

## ANNEX 1

This annex provides background on past and present programmes addressing the four priority themes in DFID's Research Funding Framework 2005-2007. These topics currently account for over 70% of central research spending.

In addition, the annex sets out DFID's approach to research communications and getting research into use, as key objectives for all directly managed research. It also provides background information on important DFID research programmes that currently sit outside the four priority topics of the Research Funding Framework 2005-2007

### TOPIC

1. [Sustainable agriculture, especially in Africa](#)
2. [Governance and social research, in particular how states can work better for poor people](#)
3. [Health and HIV and AIDS research](#)
4. [Environmental change in developing countries, specifically the impact of climate change on poverty](#)
5. [Research communication and getting research into use](#)
6. [Economics and growth](#)
7. [Transport](#)
8. [Education](#)

## **1. BACKGROUND: DFID RESEARCH ON SUSTAINABLE AGRICULTURE AND RENEWABLE NATURAL RESOURCES**

1. DFID has considerable experience in managing research into agriculture and renewable natural resources (RNR) that supports developing country priorities, as well as a proven ability to link the basic science community, especially in the UK, with key developing country problems and partners.

2. In 2006/7 DFID invested over £30 million in research on sustainable agriculture – including fisheries and forestry. The Government’s 2006 White Paper – *Making Governance work for the Poor* committed DFID to double funding on agriculture, fisheries and forestry to £80 million per annum by 2010.

3. The purpose of this increased investment is to build upon the impacts of agricultural research on poverty and growth. A series of studies have shown very high returns to agricultural research. The most recent is an analysis by the International Food Policy Research Institute. This demonstrated that investment in agricultural research has a larger impact on poverty compared to alternative investments in infrastructure and health.

4. Past DFID support to the Consultative Group on International Agricultural Research (CGIAR) and under its 11 year Renewable Natural Resources Research Strategy (RNRRS) have achieved significant, though not always quantified impacts. For example, it is estimated that without the CGIAR world food production would have been 4–5% lower and developing countries would have produced 7-8% less, and food and feed grain prices would have been 18–21% higher. Overall it has been estimated that for every dollar invested in the CGIAR, \$9 worth of additional benefits has been produced in the developing world.

5. Under the RNRRS some notable success stories with clear, though unquantified poverty impacts, were:

- Reduced use of insecticides and better profit margins through Integrated Pest Management
- Control of mile a minute weed in India
- Faster development and better identification of important crop traits by participatory crop breeding and varietal selection.
- Effective tsetse control at much reduced cost by research on fly behaviour
- On-farm seed priming for better germination, higher yields and target application of limiting trace soil nutrients.

### **Evolution of DFID’s approach to agriculture and RNR research**

3. A major review of the RNRRS was conducted in 2005. A major consultation exercise followed on development of a new research strategy for sustainable agriculture this led to a set of principles for research that have

informed not only the current agriculture and RNR programmes but lead to the development of new research modalities for all directly managed central research.

- Numerous short-term projects should be avoided and more productive, longer-term links between individual researchers, research institutions and wider stakeholder groups promoted.
- Use of existing knowledge and scientific innovation can be increased by involving beneficiaries and users of research in designing and implementing larger multi-disciplinary research programmes on priority research themes.
- Human and institutional capacity building should be explicitly built into research programmes, not only for the professional development of the researchers, but also focussed on policy makers, decision takers and change agents.
- Standardised monitoring and evaluation processes at programme and project levels should be established and impacts of programmes assessed in order to provide evidence of outcomes and learn lessons on how to better do and use research.
- Overall cost-effectiveness of research can be achieved by locating programme management within the regions where the research is conducted.
- Developing country research organisations should be directly involved in research in order to increase relevance of research, improve participation, ownership and build capacity in developing countries.
- Contracting out programme management and competitive funding mechanisms are important in ensuring value for money.

### **Strategy for Research on Sustainable Agriculture (SRSA 2006 to 2016)**

6. DFID's new strategy - the SRSA - was launched in March 2006 by the Secretary of State with an additional funding commitment of £100 million for 5 years. It set out DFID's strategy on agriculture, fisheries and forestry to get new technologies to poor farmers, and help governments to make better policies. This is part of DFID's overall approach to agriculture as described in its Agricultural Policy Paper *Growth and Poverty Reduction: the role of agriculture*.

7. The Strategy responded to demands from developing countries. For example it supports the African Union's and NEPAD's Comprehensive African Agricultural Development Programme (CAADP), regional and national initiatives, and strengthens the capacity of national research institutions. It set out DFID's aims to work closely with other donors to make aid for research more effective. The strategy aims to:

- Prioritise technologies that will increase the productivity of labour. Creating employment opportunities in agriculture, post-harvest transformation and commerce are vital to reduce rural poverty and to stimulate growth and

investment in other sectors thus delivering benefits far beyond the rural sector.

- Focus on situations where potential gains are greatest. This means research for areas with potential to achieve meaningful increases in employment and output. But this principle does not mean only focusing on current high potential areas but on areas of potential, and also on the need for research to reduce vulnerability and risk in marginal areas.
- Take full account of people's exposure to risk and vulnerability, seeking to maintain high levels of resilience to short-term shocks such as drought, pests and diseases, and longer term trends such as climate change where agriculture, fisheries and forestry can contribute significantly to mitigation measures.
- Incorporate research on market opportunities. Growing and secure markets are critical if farmers are to invest, innovate and take the risks in improving their productivity. For large parts of Africa this means focusing on basic food staples and domestic markets. In other areas and in Asia, which are self sufficient in basic staples, more emphasis should be on higher value commodities.
- Ensure the sustainable and productive use of resources such as soil, land, water and common property; to maximise their contributions to growth and poverty reduction, provision of environmental services, and ensuring environmental sustainability.

## **Current portfolio**

8. The SRSA is made up of four components:

### **I. Research into Use**

**Research Into use programme** commenced implementation in July 2006. This is working to promote the best results of past DFID funded research (and others) and promote them in Africa and south Asia. They are being selected on their potential to raise farmers' incomes, reduce poverty, halt environmental degradation, and increase food security. Lessons from the programme will be collected and shared to show how responsible forestry, fishing, farming and livestock rearing combined with new, viable technology can help reduce poverty.

Support to **Public-private partnerships** to develop products and technologies for use by farmers in developing countries using intellectual property from the public and private sectors. To date DFID has supported two partnerships: the Global Alliance for Livestock Vaccines (GALVmed) and the African Agricultural Technology Foundation.

### **II. Regional research**

These will focus on West Africa, East Africa, Southern Africa and South Asia. A smaller programme has been commissioned in the Andes. These programmes will work in close partnership with existing regional organisations so that research is undertaken on those issues that most

affect the lives of the people living there. An important part of these programmes is a focus on capacity building. We are already supporting the Forum for Agricultural Research in Africa (FARA) to implement a major capacity building programme.

### **III. International research**

Support to international agricultural research to deliver high quality and effective international public good research to tackle poverty reduction and achieve sustainable growth. The majority of this will be to the 15 centres and challenge programmes of the Consultative Group on International Agricultural Research (CGIAR). In addition support is provided to international research organisations outside of the CGIAR which compliment its work and/or fill gaps.

### **IV. Advanced Research Organisations**

Responsive research programme with the UK's Biotechnology and Biological Sciences Research Council (BBSRC) on sustainable agriculture for international development was launched in 2006. This and potentially further programmes will provide opportunities for advanced research institutes to increase their efforts towards the science and technology needs of developing countries.

9. DFID's sees one of its main roles as to improve how research is carried out and used, and not just selecting and funding priority topics for research. As part of this we are working to facilitate linkages and synergies between different parts of a notional global system – from farmers to international and advanced research organisations. A diagrammatic representation of this is given in Figure 1. This illustrates how the different components of the SRSA fit in.

### **Future challenges**

10. While the SRSA sets out DFID's approach, and programmes are already under way, the increased funding commit for agriculture, fisheries and forestry provide opportunities for development of new, or expanded programmes, under its four components.

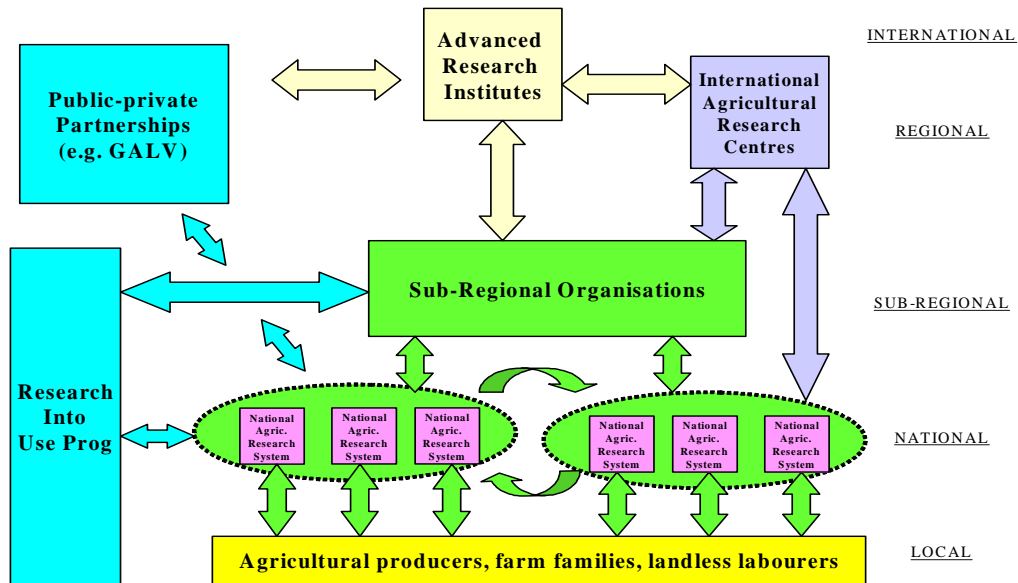
11. Questions and challenges in implementing and scaling up our programmes on agriculture and RNR research include:

- The balance of support between research into use, capacity building and generation of new knowledge programmes.
- How to address cross-cutting issues – especially gender, HIV/AIDs and environment – in this research agenda.
- The challenge of climate change and adaptation of agricultural and RNR systems.
- The links with other sectors on the achievement of poverty reduction and sustainable growth and need for more truly multi-disciplinary research (e.g.

nutrition; trade, environment and agriculture; agriculture, transport and infrastructure; and poverty-environment and growth).

- Building effective partnerships between all stakeholders including strengthening the coordination between donors (bilaterals, multilaterals and foundations).

**Figure 1 Linkages of SRSA to different levels of agricultural research**



There is information available on the associated research in [economics and growth](#), and [transport](#).

## 2. BACKGROUND: SOCIAL AND POLITICAL RESEARCH

*Chronic poverty is that poverty that is ever present and never ceases. It is like the rains of the grasshopper season that beat you consistently and for a very long time. You become completely soaked because you have no way out. Some poverty passes from one generation to another, as if the offspring sucks it from their mother's breast. They in turn pass it on to their children.*  
Disabled Women in Uganda – Chronic Poverty Research Centre.

1. DFID invested over £10 million in 2006/7 in research into social and political change, which is around 9% of the overall budget for central research. Research to advance understanding of the multi-dimensional nature of poverty; the intergenerational characteristics of poverty which may keep people poor; and the processes of institutional and social change which may help or hinder development efforts.

2. Research falls into two categories: **governance and political science research** that answers questions about how states do and don't work in the interests of poor people and **social research** on global trends and themes that fundamentally affect the context for development across DFID partner countries, ranging from women's empowerment to migration and faith issues.

3. DFID's current Research Funding Framework 2005 -2007 has as one of its four priority areas, research on what to do where states do not work in the interests of the poor, committing some £20m to research in this area. Around 340 million people, almost a third of the world's poor, live in fragile states – those states which are failing to provide basic services to poor people because they are either unwilling or unable to do so. Without progress in these countries the MDGs cannot be met. Research to improve our understanding for new approaches in this area covers issues of citizenship, crisis states, state building and human insecurity.

4. DFID currently supports 10 research programme consortia/development research centres in social and political research. These programmes typically run over 5 years, covering questions in the following broad areas:

- Women's empowerment and rights
- The role of religion in development
- State building, accountability, citizenship and participation
- State collapse and reconstruction
- Migration, globalisation and poverty
- Inequalities, human security and ethnicity

DFID is also supporting *Young Lives* a longitudinal research project on childhood poverty, tracking the lives of children born in 2000 through to 2015.

## **Putting the politics back into development - governance and political science research**

5. Both the 1997 and the 2006 White Papers on International Development emphasised the importance of capable, accountable and responsive states in reducing poverty. DFID research seeks to understand better the “deep structures” that determine how states and politics operate, providing knowledge to a range of development practitioners on such new and enduring governance challenges as: the role of neo-patriotism; new forms of public authority needed by states to address the demands of globalisation; citizenship participation; tax and accountability; and issues underlying state instability and conflict.

6. DFID is one of few research funders to focus explicitly on political change research, including understanding what effective “operating principles” for donors in this area should be. In part for this reason, there have been strong links between the outputs of the research DFID’s has commissioned and the policies DFID has subsequently developed, most notably the 2006 White Paper on International Development.

### **Knowledge highlights from DFID Governance research**

#### **Taxation is crucial**

DFID governance research has highlighted taxation as a crucial area of state/society engagement and accountability. It has found that large amounts of aid can weaken the links between tax and accountability, encouraging accountability to donors at the expense of domestic taxpayers and legislatures. Donors therefore need to think through the likely impact of different aid modalities on state/society relationships. Tax needs to be seen not just as a fiscal or economic concern but an essential ingredient of better governance.

#### **Understanding the trajectory of state collapse and reconstruction**

Recent research in Africa on state building in fragile or 'reconstructing' states shows that despite international pressure to move towards formal democratic procedures (Rwanda before the genocide, DRC) there is considerable doubt that state-making can best be pursued through modern liberal democratic models of governance. Too much pressure to introduce political competition can threaten the stability of a precarious polity. This means that elections, for example, may be divisive whereas inclusive coalitions have a better chance (in some contexts) of being effective-because they have popular support and are seen to be legitimate. Both the Tanzanian one-party state and the Ugandan 'no-party' system have acquired a degree of legitimacy by being inclusive.

## Research on social change

7. The portfolio of social change research investigates a range of cross country and cross-cultural themes where significant gaps in international development knowledge about rights and inequalities, supporting for example DFID's work on reducing social exclusion and ensuring gender equality. Programmes include longitudinal research exploring the nature of childhood poverty, migration, the barriers to policy-makers tackling chronic poverty and effective strategies for women's empowerment.

8. Part of DFID's social research programme is run in collaboration with the UK Economic and Social Research Council. This partnership has been important in supporting the role of inter-disciplinary research through international research collaborations. DFID also support the UN Research Institute for Social Development and the International Council on Human Rights Policy.

9. DFID social research has been significant not only in revealing the social contexts for addressing development challenges but also in framing policy, for example work from the Chronic Poverty Development Research Centre provided evidence for the *Commission for Africa* for contextualising the extent and meaning of poverty, by mapping where the world's most poorest people are located; and also on Migration, both for DFID and HMG more broadly.

### Joining up UK policy on migration

The DAC peer review 2006 noted how national and international coherence between migration and development policies can assist the UK to manage its migration more effectively while harnessing the benefits of migration as part of its strategy for poverty reduction in developing countries. DFID has played an increasingly active role in interdepartmental discussions on migration and development, promoting policies and practice to maximise the benefits of migration for poor people. Research in this area has been important both to support inter-departmental discussions, DFID policy, and international debates, informing the DFID policy paper *Moving out of Poverty – Making Migration Work Better for Poor People* and the *Global Commission on International Migration*.

### Research impact at a National level - supporting national poverty strategies

In Vietnam, recommendations from the *Young Lives* project have been incorporated into the Social and Economic Development Plan 06-10; in Ethiopia the project carried out a detailed analysis of the 2002-05 Sustainable Development Poverty Reduction Programme, drawing on best practice from other Poverty Reduction Strategies and developed recommendations and indicators for Ethiopia's second PRSP.

Bangladesh – the Chronic Poverty Research Centre contributed background papers for the PRSP.

Uganda - Recognition by Government of Uganda Social Protection Task Force that the chronic poor need to be included in any major social assistance scheme. The research programme has been requested to design a cash transfer pilot programme for the Government's Social protection Task Force, to feed into the next Poverty Eradication Action Plan revision.

In South Africa qualitative work on social grants for the Treasury has already helped to correct misperceptions in government about the likely effects of grants on dependency.

### **Lessons learned and issues for the future**

10. Research is typically organised around networks of research partners, usually lead by Northern institutions but with strong partners in the South. Experience of working through this mechanism has highlighted:

- the need for additional resources and dedicated strategies to develop further the research capabilities of southern partners
- the importance of strengthening inter-disciplinary research skills and approaches in partner countries.

11. Key issues to address in future are:

- ensuring that DFID research in other sectors take sufficient account of governance, rights and equity issues
- who will still be poor in 2015 and how can we tackle the needs of those people who fall outside of the MDG targets
- Understanding the role of social policy in development

### 3. BACKGROUND: DFID RESEARCH ON HEALTH AND HIV AND AIDS

Successive DFID health strategies have underlined the importance of generating new knowledge to deliver health services better, as well as scientific breakthroughs to provide new medicines and vaccines for tropical diseases and HIV and AIDS. In 2006/7 DFID invested around £45 million in health research – that is, one pound for every ten spent directly on health and over 35% of the entire central research budget. This makes DFID one of the largest investors in international health research, spending twice the minimum level for donors recommended by the Commission on Intellectual Property Rights, Innovation and Health in 2006.

2. Tropical diseases and TB together account for 12% of the global disease burden but less than 1% of new drugs developed. The 2006 White Paper “Making Governance Work for Poor People” commits DFID to boosting support for scientific innovation to develop a new generation medicines and vaccines for tropical diseases, TB and HIV and AIDS. In addition, a review commissioned to inform the forthcoming research strategy has singled out DFID’s strong track record in health sector research as an area of international comparative advantage on which to build further<sup>1</sup>

#### **Operations and implementation research in health and HIV**

3. Decades of published research and systematic reviews provide good evidence for what basic health services are needed in poor countries and how much these interventions cost<sup>2</sup>. DFID funds operational research on how these interventions can be delivered more effectively – for instance for better coverage, cost-effectiveness and user uptake. This type of research is funded through consortia of North/South research institutions working across a number of partner countries to provide comparable findings and draw out lessons. DFID’s previous experience of managed research has shown that long term programmes produce significant and coherent bodies of knowledge relevant to the health of the poor; build research capacity within developing country partner institutions; and support the translation of knowledge into policy and practice. Five examples of significant new knowledge generated by DFID health research are set out below.

#### **Knowledge breakthroughs from DFID health research**

Research in Ghana in 2006 found that breastfeeding within the first hour reduced neonatal deaths by 22%, showing that a clearer message needs to be developed about early breastfeeding as a key component of infant survival programmes.

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<sup>1</sup> Setting DFID’s research policy and practice in an international context, ODI April 2007

<sup>2</sup> Walford V. “Overview of the emerging health challenges and the implications for DFID support”, July 2006, DFID Health Resource Centre

Researchers in Zambia found that a 43% reduction in HIV and AIDS deaths was possible when children admitted to hospital were treated with a common antibiotic co-trimoxazole. This treatment regimen has subsequently become WHO recommended practice.

Insecticide treated bednets have the potential to reduce infant mortality rates by up to 20%. DFID research showed that nets could be re-treated at home safely and effectively by semi-literate communities in Africa. As a result, DFID Tanzania helped to ensure that around 2 million nets sold annually by the three competing commercial factories were co-packaged with dipping kits.

More patient-friendly and community-based TB treatment case management guidelines produced by researchers in partnership with the Pakistan National TB Programme have been adapted and adopted by other national programmes (eg Uganda and China) and have influenced WHO advice.

Research supported by the EC and DFID in Mwanza, Tanzania in [1992] validated the link between untreated sexual infections and physical susceptibility to HIV and AIDS, leading to important changes in the way sexual health programmes are managed

4. DFID currently supports 11 research programme consortia in health and HIV. These programmes typically run over five years, covering questions in the following four broad areas:

- Communicable disease (eg TB, malaria, HIV and AIDS and other neglected tropical diseases)
- Maternal and child health
- Health systems
- Non communicable disease

#### **Scientific innovation to produce new medicines and vaccines**

5. Between 1975 and 2000 only 13 new drugs were licensed for tropical diseases – that is, around 1% of the all new licenses issued globally. DFID has sought to address this market failure by subsidising new product development public-private partnerships (PDPs) that specialise in R&D for priority diseases affecting the poor. Since the emergence of PDPs in the 1990s over 65 potential drug candidates are now in development and 3-5 new drugs are expected to be registered over the next two years.

6. PDPs work as virtual pharmaceutical companies in which a central staff manage a portfolio of potential new drugs/vaccines developed by a range of different partners including large pharmaceutical companies, pharmaceutical companies in middle income countries, biotechnology companies, contract research organisations, developing country stakeholders in disease programmes, user and advocacy groups etc. Medicines and vaccines in development cover the main “killer diseases” but also a range of neglected conditions that contribute to the disease burden in poorer countries (eg sleeping sickness; leishmaniasis). Essential health technologies such as diagnostics are also developed. PDPs aim to provide subsidy where it is needed most in the R&D pipeline: (i) at discovery and (ii) to partner projects through late stage clinical development (which is particularly costly, including

clinical trials, developing country market analysis and regulation. DFID's current investments in PDPs are shown below.

International AIDS Vaccine Initiative
International Partnership on Microbicides
Drugs for Neglected Diseases
TB Alliance
Medicines for Malaria Venture
Bilateral or UN drug/vaccine/technology development initiatives
Microbicide Development Partnership (bilateral)
WHO/UNDP/World Bank Human Reproduction Programme
WHO/UNICEF/World Bank Tropical Disease Research Programme

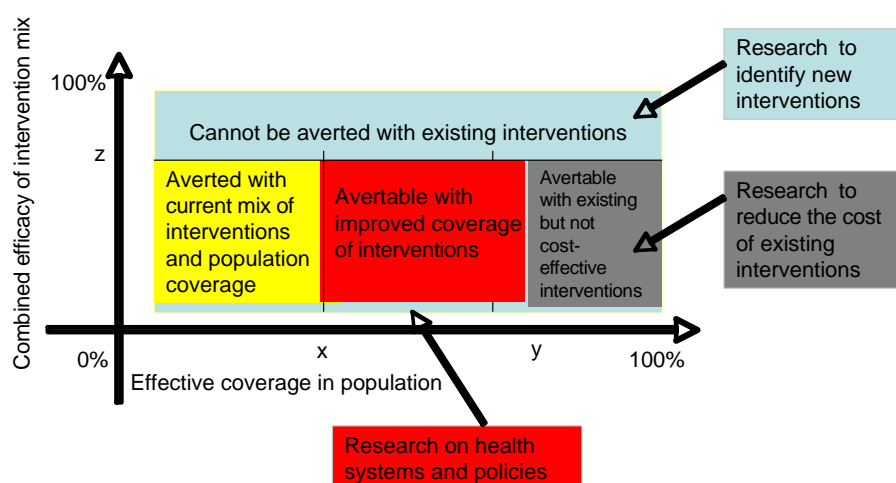
7. Existing PDPs estimate that there is an annual shortfall of \$1 billion shortfall in funding available to promote their work. Research by the Office of Health Economics (OHE) and has shown good rates of return from investing in drug and vaccine PDPs in terms of \$ per Disability Adjusted Life Year (DALY) averted:

- **for Drug PDPs** the cost per DALY averted is comparable with existing interventions e.g. use of insecticide treated bednets, residual household spraying and HIV voluntary counselling and testing.
- **for Vaccine PDPs** it is comparable with existing interventions e.g. TB DOTS therapy, HIV-TB co infection prevention and treatment, HIV and AIDS mother to child prevention

### **Future research priorities**

8. As part of the new research strategy DFID will aim to match future research to the need for different types of evidence. Figure 1 below shows how this could potentially be done.

**Figure 1:**  
**Matching research to the need for different types of evidence**



x  $\hat{=}$  population coverage with current mix of interventions

y  $\hat{=}$  maximum achievable coverage with a mix of available cost-effective interventions

z  $\hat{=}$  combined efficacy of a mix of all available interventions

Source: Adapted from Ad Hoc Committee on Health Research, *Investing in health research and development* (WHO, 1996)

9. In terms of **investigational research** future priorities could include:
  - Research to reduce the cost of existing interventions, for instance, second line treatments for TB, HIV and malaria
  - Research to investigate future changes to the disease burden, in particular the rise in non communicable disease but also the impacts of climate change on human health
10. In terms of **operational research** future priorities are likely to include:
  - Further research on health systems and policies that will enable coverage and quality of existing interventions to be improved and new models adapted, including at community level
11. In terms of **translational research** future priorities are likely to include:
  - Further investment in clinical trials to test and develop new drug treatments, health interventions and vaccines, with particular emphasis on clinical trials capacity building and co-ordination.
12. In terms of **scientific innovation** future priorities are likely to include:
  - supporting a “second generation” of medicines and vaccines for the major “killer diseases”
  - diversifying our PDP funding to include new priorities such as diagnostics
  - pay more attention to the “science” of product introduction – including funding research on drug regulatory capacity, public procurement and

distribution systems, and standards and guidelines for programme delivery.

13. Additionally, we see a need for multi-sectoral and inter-disciplinary research on the social context for health. For instance, future questions could include how women's incomes affect the survival and nutrition of their children.

There is information available on associated research in [education](#).

#### **4. BACKGROUND: RESEARCH ON ENVIRONMENTAL CHANGE**

1. DFID invested around £8 million in environmental change research in 2006/7, equivalent to over 6% of the central research budget. The 2006 White Paper on International Development highlighted the need for further research to help partner countries understand and address the challenges of adapting to climate change; our portfolio of research in this area is expanding rapidly with a view to helping partner countries strengthen their adaptive capacity but also manage their natural resource base in more sustainable ways.

2. The environmental change programme is being taken forward in four main areas

- Climate change adaptation. A programme reaching 10 African countries is now underway.
- Ecosystems services. A programme designed to support the management of ecosystem services to promote people's livelihoods and sustain the ecosystem is in design in four regions.
- Water and Sanitation, where our aim is to meet the research needs set out in DFID's Water and Sanitation strategy, as well as get outputs of previous DFID water and sanitation research into use
- Energy, where a new programme is under design.

3. DFID began investing in targeted environment research, mainly on energy and water and sanitation over two decades ago through the (now closed) Engineering and Knowledge and Research programme (EngKaR). An evaluation of DFID research "Research for Poverty Reduction" was conducted in 2002<sup>3</sup>. This emphasised the growing importance of environmental and climate change research, as did the House of Commons Science and Technology Select Committee in an enquiry into research for development conducted in 2004. Based on these reviews, the consultation to develop the Research Funding Framework 2005-07 and a review of the EngKaR programme in 2004, DFID placed the impact of climate change on poverty at the centre of its environmental change agenda.

#### **Climate change adaptation research**

4. DFID's current Research Funding Framework 2005-2207 has Climate Change as one of its four priority areas for research. Little existing research on climate change is focused on poverty impacts, despite the fact that climate change is expected to hit developing countries the hardest. Current levels of greenhouse gas emissions mean that many impacts are now unavoidable:

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<sup>3</sup> Surr et al 2002

ranging from decreases in crop yields in regions where people are already undernourished, to more severe water stresses and increased incidence of serious climate-related disasters. Climate change impacts will also impair poverty reduction efforts. The poor will have to cope with more droughts, more extreme temperatures and sudden and intense rainfall causing greater food insecurity, loss of income, greater mortalities and increased prevalence of diseases.

5. A recent study on positioning DFID research<sup>4</sup> has highlighted that DFID is one of only two international donors to focus explicitly on the impact of climate change on poverty and DFID is keen to develop this area of comparative advantage, building on UK commitments at the G8 and in response to the Stern Review on the Economics of Climate Change which also highlighted the vulnerability faced by poor people to the growing impacts of climate change.

### **Current Climate Change Research Initiatives**

DFID and Canada's International Development Research Centre are collaborating on a major Change Adaptation in Africa (CCAA)<sup>5</sup> research programme, which is managed by IDRC. CCAA funds work to improve the adaptive capacity of poor people to current climate variability, as well as to the risks associated with longer-term climate change. The first call for concept notes elicited 250 African-led proposals from across the length and breadth of Africa.

Following the G8 commitment to an Africa Climate Observing System, DFID is supporting **ClimDev Africa**, a programme which will strengthen the contribution of climate information services in addressing various climate susceptible sectors including food security and health.

### **Ecosystem services**

6 Degradation of ecosystem services hits the poor disproportionately. It is also sometimes the principal factor causing poverty, often contributes to the growing inequities and disparities across groups, and increasingly fuels social conflict. This is because poor people rely heavily on ecosystem services and, with limited other resources, they are more vulnerable to ecosystem change. Modification of ecosystems to enhance one service generally comes at a cost to other services and these costs are often borne by the poorest. Richer people's greater access to many ecosystem services, their over-consumption and waste, and prevailing resource-intensive development patterns are the flip-side of the same coin and require equal efforts to redress. DFID intends to explore with partners producing evidence based good practice in ecosystems

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<sup>4</sup> Situating DFID's research funding policy and practice in an international comparative perspective, ODI April 2007

<sup>5</sup> See <http://www.idrc.org/CCAA/>

management. DFID is currently developing a research programme in collaboration with the UK Research Councils on Ecosystem Services.

### **Water and sanitation**

7. A third of the world's people live in countries which don't have enough water; by 2025, that proportion will rise to two thirds. DFID has stated that everyone should have access to water and sanitation and the 2006 White Paper on International Development commits to helping partner countries develop sustainable and equitable ways of managing their water resources. In part this aim will be addressed by significantly increasing support for the research and development of innovative technologies and policies for cleaner water and sanitation provision.

#### **Current Water Research programmes**

CRD has commissioned a research programme consortium (RPC<sup>6</sup>) on the equity of access for the poor to water & sanitation services. The RPC, currently in its inception phase, is based in Ethiopia. Research findings will find policy and development entry points for uptake in regional processes including the Nile Basin programme. RiPPLE (Research-inspired Policy and Practice Learning in Ethiopia and the Nile Region) aims to advance evidence-based learning on water supply and sanitation, focusing specifically on issues of financing, delivery and sustainability. Working in three regions of Ethiopia, RiPPLE will develop a new body of high quality policy and practice-relevant knowledge through the establishment of Learning and Practice Alliances at different levels. In parallel RiPPLE will build outward linkages to networks and partnerships within other Nile region countries.

DFID has won funding from the EC to co-ordinate a network of member states that fund water research for development. The work includes co-ordinating existing programmes with an objective of future joint programmes in agreed priority areas such as research into use.

8. Based on internal and external consultation DFID has identified three areas where significant contributions can be made in adapting, disseminating and mainstreaming water and sanitation research outputs. Key topics include:

- Governance and management of water and sanitation services including reforms of public sector utilities;
- Technological innovation to improve poor peoples' access to clean water and sanitation;
- Combating degradation of water resources including improved assessment, development, management and protection of water resources and aquatic eco-systems.

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<sup>6</sup> RPCs are centres of specialisation around a particular research and policy theme. They group a range of research partners, including civil society organisations, both in developed and developing countries.

9 For water and sanitation research for development to achieve impact requires research management improvements. Strategies are required to make research outputs accessible to a wider range of users, to get more research into use and to achieve better co-ordination among research funding bodies. This strategy proposes ways of achieving these three.

10. DFID also recognises the need to harmonise better research effort, outputs and implementation across multi-lateral and bi-lateral research funding agencies in water and sanitation. In an effort to accomplish this DFID has taken the initiative to act as the co-ordinator of a network of EU member states agencies that fund water and sanitation research for developing countries. The EC has awarded Central Research £3m euros to coordinate the network. It is expected that the network will lead to the identification of potential and plans for future joint programmes.

### **Energy**

11. The equitable access to energy is a core component of CRD energy research. CRD research planning has been extrapolated around this theme and that of the use of new fuels and the need to mitigate against climate change. DFID has already commissioned work on the equitable access of the poor to bio-energy, with policy and practice objectives but more is planned on the navigable path between cost, access and renewable sourcing. DFID is in the process of commissioning a research consortium to consider how best to scale-up and sustain improvements in energy access for the poor. A scoping study is also underway to identify how research can contribute to optimising the main driving forces behind energy policy formation.

12 Energy production and use is very much a part of climate change and the links, policy and technological innovations will be explored in planned programmes.

### **Priorities for the future**

13. Our priorities for the future include:

In terms of **investigational research** future priorities could include:

- developing and launching a major new initiative to address ecosystem services and poverty, in conjunction with the UK Natural Environmental Research Council, the Economic and Social Research Council and the Department for the Environment, and Food and Rural Affairs

In terms of **operational research** future priorities are likely to include:

- Further research on public utility reform and policies that will enable coverage and quality of existing systems to be improved and new models adapted, including at community level. further work on

sustainable management of ecosystems to promote livelihoods and service preservation.

In terms of **translational research** future priorities are likely to include:

- Further substantial investment in research into use programmes including investments in joint programmes with member states on water and sanitation.

In terms of **scientific innovation** future priorities are likely to include:

- Data collection and management for climate change prediction in Africa

14 Additionally, we see

- DFID support for climate change adaptation research to Asia and Latin America, in conjunction with other research funders;
- research into urbanisation, both from a social science perspective and in relation to driver of growth.
- programmes that seek to get water and sanitation research outputs into standard practice, including through more joint work with the World Bank.
- research on more sustainable energy provision that is equitable and less damaging to the environment.
- DFID support for capacity building and more local led programmes
- Technological innovation in water and sanitation
- Environmental governance – recognising the importance of governance in relation to environmental issues and climate change and rights

## 5. DFID RESEARCH ON COMMUNICATION AND GETTING RESEARCH INTO USE

*"Access to the research of others will not bear fruit if the capacity to use that knowledge effectively, in particular to innovate is absent." M. Surr et al<sup>7</sup>, 2002*

1. Research on its own cannot bring about change. Research must be communicated in an appropriate form if new knowledge is to bring about improvements in the lives of the world's poorest people. The research must also be useful and accessible to people, who may require additional skills and capacity to enable this.
2. Experience tells us that unless communication of research is planned for throughout a research programme, including once it's completed, then research uptake and impact may be limited. A top-down, linear approach to communication, where a homogenous group of end users receive information, is unlikely to lead to change. Communication of research should be an iterative, interactive and multi-directional process that involves a wide range of stakeholders from planning, through to design, implementation and monitoring and evaluation. The shortcomings of the linear model are widely recognised, and the question that is asked instead concerns research uptake pathways: 'Why are some of the ideas that circulate in the research/policy networks picked up and acted on, while others are ignored and disappear?' Or, to phrase it from the perspective of those engaged in research: 'How can we market our ideas so that they are noticed? What do we have to do to influence policy in a pro-poor and evidence-based direction?'<sup>8</sup>
3. Evidence that forging links between researchers and the policy and decision-makers they seek to inform is beginning to emerge. Canadian Health Services Research Foundation supported 400 knowledge brokers over ten years, in order to promote research-based evidence in decision-making. A recent review of the initiative showed its research to be 'four times more likely to be subject to active dissemination and implementation'. Encouraging policymakers to be 'more intelligent consumers of research' can also work: the Foundations' capacity building training showed an increase from 21% to 50% of health systems managers actively seeking out and using research information in their daily jobs.
4. DFID's current RFF highlights the importance of getting research into use. Background studies<sup>9</sup> that support the current RFF provided evidence that good communication of research does enhance the uptake and use of

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<sup>7</sup> Research for Poverty Reduction, Surr et al 2002

<sup>8</sup> Tools for Policy Processes: A Handbook for Researchers, Daniel Start and Ingie Hovland, Overseas Development Institute 2005

<sup>9</sup> The DFID Research Communications Review (conducted in 2003 (<http://www.dfid.gov.uk/research/Comms Strategy Final.pdf>); Surr Report 2002.

research outputs, and recommended that more attention be paid to the environment in which research gets taken up and used in a way that benefits poor people. The RFF recognises that ‘to achieve impact, research needs to both make the relevant information accessible and promote an enabling environment in which it can be adopted’.

5. The RFF lays the foundations for DFID’s support to communication, uptake and use of research. The RFF specifies that a minimum 10% of the budget for all DFID commissioned research must be spent on research communication activities. For 2006/07, this amounts to around £2 million<sup>10</sup>. It’s recognised by a broad range of our stakeholders that this policy has given communication specialists great leverage – ‘most researchers what to communicate their work and CRD has begun to develop operational means to support that’<sup>11</sup>.
6. A further £7 million per annum is spent directly on communication research and service delivery programmes to get research into use. These programmes include: research on new ways of delivering knowledge and information (e.g. through television and radio dramas; internet based services; linking the media to researchers); research on information standards and records; and, information services for a broad range of stakeholders such as on-line journals, technical enquiry services, policy papers.

### **Impact of DFID’s Research Communication Work**

7. DFID has supported work in the area of research communication since the early 90s, mainly in the natural resources field. A number of important studies were conducted that examined promotion and uptake of natural resources research. Evidence from these studies (including the evaluation of the RNRRS), indicates that good communication of research does have an impact on the uptake and use of research. This evidence has led DFID to be a major influencer in the field of research communication<sup>12</sup>, along with Canada’s International Development Research Centre. There is now a growing body of evidence and support that planning for good communication (including influencing, scaling-up and out, promotion) is a prerequisite in any research programme.

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<sup>10</sup> This is calculated as 10% of the budget for RPC/DRC. It is an approximate figure as many RPC/DRC spend more than the minimum 10% on communication. It does not include the multilateral programmes or Research into Use. The latter has allocated approximately £4 million to research communication activities (around 11% of the budget) for the duration of the programme.

<sup>11</sup> Improving uptake of DFID Research: A Review of Options. Chetly and Perkins. April 2007.

<sup>12</sup> Setting the Scene: Situating DFID’s Research Funding Policy and Practice in an International Comparative Perspective. A scoping study commissioned by DFID Central Research Department. ODI. April 2007.

8. The importance of research communication is rising up the agenda of both donors and the global research community<sup>13</sup>. A survey of funders, including SIDA, IDRC, DANIDA, ESRC, NORAD and SDC illustrate the range of tools deployed including requiring researchers to produce communication plans and providing guidance and expertise to assist them; requiring minimum spend on research communication; holding central budgets for communication and funding non-project communications work. Overall it appears that DFID is demonstrating real leadership in its efforts to encourage communication and uptake of research, to enhance the impact of research (Chetly and Perkins, 2007).

### **Communication within Research Programme Consortia**

#### **New engagement: communicating research - transforming researchers**

Creating space for peer-to-peer learning between researchers has resulted in changes in how some Citizenship DRC researchers' work – both in terms of communicating research and in how researchers themselves are transformed as part of the research process. For example, during a workshop where researchers were asked to share different approaches to communicating research, Carlos Cortez from Mexico showed a video of the research with Zapatista communities in Chiapas, Mexico. This inspired Simeen Mahmud, a statistician who used mainly traditional research methods to make a video about garment workers' rights in Bangladesh as a way of communicating research. This video was important because it helped create awareness about the range of different stakeholders involved in the garment sector, some of whom have in the past have been ignored. The stakeholders have different demands and needs and levels of influence and power. It is essential to consider these different views and positions to gain a real understanding of the situation.

#### **Forging new partnerships for better uptake chances**

Traditional academic partnerships are no longer the 'norm' for DFID-funded Research Programme Consortia (RPC) as researchers recognise that working with communications organisations, networks, knowledge brokers and communications-savvy researchers early on increases the likelihood of take-up by other stakeholder groups later on. The RPC on CRISIS States has a Uganda partner who regularly writes a newspaper column in which he raises issues framed by his research knowledge. Chronic Poverty Research Centre has partnered with Development Initiatives, a development communications and advocacy consultancy that succeeded in getting Gordon Brown to launch their first Chronic Poverty report in 2004. Another RPC is partnered with the Stanhope School for Communications, which helps them to frame research knowledge and package it appropriately throughout the research cycle.

### **Impact: from intermediaries delivering and repackaging research**

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<sup>13</sup> Maximising the impact of development research, workshop report at IDS October 2006, Geoff Barnard, Liz Carlile, Deepayan Basu Ray [www.ac.uk/research-comms](http://www.ac.uk/research-comms)

<b>Programme</b>	<b>Detail</b>	<b>Impact</b>
Makutano Junction (Mediae Trust)	TV soap drama. Storylines are based on DFID supported research outputs	A recent storyline followed a young mother whose baby had contracted malaria. It emphasised the importance of using insecticide treated nets and seeking expert medical attention at an early stage. Audience data collected after the programme indicated that 43% of respondents heard about the importance of bed nets and more than 70% who watch the programme use bed nets <sup>14</sup> .
Research Communication Programme (RELAY) (PANOS)	Developing a new way of linking the media with academic research communities.	Relationships are being built between journalists and researchers. Results are being seen through increased and better reporting about important research findings. At a recent workshop a Zambian researcher said, 'This is the first initiative that has recognised the need to develop close co-operation between researchers and journalists. It brought out the needs of both researchers and journalists and provided a forum for them to explore avenues for collaboration.'
Programme for the Enhancement of Research Information (PERI) (INASP)	Provides Developing Countries with access to the latest research information, through discounted rates to journals, capacity support and skills development	Access to high quality information inspires timely, new and high quality research. Beneficiaries are broad including universities, non-profit organisations and the private sector. Currently 42 publishers provide discount rates of up to 96% to developing country partners.

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<sup>14</sup> This is data collected two months after the programme was broadcast. It is too early to evaluate whether or not people's behaviour has changed.

Programme	Detail	Impact
Research 4 Development	A web-based information portal on research, containing case studies, success stories and programme information about all DFID supported research	Since its launch in March 2006 visits have increased from approximately 4,500 to 13,600. Gradual increase in the duration of a visit from 8 minutes to 26 minutes.

### Future priorities

DFID continues to learn about how research gets taken-up and used; especially by the poor. We need to learn more about how different research communication models enhance and impact on this process.

Future priorities could be to:

- Continue research into innovative ways to communicate research; understanding what capacity is needed to create and enabling environment for research, so improving peoples access to and use of research.
- Look at ways of working across disciplines and learning from different communication models used in different disciplines. So that research communication becomes an integral process in research, rather than a discipline in its own right.
- Improve monitoring and evaluation. Does good M&E feed into better research design and in what ways? And how can researchers learn more from those who experience or use the research?
- Increase our work with intermediaries (those people/organisations who 're-package' research outputs) to understand and explore better ways of working, especially building partnerships and coalitions.
- Continue to support national systems to improve the way that research is communicated; also finding ways of stimulating the demand for research.
- Work with International research funders to harmonise good practice in research communication and better coordination of funding for research communication activities.
- Work with organisations that set international standards and norms in scientific information management processes and to build capacity of their member stats to collect, analyse and disseminate the material.

## 6. BACKGROUND: DFID RESEARCH ON ECONOMICS AND GROWTH

1. Rapid and sustained growth is the single most important way to reduce poverty and so better growth performance in developing countries is clearly central to our core mission of poverty reduction. In 2006, world GDP growth strengthened to 3.9% compared to 3.5% in 2005. To a significant degree, this recent strong global performance reflects the very rapid expansion in developing economies, which grew by 7% - more than twice as fast as high-income countries (3.1%).

2. Prospects remain good in the medium term. However, a key issue now is to ensure that more countries achieve high per capita growth rates and that when this is achieved, it is sustained, particularly in Africa. Episodes of sustained high per capita growth in Sub Saharan Africa remain rare. Growth across a large number of African countries remains highly unstable, including large African countries such as Sudan, DRC, Nigeria and Ethiopia. These countries are particularly important in terms of delivering positive regional spillover effects, similar to the experiences in East Asia, and to a lesser extent, Southern Africa.<sup>15</sup>

3. DFID's approach to growth is set out in Chapter 5 of the most recent White Paper<sup>16</sup>. It is difficult to pin-point the exact causes of growth but the White Paper recognises the need for **macroeconomic stability, a better investment climate, investment in infrastructure and agriculture**. It also recognises the fundamental **importance of trade** for reducing poverty.

4. Growth cuts across many sectors, and so research on growth cuts across all of DFID's research programmes. For example, agricultural research can make major contributions to growth; transport, growth and infrastructure are linked; similarly research on migration and labour markets are all linked to growth; environmental aspects and climate change are also linked to growth. Further discussion on these aspects is included under the background to sectoral programmes in this annex.

### Research on Growth

5. In the past DFID funded economic research through the Economic and Social Research (ESCOR) programme and development research centres. ESCOR was a responsive programme, which while funding much good research across a wide range of social science areas, was not necessarily well prioritised and focused. The responsive element of this programme is now supported under our joint programme with the ESRC. DFID supported two development research centres related to economic and growth. The first was on competition and regulation and the second on new and emerging markets.

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<sup>15</sup> Ndulu, "Challenges of African Growth" World Bank (2007).

<sup>16</sup> DFID, White Paper 3: Eliminating World Poverty, Making Governance Work for the Poor, (2006).

6. The World Bank has led much of the research on growth related to developing countries. A comprehensive World Bank study of growth in the 1990's<sup>17</sup> comes to the conclusion that there is no magic bullet to achieve growth and that there are things we still don't know about exactly how to do it. Sustaining growth will be a continuous challenge for developing country governments (as it is in developed countries) and policies must be kept under constant review.

7. Some key lessons which emerge from looking at the 90's are that:

- There are diverse institutional paths to growth;
- Generally accepted policy principles (sometimes known as the Washington Consensus) do not translate into a unique set of policy actions which will deliver growth;
- Policy rules cannot effectively replace Government discretion in policy making, ie there is a role for active Government in support of growth;
- Good macroeconomic management is at the heart of all successful growth strategies;
- Correct sequencing of sector policy reforms to support growth is important;
- There needs to be more focus on **identifying the binding constraints to growth rather than trying to improve all areas simultaneously.**

8. The last 2 points identify very clearly that policy advice needs to move away from a long laundry list of reforms for growth, to identifying a smaller list of key binding constraints in an economy at any given time. These lessons demonstrate the need for carefully developed, **country specific, growth strategies**, preferably as an **integral part of Poverty Reduction Strategies**, through analysis of what is constraining growth and where realistic potential for future growth lies. Such strategies should aim to identify a manageable group of policy interventions which are likely to increase growth potential. For smaller economies, the regional context may form an important part of the policy picture.

9. From the consultations for the 2005-7 research funding framework and the advice of the Chief Economist a gap was identified in the understanding of institutions for pro-poor growth. The World Bank's key lesson from the 1990s was the need to 'get the politics behind the economics right'.<sup>18</sup> Effective states and better governance are important to economic growth and therefore poverty reduction. States which are more politically stable are more likely to encourage domestic investment, nurture entrepreneurial activity, attract investment and generate long term economic growth.

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<sup>17</sup> World Bank, Economic Growth in the 1990's: Learning from a Decade of Reform, (2005)

<sup>18</sup> World Bank, Economic Growth in the 1990s: Learning from a decade of reform, 2005, p.125.

10. Rodrik, Hausmann and Prichett's work on growth spurts<sup>19</sup> throws doubt on whether 'institutions' really matter for at least kick-starting growth – they may become far more important for sustaining growth over the medium/longer-term; by then the economy is growing, providing the resources needed to implement reform.

11. Two Research Programme Consortium have now been commissioned to produce new policy-relevant research in this area.

12. In addition, the research funding framework identified the need to support work undertaken by other partners and donors. This includes support to the World Bank on its analytical work on growth and economics. This is principally through the multi donor Knowledge for Change Programme (KfC) which supports research in three main areas: Investment Climate and Trade and Integration; Poverty Dynamics and Basic Delivery Trust Fund; and Global Public Goods.

13. DFID also provides support to the World Institute for Development Economics research. Areas of research under this support have included research on migration, spatial aspects, conflict, and inequality. It is now beginning new projects on wealth (as opposed to income) distribution; on the global impact of Brazil, India, China & South Africa; on health inequalities on fragile states, looking at aid and at small countries ; and on gender and food security.

### **Future Challenges and Priorities**

14. The World Bank highlight two issues in particular that warrant further examination<sup>20</sup>. The first relates to development agencies' role in aid-dependent countries. The agencies' large role in financing the budget has forced them to be involved in budget processes, weakening national decision making and rendering the concept of "ownership elusive in practice", particularly in aid-dependent Africa. Clearly, forms of engagement developed for project finance do not apply to budget finance. There may be a need to explore new approaches to the transfer of resources to these countries, rooted in public finance, such as those typically used in federated nations that have chosen rule-based, arms-length systems of transfers.

15. Second, there has been an assumption that all nations will catch up to income levels of industrialised countries. All nations may not succeed in reaching industrialised countries' income levels within a reasonable time frame and research in this area may yield important implications for the role of nations and migration, and also for the optimal degree of discretion regarding national policies.

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<sup>19</sup> Rodrik, Hausmann and Prichett, Growth Accelerations, NBER Working Paper No. 10566, June 2004

<sup>20</sup> World Bank, Economic Growth in the 1990s: Learning from a decade of reform, 2005, p.25.

16. DFID recognises it needs to build upon its existing growth research. We see a need to broaden this area to meet our White Paper commitment to promote research related to the growth agendas of African countries in particular. Themes that could potentially be emphasised in the new strategy include:

- How can African countries achieve a high growth rate and if this is achieved how can they sustain this growth rate?
- What policies promote shared growth?
- How can trade be stimulated to -----
- What are the main drivers of growth in specific African countries?
- What technological innovations can best raise productivity, including agricultural productivity?
- What is the relationship between climate change, the environment and growth?
- The ability of economies not only to grow but to create jobs is likely to become an increasing policy priority in developing countries. How governments promote the right kinds of education and skills for the world of work and ensure that labour markets provide opportunities for all, including women are important areas to look at in more detail.
- Population dynamics and growth in Africa - what impact does migration and increasing urbanisation have on sustainable growth?
- What policies are needed for growth and pro-poor growth in fragile states?

## 7. BACKGROUND: RESEARCH ON TRANSPORT

1. DFID invests around £4 million a year in transport research. Transport is key for poor peoples' access to economic, health and educational opportunities and is closely linked to poverty reduction and the achievement of the MDGs. CRD research and research-into-practice programmes have been focused on delivering outputs of research to those whom it will benefit most.

2. There has been a traditionally strong involvement from the UK in transport research. This has led to an innovative culture in a broad spectrum of transport matters in the UK that ranges from technological advancement to policy innovation such as road congestion charging and road safety awareness campaigns such as the latest 'Think Bike'.

3. This strength and reputation has reached developing countries mainly through the work of the DFID Engineering Knowledge and Research programme (EngKaR). Under this, the UK Transport Research Laboratory (TRL) produced the *Overseas Road Notes* series that are seen as the definitive documents for developing countries on transport policy and guidance on subjects from road maintenance to bridge building. They were used by the World Bank in developing its own model on road maintenance.

4. Following a review of EngKaR in 2004, and in response House of Commons Select Committee on Science and Technology in January 2005 DFID committed to maintain an annual investment of £4 million in transport research. This investment has focussed getting the wealth of knowledge generated by EngKaR into widespread use including the dissemination of high quality guidelines, case studies and advocacy.

5. At the strategic level DFID with other stakeholders set up the global Transport Knowledge Partnership, gTKP, and this network is now working to collate knowledge and disseminate to users. gTKP is also set up to identify gaps in knowledge and innovation and update and translate existing research outputs.

6. In addition to the gTKP network DFID supported a joint programme with the World Bank - the Transport and Rural Infrastructure Learning and Sharing Programme, (TRISP). This aimed to synthesise sector knowledge from World Bank operations and facilitates its dissemination. It was reviewed in 2005 with an endorsement of its achievements including the strengthening of World Bank transport and infrastructure programmes. At the same time it was seen as essential to assist the World Bank in these sustainable techniques and incorporating externalities such as social responsibility, disability, and health issues.

7. Plans are well advanced for a successor to TRISP that will have an expanded role including the development of flagship programmes. Potential areas for these include transport, energy and vehicle emissions; freight logistics for development; transport and social responsibility. The programme

is expected to develop greater co-operation with gTKP and regional community access programmes.

8. DFID has developed a regional approach to get research knowledge into practice. One area of work is how improved rural access contributes to poverty reduction. The first of these programmes was the South and East Asia Community Access Programme (SEACAP) was developed with DFID Vietnam. SEACAP is a current programme of 24 projects operating in Vietnam, Laos and Cambodia that has already achieved considerable change in practice and has support from the Asian Development Bank and the World Bank. SEACAP has used an adopting “learning by doing” approach where the involvement of local institutions and organisations have been crucial to the equity and sustainability of better access.

9. Building on the success of SEACAP, a sister programme for Africa is about to start. The African Community Access Programme will complement the work of the Sub Saharan Africa Transport Policy Programme (SSATP) and support that of the African Union and the New Partnership for African Development, NEPAD transport work. AFCAP will provide advice and undertake research to facilitate the delivery of safe and sustainable access for poor communities in Africa. It will be based around a portfolio of research, demonstration, advisory and training projects. The outputs will feed directly into regional and national governments’ rural transport policies and strategies for poverty reduction. This will ‘close the loop’ between research and application, a gap that eluded so much of earlier infrastructure research.

10. DFID’s transport research programmes meet the Government’s 2006 White Paper on International Development commitments on more sustainable investments in rural infrastructure and to help achieve growth which will benefit the livelihoods of poor communities in Africa. For example the expected outputs of AFCAP have the potential to significantly reduce the estimated US\$ 12 billion annual costs for operation and maintenance of roads in Africa.

### **Future challenges and Priorities**

11. While DFID’s current and planned transport portfolio are primarily designed to get existing knowledge into use widespread use in Africa and Asia there are further questions and challenges. These include

- The role of infrastructure in promoting more sustainable and equitable growth, and linkages with other sectoral research (e.g. agriculture).
- Transport policy and climate change The challenges of transport activities and infrastructure that contribute less to CC whilst maintaining equitable access for poor people
- Transport, congestion and health and the role of successful cities having good policies in transport
- Road safety, influencing change through evidence based techniques.

- Waterways and poor people's access. The better and more successful use of natural waterways for poor people, overcoming the barriers to access. A CC initiative also.
  - Public Utility reform and private public partnerships. Successful components research.
12. We also plan to look at the modalities of the delivery of our transport portfolio with the aim to make these more effective and coordinated with other donors and partners. This will include the option of an amalgamation of programmes into potentially a single programme. An analysis will be carried out to look at different management options and determine the most appropriate and effective.

## **8. BACKGROUND: DFID RESEARCH INTO EDUCATION**

### **Overview**

1. DFID invested around £2 million in education research in 2006/7. Work focuses on three large multi-country work-programmes investigating the themes of education access, quality and outcomes, which are related not only to achieving the education-related Millennium Development Goals (MDGs) but also better understanding the relationship between education and other MDGs. A key objective within these programmes is to strengthen the capabilities of the southern institutions to become regional centres of excellence in research, teaching and policy advocacy.

### **Evolution of DFID's approach to education research**

2. Between 1993 and 2007 DFID published over 70 research papers on aspects of education and training in developing countries. The studies, which are intended to support policy-makers, are drawn together in the DFID Researching Education Development library and available both in hard copy and on compact disc. More recent reports can also be downloaded from DFID's website. Topics covered include: literacy; girls' education; teacher training; secondary and vocational education; HIV/AIDS and education; education financing; ICTs and distance learning; globalisation and education.

3. Early publications were largely commissioned individually but in 2001, following a tendering process, about 40 projects were funded on the themes of: Education for All; Access and Inclusion; Skills for Development; Education and ICTs; HIV/AIDS and Education. A further six projects were commissioned in 2004, three of which were on globalisation and education. All these projects involved southern researchers and most have been published in the DFID "Researching the Issues" series.

4. Unlike some health research, education research is unlikely to produce knowledge breakthroughs, such as new medicines or vaccines, or more effective treatment regimes, which can be used with immediate effect. Rather, as with DFID's operational research on health, the focus has been on knowledge to deliver education services better, especially how policies, systems and capacity can be developed to include all children, improve learning, enhance partnerships with non-state providers, parents and communities, and use resources efficiently. Syntheses and evaluations of policies and practice in one or more countries are particularly useful for disseminating effective approaches and identifying issues which countries, and the international development community, need to address. Reviews of challenging and complex issues, such as the globalisation of education, also provide a knowledge base from which policymakers can draw to enhance country policy responses and make aid more appropriate and effective

<b>Examples of knowledge gained from DFID education research</b>
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Research on teacher training in Africa- the MUSTER project- identified key challenges in increasing the number and quality of teachers to achieve universal primary education and recommended different options for reform.

A study on the barriers to education for the poorest households in six countries found that poor people will make sacrifices to educate their children but that policies on access and completion must address the quality of services to sustain demand.

Several studies of distance learning question its effectiveness for developing professional competencies unless complemented by local face to face support. They also suggest that although such programmes can facilitate access by women, and benefit young people, they are not reaching poorer and marginalised groups.

5. Previous DFID research has also been complemented by the publication of other policy and practice papers, by support for projects such as “Beyond Access” which resulted in several publications on girls’ education, a partner project with the World Bank on research on skills development, and by research capacity building partnerships with universities in developing countries through the former Higher Education Links and current DELPHE scheme.

### **Current education portfolio**

6. Publication of individual research projects has provided a knowledge resource but impact has been weakened by the fragmentation of themes and lack of a systematic dissemination strategy.

7. A new approach to managing education research was therefore developed in the context of the Research Funding Framework 2005-2007. Large multi-country work-programmes were introduced in order to create coherent bodies of knowledge on key themes related to achieving the education-related Millennium Development Goals (MDGs) and also the relationship between education and other MDGs

8. DFID’s three education work-programmes are led by consortia of northern and southern research institutes. A key objective within these partnerships is to strengthen the capabilities of the southern institutions to become regional centres of excellence in research, teaching and policy advocacy.

9. DFID’s current investment in education research programme consortia is around £2 million!!!! a year. Details of these programmes are set out below.

- **Improving access to education** explores how to improve access and reduce school exclusion for 5 to 15 year olds. Key hypotheses being pursued are: (i) whether the amount of over-age entry into primary

school, and repetition in primary school, affect completion and drop-out rates as a result of being overage for the grade; (ii) can multi-grade patterns of school organisation increase enrolment, retention and successful completion in small primary schools; and (iii) what advantages will long-term sector planning provide for the achievement of Education for All and the Millennium Development Goals?

- **Improving the quality of education** in low income countries. This programme links state-of-the-art school effectiveness techniques with priorities determined at national level to improve the way education initiatives are implemented. Priority themes include: using information communications technologies to improve learning in Rwanda and South Africa; effective use of mother tongue to improve educational attainment in Ghana and Tanzania; school leadership and management to improve educational outcomes in Ghana, Tanzania and Pakistan; and raising achievement of disadvantaged learners in science and mathematics in South Africa, Rwanda and Pakistan.
- **Improving the outcomes of education** is concerned with the cycle of deprivation whereby poverty often leads to inferior educational outcomes which then determine future poverty. This work programme will identify the policies needed to ensure benefits for the disadvantaged, through exploring in South Asia and sub-Saharan Africa the inter-dependence between the objectives of the education-related and other Millennium Development Goals, at a time when more children than ever before will be moving through schooling and training to become working youths and adults.

### Issues for the future

10. The research strategy for education should continue to support systematic, focused, multi-country and long-term studies, while being able to respond to emerging research needs to support new policy issues and new developments in programming in DFID partner countries

11. Potential areas that DFID's education research could address in future include:

- post-primary education, particularly secondary education;
- education in conflict-affected and fragile states;
- effective strategies to reach children still out of school;
- monitoring the impact of development partnerships, particularly the financing of education;
- more systematic exploration of the links between the education-related and other MDGs.
- research targeted at assisting high population LICs get on track to meet the education MDG