

MID-TERM REVIEW OF THE CSIRO-AFRICA FOOD SECURITY PARTNERHIPS

REPORT 3: STRATEGIC REVIEW OF OVERALL AusAID-CSIRO PARTNERSHIP

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Report Prepared for AusAID by a Review Team

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EXECUTIVE SUMMARY

This report is a strategic review of the two AusAID supported CSIRO Partnership programs with CORAF/WE CARD in West Africa and BecA in East Africa. It draws on the findings of a mid-term review (MTR) of the CORAF/WE CARD Partnership conducted in June/ July 2012 and an MTR of the BecA Partnership conducted in September 2012. The two Partnerships form the major component of the agricultural productivity pillar of AusAID's African Food Security Initiative.

Rationale and Design of the Partnership Program

The rationale behind the Partnership is that CSIRO and other Australian research agencies are world leaders in semi-arid farming systems research and biosciences applications to improve animal health, plant improvement and human nutrition and that this expertise would be brought to bear on agricultural production challenges faced by African partners. It was also anticipated that CSIRO would incorporate a stronger systems focus in the deployment of agricultural outputs within African communities.

The Partnerships' design stresses the contribution CSIRO will make to both research and capacity building in the respective regions. Capacity building is understood in these design documents in two ways: enhancing scientific research capability in the partners and their networks of collaborators; and institutional development support to help partners improve their ability to undertake agricultural research for development and impact and to build the systems needed to achieve this. This combination of support to research, together with capacity building and institutional development, is referred to as bi-modal support by the Partnership and in this report. At the time of the MTRs the Partnership had been in active implementation for 18 months in West Africa and two years in East Africa.

A common design feature of both Partnerships is an explicit desire to use agricultural research and allied capacity building activities to achieve development outcomes and impact. This is referred to as agricultural research for development (AR4D) and has the following characteristic principles: an explicit attempt to define impact pathways at the outset of the research process; a strong emphasis on developing partnerships with a range of stakeholders in impact pathways, including from the private sector and the policy arena; and attempts to set up monitoring and learning arrangements to improve the impact performance of research and program investments. A major focus of this review has been on how successful the attempts to use an AR4D approach have been.

Headline Findings of the MTRs of CORAF/WE CARD and BecA

Both good programs. The two programs are quite different in terms of their institutional settings and the key institutional challenges they face. However, the MTR concludes that both Partnerships, have potential for very significant impact, both directly as a result of impact-oriented research they conduct, and indirectly in terms of capacity building, and by influencing the way others do research, which has the potential for larger scale impact.

Very strong partnership relationships. A key strength of CSIRO engagement in both programs has been the quality of partnerships developed in terms of the bimodal engagement, the personal relationships, and the mutual respect and appreciation shown.

Both require change. Neither program can afford to continue the way it has done to date if it is to maximise the potential impact. Both reviews have concluded that a challenging process of improvement is required if the research conducted is to be translated to impact at scale.

Both need attention to intervention logic and impact pathways. The key finding of both program reviews is that both Partnerships need to raise the quality and extent of the way they deal with their intervention logics and impact pathways.

Both need to incorporate research on how to achieve impact into their programs. In discussing how to enhance the impact of research it has become clear that in both programs the answer is unclear. Both MTR reports acknowledge this situation and recommend the incorporation in both Partnerships of a specific research agenda aimed at understanding more about this issue. This learning focus has a double effect: enhancing the impact of research done through adaptive management feedback loops, while also identifying lessons for wider application and building capacity in agricultural research for development (AR4D).

Both need more attention to policy, institutional and livelihood aspects of research. The effective conducting, delivery, adoption and impact of research is subject to complexity in spheres beyond biological sciences. Both Partnerships have made great strides forward on these issues, but the MTR finds that both need better access and use of expertise on policy, institutional and livelihood dimensions of their research if they are to maximise potential impacts.

Both need a revision to the support CSIRO provides. Each review has observed that CSIRO needs to improve and expand in terms of the range, experience, appropriateness and quality of support provided to both CORAF/WE CARD and BecA. This is not a criticism of the quality of expertise provided by CSIRO to date, but a recognition that a wider set of expertise is required and that CSIRO needs to act as a broker of excellence in addition to being a supplier of expertise in areas where it has an acknowledged comparative advantage.

Vision for CSIRO Partnership Phase Three

The similarity of the changes each Partnership requires raises the possibility of strengthening the connections between the two programs. The review team presents a vision for Phase 3 of the CSIRO Partnership that includes a new activity stream that binds the two programs together. This new activity focuses on supporting both Partnerships in their efforts to achieve impact. It also focuses on a learning agenda that builds on the internal learning of each program to derive cross-cutting lessons for wider application beyond the CORAF/WE CARD and BecA Partnerships and their projects and implementing partners. This influencing agenda can be seen as an additional third impact pathway from AusAID's investment in the CSIRO Partnership.

The review team understands that its recommendations will be considered by AusAID in the context of the evolving strategy for food security in Africa. It also recognises that the vision presented is a challenging one as it combines achieving better impact with learning how to achieve impact and influencing others. The review, however, believes that AusAID and CSIRO can and should make the step up to a more ambitious program of this type if they wish to better deliver on the commitment they have made to Africa.

Thinking Ahead: Consolidation at End of Phase Three

The ambition for the end of phase three should be that the research projects supported by the Partnership are completed as far as possible and have demonstrated the impact that they promise. Similarly the capacity development, learning and influencing agenda should be taken as far as possible. If this is achieved it could lead to sustainable agricultural research and innovation capacities, architectures and policies underpinning improvements in agricultural production and in enhancing the livelihoods of large numbers of poor people in Africa. An indicator of this might be the emergence of multi-agency consortia funded from

regional and multilateral sources making effective use of new agricultural research capacities in tackling critical development issues.

If the two outcomes; (i) impact from projects and (ii) impacts from lessons and influencing are achieved, AusAID could make a responsible exit from its support to the Partnerships at the end of phase three. AusAID needs to monitor progress closely in phase three to ensure the Partnerships remain on track to achieve this. This will be particularly important for the influencing agenda.

LIST OF ACRONYMS

| | | |
|---------------------|---|---|
| ABCF | - | Africa Biosciences Challenge Fund |
| AFSI | - | African Food Security Initiative |
| AGRA | - | Alliance for a Green Revolution in Africa |
| ASARECA | - | Association for Strengthening Agricultural research in Eastern and Central Africa |
| AU | - | African Union |
| AusAID | - | Australian Agency for International Development |
| BecA | - | Biosciences eastern and central Africa |
| BMGF | - | Bill and Melinda Gates Foundation |
| CAADP | - | The Comprehensive Africa Agriculture Development Programme |
| CGIAR | - | Consultative Group on International Agricultural Research |
| CIDA | - | Canadian International Development Agency |
| CORAF/WECARD | - | West and Central African Council for African Research and Development |
| CRP | - | CGIAR Research Program |
| CSIRO | - | Commonwealth Scientific and Industrial Research Organisation |
| DFAT | - | Department of Foreign Affairs and Trade (Australia) |
| DFID | - | Department for International Development, UK |
| ECOWAS | - | Economic Community of West African States |
| ECOWAP | - | ECOWAS Agricultural Policy |
| EMF | - | Environmental Management Framework |
| FAAP | - | Framework for African Agricultural Productivity |
| FANS | - | Food and Nutritional Security |
| FARA | - | Forum for Agricultural Research in Africa |
| IAR4D | - | Integrated Agricultural Research for Development |
| ILRI | - | International Livestock Research Institute |

| | | |
|-----------------|---|--|
| M&E | - | Monitoring and Evaluation |
| MTR | - | Mid-Term Review |
| NARI | - | National Agricultural Research Institute |
| NARS | - | National Agricultural Research System |
| NEPAD | - | New Partnership for Africa's Development |
| NGO | - | Non-Governmental Organisation |
| NRM | - | Natural Resource Management |
| OECD-DAC | - | Organisation for Economic Cooperation and Development – Development Assistance Committee |
| QAAFI | - | Queensland Alliance for Agriculture and Food Innovation |
| R4D | - | Research for Development |
| RPG | - | Regional Public Good |
| RUFORUM | - | Regional Universities Forum for Capacity Building in Agriculture |
| SIDA | - | Swedish International Development cooperation Agency |
| SROs | - | Sub Regional Organisations |
| TAG | - | Technical Advisory Group |
| TOC | - | Theory of Change |
| TOR | - | Terms of Reference |
| UK | - | United Kingdom |
| UN | - | United Nations |
| USAID | - | United States Agency for International Development |

1. Introduction

As part of AusAID's four-year African Food Security Initiative (AFSI), Australia is funding the A\$16.9m² CSIRO Partnership with the West and Central African Council for Research and Development (CORAF/WE CARD) and the A\$13.87m³ CSIRO Partnership with Biosciences eastern and central Africa (BecA). The initiative runs from 2011 to 2013 and aims to lift food security and agricultural productivity in Africa through joint research — working with and building the capacity of African organisations. This report is a strategic review of the two CSIRO Partnership programs. It draws on the findings of a mid-term review (MTR) of the CORAF Partnership conducted in June/ July 2012 and an MTR of the BecA Partnership conducted in September 2012. These MTRs are reported separately.

1.1 About the CSIRO–Africa Partnerships

The CSIRO Partnerships in West and East Africa form part of AusAID's African Food Security Initiative. This was designed around a number of key principles:

- Alignment with the Comprehensive Africa Agriculture Development Programme (CAADP)
- Ensuring that any Australian contribution would need to demonstrate a clear Australian value addition
- Activities would generate recognition and a positive profile (particularly among African leaders)
- Ensuring strong African ownership

The West Africa Partnership with CORAF/ WE CARD. CORAF/WE CARD is a regional body mandated by the Economic Community of West African States (ECOWAS) and the Forum for Agricultural Research in Africa (FARA) to coordinate the implementation of CAADP Pillar IV (agricultural research, technology dissemination and adoption) in West and Central Africa. The design document for the West Africa Partnership identifies a number of priority research areas and has an overall objective of “assisting CORAF/WE CARD to more effectively discharge its responsibility to drive improved agricultural research in West and Central Africa”. CORAF's strategic plan maps out how this responsibility will be addressed and places significant emphasis on the use of an Integrated Agricultural Research for Development (IAR4D) approach. The elements of this approach are described as “engagement and partnership with a full range of stakeholders, targeting change and adoption of new practices at various scales from on-farm to policy, and an embedded capacity building and learning focus for all stakeholders”. (see also discussion in section below on terminology of using research for development). The design of the Partnership places particular emphasis on CSIRO's systems expertise and the relevance of this to the farming systems of West Africa and the production challenges faced there.

The East Africa Partnership with the Biosciences eastern and central Africa (BecA) Hub. The BecA initiative is a joint activity of AU/NEPAD and the International Livestock Research Institute (ILRI), in support of the AU/NEPAD CAADP agenda. The BecA Hub is a shared agricultural research and biosciences platform located at the Nairobi campus of ILRI in Kenya, whereby ILRI shares its recently upgraded and expanded research facilities with a broad range of new national, regional and international partners through the BecA initiative. The BecA initiative provides access to first class research laboratories for African scientists and post graduate fellows to conduct their research in Africa and address African

² \$15.8 from AusAID and \$1m from CSIRO — \$12m goes through CORAF/WE CARD and the rest is managed by CSIRO.

³ \$13.01m from AusAID and \$0.86m from CSIRO. Just under \$10m of this is managed by BecA, with the remainder managed by CSIRO.

agricultural/food security problems. The BecA Hub achieves this by hosting research projects implemented by African scientists and institutions; by providing research and technology related services; and by conducting joint research, capacity building and training programs for African scientists. The research projects implemented at the BecA Hub are directed towards delivering products useful for improving productivity and ensuring food security for smallholder farmers and regional communities in Africa. The design of the Partnership with BecA identified a range of research and capacity building priorities in the areas of animal health and human nutrition. The objective of the Partnership was aligned to BecA's business plan, current at the time of the design, which stated its ultimate goal as "harnessing and applying modern biosciences and related innovations to increase the productivity and sustainability of agricultural systems in Africa".

The rationale for CSIRO in the Partnership. CSIRO, through its Sustainable Agriculture Flagship Program, and other Australian research agencies are world leaders in semi-arid farming systems research and biosciences applications to improve animal health, plant improvement and human nutrition. The rationale for the partnership with CSIRO was that this expertise would be brought to bear on agricultural production challenges faced by African partners. It was also anticipated that CSIRO would incorporate a stronger systems focus in the deployment of agricultural outputs within African communities. The design documents for both the Partnerships stress the contribution CSIRO will make to research and capacity building in the respective regions. Capacity building is understood in these design documents in two ways: enhancing scientific research capability in Partners and their networks of collaborators; and institutional development support to help Partners improve their ability to undertake agricultural research for development and impact and to build the systems needed to achieve this. This combination of support to research, together with capacity building and institutional development, is referred to as bi-modal support by the Partnership and in this report.

Key activities supported through the Partnership. The Partnership used a combination of competitive and commissioning processes to identify research projects that addressed the priorities of the African Partner organisations. CSIRO was involved in the selection and development of these projects in collaboration with its Partners. Once approved, CSIRO identified expertise both from CSIRO, and Australia more generally, to collaborate and mentor these projects. CSIRO also provided a range of institutional development support, collaborating and mentoring in M&E, impact pathway analysis, communication, research ethics and, in West Africa, experimentation with an integrated agricultural research for development (IAR4D) approach. CSIRO helped organise and design formal capacity building efforts, most notably in East Africa where a novel bioscience fellowship program was established for young African scientists. At the time of the MTRs the Partnership had been in active implementation for 18 months in West Africa and two years in East Africa.

Terminology on using agricultural research for development. A common feature of both Partnerships is an explicit desire to use agricultural research and allied capacity building activities to achieve development outcomes. In other words there was an explicit desire to go beyond research discovery and explore and engage with processes, stakeholders and policy and institutional arrangements that lead to the use of research in the process of innovation and impact. In the case of the West Africa Partnership this involves the adoption of a specific approach to organise research as part of a wider process of learning, innovation and development. This is referred to as integrated agricultural research for development (IAR4D). In the case of the East Africa Partnership the approach adopted was not "branded" in the same way as a specific approach that was being followed. Nevertheless this involved some similar characteristic principles: an explicit attempt to define impact pathways at the outset of the research process; a strong emphasis on developing partnerships with a range of stakeholders in impact pathways, including from the private sector and the policy arena; and attempts to set up monitoring and learning arrangements to improve the impact

performance of research and program investments. The term agricultural research for development (AR4D) is used in this report to refer to agricultural research that applies these principles. The term applies equally to the implicit and explicit approaches adopted in East and West Africa. The report uses the term IAR4D specifically in respect to the activities in West Africa as this is how the CSIRO-CORAF Partnership has styled its approach in line with the strategic plan of CORAF. The challenges and opportunities arising from adopting an AR4D perspective in implementation of the Partnership in East and West Africa is a major focus of this review and its suggestions for ways forward.

1.2 Mid-term Review: Purpose and Approach

The terms of reference for this review (see Annex 1) request that this mid-term review **report on progress** towards program implementation, make detailed **recommendations to improve the overall quality** of the CSIRO African Partnerships, **develop options to guide the design of a second phase of AusAID support** to 2015-16 and suggest strategies for how the program might be scaled back or concluded post 2015-16.

The context for this review is AusAID's proposed consolidation of its food security program and an increased focus on managing for results. The Africa food security team needs to both appraise progress of its activities, and map future directions for the program. The review will be immediately useful to the following stakeholders:

- AusAID senior management
- AusAID and CSIRO desk officers
- CORAF/WECARD and BecA program and project managers

Specifically the terms of reference state that the review will:

“provide an assessment of how well the CSIRO partnerships have been carried out to date, based on evaluation of the performance and progress of the research projects, engagement in capacity building with African partners and constraints or issues encountered in implementation.”

“The overall evaluation will address whether the program logic in the design documentation is to result in higher level development outcomes. It will also provide recommendations on changes to the design of the partnership activity that can improve ability to reach the development outcomes. Further, it will develop options to guide the design and development of a second three of more year phase of Australian Government funding for the partnerships, and consider possibilities for program consolidation at the close of this second phase of funding.”

An MTR of the CSIRO-CORAF/WECARD Partnership was conducted in June-July 2012 and of the CSIRO-BecA Partnership in September 2012. Both these MTRs shared a common review plan and questions. Specific review questions were developed in consultation with AusAID for each MTR. The review plan is provided in Annex 2. The MTR process involved a review of program documentation, interviews with senior managers in CSIRO, CORAF/WECARD and BecA, interviews with researchers involved in projects and their partners and interviews with training fellowship recipients in East Africa. This was complemented by field visits to project sites in both East and West Africa. Each MTR developed its key findings and recommendations in a participatory fashion through a shared analysis with key stakeholders in the two partnerships. (Annex 3 provides a list of persons met in the two MTRs).

2. Key Findings from the two Program Reviews

This section summarises the key findings from the two reviews of CORAF/WECARD and BecA as the basis for understanding the current status and future evolution of the Partnership that is the main focus of this report. It then brings together the common findings that apply to both individual programs in order to begin to establish the analysis that will be developed in later sections into a rationale for an overall joined-up Partnership program rationale.

2.1 CORAF/WECARD MTR Main Findings and Recommendations

A strong partnership. The partnership between CORAF/WECARD and CSIRO is highly appreciated by both partners, especially its use of the bi-modal support in which research funds are complemented by Australian expertise. The Partnership is targeting critical dimensions of agricultural productivity and food security in a region where these are of the highest priority. It has mobilised high quality scientific expertise from CSIRO and has raised the profile of Australia in the region. It is working within the structures and systems of CORAF/WECARD and its strategic and operational plans and has explicit ambitions to support CORAF/WECARD in discharging its responsibilities in the region. These responsibilities include the use of IAR4D to transform agricultural research practice in the region as a way of improving productivity and food security.

Intervention logic needs further development. The intervention logic presented in the program design documents has the strength of nesting within the CORAF/WECARD strategic plan, but it does not play an effective role in defining what the Partnership is supposed to achieve. This ambiguity has played out in the nature of support provided by CSIRO to CORAF/WECARD, weakening the overall impact of CSIRO support. A revised logic should be clearer about how it will align with the Partnership's purpose of helping CORAF/WECARD discharge its responsibilities in the region and may involve identifying wider CORAF/WECARD institutional development issues that need to be addressed as part of the Partnership. This will provide a stronger foundation for reformulation of the research projects and other activities, and provide a clear focus for the management of CSIRO inputs. A revised approach to M&E can then be devised to track progress and record results and strike a better balance between learning and accountability.

Stronger focus on enabling learning on use of research for development required. A stronger focus is required on systematically learning how to use research for development to help CORAF/WECARD better operationalise IAR4D as a way of transforming research practice in the region. In addition to using IAR4D more consistently in projects it may also require the Partnership to find ways of giving this theme stronger operational and organisational focus within CORAF/WECARD. Critical to this will be arrangements that allow CORAF/WECARD to better support a learning function in projects and facilitate the spread of this learning to research and development organisations in the region through networking and capacity development.

Project portfolio with more diversified impact pathways. The Partnership would be strengthened by development of a better balance between short and long-term impact pathways in the project portfolio with at least some projects delivering impact within the Partnership timeframe. This will require a careful analysis of existing projects, the identification of key development objectives that can realistically be achieved and the identification of champions and new partners who can mobilise research and development activities through market, social development and/or policy processes. A more consistent application of the IAR4D approach will be critical to the revisions required and will need to be

complemented by wider institutional developments in CORAF/WECARD that are needed to operationalise this approach. Exploring collaboration with both research and development-orientated programs (including other programs supported under AusAID's Africa Food Security Initiative) as a way of leveraging resources, accessing expertise and achieving impact would be entirely consistent with an IAR4D approach.

Expand the scope of expertise provided by the program. Both CSIRO and CORAF/WECARD acknowledge some gaps in the expertise that the Partnership brings to bear on the projects and the program as a whole and this is likely to be a continuing feature of the reconfigured program in the future. Key areas are as follows:

- Social science support of projects. Social scientists (including economists) are engaged in all projects, but many are relatively junior, with few taking leadership roles. Strengthening these complementary disciplines (such as livelihood analysis, political economy, institutional and policy analysis and market development) will help to strengthen the impact pathways for the projects and learning on IAR4D.
- IAR4D expertise. While CSIRO scientists have engaged in the intellectual challenge of IAR4D, specific expertise in this area is required to support CORAF/WECARD and CSIRO to better operationalise the concept at project, Partnership and organisational levels.
- Gender and environment expertise. CORAF/WECARD has adequate procedures in place for dealing with gender and environment considerations, but needs access to additional expertise to operationalise those procedures.
- Knowledge management and innovation communication. This is an area of expertise that the Partnership recognises it needs to address to support the IAR4D approach. Expertise in the area will need to tackle the issue of making information available via databases etc., but it will also need to address a wider set of communicative issues related to institutional and policy innovation in the region.

More emphasis on helping CORAF/WECARD deliver on its mandate. Largely as a result of the unclear intervention logic described above, CSIRO support has focused its efforts on the Partnership projects. With some exceptions, this has been at the expense of efforts to help CORAF/WECARD deliver on its own strategic plan. Key to this is the observation that several key CORAF/WECARD systems do not currently function in the way they need in order to effectively achieve Strategic Plan results and objectives. These include the CORAF/WECARD project selection process, project strategic planning, operationalisation of IAR4D as discussed above, the difficulties of translating the 'business unusual' sub-regional CORAF/WECARD vision to the NARS, and the critical role of Program Managers as purveyors of the CORAF/WECARD vision. Addressing such issues will define the ultimate legacy of the CSIRO Partnership; more focus on these issues will be required in the next phase and is consistent with the bi-modal support provided by CSIRO through the Partnership.

2.2 BecA Main MTR Findings and Recommendations

A strong partnership with valuable institutional innovations in the practice of research for development. Key achievements include:

1. The Partnership is strong, based on mutual respect, and a passion for joint endeavour. The "bi-modal" model of collaboration brings high-level scientists to the Partnership in a way that provides professional satisfaction and value to both parties.
2. The successful establishment and organisation of the African Bioscience Challenge Fellowship (ABCF) program.
3. Support for a portfolio of seven projects undertaking advanced bioscience research, but also taking bioscience use to scale, especially the animal health projects with their focus on disease control in Africa.

4. Selection of development problem-driven projects, with even proof of concept projects exploring bioscience breakthroughs with a clear focus on important development problems and opportunities.
5. Ex-ante design and redesign of existing projects to strengthen development focus. CSIRO played an important role in supporting this process.
6. The introduction of ethics protocols into the design and implementation of research projects.
7. Pushing the project envelope — taking science to use rather than stopping at ‘just’ the scientific outcome.
8. Working with complex partnerships, and learning about both the self-evident benefits, but also the challenges associated with this approach.
9. Specifying impact pathways for all projects, which is a critical start to the process of taking research to use.
10. World-class communication of science-for-development.

Stronger program logic and impact pathways required. The Partnership's projects have made a promising start in the process of orientating bioscience towards impact. However, there are a number of areas that need to be strengthened that are evident from the evolving program logic of the Partnership and the implementation of its projects. Weaknesses include:

- **Impact pathway analysis.** The analysis of impact pathways appears to be rather superficial and was undertaken too late to have a significant influence on the initial design of the projects, highlighting strategies that have been found to lead to irresolvable delivery/ impact bottlenecks.
- **Realistic assumptions in impact pathways.** Many of the assumptions implicit in the impact pathways developed by projects are unrealistic and need to be tackled as part of each project itself.
- **Monitoring partnership development and performance.** The nature, quality and extent of partnership arrangements associated with the projects are not adequately considered by monitoring arrangements. This means that a key dimension of the pathway to impact is developed and managed on a rather ad hoc basis.
- **Skill set to investigate, manage and monitor innovation and impact pathways and processes.** There is currently insufficient expertise in most cases to help projects locate in and develop operational impact pathways and to generate an understanding of how impact takes place. The skill set of projects needs to broaden if a research-for-impact perspective is to be achieved.

These challenges undermine the ability of some projects to achieve impact and build capacity as these: cause uncertainty about how far bioscience projects go down the impact pathway; limit the ability of projects to learn and adapt as they proceed down impact pathways; and limit systematic investigation and generation of generic lessons on how to use bioscience for impact that could inform future research and capacity building program design.

Need to mobilise a wider range of scientific expertise. The Partnership with CSIRO has allowed BecA to access world-class bioscience expertise from CSIRO, and Australia more generally. However, the Partnership with CSIRO has been less successful in mobilising expertise related to investigating innovation/ impact pathways and processes and a range of social science expertise with African perspectives, particularly livelihood analysis.

Capacity building needs a stronger impact orientation. The capacity building aspects of the Partnership have included the successful ABCF program. Capacity has also been built in the sense of a wider set of linkages around projects and between ABCF fellows and other

researchers and impact pathway stakeholders, including policymakers around specific bioscience-for-development themes. A number of dimensions of capacity building that could be further strengthened include:

- Building skills on using bioscience for impact
- Building links to and from capacity in the private sector
- Supporting emerging platforms, networks and communities of practice

Opportunities to contribute positively to developments in the wider institutional context of BecA.

BecA is at a critical point in its development. There are uncertainties arising from changes in the wider institutional environment of the CGIAR and African stakeholders in which it is situated. Key issues include BecA's future vision and comparative advantage, its cost structures, and its governance. The contending priorities and perceptions of different stakeholders in its wider environment could distract BecA and potentially undermine the effectiveness of the Partnership with CSIRO. There are, however, opportunities for both the Partnership and AusAID to contribute positively to ongoing processes in place to facilitate dialogue, diffuse tensions and strengthen BecA's strategic vision.

Ways forward for the BecA Partnership. The MTR outlines a vision of how the CSIRO BecA Partnership can move forward. This focuses on strengthening the impact orientation of research and capacity building and on introducing a stronger learning orientation into both the projects and the Partnership as a whole. The latter is seen as a critical contribution to strengthening impact within projects and in future research activities. It also has a critical role in further strengthening the capacity building agenda of the Partnership. This vision holds the potential to improve both the short and long-term impact of the CSIRO-BecA Partnership. Key steps in achieving that vision include:

1. Strengthen the mobilisation of expertise on impact pathways and learning.

BecA/ the Partnership needs to create a focal point or champion for understanding innovation processes, impact pathways and learning. This will help the Partnership continue to develop its program and project logic in order to improve its ability to achieve impact. It will also allow the Partnership to act as an "informed buyer" of expertise to service these needs in projects. This will help projects and the Partnership as a whole to more effectively partner with other organisations to access and broker expertise on innovation processes and impact pathways as well as research expertise on institutional, market, policy and livelihoods topics.

2. Practice adaptive management. The Partnership needs to adopt this approach so that projects can tackle unexpected (and unbudgeted) areas of research and as they bring in unexpected impact pathway partners into projects. This requires the adoption of process monitoring arrangements to generate information to track institutional changes in impact pathways, and to develop plausible causal connections between these institutional changes and impact. It also requires the adoption of flexible funding arrangements in projects.

3. Strengthen learning at the project and Partnership level. The Partnership needs to embed learning in projects as both a monitoring (as discussed above) and research task. It also needs to organise learning in the Partnership to identify and document high-performing research approaches that lead to impact by creating a specific learning project for the Partnership's work with a well-defined set of learning objectives. Creating a focal point or champion for this perspective in the Partnership will be critical in advancing this learning perspective.

4. Strengthen impact orientation of capacity development interventions. The Partnership needs to link lesson learning on impact to (i) further develop the strategic focus of BecA by helping prioritise research themes with high impact pay-offs; (ii) broaden training and mentoring in the ABCF program (iii) help BecA identify the composition of networks and consortia that need to be developed to utilise

bioscience for impact, (iv) Create professional incentives for scientists in impact projects by strengthening BecA's "brand" of bioscience for impact.

2.3 Common Ground/ Comparative Analysis

A comparative assessment of the two Partnership program reviews suggests a large degree of common ground between the CORAF/WECARD and BecA programs.

Both good programs. The two programs are quite different in terms of their institutional settings and the key institutional challenges they face. In CORAF/WECARD the key challenge is the operationalisation of the CORAF/WECARD vision as represented in the strategic plan such that the big wins would come from CORAF/WECARD managing to transform the way research is done in its member NARS. In BecA the institutional challenges are at two levels: the challenge of developing ways of conducting bioscience research in such a way that it internalises partnerships, processes and pathways to impact and the challenge of defining its strategic role and comparative advantage in bioscience research and capacity building in the region that will best allow it to take forward its broad agenda of bioscience for development. The MTR concludes that both partnerships, each in its own way, have potential for very significant impact, both directly as a result of the impact-oriented research they conduct, and indirectly in terms of the influence they can have on the way others do research, which has the potential for impact on a larger scale.

Very strong partnership relationships. A key strength of CSIRO engagement in both programs has been the quality of partnership developed in terms of the bimodal engagement, the personal relationships, and the mutual respect and appreciation shown.

Both require change. Despite these positive comments, neither program can afford to continue the way it has done to date if it is to maximise potential impact. Both reviews have concluded that a challenging process of improvement is required if the research conducted is to be translated to impact at scale.

Both need attention to intervention logic and impact pathways. The key finding of both program reviews is that they need to raise the quality and extent of the way they deal with their intervention logics and impact pathways.

Both need to incorporate research on how to achieve impact into their programs. In discussing how to enhance the impact of research in both programs it has become clear that in both cases the answer is unclear. Both MTR reports acknowledge this situation and recommend the incorporation in both Partnerships of a specific research agenda aimed at understanding more about this issue. This learning focus has a double-effect: of enhancing the impact of research through adaptive management feedback loops, while also identifying lessons for wider application and building capacity in AR4D.

Both need more attention to policy, institutional and livelihood aspects of research. The effective conducting, delivery, adoption and impact of research is subject to complexity in spheres beyond biological sciences. Both Partnerships have made great strides forward on these issues, but the MTR finds that both need better access and use of expertise on policy, institutional and livelihood dimensions of their research if they are to maximise potential impacts.

Both need a revision to the support CSIRO provides. Each review has observed that CSIRO needs improve and expand in terms of the range, experience, appropriateness and quality of support provided to both CORAF/WECARD and BecA. To date the majority of staff provided has been CSIRO staff, especially to the CORAF/WECARD program. Moving

forward the selection of personnel inputs by CSIRO will need to be driven more by consideration of results than institutional home. This is not a criticism of the quality of expertise provided by CSIRO to date, but a recognition that a wider set of expertise is required and that CSIRO needs to act as a broker of excellence in addition to being a supplier of expertise in areas where it has an acknowledged comparative advantage.

This strong degree of overlap of the MTR's analysis of what is needed to strengthen each program, and the similarity of the changes each requires, raises the possibility of strengthening the connections between the two programs. This, in turn, suggests a potential benefit to be derived from the identification of an intervention logic for the partnership that binds the two programs together and which at the same time provides a better fit with the evolving logic and theory of change of the wider AusAID Food Security Strategy.

2.4 Likelihood of Higher Level Development Outcomes

As is clear from the discussion presented above, the MTR analysis of the likelihood of development outcomes arising from the two Partnerships to date may be summarised as follows:

1. Both programs have a lot of potential for impact through their different institutional contexts: CORAF/WECARD through the potential to impact how research is conducted across the NARS of west and central Africa, and BecA for the direct impacts of the research projects it is currently conducting, but also through its wider capacity development efforts.
2. However, both Partnerships require significant adjustments if they are to maximise the potential impact of their efforts.
3. The review team believes that both programs are capable of responding effectively to the recommendations of the MTR.
4. Although this is challenging for CORAF/WECARD, BecA and CSIRO, we believe that with the adjustments suggested by the MTR, both programs can achieve direct development impacts at a significant scale while laying the foundations, through learning, for indirect impacts at a much larger scale.

3. A Vision for the Way Forward

The AusAID Partnership review team has been asked to comment on the future evolution of the Partnership until 2015-16 in order to inform the forthcoming design process. The Team understands that its recommendations will be considered by AusAID in the context of its evolving strategy for food security in Africa. This vision of ways forward is informed by recognition of the importance of the commitment AusAID has made to Africa. We see that this commitment emerges from a strong rationale, both in terms of Australia's growing economic presence in the region and its comparative advantage in science and technology in agriculture. The selection of CSIRO as the main implementation partner in terms of agricultural productivity under AusAID's Food Security Strategy in Africa strengthens this rationale and comparative advantage. The review team also recognises the magnitude of the challenge involved in Australia's commitment to Africa and to agricultural productivity in particular. This challenge can only be met by innovative programs that employ cutting edge, ambitious ideas in development practice that offer the chance to redefine how development tools such as research are deployed. The review believes that AusAID and CSIRO can and should make the step up to a more ambitious program and by doing so better deliver on the commitment they have made to Africa. This section outlines our thoughts on how this could be done.

3.1 Maximising Complementarities of CORAF/WECARD and BecA Partnerships with CSIRO

The two Partnerships have to date been seen and managed as two separate programs, with little common ground other than that they are both about agricultural research in Africa and they are both supported by CSIRO. There is some relatively light cross-over on animal health. There is also an overarching 'Learning Project' which is focused predominantly on CSIRO learning rather than learning together with Partnership partners. This project has struggled to gain traction in the Partnership. It is a legitimate exercise for CSIRO, but the review team does not view it as a substitute for the more embedded learning process that the two Partnerships need to develop in order to achieve their impact ambitions at both the immediate scale of the projects and at the wider level of transforming regional capacity to use agricultural research for development.

The review team see a different picture. There is an opportunity to create an intervention logic which builds on the similarities and complementarities of the two current Partnership programs and binds them together with a single shared objective.

This arises from the fact that:

- Both Partnership programs are focusing on how to do research which is better at having impact.
- The MTR has recommended that both introduce a more effective learning component into their future activities.
- The MTR has also recommended that CSIRO raise its ability to provide appropriate skilled and experienced input to support the learning agenda in both programs.

We also see that this would provide a more consistent rationale for AusAID's support to agricultural research for impact within the Africa Food Security strategy. Some initial thoughts on a possible Theory of Change for the next phase of the Partnership are presented in the next section.

3.2 Outline Theory of Change for CSIRO Partnership Phase Three

A first attempt at an outline Theory of Change, which follows the logic described in section 3.1 above, is presented in Figure 1.

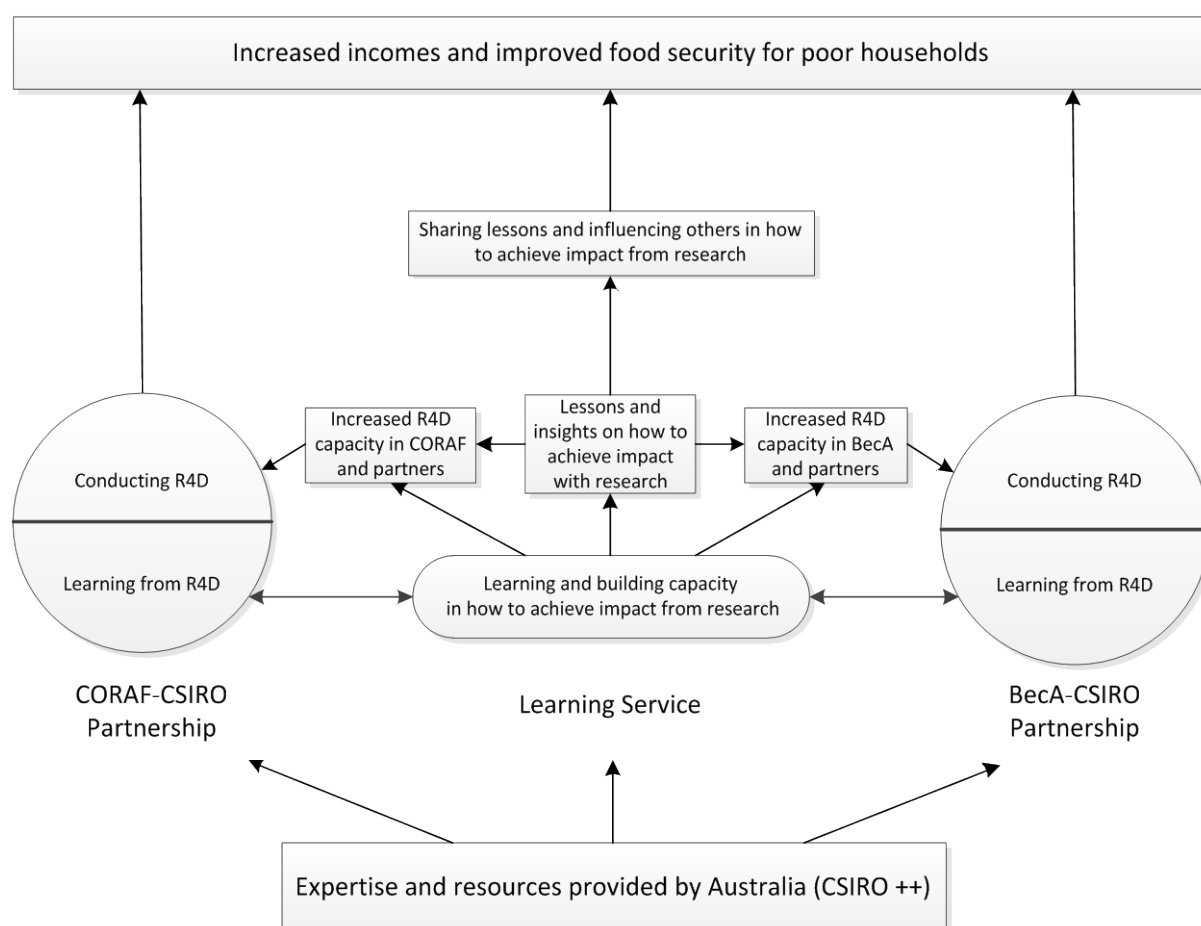
Key features of the proposal are as follows:

1. **Retain both programs.** The proposal provides for both the CORAF/WECARD and BecA Partnership programs to continue as region-specific programs with their specific partners, modified as per recommendations from the MTR of each program.
2. **Renewed emphasis on direct impact and learning for impact.** In deepening their focus on impact pathways, as suggested by the MTR, each program will be supported and equipped to conduct better research with a higher chance of achieving direct impacts. Thus they will conduct AR4D while also learning about how to improve the effectiveness of AR4D. Their own internal learning processes will support adaptive management and their continual iterative improvement based on learning what works and why in order to translate research into impact on targeted client groups.
3. **New learning and influencing agenda.** The proposal introduces a new shared agenda and logic, and creates a new activity stream between the two programs. This learning agenda builds on the internal learning of each program to derive cross-cutting lessons for wider application beyond the CORAF/WECARD and BecA Partnerships and their projects and implementing partners. How to resource that new

activity stream and which organisations should be involved remains to be discussed (see options below).

4. **Proactive influencing for scale.** The lessons derived on how to conduct research in such a way that impact pathways are internalised in research processes and partnerships will be applied, as part of the overall AusAID-CSIRO Partnership, to influence additional actors beyond program partners. For example, to influence other programmes in BecA not covered by the Partnership, other African sub-regional research organisations (SROs) beyond CORAF, major development partners investing in research such as the World Bank, other CAADP organisations such as FARA and NEPAD, and the CGIAR system. This is a means for leveraging Partnership products, derived from learning-by-doing, to improve research impact across a wider landscape.
5. **Direct and indirect impacts.** Direct impacts at scale on poor African families will be derived from each of the two Partnership programs through conducting more effective development and impact-oriented research in which impact pathways are increasingly internalised in research processes and the likelihood of success progressively increases. Additional impacts will be achieved by the application of lessons learned from these experiences by other organisations who are seeking help on enhancing the translation of their own research into development results. This can be seen as an additional third impact pathway from AusAID's investment in the CSIRO Partnership.

Figure 1: Outline Theory of Change for AusAID-CSIRO Partnership Phase Three



3.3 Implications for CSIRO

The proposed approach has direct implications for the organisation of CSIRO support to the Partnership. These all derive from the findings of the individual reviews of CORAF/WE CARD and BecA, as follows:

CSIRO role. This new proposal for phase three requires that CSIRO is clear on its role in the Partnership. CSIRO will be contracted by AusAID to implement the second phase of research and development program funded through the Australian aid budget. It would be reasonable, therefore, to hold CSIRO responsible for delivering development results from this Partnership, and not just agricultural research.

Excellence. The translation of research into impact is one of the great development challenges; one which many national and international agricultural research organisations are currently struggling with. If the intervention logic proposed here is to be successful in its research, learning and influencing roles, the Partnership will need to be founded on excellence.

Supply of resources. The resources provided by CSIRO will need to reflect the clear development-oriented role for CSIRO and the need for excellence. In the Theory of Change diagram this is phrased as Expertise and Resources provided by Australia (CSIRO ++). This means that CSIRO will need to provide world class relevant expertise to support the future Partnership requirements, and that these may not necessarily either a) originate from Australia, or b) originate only within CSIRO. As such CSIRO is a broker for appropriate expertise, and the key selection criteria should be based around demand-side factors such as suitability for the role rather than supply-side factors.

3.4 Design Option for an Overarching Learning Architecture

The design process for the next phase of the CSIRO Partnership program would need to consider options for the design of the device that supports learning in the two Partnerships and that supports a wider influencing agenda based on this learning. It is probably beyond the terms of reference of this review to recommend what this should look like and this would ideally be tackled as a separate scoping study. However, the following presents a consideration of some issues and options that may be useful in the phase three design process.

Vision

The Partnership will need to establish learning teams with embedded champions at three levels: at the level of projects (in both Partnerships), at the level of the Partnership (in both), and at the level of the overall Partnership.

Role/function of level three

- Technical support to levels two and one, including building capacity in monitoring and research practices that support learning
- Training on learning and the development of a reflexive culture of agricultural science for development
- Research on understanding how agricultural research can be used for impact and coordinating/synthesising learning from both Partnerships
- Communication, network building and policy influencing activities on AR4D
- Brokering expertise on innovation and impact learning for use in teams one and two

Organisational format of level three function

This is probably the most difficult aspect of the phase three design. It concerns where to locate the team — what its organisational home should be. Considerations include the need to locate this initiative in the Africa region; the need to find an organisational home that can take the learning agenda forward in the region and internationally beyond the life of the project, and the often disconnect between the mandate to do this and the capacity to do this in the region. An analysis of options is as follows.

1. Establish a CSIRO/ Australian agencies AR4D learning hub in West or East Africa serving both Partnerships. This has the advantage of creating a dedicated facility to serve the Partnership. It could be located in either partner organisation. Challenges include limited mandate of such a hub beyond the Partnership and identifying appropriate staff that could be located in the region full time or at least a substantial part of their time. Partnering could be used to access additional expertise, but this presents its own challenge of identifying partner organisations that have credibility at both an operational level and in wider policy spheres in the region and internationally.

2. Establish an African AR4D learning hub in a regional organisation. This has the advantage of helping build regional capacity that has strong links to regional discussions and processes associated with using research for development. Challenges include negotiating the complex institutional environment associated with regional bodies (for examples FARA, AU/NEPAD); risk of losing Australian identity in the initiative; relatively limited current capacity in most regional organisations to take an AR4D learning agenda forward. The capacity issues could be addressed in the same way as for an Australian hub, but also present the same challenges in terms of identifying suitable partner organisations.

3. Outsource to a partner organisation acting as an AR4D learning hub. This has the advantage of being administratively attractive. It also presents the possibility of accessing existing specialist expertise. The main challenge is that no examples of this sort of partner are immediately apparent. A tendering process for this sort of expertise would help identify candidate organisations (probably from the consulting sector). This, however, might not be the best route to influence policy and would restrict regional capacity building on AR4D.

4. Establish a multi-donor AR4D learning hub. This would have the advantage of facilitating policy influence in the donor community on issues of AR4D. It would also help spread costs and open opportunities for learning from a wider set of AR4D investments. The main challenge would be in negotiating the establishment of such a facility in a timely fashion and in ensuring that the learning needs of the Partnership were adequately met within the wider agenda of the hub.

5. Establish an independent expert panel on AR4D learning. This would have the advantage that it could draw on global expertise on this topic and not lock the hub into a relationship with only one partner organisation. Global expertise, while thinly spread, is well linked to international policy debates on the use of AR4D. A panel approach would also side-step the need to identify an organisational home for the level three function. The disadvantages include that it would have no organisational home and most expertise would probably not be located in the region. More positively if this expert panel was used as a proof of concept for an overarching learning function, it could lay the foundations for the establishment of such a function in a regional or international organisation.

The design process for phase three could consider creatively using different elements of these options.

4. Proposed Design Process

The development of the design for phase three should be a participatory process, involving CORAF/WECARD, BecA, CSIRO and AusAID. It should also, if possible, involve at least one member of the review team to ensure the insights from the review are carried forward effectively into the design considerations. Terms of reference for the design would need to be endorsed by the three partner organisations, as well as by AusAID.

Inputs should also be sought from gender and environment specialists familiar with such programs in developing countries. A peer review process of the design document could be used to bring in wider perspectives. These perspectives include an Africa regional perspective, a bioscience perspective and a development rationale perspective.

The design process should include a review of fiduciary risks — and how the program might best manage those risks — by a specialist with experience working in African institutions. The same specialist might also be tasked with analysis of the cost structures and budgets of the various partnership arrangements, unless this has already been undertaken by then.

The existing Partnership program and funding will end by mid-2013. To allow sufficient time for securing appropriate personnel and preparation of contracts, etc., the design will probably need to be approved by CORAF/WECARD, BecA, CSIRO and AusAID by April 2013 at the latest. Working back from that deadline, it would be best to have the main part of the design process completed by the end of December 2012. Given the competing commitments in December, the key month for the design process would probably need to be November 2012.

5. Thinking ahead: Consolidation at the End of Phase Three

The vision set out for the Partnership concerns large projects that can deliver large impact as well as delivering improved capacities and lessons on how to use agricultural research for impact and development. The ambition for the end of phase three should be that the projects supported by the Partnership are completed as far as possible and have demonstrated the impact that they promise. This may offer the promise of further impact at declining marginal cost as plans go to scale. Similarly the capacity development, learning and influencing agenda should be taken as far as possible. If this is achieved it could lead to sustainable agricultural research and innovation capacities, architectures and policies underpinning improvements in agricultural production and enhancing the livelihoods of large numbers of poor people in Africa. An indicator of this might be the emergence of multi-agency consortia funded from regional and multilateral sources making effective use of new agricultural research capacities in tackling critical development issues.

If the two outcomes; (i) impact from projects, and; (ii) impacts from lessons and influencing; are achieved, AusAID could make a responsible exit from its support to the Partnerships. Of these two pathways to impact the second arising from influencing policies and practices of agencies beyond on the Partnership is probably the most uncertain in that it relies to a degree on opportunities emerging to exert influence and leveraging lessons in a complex arena of players, policies and politics. One way of addressing this with a view to a responsible exit is to build in a mid-term review into the third phase that would focus specifically on the effectiveness of influencing agenda and ways of strengthening this. By then, if the decision is for responsible termination, the MTR would be in a much better position to recommend specific actions and likely costs.

Annex 1

MID-TERM EVALUATION OF THE CSIRO AFRICA FOOD SECURITY PARTNERSHIPS WITH CORAF AND BECA: TORS

Background of the program

As part of AusAID's four year African Food Security Initiative (AFSI), Australia is funding a A\$12m CSIRO partnership with the Western and Central African Council for Research and Development (CORAF/WE CARD) and a A\$10m CSIRO partnership with Biosciences Eastern and Central Africa (BecA). The activity which runs from 2010 to 2013 aims to lift food security and agricultural productivity in Africa through joint research; working with and building the capacity of African agricultural organisations.

The CSIRO partnership program is aligned with the framework of the Africa Union's Comprehensive Africa Agriculture Development Programme (CAADP) and is accordingly is being delivered through regional organisations to further build African capability in agricultural development.

AusAID Africa branch is proposing to continue funding past the 2012-13 financial year and a senior management decision is being sought on this. This evaluation will form part of the decision making process.

AusAID is scaling up its food security support in Africa and several new programs/activities are being funded in 2011-12. The Africa Food Security program has been organised into two portfolios comprised of activities focused on a common set of objectives. The CSIRO partnership was the first and is one of the largest activities and sits under portfolio one. The Food Security Program is currently revising its program strategy.

The portfolio details are as follows:

Portfolio one: Building agricultural productivity through improved research and adoption. The activities in this portfolio directly address availability related food security challenges (and may indirectly address food access issues). The activities have a strong regional component and broad geographic spread.

Portfolio two: Building community resilience and sustainable livelihoods. The activities in this portfolio directly address access-related challenges to food security (and may indirectly address food availability issues). It will strengthen our bilateral engagement in small number of priority countries.

CORAF/WE CARD

CORAF/WE CARD is the primary agriculture research organisation in West and Central Africa. Australia's partnership with CORAF/WE CARD focuses on Farming Systems Research and Animal Health Research projects in the sub-humid-semi-arid region of West and Central Africa. Seven AusAID and CSIRO funded projects are underway in Senegal, Mali, Burkina Faso, Niger, Chad, Cameroon, Ghana, The Gambia and Benin. Each project includes West African National Agricultural institutional partners, sub-regional agribusiness partners as well as experienced researchers from CSIRO.

Partnership objectives

The CORAF/WE CARD partnership contributes directly to the implementation of the CORAF/WE CARD operational and strategic plans and to the achievement of CAADP Pillar IV in West and Central Africa, specifically, to:

- Add value to crop productivity through more efficient water and nutrient use and management

- Add value to livestock productivity through better feed and animal disease management
- Disseminate relevant agricultural knowledge at the farm and community level
- Build the capacity of institutional partners and community stakeholders
- Develop a research portfolio aimed at addressing market access and informing policy

BecA

The BecA-CSIRO Partnership is a program developed by the BecA Hub, AusAID and CSIRO, which has been framed within the CAADP policy framework for African agricultural development. The Partnership addresses CAADP issues by contributing to CAADP Pillar IV, with implementation of projects and other activities based on the guidelines provided under the Framework for African Agricultural Productivity [FAAP] developed by the Forum for Agricultural Research in Africa [FARA].

CAADP and FAAP provide the strategic basis for agricultural research, technology dissemination and adoption activities throughout African agricultural research

The BecA Hub has been created by AU-NEPAD under the Comprehensive African Agricultural Productivity Program [CAADP] to service the needs of countries in east and central Africa. CAADP's goal is to support agriculture-led development that eliminates hunger and reduces poverty and food insecurity, generating agricultural growth.

Partnership objectives

The BecA-CSIRO Partnership project and capacity building activities have been designed to contribute to a greater or lesser extent to CAADP strategic policies. Within this context, the overarching objective of the BecA-CSIRO Partnership is: **Appropriate resources for increasing agricultural productivity and food security developed and made available.**

Purpose of evaluation

AusAID is consolidating its food security program and increasing its focus on managing for results. The Africa food security team needs to both appraise progress of its activities, and map future directions for the program. The evaluation will be immediately useful to the following stakeholders:

- AusAID senior management
- AusAID and CSIRO desk officers
- CORAF and BecA program and project managers

AusAID senior management will use the findings of the evaluation to verify effectiveness of the CSIRO partnerships and make decisions about how to continue funding the CSIRO partnership activity.

AusAID and CSIRO desk officers will use the findings and recommendations of the evaluation to inform any changes that need to be made to the implementation of the current phase of the activity.

The evaluation will also be used to inform future directions. The design of the extension of the partnership activity will need to ensure necessary outcomes can be met and contain a monitoring and evaluation framework which can capture these outcomes and results. The robustness of the program logic also needs to be examined to ensure the next phase of the partnership is able to produce the stated end of program outcomes.

Objectives and evaluation questions

The mid-term evaluation will **report on progress** towards program implementation, make detailed **recommendations to improve the overall quality** of the CSIRO African partnerships, **develop options to guide the design of a second phase of AusAID support** to 2015-16 and suggest strategies for how the program might be scaled back or concluded post 2015-16.

The evaluation will be based on two field missions; one reviewing the CSIRO partnership with CORAF/WECARD and the second reviewing the CSIRO partnership with BecA. These will need to provide an assessment of how well the CSIRO partnerships have been carried out to date, based on evaluation of the performance and progress of the research projects, engagement in capacity building with African partners and constraints or issues encountered in implementation.

Drawing from the field visits for each of these missions an overall evaluation report will be completed which will address specific evaluation questions.

AusAID will provide evaluation questions, corresponding to these parts. The evaluation team will be given the opportunity to review and revise these questions as part of the evaluation plan preparation process. The questions for the two field missions will address the OECD/DAC criteria and look at effectiveness, impact, relevance, sustainability and efficiency of the partnership activity based on the design and its implementation. The overall evaluation will address whether the program logic in the design documentation is to result in higher level development outcomes. It will also provide recommendations on changes to the design of the partnership activity that can improve ability to reach the development outcomes. Further, it will develop options to guide the design and development of a second 3 + year phase of Australian Government funding for the partnerships, and consider possibilities for program consolidation at the close of this second phase of funding.

Three separate reports will be provided; one for each field mission and an evaluation report for the overall AusAID–CSIRO partnership.

Evaluation process

| Task | Time allowed and due dates | Details |
|--|--|---|
| Produce evaluation plan for the CSIRO-AusAID strategic review Produce evaluation plan for the CORAF partnership mid-term review | 4 days allocated | In consultation with AusAID officers: -review and revise evaluation question provided by AusAID review ToC of activity provided by AusAID -review design documentation -develop plan and share with AusAID officers (plan should include division of responsibility among the evaluation team) |
| Field visit to Senegal and Burkina Faso | 12 days in-country allocated, 2 days travel time. Dates: 22 June – 4 July 2012 | Inspect a selection of projects as determined in evaluation plan Meet with various partners Full itinerary will be prepared by AusAID in consultation with the team and CSIRO |
| Prepare Initial report on CSIRO - CORAF/WECARD partnership (for review and comment by AusAID). | 4 days allocated Due 3 August 2012. Comment from AusAID will be provided by 17 August 2012. | Maximum of 20 pages excluding appendices. |
| Produce evaluation plan for the BecA partnership mid-term review | 2 days allocated | In consultation with AusAID officers: -review and revise evaluation question provided by AusAID - review ToC of activity provided by AusAID -review design documentation -develop plan and share with AusAID officers (plan should include division of responsibility among the evaluation team) |
| Field visit to Kenya | 10 days in-country allocated, 2 days travel time. Dates: 10-20 September 2012 | Participate in BecA- CSIRO annual review process Visit laboratory facilities Conduct relevant field visits in Kenya |
| Prepare Initial report on CSIRO-BecA partnership (for review and comment by AusAID). | 4 days allocated Due 5 October 2012 Comment from AusAID will be provided by 19 October 2012. | Maximum of 20 pages excluding appendices |
| Prepare Initial Report on AusAID Food Security in Africa Strategic Review | 4 days allocated Due 19 October 2012 Comment from AusAID | Maximum of 20 pages excluding appendices |

| | | |
|---|--------------------------------------|---|
| Report for review and comment by AusAID). | will be provided by 2 November 2012. | |
| Final versions of: 1. CSIRO - CORAF/WE CARD partnership review 2. CSIRO-BecA partnership review 3. AusAID Food Security in Africa Strategic Review | Due 17 November. | Incorporating comments on initial versions from AusAID. |

Skills Required for the Evaluation Team:

- Relevant expertise and experience in international agricultural research and agricultural innovation;
- Knowledge of the institutional and strategic context of African agricultural research and development;
- Relevant expertise and experience monitoring and evaluation for agricultural research and development programs, including knowledge of, or ability to build an understanding of the specific requirements of AusAID;
- International organisational and institutional development and strengthening;
- Strong report writing skills

Documentation to be provided:

- Partnership design and contractual documentation
- Relevant AusAID strategic policy documents
- Peer review documentation
- Progress reports and partnership M&E plan
- AusAID Quality at Implementation Report
- Model of program logic for the partnership activities

Three sets of evaluation questions to inform evaluation plan

Evaluation questions for Africa Food Security mid-term evaluations

Definition of terms:

Project: individual research projects

Partnership activity: the CSIRO and BecA partnership or the CSIRO and CORAF partnership and encompasses the selection of projects

Program: the whole program encompassing the AusAID and CSIRO partnership and their partnerships with CORAF and BecA

Partnership activity level questions for both CORAF/BecA

Effectiveness

- *Are individual projects being designed with and shaped by clearly articulated pathways to impact (theories of change)?*
- *Are project and institutional capacity building outputs on track to be achieved and to what extent will they contribute to program outcomes?*
- *What changes need to be made to maximise chance of the 'end of program' outcomes being achieved?*

Relevance

- *Is the partnership activity aligned with relevant African government and institutional policies, priorities and strategic goals?*
- *Are the projects appropriately matched to the needs of farmers and other intended beneficiaries in the region?*

Sustainability

- *Is the partnership activity strengthening the institutional capacity of CORAF or BecA, in line with its strategic objectives, in a way that allows for the sustainability of the program?*

Efficiency

- *Has the implementation of the partnership activity made effective use of time and resources to achieve the outcomes?*
- *To what extent do Australia's contributions complement and harmonise with the contributions of other donors to CORAF & BecA?*

Overall Program level questions

Relevance

- *Is the program logic sufficiently clear and robust and does the monitoring and evaluation system provide a credible basis for reporting on progress and results?*
- *Does the program represent international best practice in agricultural research for development; if not, how could it be improved?*
- *Is the program aligned with relevant African government and institutional policies, priorities and strategic goals?*
- *Is the program aligned and complementary to similar donor initiatives to improve food security in Africa?*

Effectiveness

- *Are the program outcomes on track to be achieved and to what extent are those outcomes able to contribute to AusAID's higher level food security development objectives in Africa?*
- *What changes need to be made to maximise the chance of linking the activity outcomes to higher level outcomes?*
- *How do African partners view the Australian technical assistance provided to date, and how would they like to see Australia's engagement evolve?*

Impact

- *Are the partnership activities designed to ensure maximum potential impact at scale, in line with partnership objectives?*
- *What impact has there been on our partners in the program (ie. CORAF and BecA) as a result of AusAID funding and their engagement with CSIRO?*

Sustainability:

- *How can partners be supported to continue to develop effective ownership and implementation?*

Further questions:

Consult with CSIRO, AusAID and African partners to develop options for the focus and approach for the second phase of AusAID funding, including opportunities for expansion or contraction of existing projects, or the development of new projects.

In doing this, consider the best way of achieving maximum development impacts for the smallest investment.

Recommend an appropriate process and prepare draft Terms of Reference for the design of the second phase of the program.

Annex 2

DRAFT FOR DISCUSSION

DRAFT REVIEW PLAN FOR MID-TERM REVIEW OF THE CSIRO AFRICA FOOD SECURITY PARTNERSHIPS WITH CORAF AND BECA

Introduction

This review plan frames an assessment of how well the CSIRO Africa Food Security Partnerships with CORAF and BecA have been carried out to date. This assessment will be based on the performance and progress of the research projects, engagement in capacity building with African partners and constraints or issues encountered in implementation. This assessment will be used for making recommendations for program strengthening and future directions.

Purpose of Review

AusAID is consolidating its food security program and increasing its focus on managing for results. The Africa food security team needs to both appraise progress of its activities, and map future directions for the program.

AusAID senior management will use the findings of the review to verify effectiveness of the CSIRO partnerships and make decisions about how to continue funding the CSIRO partnership activity.

AusAID and CSIRO desk officers will use the findings and recommendations of the review to inform any changes that need to be made to the implementation of the current phase of the activity.

The review will also be used to inform future directions. The design of the extension of the partnership activity will need to ensure necessary outcomes can be met and contain a monitoring and evaluation framework which can capture these outcomes and results. The robustness of the program logic also needs to be examined to ensure the next phase of the partnership is able to produce the stated end of program outcomes.

Review Objectives

The review has the following objectives:

- **Report on progress** towards program implementation
- Make detailed **recommendations to improve the overall quality** of the CSIRO African partnerships
- **Develop options to guide the design of a second phase of AusAID support** to 2015-16
- Suggest strategies for how the program might be scaled back or concluded post 2015-16

Specifically the review will:

- Provide an assessment of how well the CSIRO partnerships have been carried out to date, based on a review of the performance and progress of the research projects engagement in capacity building with African partners and constraints or issues encountered in implementation.

- Address whether the program logic in the design documentation is likely to result in higher-level development outcomes.
- Provide recommendations on changes to the design of the partnership activity that can improve ability to reach the development outcomes.
- Develop options to guide the design and development of a second 3 + year phase of Australian Government funding for the partnerships, and consider possibilities for program consolidation at the close of this second phase of funding.
- Three separate reports will be provided; one for each field mission and an evaluation report for the overall AusAID–CSIRO partnership.

Review Users

AusAID is consolidating its food security program and increasing its focus on managing for results. The Africa food security team needs to both appraise progress of its activities, and map future directions for the program. The review will be immediately useful to the following stakeholders:

- AusAID senior management
- AusAID and CSIRO desk officers
- CORAF and BecA program and project managers

AusAID senior management will use the findings of the review to verify effectiveness of the CSIRO partnerships and make decisions about how to continue funding the CSIRO partnership activity.

AusAID and CSIRO desk officers will use the findings and recommendations of the review to inform any changes that need to be made to the implementation of the current phase of the activity.

Review Approach

The overall review question provided by AusAID can be stated as follows:

“How well have the CSIRO Africa Food Security Partnerships with CORAF and BecA been carried out to date based on their performance and implementation issues encountered”

The review frames its analysis of the overall performance of the partnership with the following definition of partnership:

A relationship between individuals or groups that is characterised by mutual cooperation and responsibility for the achievement of a specified goal.

Six key dimensions of partnership performance will be explored: program design and logic, alignment with regional strategies and other frameworks, partnership effectiveness, quality of science, impact pathways, and a cross-cutting issue of attention to gender and environmental concerns.

Design and Implementation Logic

The program design makes assumptions concerning the way support of research and capacity building activities leads to higher level development outcomes. Specifically there are assumptions concerning the adequacies of capacities and institutional arrangements in partner organisations and their strategic plans, as well as support provided by the program to convert investments in research into widescale impacts. The evaluation will explore whether these design assumptions and the associated theory of change of the program were realistic and it will assess whether over time the implementation of the program will be sufficient to achieve high-level development outcomes. An important dimension of this will be to revisit steps in the impact chain to understand the necessary conditions that need to be

put in place to achieve higher-level development outcomes. The evaluation will also explore the effectiveness of the M&E system in tracking progress and revisiting assumptions. The review will explore these issues both for the individual partnership programs as well for the overall partnership, where the overarching strategy is understood to be articulated by the Africa Food security Initiative of AusAID. (Steve Ashley with Ian Kershaw and others)

Partnership Effectiveness

Partnership is the central operational approach of the program and is premised on the assumption that a partnership between CSIRO and subregional organisations provides value added compared with other ways of supporting agricultural research for development. In order to understand the effectiveness of this partnership arrangement the review will explore (i) the quality of the partnership, including the degree of collaboration in planning and implementing activities and monitoring progress and the range of institutional issues that effect this (ii) The collaborative advantage of the partnership, including the range of methodological, technical and institutional innovations/ capacity building outcomes that have emerged as a direct result of the partnership (see also quality of science and capacity building theme) (iii) The scope of the partnership, including the role of partner organisations (research vs. administration vs. wider capacity development contributions) and the capacity of partners to play this and other roles that might support the overall effectiveness of the program. (Howard Elliot with Andy Hall and Ian Kershaw)

Alignment with Subregional and Regional Priorities and Strategies

The program frames its research and capacity building activities as a contribution to regional strategies (CAADP Pillar 4 in West Africa and FAAP in East Africa). The review will explore the extent to which the portfolio of projects under the partnership program and capacity building activities align with relevant subregional and regional strategies and ongoing processes to monitor progress in these strategies. Another dimension of this will be to explore wider landscape of donor-supported activities that are contributing to these strategies and the way the partnership program complements these or suggests where synergy could be better achieved. (Howard Elliot with Steve Ashley and Ian Kershaw)

Robustness of Research into Use and Impact Pathways

A key approach of the partnership program in West Africa is the development and use of IAR4D. IAR4D covers a flexible suite of principles and practices that include but are not restricted to: the development of innovation platforms, use of partnerships between research and development and private sector actors; links between research and policy, innovative financing mechanisms; results-based and learning-orientated management approaches. The approach often suffers from attempts to use the key tools as best practice rather than to take inspiration from these to guide a range of best fit arrangements that can help research lead to innovation and impact under different technological, market, social and policy conditions. The review will approach the robustness of research into use and impact pathways by first exploring the way projects have interpreted IAR4D (and allied approaches). It will then explore whether this interpretation of IAR4D is appropriate for the types of research into use tasks that are associated with the partnership program's portfolio of research projects and the results ambitions of these projects and the program as a whole. (Andy Hall with Steve Ashley and Howard Elliot)

Quality of Science and Capacity Building

The rationale for the collaborative advantage of partnerships with CSIRO is that it offers the potential to transfer high performing research methods and approaches from Australian researchers to African partners. Farming systems research and systems approaches more generally are highlighted as a particular strength. The review will explore this by looking for new research approaches that are a direct result of the CSIRO partnership. This will also be explored by judging the extent to which CSIRO scientists are actively involved in research

projects rather than in a research management role. (Andy Hall and Howard Elliot with advice from Tristan Armstrong)

Gender and Environment Mainstreaming

Aid best practice demands that all development programs tackle gender and environmental issues in a cross-cutting fashion. The review will explore this by investigating the extent that these issues have been addressed in the selection of projects, choice of research partners, staffing and other management protocols and the extent to which these issues are considered in M&E arrangements. (Ian Kershaw with others)

Review Questions

AusAID provided a set of review questions in the Terms of Reference for the review, including a series of key questions that address the OECD DAC evaluation criteria. These questions were discussed by the review team with AusAID and have been adjusted to take into account the 6 criteria of partnership performance discussed above.

Effectiveness

Partnership performance/ value added

- How well is the AusAID-CSIRO partnership working and what is its value addition over and above direct funding regional organisations or other international research partners?

Partnership scope

- In the future, what should be the balance of emphasis between support for CORAF and support for BecA?
- Is there adequate interaction between the BecA and CORAF partnerships?
- What is the niche that the partnership program occupies? Is this adequate in scope to achieve overall program objectives?

Program logic

- Is the original theory of change still relevant?
- Are current M&E arrangements adequate to address this?
- Are the assumptions about links between program outputs and expected outcomes realistic?
- What mid-course corrections are necessary in the current program and in future strategies?

Impact

Capacity development

- Quality of the biological science methods underpinning the program
- Extent and quality of IAR4D/ research into use arrangements
- Institutional change in partner organisations
- What impact has there been on partners in the program (i.e., CORAF and BecA) as a result of AusAID funding and their engagement with CSIRO?

Evidence of research uptake and use

- Is there any evidence of technology dissemination/ uptake?
- What are the necessary conditions for this to take place?

Evidence of higher-level development impacts

- Are the partnership activities designed to ensure maximum potential impact at scale, in line with partnership objectives?
- Are there any impacts on food security and agricultural productivity?
- When are these likely to emerge and under what conditions?

Relevance

Alignment

- Is the program aligned with national, sub-regional and regional agricultural research and development frameworks (CAAPD, FAAP, AU-NEPAD)?
- Is overall program-level M&E working adequately and well enough linked into AusAID's food security strategy for Africa?
- Is the program logic sufficiently clear and robust and does the monitoring and evaluation system provide a credible basis for reporting on progress and results?
- Does the program represent international best practice in agricultural research for development; if not, how could it be improved?
- Is the program aligned with relevant African government and institutional policies, priorities and strategic goals?
- Is the program aligned and complementary to similar donor initiatives to improve food security in Africa?

Sustainability

- Is the partnership activity strengthening the institutional capacity of CORAF or BecA, in line with its strategic objectives, in a way that allows for the sustainability of the program?
- What wider set of implementation issues and contextual issues affect sustainability?
- How does the wider landscape of donor and national and sub regional and regional support/ funding affect sustainability?

Efficiency

- Are the program outcomes on track to be achieved and to what extent are those outcomes able to contribute to AusAID's higher-level food security development objectives in Africa?
- What changes need to be made to maximise the chance of linking the activity outcomes to higher-level outcomes?
- How do African partners view the Australian technical assistance provided to date, and how would they like to see Australia's engagement evolve?
- Is CSIRO and the partnership program an effective vehicle to help build capacity for high impact research/ IAR4D?
- Are there rigidities that are preventing CSIRO taking on a role beyond farming systems/ scientific focus?
- Do they need additional support in exploring new methods, training staff, etc.?

Cross cutting

- How well are the partnerships dealing with gender equality issues and is adequate attention being given to environmental impact and climate change issues?

Review Approach

The review will use the questions outlined above to guide its analysis of program documentation and discussion with partners and stakeholders in impact pathways. In-country missions will use a combination of informal participatory workshops and one-to-one meetings to both develop an analysis of the performance of the CSIRO-Africa partnership and to share and develop and recommendations for ways forward.

The CSIRO-CORAF Partnership will be reviewed through an in country mission in June–July 2012 and reported in August 2012. The CSIRO-BecA Partnership will be reviewed through an in-country mission in September 2012. An overall review report will be prepared based on these two partnership reviews.

Annex 3

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