

ACIAR comments on DFAT Consultation Paper: Performance Benchmarks for Australian Aid

Executive Summary

ACIAR supports the setting of performance benchmarks for Australian Aid. ACIAR's experience suggests that these should be simple and verifiable and need not be costly. In agricultural research, it may require several years for outcomes to be observed, and a decade or more for significant farm-level impacts to be measurable. Therefore metrics should link short-term project outputs with medium-term outcomes and long-term impacts. ACIAR uses an impact pathway framework incorporating short-, medium- and long-term effectiveness measures. This framework also creates a structure to help monitor current achievement of outputs of all projects, adoption of project outputs leading to development outcomes, as well as 10-year farm-level impacts across a sample of projects.

Metrics should be 'fit for purpose' and aligned with international standards. They should consider the role of qualitative information to capture significant, sometimes non-measurable, outcomes and impacts in partner countries as well as in Australia. Resourcing of monitoring and collection of metrics should also be considered in benchmarking. Relative costs (as a proportion of investments) are low for output metrics, higher for outcome assessment and higher again for impact assessment. The rising costs reflect issues around attribution and choices of methods for collecting reliable evidence. It is also important to ensure a mix of quantitative and qualitative approaches. An overemphasis on one or the other can skew results, and create incentives to overestimate reporting around quantitative metrics.

ACIAR's approach begins with identification of priorities for research (based on learnings from these assessments) and the selection of benchmarks in consultation with partner countries. Benchmarks must also maintain a degree of flexibility, to underpin high-performing partnerships that can respond to emerging challenges in partner countries and Australia. The ACIAR experience is recognised as international best practice, and can contribute to the task of developing an appropriate whole-of-government framework for performance benchmarks for Australian Aid.

ACIAR comments on DFAT Consultation Paper: Performance Benchmarks for Australian Aid

ACIAR recognises and supports the requirements identified in the Consultation Paper: *Performance Benchmarks for Australian Aid*. The Australian Government aid program needs benchmarks that demonstrate Australian aid impact. Such benchmarks would assist in prioritising and delivering the Government's aid investments efficiently and effectively, in alignment with Australia's foreign and trade policies. In this way, aid will support economic growth in developing countries in the Indo-Pacific region, and also provide a flow of benefits back to the Australian agricultural and food value chain, and research and education sectors.

Appropriate aid effectiveness benchmarks ensure that public money investments achieve real and measurable development outcomes. They also provide indicators to assist, shape and guide future aid investments. The Australian public sector experience with performance benchmarking is viewed favourably by the OECD, which also concludes that output benchmarking has been easier to operationalise than outcome benchmarking. Benchmarking for agricultural research should take account of the pathway from research outputs to scaling out of research results to produce outcomes and ultimately farm-level impacts with extended biological lags.

Given its legislated mandate, ACIAR's comments are made in the context of applied research elements of the R&D development continuum with a specific focus on agriculture as described in the recently-approved ACIAR Strategic Plan¹. The following comments are offered as a contribution to the whole-of-government performance benchmarking framework with illustrations where appropriate from ACIAR experience.

Performance Benchmarks and Impact Assessment

How should performance of the aid program be defined and assessed?

Attributes or characteristics of benchmarks need to be considered in line with the mandate and objectives of specific aid agencies and programs.

Benchmarks should be 'fit for purpose', defined so they are effective, efficient and relevant to the program being delivered. Benchmarks should be transparent and easily attributed to the activities and outputs from projects and programs. Benchmark metrics therefore need to be:

- Simple, few in number, quantitative and/or qualitative, and readily understood by non-specialists
- Effective and verifiable with clear links to strategic goals and with attribution to R&D investments and activities
- Efficient: easily measurable, minimising the cost of collection and, where possible, based on existing monitoring and evaluation (M&E) and reporting systems

¹ ACIAR's Strategic Plan is available at <http://aciar.gov.au/publication/cp027>. The Plan reports that Gross Domestic Product (GDP) growth generated by agriculture can be up to four times more effective in reducing poverty than growth generated by other sectors.

- Focused on outputs while supported by longitudinal outcome measures.

ACIAR research outputs primarily contribute to national development goals in partner countries and Australia along themes of economic growth and trade, jobs, poverty reduction, capacity development and gender (refer to Appendix 1). ACIAR research outputs are often modifications of successful Australian technologies, so the benefits also flow to the Australian scientific and farming sectors. Outputs are considered within impact pathways at the project design phase, to draw linkages from outputs, to outcomes and then to impacts. These outputs can be efficiently measured in project delivery and the link with outcomes addressed by the systematic use of impact assessments at a later point when defensible evidence is available.

Simple and readily understood by non-specialists

Since its inception in 1982, ACIAR has placed importance on measuring the effectiveness of its investments in agricultural research in developing countries. Experience suggests that stakeholders prefer simple metrics—ideally few in number and appropriate to the output, outcome or impact expected—rather than complicated metrics. Qualitative benchmarks, such as used in ACIAR adoption case studies, can often be good substitutes for quantitative indicators.

Effective and verifiable

The identification of effective, verifiable, metrics requires the definition of a clear impact pathway from aid activities and outputs to measurable outcomes and impacts. An impact pathway should clearly identify the “next users” of project outputs who generate the outcomes, and also the “end users” and the consequent farm and community impacts. Agricultural R&D activities undertaken by ACIAR strategically focus on key parts of the impact pathway (see Appendix 2). Some projects are focused on strategic and basic research with a focus on higher-level research outputs and outcomes, often with long timeframes to ultimate farm-household impacts. Some other applied research projects deliberately incorporate research and pilot development activities with development partners and typically shorter timeframes to development impacts. It is important therefore to establish clear links between project- and program-level metrics with the broader aid benchmarks. Appropriate metrics should measure the extent of the potential benefits that may flow to Australian farmers and our natural resource management from the sharing of particular ACIAR technologies, such as new dryland cropping and pasture varieties, disease-tolerant fruit and vegetable varieties and various biological disease and pest controls.

The CGIAR centres are developing metrics that can contribute to intermediate and system-level development outcomes on a national and regional scale. ACIAR’s experience in the successful delivery of agricultural research in developing-country settings and the subsequent assessment of impact assessment is recognised as international best practice by the CGIAR and ACIAR has been asked to share its expertise and experience with the CGIAR.

ACIAR has systematically undertaken economic impact assessments of program investments throughout its 31 years of operation. These have quantified the economic benefits derived from more than 150 research projects of different types. This process provides a continuous

quantification of the long-term economic impact of the agency's research portfolio in developing countries² and also in Australia.

Efficient and built on current reporting and M&E practices

The design and implementation of the performance benchmarking system itself should be efficient (in terms of resources required). Often the best way to ensure efficiency and low cost is to build on existing M&E and reporting systems, with adjustments as required to deliver higher-level system benchmarks. In this connection, the timing and periodicity of reporting benchmarks is an important design feature.

ACIAR is currently reviewing and re-focusing its project, program and corporate M&E processes to ensure that project- and program-level outputs and outcomes provide clear and robust evidence of delivery towards strategic whole-of-government goals. The M&E system is organised around several levels of aggregation from projects, to program and through to corporate performance information (see Appendix 3). A key ACIAR channel for capturing benchmark information is the annual project reports that are delivered each May, which matches the agricultural cycle in many ACIAR partner countries in South-East Asia.

Performance assessment should extend beyond economic analysis to include, in particular, social and environmental outcomes and impacts. Generally the impact of capacity building of partner country institutions is not readily quantifiable in economic terms and is better captured in qualitative terms. Thus, consideration of how to incorporate qualitative metrics and rich outcome narratives is essential. Policy makers often tend to have greater confidence in metrics that can be verified, for example by alternative data collection methods.

Many agricultural research projects have long times to impact. Therefore it is important to establish long-term M&E strategies that identify and measure the full long-term development impacts of these research investments, with appropriate consideration of attribution. ACIAR achieves this by undertaking adoption studies and detailed impact assessments years after projects are completed. The subsequent findings from these studies provide robust evidence of impact and contribute to current ACIAR strategy design—as recently documented by the Crawford Fund Report³.

Focused on project and program outputs (instead of outcomes and impacts)

ACIAR's program and project impact pathways provide a basis for selecting metrics along the R&D impact pathway. ACIAR projects strive to link outputs to outcomes and impacts at the farm-family level as well as scientific and environmental impacts. Outcomes generally occur when the first users

² For 31 years ACIAR has continually and systematically evaluated research projects, specifically in terms of their impact in developing countries. These independent assessments have demonstrated strong economic returns to investment in agricultural research. Based on a conservative estimate of benefits from just 103 bilateral research projects evaluated since 2005, ACIAR research obtained a 5.2:1 benefit–cost ratio, including total ACIAR bilateral project investments since 1982 (Lindner et al. 2013; available at http://aciar.gov.au/files/ias_86.pdf).

³ Blight et al. 2013; *Doing Well by Doing Good: International Agricultural Research – How it benefits Australia as well as developing countries*. Report of the Crawford Fund Doing Well by Doing Good Task Force; available at http://www.crawfordfund.org/assets/files/publications/cf_task_force_report.pdf.

make use of the research outputs. Timeframes vary from during projects to some time after the delivery of research outputs, depending on the project's impact pathway and the nature of agricultural development processes within a particular context. ACIAR defines the time to significant measurable impact as a guiding framework for the specification of key performance indicators (KPIs). For example, some projects are designed to deliver outputs within 5 years of the end of the project. Therefore, for practical reasons, the emphasis is placed on benchmarks associated with project outputs that are deliverable and measurable in the short-term—complemented by systematic assessment of progress towards a sample of project outcomes and impacts years later.

Longer term studies are a way to demonstrate the ultimate impact of research for development. Evaluations even 15–20 years after the work is done would give further robust insight into the impact of aid and enable the identification of the possible enabling factors and barriers to that impact.

Budget Consequences

How could performance be linked to the aid budget?

Past performance of projects and lessons from adoption and impact studies are important guides to the selection or continuation of projects within a portfolio. Key factors include:

- Value proposition of new investments in partner countries and in Australia
- Australia's comparative advantage in undertaking the project
- Alignment with Australian and partner country priorities
- Project and program payment on delivery of outputs or milestones.

Value proposition

The value proposition of research is established and documented at ACIAR project development stage, to ensure contribution to program, corporate and whole-of-government goals. At this planning stage, past performance is one criterion for the prioritisation of research areas, and also the estimated benefits of the proposed research, based on a variety of quantitative and qualitative project metrics such as: the number of farmers to be reached, the relevant target region, the additional capacity to be developed in partner institutions (including international agricultural innovation platforms) and the expected scientific benefits.

Australia's comparative advantage

Relevant research expertise is a key determinant of project effectiveness, and is aligned with the comparative advantage of Australian research providers. In the agricultural sphere, Australia has internationally recognised expertise in many knowledge areas; for example, dryland development, salinity management and modelling. There is a priority for Australia to accelerate its investment in research and maintain global networks to ensure that our scientific engagement is relevant and adequate to meet agricultural development needs.

Alignment of Australian and partner country priorities

ACIAR's effectiveness is largely attributed to its strength in developing and managing research partnerships that match Australian priorities and comparative advantage with the priorities and needs of partner countries. Common goals include Australian and partner country economic growth, food security and family incomes, which could be supported by the relatively broad spectrum of relevant agricultural research capabilities. ACIAR's approach matches the most effective and skilled management capabilities to the priorities identified. This approach results in projects designed to meet specific priorities or subsets of priorities, timeframes for delivery of outputs, and an M&E structure that supports this delivery. The clear goals and match to priorities also allows flexibility within projects without compromising M&E.

Flexibility is required for two reasons. First, farm-production problems evolve and can change even during the lifetime of a program, which requires adaptive management of programs. Secondly, high-performing partnerships in public and/or private sectors require trust and flexibility with the built-in mechanisms for adjustment.

A critical outcome of R&D projects is the capacity built at individual and institutional levels. Achievement of sustained institutional capacity improvement within partner country research institutions has a large impact on medium-term development outcomes and longer term impacts, extending well beyond the direct outputs of a research project. A prerequisite for such capacity improvement is that project and program priorities are aligned with partner country priorities. Performance benchmarks that do not adequately capture these capacity benefits could bias investment priorities and project selection.

Payment on delivery of outputs or milestones

Project governance and management receive close attention in project design. Ideally, project funding should be closely linked to the delivery of project milestones or research outputs. Such discipline should be coupled with a rigorous project formulation, appraisal, supervision and review processes as well as a robust M&E framework. In the case of non-delivery of milestones arising from poor management, projects should be varied or terminated, and in such cases funds are directed to other research outputs or new research projects.

Improving Implementing Partner Performance

How can the assessment of the performance of our implementing partners be improved?

ACIAR works with a diversity of research and development partners, including Australian and developing country agencies and organisations, and various international partners, private sector and non-government organisations. To achieve effective delivery by project partners, ACIAR undertakes active project management to mitigate project risks and ensures that projects have:

- Robust project M&E process agreed to with partners
- Mutual obligation—accountability rests with all project partners.

Robust project M&E processes

Project monitoring is about the efficiency of delivery and metrics are readily available for this. Evaluation is about the effectiveness of the project in meeting its high-level community and social goals.

The establishment of project and program M&E needs to recognise any existing processes that our partners might have in place. Where project management has an incentive to implement quality M&E systems (often through immediate use of the information for project management), the resulting benchmark indicators are generally of higher quality and accuracy. In relation to international partners, it should be noted that the CGIAR system is revising its Strategic Research Framework and associated performance metrics. ACIAR will contribute to and closely monitor this process. As noted above, the current revision of ACIAR's M&E system will also finesse ACIAR's performance monitoring processes.

Mutual obligation of partners

In addition to linking payments to the delivery of project outputs, the establishment of benchmarks needs to recognise any existing processes and benchmarks that our partner countries might have in place. Benchmarks that align with country and international partner priorities also strengthen partner performance and emphasise mutual obligation (and the converse might weaken commitment and post-project follow up).

Operational considerations

Operationalisation of performance benchmarking

Recognition and identification of the impact pathway is critical for the sensible and defensible link between research outputs and outcomes and eventual development outcomes and impacts, and the specification of effective benchmarks. Well-designed M&E systems support the required performance benchmarking. The benchmarking framework should outline the flow of quantitative and qualitative data from project level to program, program to corporate, and corporate to whole of government.

For ACIAR, not all projects will have readily definable performance benchmarks that can directly aggregate up to ACIAR corporate-level benchmarks. In such cases performance benchmarking would be undertaken at the program level.

Added cost /value of benchmarking task

In designing appropriate benchmarks, account must be made of the cost of establishing and monitoring benchmarks, and the associated reporting requirements within aid programs. The costs can mount quite rapidly for the accurate determination of quantitative benchmarks, especially for outcomes and impacts that occur many years after project completion. Ideally, benchmarks not only provide accountability to government and improve efficiency of implementation, but also add value to the implementation of individual projects and programs.

Benchmarks and reporting frameworks that recognise the richness of qualitative data— that support and in some cases overcome the limitations of quantitative data—must be considered in assessing

development outcomes. Project, program and agency annual reports, along with ACIAR's post-project adoption and impact studies often aim to integrate both qualitative and quantitative outcome information and provide effective sources of milestone and benchmark achievements for R&D investments.

Time lags and periodicity

In the particular case of agricultural research, there are varying time lags associated with the various outputs from aid projects and programs. Appropriate updating of benchmarks needs to reflect fast-moving (e.g. prices and incomes) and slow-moving (e.g. natural resource management metrics) variables. This means specific benchmarks must be recalculated at different intervals to reflect the rate of change anticipated.

Avoiding unintended incentives arising from benchmarks

Establishment of aid program benchmarks must recognise the risk of causing unintended outcomes by creating inappropriate incentives. For example, a simple focus on benefit–cost metrics could lead to myopic thinking with a bias towards short-term projects, avoiding projects targeting longer term structural changes in developing countries.

Similarly, requiring a minimum economic return for projects could bias against activities in partner developing countries that are characterised by particularly challenging physical, social and institutional environments. Such countries or regions may be in fact where the need for aid is most pressing.

Appendix 1

Association of indicative national and ACIAR Strategic Plan goals on which ACIAR research is focused for benefits in partner countries and Australia

Indicative whole-of-government development goals	Associated ACIAR Strategic Plan goals and contributing outputs
Economic growth; trade (market access)	Increased productivity, increased farm household incomes (in partner countries and Australia) from new technologies and better decision making
Jobs	Rural industry employment along the whole agricultural and food value chain, from new technologies, greater capacity and better decision making
Poverty reduction	Improved livelihoods (household food security, reduced vulnerability, increased household assets), from new technologies and greater capacity
Capacity development	Organisational and individual capacity building, to deliver new knowledge
Gender	Gender-sensitive agricultural research, greater benefits to women, from new technologies, new knowledge and greater capacity

Appendix 2

Illustration of key elements of a stylised impact pathway of a research project

Research outputs	Capacity outcomes	Intermediate development outcomes	Development impacts
e.g. diagnostic tests developed	e.g. partner-country researchers and extensionists able to apply the test	e.g. pilot application and adoption of diagnostic test by partner-country practitioners	e.g. use of test leading to improved disease surveillance and management with on-farm productivity benefits
	<i>Link with next users of technology</i>	<i>Link with end users of technology</i>	

Appendix 3

Hierarchical levels of ACIAR's M&E system

Operational level	Performance information and contexts	Sources of information
Whole of government	Performance metrics in the context of foreign, trade and aid priorities	ACIAR annual and supplementary reports
ACIAR	Aggregate corporate efficiency. Intermediate development outcomes and impact in the contexts of ACIAR Strategic Plan, Country Strategies and Annual Operational Plan	Adoption/outcome studies, impact assessments, mid-term and final project reviews, annual and final reports, staff supervision of projects
Cluster/program	Program outputs in the context of program strategies and components of Annual Operational Plan including KPIs	Mid-term and final reviews, annual and final reports, staff supervision of projects
Project	Project activities, outputs and progress towards outcomes and impacts in the context of project documents	Project management supervision, partner reports, project M&E systems