ANNUAL REPORT

1. BACKGROUND INFORMATION

Title of RPC: **TARGETS* - Team for Applied Research to Generate Effective Tools and Strategies for communicable disease control**

Reference Number: **HD205**

Period covered by report: **May 2005 – May 2006**

Name of lead institution and Director:
London School of Hygiene & Tropical Medicine,
Prof Sandy Cairncross (from June 2005, Dr John Porter)

Key partners: **Centre for Health Research and Development, India**
Ifakara Health Research and Development Centre, Tanzania
INDEPTH Network, Accra and worldwide
KNCV-Tuberculosis Foundation, Netherlands
Makerere Medical College and Infectious Diseases Institute, Uganda
The Zambian AIDS-related TB (ZAMBART) Project

Countries covered by research so far: **Argentina, Cuba, Brazil, East Timor, Gambia, Ghana, India, Kenya, Malawi, Peru, Sudan, South Africa, Tanzania, Uganda, Zambia, and Sub-Saharan Africa in general.**

* A list of abbreviations is provided in Annex 7.

2. ONE PAGE SUMMARY

1. Knowledge generated

A Taking interventions to scale and improving access for vulnerable groups.

Many of our studies in this area are in the initial or baseline stage. These include:
- Evaluation (with CREHS) of the Tanzanian National Voucher Scheme for ITNs
- The Tanzanian and Zambian national TB prevalence surveys.

Examples of work which has generated significant new knowledge this year include:
- Surveys of efficiency and equity of different ITN delivery systems in Ghana
- Analysis of different malaria outcomes by age in support of IPTi intervention design.
- Comparison of EPI-linked, NID-linked and community options for delivery of IPTi
- Evaluation of 4-drug fixed dose TB drug combinations in Central Province, Zambia

B New tools and strategies

Major studies are under way on appropriate treatment regimes, particularly for IPT, on safety and immunogenicity of new vaccines, and into new diagnostics for TB. The three principal items of new knowledge are (i) the demonstrated effectiveness of highland malaria epidemic prediction and control in East Africa, (ii) a new baseline-dependent criterion to assess immunogenicity of meningitis vaccine, and (iii) our evaluation of KO Tab 1-2-3, a wash-resistant 'dip-it-yourself' insecticide formulation for long-lasting treatment of mosquito nets. This last is especially timely in view of the world-wide shortage of long-lasting insecticidal nets, owing to the huge demand on the production capacity of the only two manufacturers.

C Risk, vulnerability and targeting of interventions

This is a new area for us, and a number of studies are under development or in preparation. Useful new knowledge was yielded this year by a study comparing TB treatment-seeking behaviour in two high-risk communities in Cape Town.

D Monitoring process and output in large programmes

An important output was the drafting, at the request of the Health Metrics Network, of standard tools for Verbal Autopsy in studies of neonatal, child, and adult mortality, which are due to be approved by WHO at the end of May. A study of the proportion of malaria-attributable anaemia in African children has enabled a new approach to M & E of malaria control programmes.

2. Knowledge disseminated and adopted in policy and practice

The highlands malaria epidemic prediction strategy has been adopted in two Kenyan and two Ugandan districts; the Kenya MoH is committed to national roll-out of the strategy, and has allocated part of its GFATM budget for this; Uganda MoH has submitted a budget to GFATM. Ghana's malaria programme manager is currently reviewing the ITN distribution strategy, and TARGETS' survey data are essential inputs to the decision. In Uganda, our changes to the DHS survey mean that it can be used to assess the relative impact of alternative delivery channels for public health interventions such as ITNs. As a result of our trials of ACT in Pakistan and Afghanistan, WHO-EMRO has recommended that the country cluster of Iran, Afghanistan and Pakistan switch to treatment of falciparum malaria with the ACT artesunate-SP. The goverments of Afghanistan and Iran have adopted it as national policy

Tanzania's National TB Control Programme has agreed to TARGETS' proposal to add GIS, poverty and vulnerability variables to the national prevalence survey, which is an operational management tool as well as a research study.

NB: The principal examples are cited here; this list is not exhaustive.

3. KEY THEMES

Theme 3i: What are the research outputs?

Output 1 of TARGETS' log frame relates to knowledge generation. The list in the table below is illustrative, rather than exhaustive. Output 2 relates to partnerships, stakeholder involvement and GRIPP, and to avoid duplication is covered in the text following the table.

Outputs	OVIs	Progress	Recommendations/Comments
New knowledge for taking interventions to scale and improving access for vulnerable groups.	Decision support tools for taking interventions to scale; reports on new approaches to improving access.	**Malaria** Analysis of data on age-pattern of malaria in Africa underway to develop a decision-support algorithm for policy makers on methods for IPTi administration.	Work to be completed by mid-2007.
		Analysis of effectiveness and equity of EPI as delivery system for IPTi in West Africa.	Paper submitted to Lancet ID argues that coverage is limited and biased against those most at risk.
		Baseline surveys on impact of Tanzania's voucher scheme on ITN coverage completed; follow-up survey due in July/August 2006. Piloting and 1st phase of qualitative work completed March 2006. M&E team invited to submit a budget for a 3rd round of data collection and analysis on impact and implementation process issues.	Some evidence suggests that not all women attending ANC for the first time are being given an ITN voucher. The knowledge generated by this research is being fed back to the National Malaria Control Programme and implementing NGOs.
		Malaria epidemic surveillance system is now complete in four pilot highland districts in Uganda and Kenya. The new system has been shown to detect malaria epidemic episodes within one week of onset. Staff at health facility and district levels said that whilst the system increases workload, most gain in efficiency, effectiveness, and also through improved supervision and communication.	Related operational, technical, economic and institutional research questions are now being addressed. Delays in the response from the central level remain an issue, as does sourcing essential resources such as spraying equipment.
		Tuberculosis Training completed for interventions in 24 sites (SA, Zambia) to improve access to TB sputum diagnosis; training	Interventions due to start June'06.

		closely documented for three types of TB interventions. Completed a study in poor slum communities of Mumbai on "Access to TB care delivered by the Revised National TB Control Programme (RNTCP)" to identify barriers and enablers to access and adherence with DOTS. The study has contributed to the baseline indicators for a GFATM-funded Urban DOTS Project.	Preliminary results presented in the National Seminar organized by DANTB and Govt. of India (Dec 2005). Officials from WHO-India and the Central TB Division showed keen interest in the findings. Also presented to TB Officials from the centre, state and city at the Urban Task Force in Mumbai in January.
New tools and strategies for disease diagnosis, treatment and prevention and overcoming obstacles to scaling-up.	Reports on the efficacy of new tools and strategies, and of their effectiveness under field conditions.	**Malaria.** RCT of different drug treatments for IPTi in Tanzania. Shown that AQ+SP is an efficacious and safe regimen for treating malaria during pregnancy in Ghana. Studies in progress: Drug alternative to SP for IPTp in Ghana Efficacy of SP IPTp in unstable transmission area, Uganda Effective and safe drug for treating malaria in children in Ghana; Drug alternative to SP for IPTi in an area of high SP resistance in Tanzania;. Efficacy of IPTc in a prolonged transmission area in Ghana Safety and immunogencity of RTSS malaria vaccine in Ghana; **Meningitis** Shown that the new GSK Heptavalent meningitis vaccine (DPT/HIB/HepB/MenA&C) is safe and immunogenic in children in Ghana. Safety and immunogencity of a trivalent meningitis polysaccharide vaccine(ACW135) in children in Ethiopia.	Enrolment completed. Follow-up to finish in 2008. Report submitted to Ghana MoH; manuscript prepared for publication. Completion due July 2006 Completion due December 2006 Recruitment slower than expected; further funding requested from Gates Foundation. 1967 children enrolled. Completion due September 2008 Completion due December 2006 Starts June 2006, ends December 2007. Need to speed up ethical clearance and staff training. Report submitted to Ghana MoH, manuscript prepared for publication. 400 children enrolled and vaccinated. Completion due Feb 2007

		Tuberculosis Pilot study on home-based DOT has started. The first of the three districts has been monitored. Anti-Stigma training using toolkit (team leaders), toolkit roll-out and evaluation ongoing in Central Region, Zambia.	In first district, 85/86 patients preferred home-based treatment.
New knowledge on risk and vulnerability and how it can be used to target interventions.	Disease specific guidelines for risk mapping and targeting strategies. Tool kits for rapid assessment.	Methodology further defined to assess poverty, vulnerability and access to care in Tanzanian TB prevalence survey. GIS also incorporated into the survey protocol. Studies completed on health-seeking behaviour and access to urban TB and HIV/AIDS Care Services by migrant workers (India), and high-risk communities (Cape Town). Method being developed to measure the impact of Human African Trypanosomiasis (HAT). HAT control programme and impact data are being assembled; preliminary model to assess the impact is developed. Uganda under five mortality study; data analysis completed.	Data will help identify districts where national TB programme needs to strengthen activities and target interventions to increase TB case detection. Protocol for a larger study in preparation (India). Presentation to city public health officials (Cape Town). Funding being sought to complete data collection and validation of the model. Mortality increase in 1995-2001 linked to malaria epidemics in South, underlining role of highland malaria surveillance in reducing child mortality.
Tools to monitor and evaluate the impact of communicable disease programmes through existing systems.	Guidelines to measure attributable morbidity, & to estimate impact of control programmes and delivery systems.	Estimates of the malaria-attributable fraction of anaemia produced. Report submitted to RBM/WHO in March 2006. Tanzanian TB prevalence survey and drug resistance survey are ready to start in May 2006. TB/HIV reporting and recording tools for the Zambian national programme developed, ready for training and roll-out countrywide.	Will allow use of anaemia as an indicator of malaria burden for M & E. These will give district estimates of TB prevalence, of case detection rates, and of acquired resistance due to inadequate treatment. Thus it evaluates the routine DOTS care given. Tools will need to be evaluated at some stage.

Evidence for interaction with policymakers & other stakeholders

The evidence includes the results of the stakeholder consultations conducted by southern partner organizations analysed using the Combined Approach Matrix, and included as Annex C of the inception report. It also includes stakeholder involvement in the research questions, design, funding, implementation and interpretation of specific studies. Examples include:

- everything KNCV does in Tanzania, where it acts at the behest of, and as consultant to the National Tuberculosis and Leprosy Programme;
- work by Ifakara and LSHTM on M & E of the Tanzanian National Voucher Scheme for ITNs, for the same reason;
- work by MAAS-CHRD under its MOU with LEPRA, where the relationship is analogous;
- the Director's leading a multi-donor evaluation of Ghana's Guinea worm eradication programme and presentation of the results to the Minister of Health, culminating in the Minister's decision to reconvene the interministerial Task Force on dracunculiasis;
- a current intervention study on improving access to DOTS in Pune, India which is partly funded by the local municipal corporation and the City TB Control Society through the advocacy efforts of the State TB programme manager;
- ZAMBART's review, at the request of the Ministry of Health, of the pilot implementation of 4-Fixed Dose Combination treatment for TB in Central Province; the review was completed in December 2005 and the roll-out to all the districts has been successfully completed, following ZAMBART's recommendations;
- peer review of TARGETS partners' proposals for use of the Research Fund; for example, a proposal from Makerere on malaria diagnosis and treatment was reviewed by the person responsible for research liaison in the Uganda Ministry of Health, and will now receive support, including the drugs required, from the national malaria control programme;
- the proposal which we developed to study the option of treating local mosquito nets in markets in Ghana, which has been taken over for implementation by the National Malaria Control Programme with DFID funding;
- review of our estimates of malaria-attributable anaemia by the RBM Monitoring and Evaluation Reference Group.

Interaction with other DFID RPCs includes:

- a Memorandum of Understanding with the Malaria Consortium (a partner in COMDIS) and collaboration on specific projects in Mozambique and Uganda;
- collaboration with CREHS on support to the M & E of TNVS;
- participation with other LSHTM-based RPCs (and bringing COMDIS into the loop) regarding a proposed symposium on alternatives to RCTs;
- a shared CAG with COMDIS.

Good communication of results

We believe that our research is generally reaching the targets set out in our Communications Strategy, as illustrated by the examples above. However, as we stated in our Inception Report,

> *"The RPC's research portfolio includes a wide variety of independent projects. Each project has a different target audience, ranging from global planners and country programme managers, through district health management teams to the community level. The manner in which the research is intended to be useful also varies. … For all these reasons, it is not appropriate to try to elaborate a well-defined and detailed communication strategy at the RPC level. Any such definition would be too vague to be useful in practice. Rather, each component project will need its own communication strategy."*

We support our partners (and LSHTM researchers) in developing these project-specific communications strategies through three main processes; first the annual stakeholder consultation which we require them to conduct, second the reviewers' comments on their proposals for use of the Research Fund, and third the requirement that they respond to the following questions in completing the fields which we have now added to the project database:

- Who is the target audience for this research – whose behaviour is it intended to influence?
- Is there any evidence that these people regard the problem you are tackling as a priority?
- What was their input into planning and implementing the research?
- Through what channels will you communicate with these people afterwards?

We have found that we have little to teach and much to learn from our partners in this domain. Given the fragility of their funding environment, they are as aware as anyone of the need for moral, material and even financial support from their stakeholders and target audience of policymakers. Indeed, it is hard to see how intervention studies relevant to scaling up interventions, reaching vulnerable groups and monitoring programmes can be carried out at all without the full participation of the health system and its management at various levels.

We have been less successful in communicating our strategy to DFID. This is partly because of the illness of Deputy Director Dr Jo Lines, who had taken on this responsibility and is now recovering from surgery. Dr John Porter, who takes over as TARGETS Director in June, has put the Communications Strategy at the top of his priorities.

Theme 3ii: What are the research impacts?

What is being done to collect baseline evidence to track programme impact on poverty?
Much of our work involves the design, implementation and analysis of population surveys which, when repeated, will provide direct evidence of the impact of disease control programmes - and hence, of our research programme through them - on poverty. The emphasis on vulnerability and poverty in TARGETS' brief, and the interaction between TB and malaria researchers, have brought added value to this research. Examples include:

- The vulnerability component added (with GIS) to the Tanzanian and Zambian TB prevalence surveys will serve to identify vulnerable groups needing targeted control interventions. Follow-up studies will monitor the impact of these interventions on the vulnerable groups.
- Other studies have identified constraints on vulnerable groups to accessing TB care in India, Lusaka and Cape Town, and helped us to identify solutions such as the anti-stigma toolkit, improved quality of care, HIV/TB coordination and (in India) the Tribal Action Plan. TB affects people in their productive years, reducing earnings and increasing poverty through the burden of the disease itself and the burden of seeking care. Evaluation of these interventions will help to monitor our programme's impact.
- The outputs from the TNVS monitoring and evaluation research, and our work on household surveys in Ghana and Uganda have already and will continue to provide the national malaria programme managers with the knowledge they require to extend and improve their programmes for equitable and sustainable delivery of ITNs. We shall continue to monitor these programmes.
- With a Renewal grant from the International Food Policy Research Institute, we are currently exploring the effect of TB on food security in rural South Africa and Zambia.
- In Zambia, a case-control study of the relationship between TB and Poverty is underway

By underwriting the salaries of TARGETS staff, DFID enables us to carry out much of this work as short-term consultancies or as *pro bono* advisory work. This fills a major funding gap, as it is notoriously difficult to find other sources of support for such operational research, particularly research on the effectiveness of delivery systems as opposed to the efficacy of interventions.

Have stakeholders increased awareness of our research findings and changed practice?
Numerous examples have been given above of changes in policy and practice at national and local level arising from our research during the last year. Here we cite a few where our influence has been more global in scope.

- The results of our study of IPTi in Ghana were used by UNICEF to obtain funding from the Gates Foundation to conduct an IPTi implementation trial in four countries, including Ghana.
- Daniel Chandramohan chaired the consultation meeting on intermittent preventive treatment for malaria during pregnancy (IPTp) organised by the WHO AFRO. In the meeting a consensus was reached to continue to use sulphadoxine-pyrimethamine (SP) for IPTp in area with up to 50% drug resistance and to conduct further studies in areas with SP resistance >50% before introducing IPTp.
- Dr Chandramohan was also the rapporteur of the consultation meeting on global rotavirus disease burden organised by the WHO.
- Prof Cairncross wrote the chapter on water, sanitation and hygiene promotion in the second edition of Disease Control Priorities in Developing Countries, published by the World Bank. We know that senior policymakers are reading it carefully, because within weeks of its publication, the World Bank's Senior Sanitation Adviser sought clarification on the costing calculations.
- We have produced two documents this year for the WHO Global Malaria Programme: one was presented by WHO at the 2nd High Level Donors' Meeting in Paris (August 2005) as the way forward recommended by WHO and UNICEF to scale up ITNs.
- Prof. Godfrey-Faussett Chairs the Technical Review Panel of GFATM

Progress in South-North, South-South and North-South learning.
An important learning and capacity-building activity in which TARGETS has played a key role is the Partnership for Social Science in Malaria Control. As described in our Inception Report, the first course on strengthening social science contributions to malaria control was held in Ghana in November 2005. The six teams at the training have now received funding from the Gates Malaria Partnership and will be implementing their research and intervention projects from June 2006. In addition, the Bénin National Malaria Control Programme has expressed interest in translating the material into French and in running a similar course for francophone participants in early 2007.

Another significant activity was the two-day TARGETS brainstorming meeting with partners held in London in May, to discuss needs and opportunities for research on the determinants and consequences of access to preventive and curative health services. The meeting was originally conceived as a preliminary to a workshop to develop new research proposals on access, but it soon became clear that there was a wealth of existing projects which would benefit from exchanges between TARGETS partners. For example, ZAMBART's work on stigma was of interest to MAAS-CHRD, and MAAS-CHRD had experience of work on gender and social constraints to TB treatment from which ZAMBART could learn. The partners involved in the Zambian and Tanzanian prevalence surveys agreed to exchange survey tools, and so on. The potential role of TARGETS' northern partners and collaborators, including LSHTM, KNCV-TF, and STI, was largely that of catalysts and interpreters.

A number of training and capacity-building activities have been pursued during the year, including:

4 ZAMBART staff trained in epidemiology and statistics, and one MSc by distance learning from LSHTM.
A joint data analysis workshop in Tanzania in April 2006, in which staff from the malaria control programme and Ifakara Centre were trained in using Stata to analyse household and facility data.

4. Lessons learned

- Working with partners

It should not be a lesson we had to learn, but it has become clearer with time that the various partners in TARGETS have very different needs and potentials. For the sake of transparency and ease of negotiating a consensus, our bidding document envisaged a similar package for each partner, with a budget (excluding personnel) of some £25,000 p.a. This is almost a derisory sum for the INDEPTH network, with a budget of millions of pounds and some 40 member organizations in three continents, while for MAAS-CHRD in India, it can be used to give financial security and fund a number of valuable local studies.

We envisaged the Research Fund, though small, as providing a much-needed opportunity to the partners to follow their own research agenda, but did not foresee a further advantage for the partner organizations. Most of their sources of research funding, particularly those which commission studies, impose tight scheduling constraints, and the timing does not always suit the researchers' convenience. The flexibility of scheduling allowed by the TARGETS Research Fund allows them to balance the troughs and peaks in workload and flow of funds.

Partnership means little if the partners are disempowered by centralised decision-making. The TARGETS log frame had been agreed by all the partners during the bidding process, so that they felt ownership of it. When DFID's consultant recommended a number of changes, they were reluctant to agree to them. Fortunately, a compromise was agreed. In hindsight, we should have invited the consultant to discuss his proposals at the inception meeting.

- Good practice/innovation

We have found by experience that the "early adopters" of new tools and strategies often come from unexpected quarters. For example, it often happens that tools developed with the poorest countries in mind are first adopted by less poor countries, which have the resources to experiment with them. One example is our new diagnostic test for tuberculosis (developed with Africa and Asia in mind), which was recently adopted by Argentina, which is likely to be followed by Cuba. Another might be the system of community-based epidemiological surveillance developed initially in Africa, which was subjected to its first full peer-reviewed trial in Cambodia.

Another lesson of the last year has been that stakeholders can often see wider potential for application than we do in our innovations. For example, we developed a new criterion of immunogenicity to overcome a practical problem encountered in the field during meningitis vaccine trials; since some individuals in the West African "meningitis belt" already had relatively high antibody titres at baseline, seroconversion could not be defined for them in the same way as for those with no previous exposure. It was our WHO colleagues who saw the application of this principle to diagnosis as well as to trials, and to infectious diseases other than meningitis.

A third lesson, though not an entirely new one, relates to the importance of our advisory work in ensuring adoption of our innovations. Our prompt and helpful responses to enquiries from stakeholders in the field and in key organizations can help to build their confidence in what we suggest, and continued "after sales service" in the form of further advice, is essential to

help overcome the practical and logistical difficulties encountered when putting it into practice.

- Project/programme management

In setting up the TARGETS Research Fund, which supports small projects proposed and carried out by Southern partner organizations, our chief concern was to make the peer review procedure as rapid and flexible as possible, with an emphasis on *formative* appraisal (to improve the quality of the proposals and build research capacity) rather than *summative* assessment (to approve or reject requests for funding). In retrospect, we should have specified the terms of reference of the referees in greater detail, as a number of them interpreted their role in the latter spirit, which is more frequently required of peer reviewers. We also need to make it clearer to the partners that a final report will be required. We plan to remedy these shortcomings during the coming year.

We were conscious of a risk that allowing the partners to dream up proposals for the research fund might encourage a ragbag of unconnected one-off research projects which did not lead anywhere. In fact, the majority of them fit well into the main themes of TARGETS' programme. One project, proposed for year 1 by the Makerere Institute of Infectious Diseases, did appear to be more of a 'blue skies' proposal; it was an analysis of infant mortality patterns to investigate why the IMR had increased between 1995 and 2001, contrary to the trend in the economy and in other countries in East Africa. Preliminary results indicate that most of the increase is attributable to epidemics of highland malaria, underlining the importance of TARGETS' existing work on predicting, detecting and preventing malaria epidemics in the East African highlands. A lesson from this experience is that we can trust our partners not to depart from our main themes, but to bring new perspectives to bear on them.

- Communication

A clear lesson to be drawn from our first year's experience is that we must devote more effort to communicating our strategy to DFID, and providing evidence of its success. The incoming Director has made the communications strategy his chief priority for the coming months.

A more positive lesson has been the discovery that our partners understand the significance and the dynamics of communicating research results no less than we do. They are also no less committed to ensuring their research has an impact on policy and practice, by ensuring that;

- they study questions which respond to stakeholders' needs,
- stakeholders are involved in study design and, where appropriate, in implementation,
- time and resources are devoted to planning the research dissemination process, and
- to implementing it.

Our partners put great energy and effort into the local stakeholder consultations during the inception period. We had simplistically assumed in our tender for the TARGETS RPC that this exercise could simply be repeated each year, but we have learned from the experience that it runs the risk of being repetitious and wasteful if the same methods are used to consult the same stakeholders after so short an interval. The Ifakara Centre has therefore proposed that they take a new approach this year. When that has been completed, we shall share the experience with the other partner organizations.

5. Programme management

Changes in management and staffing

During the year, when DFID called for Expressions of Interest in an RPC on water supply and sanitation, a bid led by Prof. Cairncross, Director of TARGETS, was shortlisted. DFID required that LSHTM should commit itself to replacing him if he was to lead that bid in submitting a full tender. Accordingly, it has been agreed, after a process of consultation with the partner organizations, that Dr John Porter will take over as Director of TARGETS in June 2006.

The illness and hospitalization of Dr Jo Lines over the last few months has made it necessary to replace him as Deputy Director. Dr Caroline Jones has kindly agreed to take on this role on a temporary basis. We hope and believe that this arrangement will last for only a few weeks more, as Dr Lines is making a satisfactory recovery.

A number of other staff changes have taken place during the year. Our economist, Damian Walker, left LSHTM and was replaced by Dr Jolene Skordis. Dr Skordis, Dr Kielmann and Dr Carneiro were all on maternity leave for part of the year, and were temporarily replaced by Dr Dirk Muller, Jane Bruce and Lucy Smith. Hamidou Traoré, our laboratory technician, will be leaving in June 2006 and will be replaced by Kim Mallard.

Consortium Advisory Group

Mobilization of the Consortium Advisory Group, shared with the COMDIS RPC, took longer than expected due to the difficulty in obtaining responses from some of the distinguished invitees. The agreed membership now stands as follows:

Prof. David Bradley, University of Oxford: Chair
Dr Billy Stewart, DFID Adviser for COMDIS
Dr Nick Banatvala, DFID Adviser for TARGETS
Ms Louise Daniel, Editor, ID21, Inst. of Development Studies, Sussex: dissemination
Dr Mukund Uplekar, WHO and Stop TB: tuberculosis control
Dr Awa Marie Coll-Seck, Executive Sec., Roll Back Malaria Partnership Secretariat
Dr Syed Karam Shah, Coordinator, Pakistan National TB Control Programme

A meeting to plan the first meeting of the CAG was held on 2nd May, under the leadership of Prof. Bradley, and attended by Prof. Cairncross and Dr Jones from TARGETS and Dr Newell and Ms James from COMDIS. It was decided to hold the initial meeting in London in September or as soon as possible thereafter, and the process of ascertaining suitable dates is under way.

Logical framework

The logical framework was revised at the inception meeting in October. No further revision has been found to be necessary (Annex 1)

New research themes

The themes of TARGETS research remain the four set out in our original tender; that is:

1. New and improved strategies and tools
2. Process and impact of taking interventions to scale
3. Vulnerability – better definitions and understanding of interactions between communicable disease and gender, age, livelihood and environment

4. Methods of monitoring process and output in large-scale programmes

The specific topics remain those identified in our inception meeting, after discussion of the stakeholder consultations, and expressed in the list of 33 current research projects and 18 incipient projects listed in Annex J of our Inception Report. Current projects were identified under all four themes, and incipient projects under all except Theme 3.

There was a consensus at the inception meeting that the best way to address this gap was to organise a proposal development workshop around the general theme of access (to health care) and vulnerability. We decided to start the process with a brainstorming meeting to consider the opportunities for research in this area and set out a strategy around which draft proposals could be prepared. The meeting took place in London on May 8-9, with representatives of the partner organizations as well as Dr Brigit Obrist of the Swiss Tropical Institute, a prominent researcher on access and vulnerability issues, and Merrin Rutherford of the MRC, currently engaged in a study of the relationship between access to health care and child mortality in the Gambia. The meeting report is available on the TARGETS website.

There was not a strong drive among the meeting participants to develop many new research projects. Rather, it became clear that we had a rich portfolio of relevant studies already under way, and that there were many opportunities to enrich them through the sharing of experience and collaboration between TARGETS partners. An attractive opportunity was identified to use the demographic surveillance systems of the INDEPTH Network to study the effects of access and vulnerability on child mortality outcomes. This might be feasible at a number of INDEPTH member sites, but would require some preliminary study of existing datasets before it could be developed into a full proposal.

Partners' contributions to programme management
The above account illustrates our approach to development and prioritization of research topics. Starting with stakeholder consultations conducted largely by our partners, moving to meetings and workshops to which all the partners are invited, and culminating, where appropriate, in the development of proposals for external funding. One could argue that this means that external funding agencies are the final arbiters of which projects go ahead, but it is the inevitable consequence of the substantial multiplier funding which TARGETS obtains.

TARGETS' own Research Fund is put at the disposal of the partners, subject to peer review of their proposals. At least one partner organization participates in the peer review of each proposal. The following proposals have been reviewed so far.

Makerere
Analysing Trends In Childhood Mortality In Uganda
Feasibility of Implementation and Benefits of Improved Malaria Diagnosis in Uganda
MAAS-CHRD
Co-ordination between the Private and Public Sectors for Management of TB & HIV in Rural and Tribal districts of Andhra Pradesh
Reactions to the Tribal Action Plan of the Revised National TB Control Programme in Tribal Districts of Maharashtra, Andhra Pradesh and Orissa
Public-Private Partnerships for Urban Malaria Control in Mumbai
INDEPTH
Community acceptability of artesunate-amodiaquine for the treatment of uncomplicated malaria in Ghana

Proposals from Ifakara and ZAMBART are currently under review.

Re-assessment of risks
As noted in our Inception Report, we have compiled a risk management plan for the TARGETS Consortium as a whole, not for each research project. We see no reason to change the assumptions and assessments made in that plan.

Ongoing monitoring arrangements
With the inception plenary in October 2005 and the brainstorming meeting in May 2006, there have been two meetings of partners this year. These have provided ample opportunity for person-to-person discussion of how the work of each partner is progressing and of how well the TARGETS management and secretariat are meeting their needs. This has provided a good platform for continued communication by e-mail which has worked smoothly, for example in compiling financial and other reports to DFID, and in establishing the TARGETS project database, which was described in the Inception Report and is updated periodically. The precise format of reporting was not defined in advance beyond the format of the database, as it depended on the format required by DFID for the Annual Report. Once that was received, it was used to prepare a matrix for reporting by the partners.

Further work is needed to standardise the format and scheduling of reporting,
- of the results of stakeholder consultations,
- of completed studies supported by the Research Fund,
- of implementation of the communication strategy, and
- of capacity-building activities.

Progress of expenditure, multiplier funding
Since most of TARGETS budget is devoted to personnel costs, these are subject to little variation or uncertainty. During the first year the residual balance of the old Malaria Knowledge Programme was able to support the salary costs for the first two months (April-May 2005). With the ending of the TB Knowledge Programme on 31 March 2006, the TARGETS budget began to support the full complement of associated personnel costs.

Since the beginning of the TARGETS contract on 1 April 2005, a total of £865,978 in additional external funding has been obtained for TARGETS activities. Details of this and of ongoing complementary funding obtained by the tuberculosis and malaria knowledge programmes are provided in Annex 2.

ANNEXES

1. **LOGICAL FRAMEWORK**

2. **FINANCIAL SUMMARY (including multiplier funding received)**

3. **RISK ASSESSMENT MATRIX (same as inception report)**

4. **COMMUNICATIONS STRATEGY (DFID suggested communications strategy should be further developed in inception report feedback)**

5. **PRODUCTS AND PUBLICATIONS**

6. **DEVELOPING CAPACITY**

7. **LIST OF ABBREVIATIONS**