AgResults: Innovation in Research and Delivery Terms of Reference for External Impact Evaluation

INTRODUCTION

AgResults is a multilateral initiative seeking to enhance smallholder welfare and improve food security for the poor and vulnerable through the use of 'pull mechanisms'. Pull mechanisms are incentive-driven structures that offer *ex post* payment for results defined *ex ante*. Pull mechanisms in agriculture are a relatively new development tool and leaders of the G20 proposed their use at the Toronto, Seoul and Cannes Summits, and have requested that the World Bank "examine and recommend potential innovative results-based mechanisms." (Seoul 2010).

AgResults is designed to encourage technological innovation as well as adoption of better products, processes and technologies by engaging the private sector in developing and delivering innovative products. It will seek to do so in settings where markets for agricultural inputs, services and outputs are underdeveloped or nonexistent, limiting private sector investment and slowing technological innovation.

Learning is a core goal of AgResults, on par with other development objectives, and high-quality evidence on the impact of the mechanisms will guide future decisions on approaches that can be replicated and/or taken to scale – and on how best to use and design agriculture pull mechanisms. External impact evaluation is therefore a a major strategic component of the initiative.

AgResults was launched at the G20 Summit in Los Cabos in June 2012. The initiative's portfolio of pilots represent a diverse mix of agriculture and food security issues, testing different types of pull mechanisms in different regions globally. The initial set of large-scale pilots, focusing on maize production in Sub-Saharan Africa, are:

- Incentivizing the adoption of on-farm storage technology of maize for smallholder farmers in Kenya;
- Encouraging innovative distribution of a breakthrough technology to reduce aflatoxin contamination of maize in Nigeria; and
- Building a market for new vitamin A-enhanced varieties of maize.

These pilots are now operational. A fourth pilot is just starting:

Incentivising legume seed uptake in Uganda¹.

Additional pilots are under design:

Two further pilots are under design and expected to be approved by end of 2014.

 Increasing vaccination of backyard poultry through sustainable vaccine distribution businesses in India:

¹ Business Plan for this pilot is available.

Low GHG emissions rice in Vietnam

A third pilot is being developed and is due to be approved by mid-2015.

Research and Development for a new brucellosis vaccine²

The administrative structure for the AgResults comprises: a donor Steering Committee exercising oversight; a Secretariat; a Trustee; Pilot Managers at country level to oversee pilots; and External Impact Evaluators. Some of these functions may be taken on by a single organization. Currently an Evaluator (a single organisation) has been contracted for a five year period through the Global Evaluation Framework Agreement. The Evaluator has been contracted to design and conduct impact evaluations of the first three pilots (Nigeria aflatoxin control; Zambia biofortification; Kenya on-farm-storage – all currently underway) and by end of 2015 to design the detailed evaluation plans of two further pilots (incentivising uptake of legume seeds in Uganda; low emissions rice in Vietnam).

DFID on behalf of the Steering Committee now wishes to commission a Partner Evaluator to implement the pre-designed Uganda and Vietnam impact evaluations and to design and conduct impact evaluations of two new pilots which are under design for Newcastle Disease in India and the development of a Brucellosis vaccine³. For the purposes of this ToR, we will refer to this new entity as the 'Partner evaluator'.

Table: Evaluation responsibilities by Pilot

Responsibility Responsibility Pilot **Current Status** for for **Evaluation Evaluation Design** implementation Nigeria aflatoxin Implementation Evaluator Evaluator control in maize Kenya Delivery of on-Implementation Evaluator Evaluator farm storage solutions Zambia delivery of Implementation Evaluator Evaluator biofortified maize (Vitamin A) Uganda Incentivising Start-up phase Partner Evaluator Evaluator – design uptake of legume expected in July-August seeds 2015 (indicative) Vietnam Low Design phase -Evaluator – design Partner Evaluator expected late 2015 **Emissions Rice** approval due by end 2014 (indicative) Partner Evaluator Partner Evaluator India Delivery of Design – approval Newcastle Disease due by end of 2014 vaccine in poultry Brucellosis R&D for a Design – approval Partner Evaluator Partner Evaluator registration ready due by mid-2015

² Considerable work has been done on a business plan for a brucellosis vaccine R&D pilot, through to a proof of concept vaccine. This was not approved by the Steering Committee, who has asked for further design work to adapt the plan from a proof of concept vaccine, to one which is registration-ready vaccine. It is anticipated that this pilot will need to cover an 8 year time frame. The funds for this exist within the AgResults Trust Fund.

³ This will be a global R&D pilot, and therefore not restricted to a specific geography. The location of the pilot manager will not be known until the first year of implementation of the pilot; however, the vaccine will be targeted for the use of smallholder livestock keepers involved in raising sheep and goats in Africa and South Asia.

vaccine

THE APPROACH AND UNDERLYING PRINCIPLES

Evaluation of the AgResults pilots provides unique learning opportunities — on pull mechanisms, small business development, and sustainability. The learning agenda is distinct from that in 'development business as usual', because the initiative itself is novel:

- 1. Pull mechanisms are a relatively new tool in development. Little is known about their impact and effectiveness. Therefore, first and foremost, impact evaluation offers a chance to ask whether agricultural pull mechanisms work in development compared to no intervention, but also, compared to conventional agricultural push approaches.
- 2. The theory of change underpinning AgResults suggests that stimulation of the private sector to develop and increase the uptake of agricultural innovations will enhance private sector engagement (market outcome), agricultural innovation uptake (agricultural development outcome) and thereby farmer livelihoods (development outcome), and that this will be sustainable (long-term outcome).
- 3. There are as yet few best practice guidelines on how to design pull mechanisms, since they remain a recent addition to the development tool kit. The AgResults evaluation can ask how different design choices perform.
- 4. Because AgResults seeks to work with the private sector along the value chain, evaluation must investigate the impact of AgResults on business and market development, in addition to its impact on farmers. The Donor Committee on Enterprise Development has produced a set of Standards for Measuring Results in Private Sector Development, which are relevant to this assignment. The extent to which the focus of AgResults on the private sector delivers outcomes for the poor, will be evaluated. Rigorous evaluation has seldom been used for the purpose of measuring impacts on market development and AgResults is an opportunity to significantly strengthen the existing evidence base.
- 5. Finally, since AgResults will ideally establish sustainable markets for agricultural innovations, there is a natural need to consider the long-term impacts of the mechanism.
- 6. Robust evaluation using clearly defined counterfactuals will provide new information on the ability of AgResults to stimulate private sector involvement, increase uptake of agricultural innovations and have a long-term sustainable impact.

OBJECTIVE

These TORs require formal evaluation of the following four critical questions:

- 1. What evidence exists that the AgResults pilots have been able to stimulate private sector involvement in the development and uptake of agricultural innovation?
- 2. What evidence exists that AgResults has been able to increase the uptake of innovative technologies by smallholders, and where relevant, the demand for related products from poor consumers?
- 3. What evidence exists that the impacts of AgResults pilots (i.e. private sector involvement and innovation uptake) are sustainable in the medium to long-term (2 years after the end of the initiative)?

4. Finally, what is the evidence on the scale of any effect on private sector investment and uptake and the cost-effectiveness (relative to no intervention or traditional push mechanisms) of AgResults as a development strategy?

The pilots also provide an opportunity to collect important information on how best to deliver AgResults and on the various steps in the process of AgResults delivery. The Partner Evaluator should consider ways of experimenting with implementation approaches (such as recruitment of private sector partners) to identify the most effective strategies as well as to ensure that sufficient process indicators are collected to identify likely barriers and enablers in AgResults pilot roll-out.

The evaluation is specifically not intended to assess the impact of the AgResults on, for example the nutrition or health impacts of pilots since these are largely tested and proven technologies. Neither is it expected to act in a routine monitoring function for example on numbers or profile of beneficiaries or private sector partners – these latter data will be routinely collected by AgResults pilot managers.

RECIPIENT

The recipient of these services will be the AgResults Steering Committee which includes DFID.

SCOPE

The scope of this present assignment is to:

- undertake external impact evaluations of two AgResults pilots, Uganda legumes and Vietnam GHG emissions reduction in rice, following the protocol which will have been already approved by the Steering Committee.
- design and undertake the external impact evaluation of an additional two pilots. It is anticipated that these will be designed and approved during 2014: Newcastle Disease Vaccine in India and a brucellosis R&D pilot⁴.

The current Evaluator has set out an **impact evaluation framework for the AgResults initiative, with a set of overarching evaluation questions for** the initiative as a whole, and a strategy for addressing the core research questions. The Partner Evaluator will be required to work within this framework, working closely with the current Evaluator to refine and modify this as appropriate, following direction from the Steering Committee. This will allow for a core set of indicators that allow for the consistent measurement and comparison of impacts across pilots, and for the comparison of the impacts and cost-effectiveness of AgResults pilots with those of similar development interventions. It will be important to ensure coherence of evaluation approach and methodology across all AgResults pilot evaluations.

⁴ These may be subject to change over the course of the design process.

The Partner Evaluator will be expected to perform the following tasks:

A. Conduct impact evaluations of two planned pilots (Uganda, Vietnam) according to agreed protocols.

- Based upon the agreed evaluation framework and pilot evaluation design, develop and test appropriate survey instruments; which are likely to include surveys of households, traders, processors, amongst others. Survey instruments will include both qualitative and quantitative methods. Use of data collected by pilot project teams should be considered, when of appropriate quality and fit for purpose.
- Prepare and present data in an industry standard format;
- The Partner Evaluator may sub-contract the administration of surveys and data entry, but not the supervision of those tasks, survey design, or data analysis.

B. Design impact evaluations for two new pilots (India, brucellosis R&D).

- Analyze what can be learnt from each of the pilot projects;
- Define appropriate indicators and protocols for measuring impacts of each pilot, some of which may be standardized across pilots, others of which will be pilot specific;
- Work with AgResults Secretariat and pilot design teams to define the evaluation and learning framework for new pipeline pilots;
- Identify core research questions to be used in pipeline pilots;
- Devise a methodology that allows for the credible attribution of causal impacts to the pilot projects;
- Identify opportunities to evaluate different pull mechanism delivery systems;
- Conduct workshops with pilot teams to familiarize them with impact evaluation methodology, discuss evaluation approaches and possible modifications to mechanism design. Several workshops may be necessary.
- The evaluation plans will be subject to independent peer review.

C. Design, implement, and analyze field surveys in accordance with established best practice (India, brucellosis R&D).

- Based upon the agreed evaluation framework and pilot evaluation design, develop and test appropriate survey instruments; which are likely to include surveys of households, traders, processors, amongst others. Survey instruments will include both qualitative and quantitative methods. Use of data collected by pilot project teams should be considered, when of appropriate quality and fit for purpose.
- Prepare and present data in an industry standard format;
- The Evaluator may sub-contract the administration of surveys and data entry, but not the supervision of those tasks, survey design, or data analysis.

D. Assist as needed in the communication of the learning agenda, impact evaluation strategy, and evaluation results.

- Assist the Secretariat in communicating the results of the evaluation and contribute to the development and communication of lessons learnt about pull mechanisms. The Secretariat will have the responsibility of leading the wider learning and communication agenda for the AgResults as a whole.

E. Participate in Steering Committee meetings as requested by the SC.

STATEMENT ON DESIGNS FOR Agresults PILOT IMPACT EVALUATION.

The goal of the AgResults is to improve the health and livelihoods of poor farmers in poor countries. However, there is a significant learning activity that must be undertaken to understand whether AgResults is more effective than existing development strategies in reaching this ultimate goal. Given the scale of the potential investment and the transformational opportunities that AgResults may have in agricultural development, high-quality evidence is needed on its ability to generate sustainable involvement of the private sector in developing and spreading agricultural innovation, and to stimulate wide-spread and sustainable adoption of agricultural innovations by farmers.

Robust evaluation of AgResults with formally-defined counterfactuals has not been straight-forward. The designs of the evaluations so far implemented have differed for each of the three pilots underway. Further complexities are inherent in working with the private sector since the evaluations have been designed in a manner that does not disincentivise private sector involvement, by for example, restricting their economic activities geographically to treatment areas. For this reason, it is not anticipated that randomized control trials will be appropriate for all of the pilots. However, the expectation is that the Partner Evaluator will conduct evaluations using the best-possible study design including a clear theory of change and results framework and using clearly defined and defensible counterfactuals. Wherever possible experimental or quasi-experimental designs should be used so that credible statements on attribution of impact can be made. For the two pilots still to be designed, it is expected that the Partner Evaluator will work with the pilot design teams to build in experimental design.

DELIVERABLES

The evaluation team is expected to produce the following deliverables, for the <u>Uganda</u> <u>legumes</u>, <u>Vietnam rice emissions</u>, <u>and India Newcastle Disease pilots</u>:

During design phase (first 6 months from Pilot Business Plan approval by Steering Committee)

Full study protocols based on the design provided by the Evaluator;

At baseline:

Survey and qualitative assessment report

After four years of implementation and impact evaluation report to include:

- Evidence of effect of AgResults on private sector involvement in development and spread of agricultural innovation and uptake of innovation by farmers;
- Evidence on the scale of any effect and their cost-effectiveness (relative to no intervention or traditional push mechanisms) of AgResults
- Process indicator report providing lessons learnt on how best to deliver the AgResults

After four years

• Data sets of all data collected for the evaluations provided for public release

For the <u>brucellosis R&D pilot</u>, the timeframe for the pilot is likely to be 8 years, and the deliverables would be adjusted accordingly. It is anticipated that the methodology and approach to the evaluation will be qualitatively different. It will require data collection with solvers but not household level surveys. Given the challenges of designing an evaluation for this type of pilot, bidders are expected to set out an approach, but recognize that there will need to be adaptation as the design details emerge.

For the AgResults initiative as a whole in the 8th year:

- Report on sustainability of impact of AgResults. This will build on the approach, methodology and results established by the Evaluator in the impact sustainability report undertaken based on the first 3 pilots. The Partner Evaluator will extend this analysis, based on an analysis of the next 3 pilots (likely to be Uganda, Vietnam, and India). The Partner Evaluator will base the analysis on survey work undertaken in the 7th year of contract.
- Provide a summary report that analyzes and discusses evaluation findings from the perspective of the entire initiative, rather than individual pilots. The summary may take the form of a high-quality policy report, and be published in a reputable research paper series, rather than an academic journal;
- Lessons learnt paper.

Reports at each stage will be independently peer reviewed, by the Evaluators' own independent peer review mechanisms, as well as by the Steering Committee. Reports are expected to be of sufficient quality to be published in leading peer-reviewed journals in relevant disciplines.

REPORTING

The Partner Evaluator will be managed by DFID on behalf of the Steering Committee. The Partner Evaluator will work closely with the current Evaluator, the AgResults Secretariat, and the AgResults Pilot Managers. The Secretariat will lend support in communication as requested by the Partner Evaluator or the SC. .

The Partner Evaluator will be expected to:

- Ensure coherence and lesson learning across pilot evaluations on key evaluation questions
- Incorporate a clear code of ethics; incorporate plans for open access publications and public access to data sets

The Partner Evaluator will provide the SC with 6 monthly progress reports highlighting progress to date and any areas for concern.

BUDGET

It is anticipated that the budget ceiling will be a maximum of £3.7m, excluding any applicable VAT. However, budgets will be scrutinized closely for value for money, and bidders are encouraged to identify realistic costs associated with the pilots.

TIMING

The contract will be let for 9 years. There will be a break point after 3 years and another after 6 years. Progression to the next 3 years of the contract in both cases will be subject to satisfactory performance of the service provider.

AgResults is a large scale initiative, breaking new ground in design and evaluation of pull mechanisms in agriculture. Experience with design indicates that there may be changes in the scope and nature of the pilots. It is envisaged that there may be a need for DFID to exercise contract modifications or extension, particularly if there are changes in the timeframe for design and implementation of the pilots themselves. These changes are outside of DFID's direct control.

THE TEAM

The Partner Evaluation team will be managed by DFID on behalf of the Donor Steering Committee. The team will need to work closely on a day to day basis with the pilot design teams. It will need to work closely with the Secretariat, particularly on the development of evaluation for new pilots. The team will be expected to:

- Ensure coherence and lesson learning across all pilot evaluations on the key evaluation questions;
- Incorporate a clear code of ethics;
- Incorporate plans for open access publications and public access to data sets.

SKILLS AND EXPERTISE

Bidders are expected to combine skills expertise in all of the following core areas:

- High quality applied and operational research;
- Expertise in experimental and quasi-experimental design and implementation;
- Expertise in evaluating the impact and effectiveness of complex, large scale, interventions;
- Experience in ensuring communication and uptake of research findings;
- Expertise in evaluations of private sector involvement in agriculture;
- High quality monitoring and evaluation frameworks;
- High quality management ability, including personnel and financial management.

It is anticipated that no one individual or organisation will be able to supply this range of expertise, and it is anticipated that bidders will submit proposals that involve more than one partner. It is vital that the consortium of institutions that constitutes the bid is viable and feasible. Bidders should demonstrate that they have access to a variety of specialist skills.

BACKGROUND DOCUMENTATION

Annex A

Background on this initiative is found at <u>AgResults</u>, including a short description of the 3 initial pilots. Additional materials to be made available to bidders include

- All pilot Business Plans which have been approved by the SC,
- Draft Business Plan for Brucellosis proof of concept vaccine (not approved by the SC)⁵,
- Approved evaluation protocols for Nigeria and Kenya pilots.
- Overview presentation and materials on AgResults and the pilots

DUTY OF CARE

The Supplier is responsible for the safety and well-being of their Personnel (as defined in Section 2 of the Contract) and Third Parties affected by their activities under this contract, including appropriate security arrangements. They will also be responsible for the provision of suitable security arrangements for their domestic and business property.

DFID will share available information with the Supplier on security status and developments in-country where appropriate.

The Supplier is responsible for ensuring appropriate safety and security briefings for all of their Personnel working under this contract and ensuring that their Personnel register and receive briefing as outlined above. Travel advice is also available on the FCO website and the Supplier must ensure they (and their Personnel) are up to date with the latest position.

This Procurement may require the Supplier to operate in conflict-affected areas and parts of it are highly insecure. The security situation is volatile and subject to change at short notice. The Supplier should be comfortable working in such an environment and should be capable of deploying to any areas required within the region in order to deliver the Contract (subject to travel clearance being granted).]

The Supplier is responsible for ensuring that appropriate arrangements, processes and procedures are in place for their Personnel, taking into account the environment they will be working in and the level of risk involved in delivery of the Contract (such as working in dangerous, fragile and hostile environments etc.). The Supplier must ensure their Personnel receive the required level of training and safety in the field training prior to deployment.

Tenderers must develop their Tender on the basis of being fully responsible for Duty of Care in line with the details provided above and the initial risk assessment matrix prepared by DFID (see Annex A of the ITT pack). They must confirm in their tender that:

⁵ Items such as the following are unlikely to change substantively in the final business plan: The Impact of Brucellosis, Strategies for Controlling Brucellosis, Market Assessment, Overview of Currently Available Solutions, Overview of Vaccine Development Process, Overview of Solver Landscape, The Case for Improved Vaccines, Summary and Implications for Pull Mechanism, Projected Impact of the Pull Mechanism, Key Risks and Mitigation Strategies, Selection Criteria for Judging Panel, Learning Agenda for Brucellosis Vaccine Pilot

- They fully accept responsibility for Security and Duty of Care.
- They understand the potential risks and have the knowledge and experience to develop an effective risk plan.
- They have the capability to manage their Duty of Care responsibilities throughout the life of the contract.

If you are unwilling or unable to accept responsibility for Security and Duty of Care as detailed above, your Tender will be viewed as non-compliant and excluded from further evaluation.

Acceptance of responsibility must be supported with evidence of capability and DFID reserves the right to clarify any aspect of this evidence. In providing evidence Tenderers should consider the following questions:

- a) Have you completed an initial assessment of potential risks that demonstrates your knowledge and understanding, and are you satisfied that you understand the risk management implications (not solely relying on information provided by DFID)?
- b) Have you prepared an outline plan that you consider appropriate to manage these risks at this stage (or will you do so if you are awarded the contract) and are you confident/comfortable that you can implement this effectively?
- c) Have you ensured or will you ensure that your staff are appropriately trained (including specialist training where required) before they are deployed and will you ensure that on-going training is provided where necessary?
- d) Have you an appropriate mechanism in place to monitor risk on a live / on-going basis (or will you put one in place if you are awarded the contract)?
- e) Have you ensured or will you ensure that your staff are provided with and have access to suitable equipment and will you ensure that this is reviewed and provided on an on-going basis?
- f) Have you appropriate systems in place to manage an emergency / incident if one arises?