Key findings and implications from the India and Bangladesh consultations for the DFID **Research Strategy**

Consultation for the DFID research strategy 2008-2013







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Table of Contents

Table of Contents1			
1	Introduction and executive summary2		
2	Impli	cations regarding research priorities	5
	2.1	Sustainable agriculture	5
	2.2	Health and killer diseases	6
	2.3	Climate change and environment	6
	2.4	Governance and social research	7
	2.5	Education	8
	2.6	Cross-cutting research needs and priorities	8
3	Implications regarding the research process10		10
	3.1	Priority setting and selection of proposals	10
	3.2	Building capacity to do research	11
	3.3	Building capacity to use research	11
	3.4	Partnerships for capacity building	12
	3.5	Dissemination of research	12
4	Implications of the changing role of BRICS countries14		
Appendix A: Consultation objectives15			
Appendix B: Consultation methodology16			

1 Introduction and executive summary

This document presents some key findings and possible implications for DFID's research strategy emerging from the India consultation [29 October to 6 November] and Bangladesh consultation [21 October to 25 October]. In developing this document we have taken into account the results of the consultations conducted in Africa and in China to identify the global emerging research needs and ideas. Appendix A and B describe the consultation objectives and methodology. The detailed summary reports of the in country consultations for Bangladesh and India are available on request.

Implications regarding research priorities

The consultation covered the four DFID priority areas, namely (1) Sustainable agriculture, (2) Health and killer diseases, (3) Climate change and environment, and (4) Governance and social research. We have added Education as a specific area of research as it came up frequently as an area where research can add significant value.

Sustainable agriculture

- Improving agricultural productivity and livelihoods
- · Limiting agricultural impact on the environment
- Understanding how to improve the economic value of agriculture
- Enhancing the take up of good practices and new ideas by farmers.

Climate change and environment

- Understanding and identifying the Impact of climate change on the poor
- Climate change adaptation strategies
- Developing new technologies for pollution and waste control.

Health and killer diseases

- Health systems
- Improving access to health
- Communicable diseases
- Nutrition related conditions.

Governance and social research

- Effectiveness, accountability and transparency of public institutions
- Improve citizen engagement in decision making
- Understanding and limiting corruption

Education

- Improving the match between education and required skills
- Improving access to education

Implications regarding the research process

We have split the recommendations according to five main topics (1) Priority setting and selection, (2) Building capacity to do research, (3) Building capacity to use research and (4) Partnerships for capacity building and (5) Dissemination of research.

Priority setting and selection of proposals

- Bring a fact based assessment of current country needs in priority setting decisions
- Engage stakeholders in the country in priority setting through a combination of face to face and online communities
- Manage your research projects as a portfolio focused on optimising impact
- Collaborate with the other major funders of research to define priorities and allocate areas to specific donors
- Shift more of the resources directed at developing country researchers from tightlydefined commissioned research projects to programmes that invite proposals for research in broader topic areas.

Building capacity to do research

- Change the terms of reference in research proposals to allow research institutes from developing countries to include training components
- Provide integrated or separate research grants for equipment and physical infrastructure to conduct research
- Provide ongoing exposure to international experts and establish mentoring relationships
- Provide access to international databases and knowledge networks where this is relevant
- Address the drivers of brain drain of researchers.

Building capacity to use research

- Provide training to users to put research into use, from identifying usable research to planning and executing the implementation
- Engage users in the research process where this has the potential to improve the uptake of research

Partnerships for capacity building

- Establish solid legal frameworks, articulate clear goals and align incentives for partnerships
- Engage private sector in to partnerships for research e.g. through advanced market commitments

Dissemination of research

- Require a communication or dissemination strategy and budget as part of the research
 proposals
- Provide a single source of information on all the research projects, those by DFID and other donors
- Disseminate to users and practitioners through a combination of mass media, people's organisations and direct contact
- Search continuously for new and innovative ways of disseminating research, for instance by using the increased penetration of mobile telephony
- Develop research guidance notes for policy makers to make it clear how research can
 be used

Implications of the changing role of BRICS countries

The role of DFID in these countries is changing but clear opportunities for development exist. Ideas for DFID's research strategy emerging from the consultation:

- Focus on funding projects focused on poverty reduction and inclusive growth and multidisciplinary approaches to studying problems and governance and social research studies
- Explicitly fund south south partnerships for research studies
- Provide a network or market place where research institutes, universities from the south can meet each other
- Provide access to research studies, funded by DFID or other donors and addressing barriers to knowledge sharing such as intellectual property
- Provide standard partnership models with legal frameworks and other tools to determine incentives and deal with intellectual property issues.

2 Implications regarding research priorities

The following chapter describes the key needs and ideas for research in the following areas (1) Sustainable agriculture, (2) Health and killer diseases, (3) Climate change and environment, (4) Governance and social research and (5) Education followed by the cross cutting needs and ideas. This report highlights those points which were identified in India and Bangladesh and which also seemed to be noted in the other countries. In addition this report notes that may be specific to South Asia.

2.1 Sustainable agriculture

Improving agricultural productivity and livelihoods

- Develop crop varieties and new practices that help (poor) farmers deal with increasing salinity, drought, flooding and pests – e.g. develop rice plant that germinates quickly so that it withstand flooding;
- Develop alternative farming practices such as integrated farming, fishing and farming combined and organic farming and integrating traditional and "modern" techniques e.g. identifying the right species for fishing and farming;
- Identify the most effective use of fertilizers, pesticides, herbicides, bio control agents and irrigation methods – e.g. how effective are traditional pesticides and can their use be scaled up?
- Identify how to apply existing processing and storage/supply chain technologies to provide consistent and export level quality products e.g. how to apply existing cheap simple technologies for cold storage of perishable goods on a smaller scale.

Limiting agricultural impact on the environment

- Research means of decreasing the use of natural resources for agriculture e.g. how to lower water requirements for rice growing, how to use of industrial waste water for farming;
- Research means for decreasing environmental effects of farming e.g. development of new technologies for recycling agricultural waste.

Understanding how to improve the economic value of agriculture

- Research alternative systems for providing access to market information and markets (Locally and internationally);
- Understand impacts of economic trends on the agricultural sector e.g. opportunities and threats from the growth of the large supermarkets sector;
- Identify opportunities in the agro processing industry e.g. which sectors of agroprocessing hold the most value for the smaller farmers?

Enhancing the take up of good practices and new ideas by farmers

 Identify how to improve the uptake of new technologies and practices by different groups.

Other needs and priorities:

Some of the topics that came up that were more specific to the South Asia consultation include (1) Technologies for agricultural waste management, e.g. recycling agricultural waste to generate energy, techniques for storage and disposal (2) Technologies for the prevention, prediction, protection and response to natural disasters, e.g. early warning systems for flooding, and (3) The effect of remittances on the development of the rural economy.

2.2 Health and killer diseases

Health systems

- Improve the ability to capture basic health information to enable closer monitoring and assessments of the success of health interventions;
- Develop evidence based standards for health care e.g. understanding which facilities and human resources are most relevant for tackling the most important health problems.

Improving access to health

- Identify alternative health care delivery mechanisms (traditional and modern) to improve access to health care – e.g. use of ICT to improve front line service delivery in rural areas and how to integrate traditional health care into the system;
- Understand the incentives for health care practitioners in rural areas and the impact of those incentives on the standards for health care delivery.

Communicable diseases

- Identify the minimum requirements for disaster preparedness and response to the reemergence of communicable diseases;
- Identify the most effective ways of communication to increase awareness of disease prevention, diagnosis and treatment – e.g. which media have the biggest effects on behaviour of given audiences.

Nutrition related conditions

- Identify the most effective ways to prevent and treat nutrition related conditions e.g. alternatives to Iron and Folic acid supplements, how to provide large scale de-worming programs on a periodic basis;
- Understand the underlying factors behind nutrition deficiencies e.g. the relationship between nutrition deficiencies and culture, religion, access and prices of food.

Other needs and priorities:

Some of the topics that came up that were more specific to the South Asia consultation include (1) India (and China) emphasized the need for research on non communicable diseases caused by changes in the diet and the use of tobacco and alcohol, (2) In Bangladesh and India a specific need was articulated to determine the impact of pollution on health, design mitigation strategies and develop methods for treatment.

2.3 Climate change and environment

Understanding and identifying the Impact of climate change on the poor

- Develop models to project future climate scenarios at country and local level and specifically for temperature, salinity, water level at given intervals;
- Understanding the impacts of climate change at a national, regional and local level on different areas such as agriculture, natural resources, health, ecosystems;
- Identify the groups that will be affected the most by climate change.

Climate change adaptation strategies

- Develop new technologies and farming practices e.g. crop varieties that withstand drought, flooding etc, alternative farming patterns that would be suitable to different amounts and timing of flooding during the year;
- Identify how current standards for infrastructure and maintenance should change to adapt to the effects of climate change e.g. what are the required changes to building rules and regulations and minimum heights of bridges;
- Identify how public services might need to change to adapt to the effects of climate change e.g. being prepared for different kinds and a higher frequency of emergencies;

Developing new technologies for pollution and waste control

- Develop and apply new technologies for waste management e.g. recycling, treatment and disposal;
- Identify alternatives for and reducing the use of polluting chemicals in the industrial and agricultural sectors;
- Identify the most cost effective interventions to reduce all types of pollution.

Other needs and priorities:

Some of the topics that came up that were more specific to the South Asia consultation include the development of alternative energy sources as a means of climate change mitigation but also as a means of waste management, e.g. options to generate energy from agricultural by-products, options for small scale applications of existing technologies.

2.4 Governance and social research

Effectiveness, accountability and transparency of public institutions

- Identify the root causes of inefficiencies and evaluation of interventions and reforms e.g. which institutional reforms have worked well in the past and how can they be replicated;
- Understand the relationship between the social structure and the functioning of public institutions e.g. how social backgrounds of judges influences court decision making;
- Identify the most effective ways to build capacity of institutions and civil servants.

Improve citizen engagement in decision making

- Understand the gaps in citizen engagement in decision making, and in particular marginalised groups;
- Identify how best to facilitate and mainstream engagement of civil society organisations, private sector and people's organisations in policy design, implementation, monitoring

and evaluation – e.g. despite the fact that Bangladesh has some large operational NGOs there is a sense that their representation is not perceived are very strong.

Understanding and limiting corruption

- Understand how corruption is perceived by the different groups in society e.g. how much of a difference does corruption make and for which groups in society?
- Evaluate the effectiveness of past anti corruption interventions, determine the requirements for impact and develop new anti corruption interventions.

Other needs and priorities:

Some of the topics that came up that were more specific to the South Asia consultation include (1) Evaluating the effectiveness of affirmative actions for marginalised groups and specifically to determine the side effects of these actions, (2) in India specifically, the question arised on how to make industry accountable to society and more specifically, how to enhance people's participation in making industry accountable, especially when industry has a strong impact on people's environments.

2.5 Education

Improving the match between education and required skills

- Understand the minimum standards for primary and secondary education required to delivery the skills and competencies to which the education system is aspiring – e.g. what is the minimum number of contact hours between students and teachers, class rooms size, facilities;
- Identify how to best engage the private sector in curriculum decisions to improve the match between education and required skills.

Improving access to education

- Prioritise the barriers to access to education for marginalised groups based on what happens to school attendance if these barriers are taken away?
- Understand the effects of (seasonal) migration on access to education e.g. how many children are affected and where? How can educational institutions keep track of these students?

2.6 Cross-cutting research needs and priorities

The preceding section includes a number of research needs and ideas that are multidisciplinary. In addition, we have identified the following cross cutting research needs and ideas in our analysis of the summary reports:

- Identifying and designing effective policies to reduce pollution and effective mechanisms to enforce regulations [Governance and Environment];
- Identifying the most effective interventions, by geographic area, by population group and by type of pollution to change behaviour that results in pollution [Governance and Environment];

- Understanding the potential impact of climate change and pollution on the emergence of specific diseases and designing adaptation strategies for these effects [Health and Climate change & environment];
- Understanding and improving the functioning of agricultural cooperatives and farmer groups in particular [Governance & Agriculture];
- Understanding the effects of agricultural practices such as the use of growth hormones, fertilizers, pest control on health [Agriculture and Health].

3 Implications regarding the research process

The following chapter presents the key recommendations for improvements to the research process that emerged from the consultations in South Asia and Africa. We have split the recommendations according to five main topics (1) Priority setting and selection, (2) Building capacity to do research, (3) Building capacity to use research and (4) Partnerships for capacity building and (5) Dissemination of research.

3.1 Priority setting and selection of proposals

Bring a fact based assessment of current country needs in priority setting decisions. The stakeholders in both Africa and South Asia mentioned that it is crucial to start the priority setting process with a review of the current information on a country (national census data, existing and ongoing research, indicators) to make the priority setting process more fact based and less opinion based.

Engage stakeholders in the country in priority setting through a combination of face to face and online communities.

The stakeholders in Africa and Asia welcomed the initiative from DFID to engage them to identify research needs and priorities. Other means of conducting these kinds of consultations include the use of online communities and wikipedia type knowledge building with rigorous quality control processes in place.

Manage your research projects as a portfolio focused on optimising impact.

This portfolio approach may require a mix between long versus short term projects and multi-disciplinary versus single discipline research.

Collaborate with the other major funders of research to define priorities and allocate areas to specific donors.

The participants of the consultation indicated that they appreciated the process that DFID is undertaking at the moment to get input on their strategy. They also indicated that there are potential time savings in conducting this consultation with the other major funders of research. This should be followed by allocating the areas of research between the major funders of research to increase overall impact.

Shift more of the resources directed at developing country researchers from tightlydefined commissioned research projects to programmes that invite proposals for research in broader topic areas.

Researchers mentioned that donor-funded research in developing countries comes often in the form of requests to conduct specific research projects, with very tightly defined terms of reference. This approach limits the ability of researchers to propose alternative ideas or lines of research in a given area. From a capacity-building perspective, the approach promotes the development of consulting skills among recipients, rather than genuine research skills.

3.2 Building capacity to do research

Change the terms of reference in research proposals to allow research institutes from developing countries to include training components.

Building capacity to do research requires an active policy on human resources development in research proposals. Specifically, skills that were seen as being able to contribute to getting research into use such as partnership management, evaluation and stakeholder consultation were identified as being particularly valuable. In addition, specific skills such as report writing and quantitative research methodologies were identified as key areas for development.

Provide integrated or separate research grants for equipment and physical infrastructure to conduct research.

Some of the countries indicated that they have the skills but lack the equipment and the facilities such as libraries to conduct research. This was also identified as one of the reasons why promising students go elsewhere to do their post graduate studies.

Provide ongoing exposure to international experts and establish mentoring relationships.

The consultation participants indicated that collaboration with overseas institutes is often too haphazard to make a genuine impact. Ongoing mentoring relationships between research providers in the North and in the South could improve impact. Other means of providing ongoing exposure could be exchange programs and scholarships.

Provide access to international databases and knowledge networks where this is relevant.

The lack of access to and availability of information and knowledge was mentioned in several consultation programmes as a major barrier to building skills to produce research. There is an opportunity for DFID to take the lead in improving access to information and dealing with intellectual property rights in their research proposals.

Address the drivers of brain drain of researchers.

Many of the elements mentioned above are themselves the drivers of brain drain. Other drivers that have not been covered by the previous points include incentives such as monetary compensation, opportunities for promotion and availability of promising students and teachers.

3.3 Building capacity to use research

Provide training to users to put research into use, from identifying usable research to planning and executing the implementation.

As the providers of research are being trained in skills to enable better uptake of their research, the users should be trained to (1) Improve the ability to identify research that is actually usable, (2) Create a plan to put research into use and, (3) Execute the plan. The training should be practical, i.e. through demonstrations, case studies etc. to show the

potential value of the research and it should target the specific users (policy vs. practitioners vs. users) as these groups have different needs.

Engage users in the research process where this has the potential to improve the uptake of research.

Stimulate collaboration between research providers and users where this has the potential to improve the uptake of research, i.e. in socio scientific research in agriculture, climate change and health.

3.4 Partnerships for capacity building

Establish solid legal frameworks, articulate clear goals and align incentives for partnerships.

One of the reasons partnerships for capacity building may fail is the absence of equality, a win-win situation and ambiguity on who owns the research results. A solid agreement between partners can help address these points and ensure that both partners are achieving their objectives.

Engage private sector in to partnerships for research e.g. through advanced market commitments.

The role of the private sector in research for development can be greatly increased. There are several examples of public private partnerships that are effectively addressing development issues, specifically in the health sector with organisations such as Medicines for Malaria Ventures and the GAVI Alliance. These examples could be used to design partnerships to address challenges in Agriculture and Climate Change and Environment. A solid legal framework for these partnerships, where the private sector is involved, is absolutely critical for success.

3.5 Dissemination of research

Require a communication or dissemination strategy and budget as part of the research proposals.

Participants believed that dissemination is the most important part of the research process. A communication strategy, with a clear definition of the target audience and a message and approach to disseminate research, will help. For dissemination to the research community this may include scientific journals, conferences and other events, online communities and electronic distribution. For dissemination to policy makers this may include workshops, consultation and publications of business cases and success stories of policy interventions. It may very well be that research providers will need to seek specific communication expertise to do this.

Provide a single source of information on all the research projects, those by DFID and other donors.

There is a clear opportunity for DFID to facilitate a single source on all research projects for development. On top of that it may be good for DFID to fund review articles in which professors synthesize all views into a single paper.

Disseminate to users and practitioners through a combination of mass media, people's organisations and direct contact.

Disseminating research results to users and practitioners requires a well thought through approach starting with a simple and concise message. The penetration of mobile telephony presents interesting opportunities to reach the grass roots level in addition to the traditional mass media. Other media to reach the grass roots are the networks of people's organizations. Practitioners should be engaged directly through demonstrations, field days and fairs and their respective professional bodies.

Search continuously for new and innovative ways of disseminating research, for instance by using the increased penetration of mobile telephony.

One of the returning themes in the research needs and ideas is findings innovative ways of disseminating research, leveraging developments in technology to improve the uptake of new development by a broad base of users and practitioners.

Develop research guidance notes for policy makers to make it clear how research can be used.

In order to disseminate research, guidance notes that help the understanding of how research can be used were mentioned to be effective. These guidance notes should specifically target policy makers to show the value of research and how research needs to be implemented to achieve impact.

4 Implications of the changing role of BRICS countries

The role of the BRICS countries in research for development is increasingly important due to their growing economies and the resulting influence and impact on their region and the rest of the world. As their economies grow, their research communities benefit from investments in innovation by the public and private sectors and they are growing to be a steady source of research and good practices in health, agriculture and climate change.

Many of the research needs and ideas identified in the in the country consultations in Ethiopia, Nigeria, Uganda and Bangladesh, as well as those in India and China are in line with the research needs and ideas that the BRICS countries are dealing with.

The role of DFID in these countries is changing but clear opportunities for development exist. Ideas for DFID's research strategy emerging from the consultation

(1) Focus on funding projects focused on poverty reduction and inclusive growth and multidisciplinary approaches to studying problems and governance and social research studies;

(2) Explicitly fund south south partnerships for research studies;

(3) Provide a network or market place where research institutes, universities from the south can meet each other;

(4) Provide access to research studies, funded by DFID or other donors and addressing barriers to knowledge sharing such as intellectual property;

(5) Provide standard partnership models with legal frameworks and other tools to determine incentives and deal with intellectual property issues.

The BRICS countries have a great deal of research capacity and resources which can be used to address research needs that are not only specific to them but also help their neighbours and other countries dealing with the same challenges. Through the ideas described above DFID may be able to contribute to unlocking this capacity and these resources to increase its impact on development.

Appendix A: Consultation objectives

The Department for International Development (DFID) is currently defining a new research strategy for 2008-2013. DFID's budget for research will double from £110 million in 2005/06 to £220 million in 2010. The new strategy is an opportunity for DFID to refocus on the most pressing research challenges, work in innovative ways and make new research partnerships. In order to guide this strategy, the Department aimed to consult internal and external stakeholders (i.e. users and producers of research) to determine the needs and priorities for research as well as to identify ways to improve priority setting, capacity building and dissemination.

The consultation process has taken place in three ways:

i) through a series of in country consultations in Bangladesh, India, Uganda, Nigeria and Ethiopia, setting an agenda for later consultations in South Africa and China;

ii) through discussions with key research stakeholders in the UK and with international funders;

iii) using an electronic questionnaire to get a wide range of views from people in the UK and internationally interested in research for development in developing countries.

The Department asked two external parties to organise the in country consultations for the following countries: Bangladesh, Ethiopia, India, Nigeria and Uganda. The purpose of these consultations was to:

- bring accurate and unbiased views both on possible research topics and on the process of funding, conducting and using research;
- incorporate the views of both producers and users of research;
- create an opportunity to stimulate discussion and to strengthen the partnership with stakeholders;
- collect and present actionable insights from the stakeholder consultations.

The output of each of the in country consultations is a summary report outlining the needs and ideas for research and the ideas for improvement of the research process. Each country report has been shared with the participants for feedback and with the respective DFID country office for comments.

Appendix B: Consultation methodology

The in country consultations took place in seven countries, Bangladesh, China, Ethiopia, India, Nigeria, South Africa and Uganda. These seven counties were split into three sets (1) Africa with Ethiopia, Nigeria and Uganda was conducted by CABI and ODI, (2) China and South Africa was conducted by DFID and (3) Bangladesh and India was conducted by Dalberg and GlobeScan.

The consultation preparation consisted of two elements (1) Stakeholder interviews and (2) Online survey. The interviews and survey questionnaire focus on the following four areas: (1) Country overview of research user and provider community, (2) Examples of positive and negative experiences with the research process, (3) Needs and ideas for research and (4) Ideas for improvement to the research process. The consultation preparation helped tailor the consultation approach to the specific situations in the countries.

After the preparation phase, we conducted in country stakeholder workshops in Bangladesh and India. These in country consultations were split out into three different types of workshops (1) Topic specific workshops, (2) Cross sectoral workshop and (3) Inclusive growth and overarching issues workshop. Each of the workshops was attended by a mix of Civil Society, Private Sector, Policy Makers, Bureaucrats, International Organisations and Universities.

The topic specific workshops were organised for each of the DFID priority areas: (1) Sustainable agriculture, (2) Health and killer diseases, (3) Climate change and environment, and (4) Governance and social research. Each of the workshops was designed to allow consultation with the participants on the strengths and weaknesses of how things work today, needs and ideas for research for development and ideas for improvement of the research process (priority setting, building capacity to produce and use research, partnerships and dissemination). In India we conducted the topic specific workshops in parallel for representatives from the national and state level.

The cross sectoral workshop included a number of participants from the topic specific workshops and focused primarily on the research needs and ideas that are on the edge between the priority areas. This workshop consisted of a series of break out sessions across the topic areas to capture the cross cutting research needs and ideas.

Each of the in country consultations concluded with a strategic workshop which focused specifically on economic growth and poverty reduction. The workshop followed the same structure as the topic specific workshops with three distinct sessions - to capture strengths and weaknesses of how things work today, research needs and ideas and finally improvements for the research process.

The results of the in country consultations have been captured in summary documents and were shared with all participants for their comments and feedback.