

PARTNER-LED DESIGN - INVESTMENT DESIGN SUMMARY

Investment Design Title: Research for One Health Systems Strengthening (ROHSS) – phase 2		
Start date: 1 September 2019	End date: 30 June 2022	
Total proposed DFAT funding: AUD 7,800,000.00		
Total proposed funding from all donor/s: AUD 10,200,000.00		
Current program fund annual allocation: RHS	AidWorks investment number: INM361/ 19A061	
Overall Risk Profile: low-risk; high value		
Concept approved by: Kate Wallace, Assistant Secretary, HPB, DPD		Concept endorsed by AGB: NA
Quality Assurance completed: Yes –ACIAR standard research commissioning process (as described in section J)		
Approval: Delegate at Post: N/A	Delegate in Canberra: Robin Davies	

A. Executive Summary

The Australian Government's Indo-Pacific Centre for Health Security (CHS) is delivering on the Government's commitment to health security under the \$300 million Health Security Initiative (the Initiative) announced by the then Foreign Minister, the Hon Julie Bishop MP, on 8 October 2017. A major component of the Initiative is a suite of planned investments to respond to the identified needs of countries. This was approved by Blair Exell on 25 January 2018 - then A/g Deputy Secretary - with \$100 million over 5 years.

ACIAR is a statutory authority under the Australian Government's foreign aid portfolio, with over 30 years' experience in developing and delivering research for development projects through a collaborative approach with partner governments throughout the Indo-Pacific region. ACIAR has an excellent understanding of partner government priorities through its country consultation processes, in conjunction with our regional and country offices in Australian embassies in 10 countries.

ACIAR and DFAT currently have a number of co-investment programs under an umbrella Record of Understanding (RoU) No. 14376 between these two organisations (Annex 1). ACIAR-DFAT co-investments promote our shared regional development priorities under ODA funding. A further investment in accordance with DFAT and ACIAR's common development priorities sends a positive message of commitment to our shared regional partners, and the Portfolio Ministers. This partnership will promote policy-oriented technical, social and economic research in regional issues at the human-animal-ecosystems interface (One Health), aligning with the findings of the Health Security Initiative scoping missions, which confirmed the need for an integrated One Health approach.

Whilst One Health has strong in-principle support from the World Health Organization (WHO) -Food and Agriculture Organization (FAO) – World Organisation for Animal Health (OIE) tripartite and major international donors, serious questions remain around its operationalisation, particularly in low and middle income countries faced with a range of health priorities. It is for this reason that applied One Health research for development - showcasing how best to develop One Health approaches within existing policy and governance frameworks in countries with many competing health and

development priorities – has the potential for Australia to positively influence regional health security and promote the work of the CHS and ACIAR.

This investment aims to:

- i. Support policy-oriented technical, social and economic research to strengthen the regional response to infectious disease threats at the human-animal-ecosystems interface.
- ii. Address gaps at the research-policy interface through the provision of targeted, evidence-based policy recommendations to strengthen linkages between human and animal health and laboratory systems in target countries.
- iii. Strengthen inter-ministerial and inter-governmental health communication and promote regional research leadership for global public goods pertaining to One Health approaches.

This approach builds on Australia’s Health for Development Strategy, 2015-2020, which emphasises the role of strong health systems, innovative research and regional collaboration and linkages in improving health security. This investment specifically addresses Sustainable Development Goal Target 3.d: to “strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks”. This includes zoonotic diseases with epidemic and pandemic potential such as highly pathogenic avian influenza and neglected tropical diseases such as rabies. ACIAR recently released a new 10-year strategy, with several high level strategic objectives – including Strategic Objective 3 human health and nutrition, which aligns with the objectives of the Health Security Initiative.

Minute FF/17938 gave written approval to commence design for the Research for One Health System Strengthening program under Activity Schedule 70 to the Record of Understanding No. 14376 between DFAT and ACIAR. The seed funding provided by DFAT, was AUD\$1.672 million GST exclusive. This was drawn from a proposed overall programme budget of AUD\$10.2 million GST exclusive: comprised of a DFAT contribution of AUD\$7.8m (inclusive of the seed funding), and an ACIAR contribution of AUD\$2.4 million.

The remaining DFAT contribution of \$6.128 million is now being requested for phase 2 of the program. This is to consist of 3 strategic project investments which have already passed ACIAR’s vigorous internal and external review processes including review by key DFAT staff members and in-country consultations. The three broad focus areas are:

- i) Antimicrobial resistance governance in the Pacific
- ii) Zoonotic malaria in Indonesia
- iii) One Health policy and economic analysis in the Mekong

B. Development Context (What problem are we addressing?)

The Australian Government’s Indo-Pacific Centre for Health Security (CHS) is delivering on the Government’s commitment to health security under the \$300 million Health Security Initiative (the Initiative) announced by the then Foreign Minister, the Hon Julie Bishop MP, on 8 October 2017. A major component of the Initiative is a suite of planned investments to respond to the identified Health Security needs of countries. This was approved by Blair Exell on 25 January 2018 - then A/g Deputy Secretary - with \$100 million over 5 years. The findings of the Health Security Initiative scoping missions, confirmed the need for an integrated One Health approach to Health Security.

ACIAR is a statutory authority under the Australian Government's foreign aid portfolio, with over 30 years' experience in developing and delivering research for development projects through a collaborative approach with partner governments throughout the Indo-Pacific region. ACIAR has an excellent understanding of partner government priorities through its country consultation processes, in conjunction with our regional and country offices in Australian embassies in 10 countries.

ACIAR and DFAT currently have a number of co-investment programs under an Umbrella Record of Understanding (RoU) between these two organisations. ACIAR-DFAT co-investments promote our shared regional development priorities under ODA funding. A further investment in accordance with DFAT and ACIAR's common development priorities sends a positive message of commitment to our shared regional partners, and the Portfolio Ministers. This partnership will promote policy-oriented technical, social and economic research in regional issues at the human-animal-ecosystems interface (One Health).

Zoonotic diseases account for more than 60% of all human infectious disease, and more than 75% of all emerging infectious disease worldwide have an origin in animals (Taylor et al 2001); the latter in particular is of particular focus in global health security narratives. One Health uses a transdisciplinary approach to address issues at the human-animal-ecosystems interface; the promotion of a One Health approach in low and middle income countries can have a profound impact not only on human health, but the livelihoods of people impacted by these diseases as a result of improved livestock productivity and trade opportunities (WHO 2015).

Whilst One Health has strong in-principle support from the World Health Organization (WHO) -Food and Agriculture Organization (FAO) – World Organisation for Animal Health (OIE) tripartite and major international donors, serious questions remain around its operationalisation, particularly in low and middle income countries faced with a range of health priorities. It is for this reason that applied One Health research for development - showcasing how best to develop One Health approaches within existing policy and governance frameworks in countries with many competing health and development priorities – has the potential for Australia to positively influence regional health security and promote the work of the CHS and ACIAR.

As part of the Centre for Health Security's Applied Research Program, this investment in Research for One Health Systems Strengthening (ROHSS) aims to:

- i. Support policy-oriented technical, social and economic research to strengthen the regional response to infectious disease threats at the human-animal-ecosystems interface.
- ii. Address gaps at the research-policy interface through the provision of targeted, evidence-based policy recommendations to strengthen linkages between human and animal health and laboratory systems in target countries.
- iii. Strengthen inter-ministerial and inter-governmental health communication and promote regional research leadership for global public goods pertaining to One Health approaches.

Phase 2 of the Research on One Health for Stronger Systems will consist of 3 key investments outlined below with additional support to high level policy discussions within the region. Together, the 3 key investments cover the Tripartite-supported One Health priority areas (https://www.who.int/zoonoses/tripartite_oct2017.pdf) of collaboration, antimicrobial resistance (AMR), and zoonotic infection.

1. Enhancing the Management of Antimicrobial Resistance (EMAR) in Fiji lead by CSIRO with the Fiji Ministry of Health and Medical Services

This project will increase the knowledge of both AMR and antimicrobial use in Fiji through a more harmonised interpretation of AMR data across human, animal and environmental sectors. It is expected that increased national skills on AMR analysis, diagnostics, biomarkers and laboratory safety will enhance the understanding of the spread and impact of AMR in people and animals in Fiji, increasing awareness – and resulting in improved policies - around AMR and antimicrobial stewardship (AMS) at the local, national and regional levels. Part of the AMS work will involve development of prescription guidelines using Australia as a case study. At the community level, increased knowledge on the role of men and women in household disease management and medication of both their families and animals, and improved knowledge on AMR governance at the community level, is expected to result in better targeted action around the prescription and use of antimicrobials that considers the local population’s needs and realities around therapeutic use, both for themselves and their livestock.

2. Establishing a network for surveillance of emerging zoonotic malaria in Indonesia lead by Menzies in Australia and the Eijkman Institute in Indonesia.

This project will facilitate sustainable agricultural development by addressing the direct association between agricultural activities and zoonotic malaria transmission in Indonesia, with the aim of informing intersectoral interventions. This will be achieved by evaluating the burden of zoonotic malaria together with the environmental risk and land use factors associated with infection. These activities will be coupled with a focus on strengthening the ability of the national public health system to detect zoonotic malaria infections and to inform best-practice malaria control that will in turn facilitate growth of the agricultural sector through reduced burden of disease.

3. Veterinary economics in Mekong countries: advancing One Health lead by the Nossal Institute for Global Health with the Cambodian Ministry of Agriculture and Cambodia National Institute for Public Health.

This research project will seek to understand how veterinary service markets might be better managed and governed by agents of government interested in human health with agents interested in agriculture and animal health, and will pay particular attention to the balance between incentive management and command and control approaches and to the building of capacities in these approaches.

Minute FF/17938 gave written approval to commence design for the ROHSS program under Activity Schedule 70 to the Record of Understanding No. 14376 between DFAT and ACIAR. The seed funding provided by DFAT, was AUD\$1.672 million GST exclusive for a period of 1 year. This was drawn from a proposed overall programme budget of AUD\$10.2 million GST exclusive: comprised of a DFAT contribution of AUD\$7.8m (inclusive of the seed funding), and an ACIAR contribution of AUD\$2.4 million.

The remaining DFAT contribution of \$6.128 million is now being requested for Phase 2 to be distributed over three years (19-20, 20-21 and 21-22FY inclusive). The total \$10.2 million represents 3% of the Initiative’s overall investment, 8% of investment set up in response to the identified needs of countries (the Centre for Health Security’s envelope for bilateral investments in-country being approximately AUD 100 million), and 44% of the Centre’s Applied Research investment. As noted, this includes an AUD \$2.4 million investment from ACIAR Livestock Systems research program for phase 2 to be distributed over the same three-year period to 30 June 2022. There is in addition, approximately AUD \$3 million in-kind contribution being leveraged from the Australian and in-country partners involved in each of the three research projects. This brings the true value of the proposed research under this portfolio to approximately AUD \$13.2 million with DFAT funding accounting for 60% of this.

C. Strategic Intent and Rationale (Why?)

This approach builds on Australia's Health for Development Strategy, 2015-2020, which emphasises the role of strong health systems, innovative research and regional collaboration and linkages in improving health security. This investment specifically addresses Sustainable Development Goal Target 3.d: to "strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks". This includes zoonotic diseases with epidemic and pandemic potential such as highly pathogenic avian influenza and neglected tropical diseases such as rabies.

Further, Australia's 2017 Foreign Policy White paper identified the building of regional resilience to health security challenges as a key priority, leading to the establishment of the Indo-Pacific Centre for Health Security (IPCHS) within the Department of Foreign Affairs and Trade. The goals of the Australian Department of Foreign Affairs and Trade (DFAT) Indo-Pacific Centre for Health Security (IPCHS) is to prevent and respond to "infectious disease threats with the potential to cause social and economic harms on a national, regional or global scale" including through innovations in health security policy and practice. Investment in Research and Development (R&D) is an important part of the Centre's strategy, and the proposed research program fits well within this framework, drawing on Australian expertise in human health systems, animal health and One Health.

The Australian Centre for International Agricultural Research (ACIAR) is the choice of partner for this ROHSS investment. ACIAR's 10-year strategy 2018-2027 has six high level strategic objectives, of which Objective 3 focuses on human health and nutrition, strongly aligning with the objectives of the Health Security Initiative. ACIAR is part of the Australian Government's Official Development Assistance Program and works to improve the productivity and profitability of agricultural systems in the Asia-Pacific region through agricultural research partnerships. It has a long-standing history as a respected and trusted partner of national government agencies and institutions in Asia-Pacific. ACIAR understands the knowledge base and challenges facing policy makers in this region and is recognised regionally for its knowledge of local contexts and circumstances. The strong focus on partnerships by both CHS and ACIAR, and the shared official development assistance funding, provides a solid foundation for shared regional work in this space.

In this context, this co-funded ROHSS program provides a strategic and catalytic opportunity for DFAT, in partnership with ACIAR, to develop an integrated, gender-inclusive and highly collaborative research approach to One Health challenges in the region. The program will focus mainly on three target countries (Fiji, Indonesia and Cambodia), but consider the broader regional issues, drivers and constraints that influence policy development and holistic approaches to health systems strengthening in the region. As per ACIAR's high-level strategic objectives, gender and other cross-cutting issues have been considered in the design, delivery and assessment of each research proposal (see Annex 10). ACIAR can add value to DFAT's ongoing health security investments in the region by assisting Australia's in-country partners to bring together the 'big picture' systemic linkages between health and sustainable food and agricultural systems, promoting regional engagement and building on the trusted partnerships created by ACIAR over the last 30 years.

a) Rationale for Australian aid investment into AMR in Fiji:

Drug-resistant organisms are not restricted by state or national boundaries; therefore, it is essential that control of AMR occurs at a global or regional level via a partnership approach. Through building on existing partnerships between Australia and Fiji, this project will develop a proof of concept that can be scaled out and up in the Pacific region to promote; i) stronger relationship between Australia,

Fijian and Pacific institutes, ii) sharing of resources between Australia and the Pacific region, iii) sustainable development as currently promoted through Australia's Pacific Step Up initiative and the Pacific Island Forum 2018 mandate¹. This project aligns with – and is supported by – the Government of Fiji, who have already taken several positive steps towards AMR control and management in the country.

The Indo-Pacific Centre for Health Security recently conducted a high-level scoping mission to the Pacific, identifying the following as key priority areas for the Pacific region: i) laboratory strengthening, ii) disease monitoring, iii) workforce development, iv) community level prevention, v) multisectoral coordination including One Health, and vi) access to medicine. This project is directly aligned to the first five thematic areas.

b) Rationale for Australian aid investment in zoonotic malaria control in Indonesia

Globally the progress towards malaria elimination, including in Southeast Asia, is at a crossroads. Although substantial progress has been made towards elimination of human transmission of *P. falciparum* and *P. vivax* in many countries, improvement has halted elsewhere. The underlying reasons are multifaceted and include a plateauing of donor funding, as well as two major technical risk factors: *P. falciparum* artemisinin drug resistance detected throughout the Greater Mekong Sub-region, and resistance of mosquito vectors to the commonly used insecticides, in part associated with agricultural insecticide use. In addition, the zoonotic malaria species in both Southeast Asia and South America are also likely to prove far less tractable to public health control efforts, due to difficulties in addressing the parasite reservoir in the natural monkey hosts, and balancing the need for sustainable agricultural development and efforts to control increasing disease transmission. The result is that the reported distribution and incidence of zoonotic malaria in humans has continued to increase in Southeast Asia over the last decade and is now the highest cause of malarial deaths in endemic areas of Indonesia and Malaysia.

The surveillance of zoonotic vector-borne diseases in the Indo-Pacific region has been identified as a priority research focal area by the WHO Integrated People Centred Health Services (IPCHS), with direct impact on ACIAR and DFAT targeted outputs related to improving population health in rural agricultural communities. This project will strengthen surveillance systems and directly contribute to the overall IPCHS goal of avoiding and containing infectious disease threats in the Indo-Pacific by addressing a major knowledge gap regarding the distribution of zoonotic malaria species, particularly *P. knowlesi*, in Indonesia. This project also aligns with the ACIAR 10-year (2018-27) strategy objective of building scientific and policy capability within partner countries, including building on the existing bilateral country partner relationship between ACIAR and Indonesia, and more broadly between the Australia-Indonesia Health Security Partnership through DFAT.

Finally, research outputs on the burden of *P. knowlesi* malaria will inform Indonesia's national malaria surveillance and risk mitigation strategies. Given Indonesia's proximity to Australia and the public goods nature of vector-borne disease, a strengthened National malarial control program will have benefits to both countries and strengthen joint approaches that will be relevant to other vector borne illnesses.

c) Rationale for Australian aid investment into One Health economics and policy processes in the Mekong

¹ The Pacific Islands Forum is the region's premier political and economic policy organisation. Founded in 1971, it comprises 18 members: Australia, Cook Islands, Federated States of Micronesia, Fiji, French Polynesia, Kiribati, Nauru, New Caledonia, New Zealand, Niue, Palau, Papua New Guinea, Republic of Marshall Islands, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu. The Forum's Pacific Vision is for a region of peace, harmony, security, social inclusion and prosperity, so that all Pacific people can lead free, healthy, and productive lives.

One Health requires integrated thinking about responses to human and animal health, and also the environmental factors that are influential over both. The need for a One Health approach is well illustrated by the issues faced in the Mekong region where economic growth rates are among the fastest in the world, climate and other environmental disruptions are marked, and human and animal geographies are shifting. Recent zoonotic disease outbreaks such as Severe Acute Respiratory Syndrome (SARS) and Highly Pathogenic Avian Influenza (HPAI) demonstrate the potential threats to health security that can emerge from this mix of forces. The current crisis of African Swine Fever in the Mekong region illustrates the threats to animal health and food security that follow from these societal shifts, with further integration of the region under the Association of Southeast Asian Nations (ASEAN) underlining the need to strengthen the human and animal health systems that should protect against these threats.

International agencies with a key stake in human and animal health, such as the OIE and WHO are clear about the measures countries need to strengthen protection against such disease outbreaks. More recently, the two organisations have jointly issued the 'Handbook for the assessment of capacities at the human-animal interface' (henceforth 'The Handbook') which explains the synergies and complementarities between the JEE and the PVS Pathway, with specific information on how to combine the data from these assessments. However, a robust analysis of the value addition of combining these capacities under the National Bridging Workshops has not yet been undertaken, with none of the joint assessments appearing to support countries in working out how to build the relevant capacities and ensure implementation of both JEE and PVS regulations. The countries of the Mekong region in which this project will focus – Cambodia, Laos and Vietnam – share a common geographic environment and expanding integration within ASEAN. This brings common challenges both in the control of infectious (including zoonotic) diseases and (more particularly) in the delivery of animal health services, as demonstrated by the current ASF outbreak. The 2017 ASEAN Leaders' Declaration refers to the need to ensure "comprehensive multi-sectoral responsibility and governance", including by strengthening regulatory mechanisms in both human and veterinary medicine.

Building One Health capacity to strengthen health security is an important part of Australian assistance in the region, backed up by a long record in strengthening human health systems that now provides the research and policy expertise needed in the parallel animal health sector.

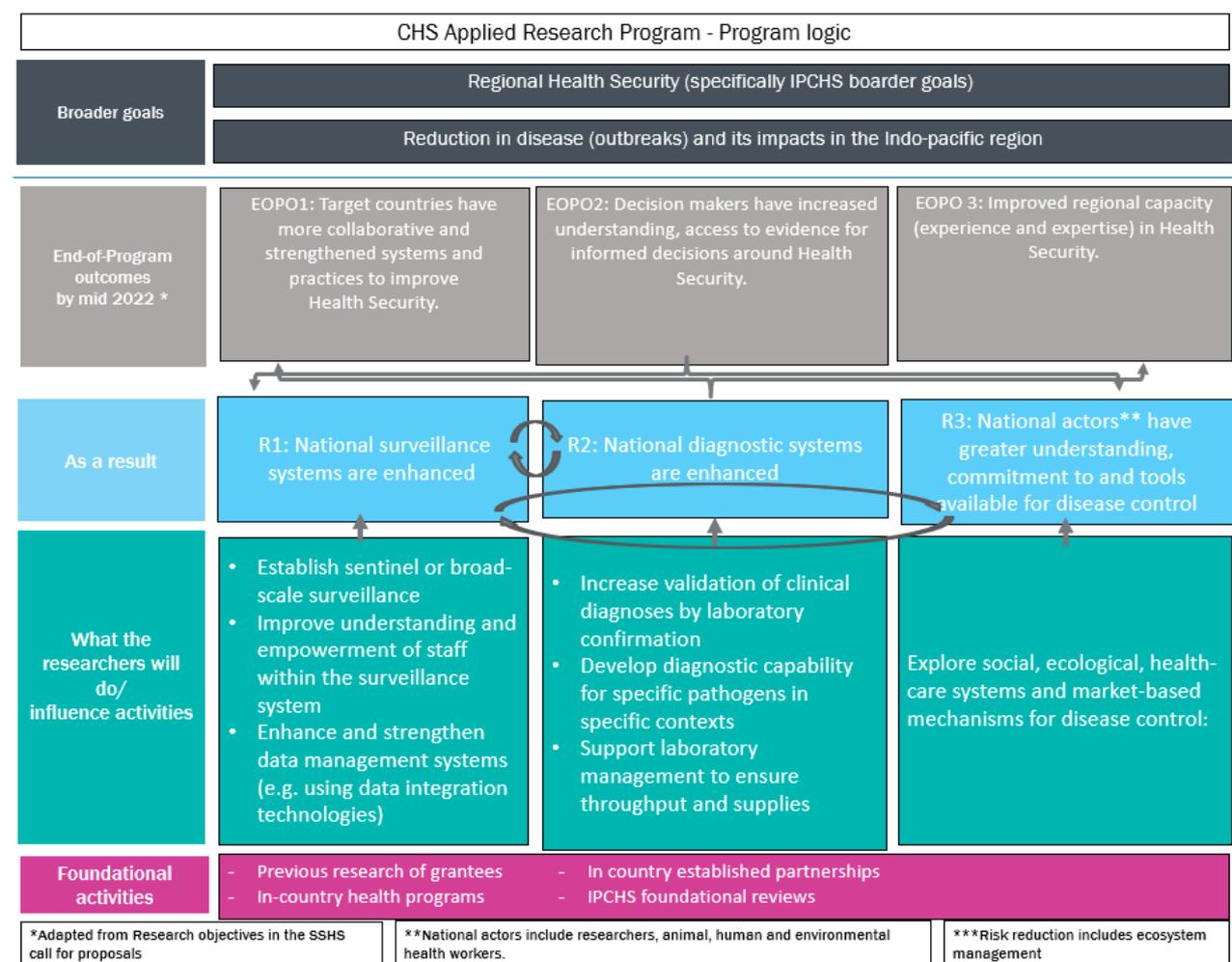
D. Proposed Outcomes and Investment Options (What?)

There are three high level objectives for the ACIAR-DFAT Research for One Health Systems Strengthening (ROHSS) programme.

1. Support policy-oriented social, economic and technical research to strengthen the regional response to infectious disease threats at the human-animal-ecosystems interface.
2. Promote the research-policy interface through the provision of costed policy options for prevention and response of human and animal infectious diseases of health security importance.
3. Strengthen inter-ministerial and inter-governmental communication and promote regional research leadership for regional public goods pertaining to health security.

These have been incorporated into the program logic for the Centre's Applied Research Program which consists of the ROHSS and Stronger Systems for Health Security (SSHS) research grants (figure 1).

Figure 1: Centre for Health Security's Applied Research Program Logic



To contribute to improved regional health security and a reduction in disease outbreaks and the socio and economic impact of these in the Indo- Pacific region, the applied research program inclusive of the ROHSS projects aims to achieve the following outcomes:

1. More collaborative and strengthened systems and practices to improve Health Security in target countries. The One Health projects particularly will promote improved collaboration between animal health, human health and environmental agencies.
2. Decision makers will have increased understanding and access to evidence for informed decisions around Health Security.
3. Improved regional capacity (in terms of experience and expertise) in health security – particularly in relation to the application of One Health methodologies.

Based on research expertise and established in-country and Australian partnerships, the 3 ROHSS projects as outlined (section C) will utilise 3 inter-related pathways to achieve these outcomes, focusing on strengthening surveillance and laboratory systems (including staff) and exploring the social, ecological, health-care systems and market-based mechanisms that impact human and animal health and the suitability of disease control mechanisms. This will result in stronger systems, better availability of information for decision making and better tools for disease control and prevention.

As One Health projects, there will be a particular focus of making these improvements with a focus on the animal, human (including eco-social aspects) and ecological systems at play.

E. Implementation Arrangements (How will DFAT engage in the partnership?)

ACIAR is a trusted aid partner of DFAT under Australia's foreign aid portfolio, implementing a range of co-investments under the umbrella ROU No. 14376 (Annex 1). Under this ROU, ACIAR co-funds and manages the research effort to build a solid knowledge base for subsequent scale-out and development. Total DFAT investment in this partnership over the last five years exceeds \$100m. DFAT also co-invests in ACIAR's capacity building program through the Australia Awards. Co-investment partnerships signify strong trust between institutions. This pathway enables DFAT and ACIAR to leverage resources, access complementary expertise, as well as engage in larger and more ambitious research programs.

F. Monitoring and Evaluation (How will DFAT measure performance?)

The monitoring, evaluation and learning approach will follow ACIAR's standard monitoring processes, and additionally engage with the contracted agencies project Monitoring and Evaluation (M&E) processes to feed information into program level reporting. A program logic has already been designed for these projects (figure 1).

ACIAR standard M&E processes include:

- Peer review and external review of all projects before proposals are finalised.
- Half yearly progress reports by the project implementation teams.
- A mid-term review to evaluate progress and make necessary modifications to the directions if required.
- A final review by external reviewers before the end of the project.
- Trip reports by all Australian partner institutions during monitoring visits.

Given all three projects in this program are over \$1 million AUD, they will all undergo both a Mid Term review (MTR) and an external Final review as part of ACIAR's standard M&E processes. The purpose of these reviews is to support the RPM and project team in achieving a successful project; they should identify and acknowledge project successes and provide constructive feedback on areas where the team must improve on deliverables or consider impact pathways.

Mid-term reviews can be called any time during the course of a project, however usually occur within the first 12-36 months of start-up depending on project length. The timing and process of MTRs are at the Research Program Manager (RPM)'s discretion; whilst external reviewers are not compulsory for MTRs, the RPM may choose to appoint someone to assist them undertake the MTR, especially in the case that specific expertise or advice is required.

In contrast, an end of project review always has two external reviewers; one Australian/international expert and one national. Decisions on choice of reviewer is made jointly by consultation between the RPM and relevant Country Manager, ensuring they can provide the relevant expertise required and there are no conflicts of interest with either the project team or subject matter. Unlike the MTR where the ACIAR RPM and Country Managers are an active member of the review team, final project reviews are an independent process.

Final reviews are conducted to assess the project against its original objectives and should be conducted 8-12 months before the termination of the project. This timing provides for information from the review to inform priority areas for completion and guidance for the project team in preparing the final report.

It is recommended that 3-5 days be allowed for the review and that the dates and venue are set 3-12 months beforehand to ensure that all relevant stakeholders can participate. It is generally efficient to organise the review around an annual meeting or similar.

Review teams have two weeks to submit a report to the ACIAR RPM outlining observations and recommendations. Once approved by the RPM, the review report is circulated to the project team and discussed with the Project Leader. A modified version of the review report is sometimes required to remove or reword references to sensitive issues. All end of project reviews then undergo a final “review of review”; and internal ACIAR process that discusses the recommendations and notes any considerations for future advocacy, action or follow-on projects that should take up these recommendations.

G. Gender, Disability and Other Cross Cutting Issues

As part of Australia’s foreign aid program, ACIAR aligns with and upholds the standard expectations around use of Australian ODA money. Progress and achievements towards these cross-cutting issues are reported on as part of the broader organisational M&E framework including the Annual Operational Plans (AOP) and Corporate Plans. ACIAR’s Gender Equity Policy and Strategy 2017-2022 (<https://www.aciar.gov.au/publication/Gender-Equity-Policy-and-Strategy>) outlines how the organisation promotes gender equity in order to pursue its strategic objectives around food security, poverty reduction, human health and climate change. Furthermore, ACIAR project proposals have a specific gender section which outlines how each individual project will contribute to – and align with – ACIAR’s broader gender policy (see Section 2.4 in each project proposal under Annex 11). ACIAR Gender Guidelines for Project Proposals are available at <https://www.aciar.gov.au/Gender-Guidelines>.

Climate change, private sector engagement, innovation and social inclusion are all ACIAR high level Strategic Objectives, as outlined in ACIAR’s 10-year strategy 2018-2027 (<https://www.aciar.gov.au/publication/Ten-Year-Strategy>). Like gender, individual projects must describe how they are addressing climate, social inclusion and innovation under specific sections addressing impact pathways and risk in the ACIAR proposal (see individual project documents Annex 11). Being a small organisation, ACIAR does not have its own policies on disability inclusion, however the agency’s focus on smallholder farmers automatically considers society’s most vulnerable people in Low and Middle Income Country settings, which includes those with disability.

H. Budget and Resourcing (What will it cost?)

Minute FF/17938 gave written approval to commence design for the Research for One Health System Strengthening program under Activity Schedule 70 to the Record of Understanding No. 14376 between DFAT and ACIAR. The seed funding provided by DFAT, was AUD\$1.672 million GST exclusive. This was drawn from a proposed overall programme budget of AUD\$10.2 million GST exclusive: comprised of a DFAT contribution of AUD\$7.8m (inclusive of the seed funding), and an ACIAR contribution of AUD\$2.4 million. The remaining DFAT contribution of \$6.128 million is now being requested (as per the attached budget and corresponding Phase 2 Activity Schedule Annex 4).

The DFAT resourcing required to manage this program is 0.6FTE to be based at ACIAR. This contract position is already in place with the remaining 0.4FTE utilised by Health Security Initiative for program management of the Stronger Systems for Health Security under the same Applied Research Program and to advise on One Health strategies within the Initiatives wider portfolio of activities. ACIAR Canberra-based and in-country staff will also provide ongoing support and assistance to the management of this ROHSS portfolio, with the overall responsibility for delivery lying with the relevant ACIAR research program (in this case Livestock Systems) as outlined in RoU 14376.

I. Risk Management and Safeguards (What might go wrong?)

1. Please refer to the completed Risk and Safeguards Tool from Activity Schedule 70 and Draft Phase 2 Activity Schedule (Annex 3 and 4).

Risk Management and Safeguard processes for DFAT-supported programs are addressed under the ACIAR-DFAT Umbrella Record of Understanding No. 14376 and further referred to under Paragraph 6 of the Activity Schedule. Specifically, Clause 6.3 outlines the agreement made between ACIAR and DFAT that *“As part of its project design and evaluation/assessment process, ACIAR will identify risk inherent to the Activity and will in conjunction with the Project Partner monitor and re-assess risk throughout the project life.”*

J. Quality assurance²

Design Process

This has been a partner-led design, initially led by Anna Okello, previously the Associate Research Program Manager (RPM) for One Health at ACIAR, and now Livestock Systems RPM who was seconded to CHS at DFAT during 2018. Francette Dusan, the new Associate Research Program Manager for One Health at ACIAR (seconded from the CHS) has directed the second phase of the design under the standard agreement outlined in the ACIAR-DFAT co-investment RoU, with input from the country program team at CHS, including comments on the design by Dr Nick Harris, a veterinarian on secondment to CHS from the Department of Agriculture and Water Resources and Head of Centre Robin Davies.

The development of the design was informed by a series of 5-6 ‘Small Research Activities’(SRAs), supported by seed funding from DFAT as phase 1 (see Annex 2 - Minute to Commence Design and Annex 3 Activity Schedule). The SRAs informed the overall longer-term program direction by facilitating dialogue, and promoting partnerships, between Australian public and animal health institutes and their international research partners. This seed funding supported Australian and regional research partners to identify key research questions around a series of known regional One Health priorities, ensuring all partners had a stake in the design process. Joint human-animal health systems strengthening was promoted through a series of inter-linked research themes addressing the following regional One Health priorities: i) antimicrobial stewardship in the Pacific, ii) Zoonotic vector-borne disease control in Australia’s near-neighbours (Papua New Guinea, Timor-Leste and Indonesia, iii) Community-level health literacy and risk perception in the Greater Mekong sub-region iv) Policy process analysis for inter-sectoral collaboration between health and agricultural sectors in Lao and Cambodia and v) Assessing the potential contribution of zoonotic tuberculosis (*Mycobacterium bovis*) to the human tuberculosis burden in the Pacific. Further information regarding each SRA can be found in Annex 9 (SRA proposal documents).

Four of the SRAs developed full proposals based on the dialogues conducted, partnerships explored, and research questions identified during the SRAs. These full proposals were peer reviewed by ACIAR, external reviewers Kevin Bardosh and Jeff Gilbert and subject to additional selection considerations (detailed below), resulting in the 3 proposals upon which the program direction and phase 2 design is now based.

ACIAR Quality Assurance process

Being a Commissioning Organisation, ACIAR has a long-standing and robust quality assurance process to assess and approve research proposals, led by the Chief Executive Officer and the Chief

² Program managers should refer to the [Investment Design Quality Assurance and Scoring Guidance](#) for advice on quality assurance options to help ensure the investment will meet [Investment Design Quality Criteria](#).

Scientist. This review process is accepted by DFAT under the Umbrella Record of Understanding No. 14376 between the two agencies. The following are the key steps in the ACIAR Quality Assurance process:

1. Initial discussion around project concept, partners and design, and if deemed suitable, Project Leader invited to submit a proposal to ACIAR
2. RPMs to liaise with the PL and team during the development of the project proposal and provide PL with feedback in preparation for the selected in-house review (IHR) date.
3. Standard systemic processes followed to ensure proposals have been assessed by RPM as meeting standard investment guidelines for submission of proposals for review (RPM Assessment, Strategic Priority Checklist, ACIAR Performance Criteria, likelihood and consequence assessment for the Environment Protection and Biodiversity Conservation Act 1999 (where necessary) and Risk Assessment). RPM to refer to the Preliminary due diligence and risk matrix for private partnerships when completing the Risk Assessment.
4. ACIAR Country Managers also provide an assessment of the quality and strategic implications of the proposal, after a project approval request is sent to the CEO via ACIAR project management system.
5. Proposal and associated documents presented to In-House Review (IHR); an internal committee Chaired by the ACIAR CEO that meets each month to consider preliminary project proposals submitted to ACIAR for funding. IHR is a critical part of the ACIAR quality assurance process and attendance and participation is mandatory by all ACIAR research managers.
6. Three possible outcomes of IHR: reject, re-submit or accepted to proceed. If proposal accepted, the CEO nominates a small group consisting of 3-4 'deep readers' responsible for critiquing the full proposal once it's developed. If proposal deemed a re-submit, the relevant RPM must bring it back to IHR when reviewers' comments and suggestions for improvement are actioned. If rejected, there is no further opportunity to continue with proposal development.
7. Once approved at IHR, Phase II proposal is developed and submitted to an external desktop review, after which the project team must respond before proposal can be taken to Small Group RPMs nominated by CEO at IHR.
8. Small group has 7 days to critically examine the proposal and associated documentation (budget, country manager reports, project teams' responses to IHR and 2x external reviews etc.) which are made available seven days prior to small group review.
9. Small Group Chaired by Chief Scientist. Same process as IHR but with a 'deep read' by the nominated RPMs. Two potential outcomes – re-submit or proceed. RPM takes small group comments back to project team, who need to address them to the satisfaction of the RPM (if small group decision is to proceed) or another sitting of the Small Group (if the decision was to re-submit).
10. Once RPM is satisfied that the project team has sufficiently addressed the review feedback, project can proceed to contracting.

K. Annexes

1. ACIAR-DFAT Record of Understanding No. 14376
2. Minute to Commence Design document FF/17938
3. Activity Schedule 70 (Phase 1) — includes [Risk and Safeguard Screening Tool](#)
4. Draft Activity Schedule ## (Phase 2) – includes [Risk and Safeguard Screening Tool](#)
5. Policy Dialogue Matrix
6. 'Minimum Sufficient' M&E Framework
7. Budget and Resourcing Requirements (including costing methodology);
8. Safeguard management plans: ACIAR process for the EPB Act and other internal ACIAR Risk Assessments undertaken by RPMs as part of the In-House-Review process
9. Short Research Agreements (Activities under Phase 1):

- a. LS/2018/212: Supporting Fijian health and agricultural authorities implement the National Antimicrobial Resistance (AMR) Action Plan.
- b. LS/2018/213: A one health approach to establish surveillance strategies for Japanese encephalitis and zoonotic arboviruses in Papua New Guinea (ZAPPA).
- c. LS/2018/214: Establishing a network for surveillance of emerging zoonotic malaria in Indonesia (ZOOMAL).
- d. LS/2018/215: Developing and testing processes and tools to generate connected and live health security knowledge in Mekong Communities (Health Lit).
- e. LS/2018/216: Incentives for early declaration and effective prevention of avian influenza in the Mekong (Policy AI).
- f. LS/2018/217: Drug sensitive and resistant tuberculosis and zoonotic infections as causes of lymphadenitis in 2 provinces in Papua New Guinea (ZOOTB).

10. Detailed Proposals from the Lead Partner(s):

- a. Enhancing the Management of Antimicrobial Resistance (EMAR) in Fiji lead by CSIRO with the Fiji Ministry of Health and Medical Services
- b. Establishing a network for surveillance of emerging zoonotic malaria in Indonesia lead by Menzies in Australia and the Eijkman Institute in Indonesia.
- c. Veterinary economics in Mekong countries: advancing One Health lead by the Nossal Institute for Global Health with the Cambodian Ministry of Agriculture and Cambodia National Institute for Public Health.

These proposals include:

- a. Sector/Problem and other relevant analyses (social, economic, environment, gender equality, poverty, disability, institutional capacity, political economy, private sector development etc.); - See Section 2: Background and Justification
- b. Program Logic model (if not included in main document); - See Section 5: Impact Pathway
- c. Implementation Plan (description of early indicative interventions/ activities, if appropriate); - See Section 4.2: Activity Table
- d. Implementation & Governance Arrangements – Organisation chart and other details as appropriate including roles/responsibilities of stakeholders; - See Section 6