an incredibly powerful story. I am very glad that it was given to BIS. It is an opportunity for us, but also for DFID as well to capitalise on the fundamentally strong research base of this country.

Baroness Morgan of Huyton: What I thought was interesting in the first session was the positive view of the advisory committee in DFID. I take your point about the strong connection to the research councils, but when you described what sounded to me like the decision-making body, chaired by the Science Minister, it did not sound as if there was lots of expertise around the table. Does there need to be some outside expertise on that decision-making body?

Jenny Dibden: I would think about it in two ways. There are people I did not mention to the committee. We have got Sir Mark Walport, the Government's current Chief Scientific Adviser, who we work with very closely. He was previously on the Newton board. We are very pleased that he has agreed to come across to the BIS ODA board. Mark runs the CSA network, so has an incredibly clear line of sight across all departments, including ones that receive ODA money. We find that very useful. Each of those CSAs within those individual departments is responsible for their subject area, so he has access to that. As part of the Government Office for Science he has a programme of work looking very much into the future, just as the research councils do on emerging opportunities and threats.

We have also been keen to bring over other input from the Newton board in the form of Judith Macgregor, who is the High Commissioner in South Africa, who has been incredibly useful describing what it is like to be in-country, the work you have to do to develop partnerships, which has been useful for us in relation to Newton. I have talked about the strategic advisory group of the research councils. All the research councils were able to nominate somebody. The research councils go through a process of people applying and a selection process.

It may be that we need to consider whether we need further advisory support, but we were very keen, in the interests of coherence and control, not to create a plethora of advisory

boards. We could have had multiple advisory boards. The research councils that work very closely with academies are very practised and used to creating the right sorts of advisory groups for work that they do, so we thought it was right that we should use that group as a direct line into the BIS ODA board. Jane Elliott, who is the RCUK International Champion, will sit on the BIS ODA board.

Lord Mair: Nevertheless, do you worry that there might be a stretching of the meaning of international development? With all these opportunities—the research councils, the two academies—there is a substantial amount of money that is available for research proposals.

Jenny Dibden: The word “malevolent” was used earlier. I definitely do not see malevolence at work. I have talked about capability and capacity and there is definitely some work to do there. I do not share the concern that you are suggesting is out there. When you read the Royal Society and Royal Academy of Engineering statements and delivery plans on ODA, absolutely at the top is not only a description of the rules, it is the whole spirit of what they are trying to do, and that runs throughout the research council plans as well. People’s hearts are absolutely in the right place on this, backed up by the science that we know all our delivery partners can do.

Q15 Baroness Neville-Jones: My question has largely been asked by Lord Cameron. I ought to declare my membership of EPSRC and the Foundation for Science and Technology and the Quantum Technologies Strategic Advisory Board. Listening to you, I do have a rather uneasy feeling that a fragmented picture could emerge about how the money is spent, the control over it and the co-ordination of the overall policy. In your evidence you say that you are reviewing your research portfolio and will set the future budget and priorities for DFID’s research. Do I understand that in your review you will only cover those money that DFID is spending? Normally, if a department sets a strategy it sets the national strategy for that sector of governmental activity. It does not seem that is entirely the case if you are not going to cover in your strategy what the global fund is also doing. Is it the case that the document you produce will cover only DFID-controlled matters and we have to look to another document to see how the totality adds up? What comment do you have as the Chief Scientific Adviser in that area?

Professor Charlotte Watts: The UK Aid strategy that was published in November set out the UK’s overall strategy on development, and that included R&D. There are four ODA objectives, which are strengthening global peace, security and governance; strengthening resilience and response to crises; promoting global prosperity and tackling extreme poverty, and helping the world’s most vulnerable. In that big strategy it is very much the ODA strategy and sustainable development goals, which is the bigger global strategy to which, within development, we are seeking to contribute.

What have finished since I joined are the Research reviews, very extensive analyses of forthcoming challenges, the majority opportunities, the gaps, the sorts of research investments that can deliver large impacts on the short to medium term. These analyses were peer reviewed. Our Research Advisory Group looked at it extensively. It had internal and external peer review. From that, we have identified a range of areas where we think development research should be focusing.

Subsequent to the cross-government ODA investments, we have looked at that portfolio again and thought what are the comparative advantages that DFID should make sure we are

funding. That often links to our presence in-country, the work we are doing in very complex and challenging settings, our direct pathways to be able to deliver impact on the ground. What are areas we might want to collaborate with the Global Challenges Research Fund on, and what areas the Global Challenges Research Fund should be leading and we can support, but potentially may not contribute funds. We have had those discussions with BIS and other research partners. The issues that we have identified are fed into the framing and priorities that GCRF have focused on, but they are also doing their own process of consultation to check they have got it right and their community feels comfortable with the priorities.

Baroness Neville-Jones: Would you say, therefore, that the Global Challenges Research Fund fits within the intellectual and policy framework of the priorities that you identify, even if you are not implementing all of them?

Professor Charlotte Watts: Yes.

Baroness Neville-Jones: It is not a question so much of who you are all aiming at but who does what?

Professor Charlotte Watts: Yes.

Baroness Neville-Jones: Are you satisfied as the lead department in the area—I think you are, rather than BIS—that there will be adequate co-ordination when it comes to implementation such that the objectives and strategy of your department are supported and followed through by people doing things outside your control?

Professor Charlotte Watts: We have been discussing the co-ordination mechanisms. I agree completely that we need very strong co-ordination mechanisms. Those are not formalised yet and the steers provided by the speakers in the previous session point to what might be the ways forward in terms of that coherence.

Baroness Neville-Jones: Do you have anything to add to that?

Professor Charlotte Watts: No. We have an overall ODA coherence board that reports to the Treasury and DFID. The opportunities to have a similar coherence mechanism, potentially drawing on the OSCHR mechanism with an independent chair, might be something that would work well thinking about the co-ordination of ODA research. We have been in discussions with UKCDS, Wellcome and BIS to think does the OSCHR work and is there some adaptation of that. That is the direction of travel, but it is not yet formalised.

Q16 Lord Cameron of Dillington: You have already answered the CGIAR question and endorsed what Sir John said in the earlier session. The main purpose of development aid is to help people stand on their own two feet. There are two parts to partnership: one is working with private sector and NGO—which is part private sector—partners; and the other is working with research institutions in the developing countries, which is what I want to enquire about. If they could develop their own research capability that would be hugely beneficial to the overall agenda. How does that work?

Professor Charlotte Watts: I am totally in agreement. If we are thinking of long-term objectives we need to be thinking about how we support national governments and local institutes to develop and use their own evidence. That is one of the other opportunities that is potentially a very important link to the increase in ODA research funding, which is how can we make sure that investments complement each other and support the development of knowledge systems and evidence systems in different lower and middle income countries

and that transition to countries generating evidence to solve their own problems. Rurik, do you want to add anything?

Rurik Marsden: Maybe just one example. We work jointly with the African Academy of Sciences and NEPAD on an initiative which is jointly funded with the Gates Foundation and Wellcome Trust on excellence in African science. That is using mechanisms in Africa to support African researchers, because it has 15 % of the world's population, 25% of the world's diseases and 2% of the world's research products. It is how we put in place sustainable support that is going to build up institutions and systems of knowledge.

Professor Charlotte Watts: Embedded in a lot of our research programmes are partnerships with academics and universities in south. Part of the way that you do good development research is with very meaningful partnerships from the outset. That is part of the lesson learning that we have been sharing with colleagues in BIS and across government to say, "These are the sorts of models that not only generate good research but lead to impact and development of capacity in the longer term".

Jenny Dibden: I mentioned the Newton partnership working. That is in-country, very much about the needs of that country backed up by a country strategy and very much helping to build the capability in those countries. Certainly on GCRF, we are looking in particular at the academy proposals but also the research council proposals, which are about developing people in science and research—leaders now and for the future in the countries we are working with.

Lord Cameron of Dillington: I helped to launch your brucellosis prize in this very building.

The Chairman: That concludes this session. We are most grateful to you for coming to help us. Thank you, Professor Watts, Rurik Marsden and Jenny Dibden. A transcript will be circulated in the normal way; do please make any minor corrections that are necessary. Thank you very much for helping us.