



Australian expertise supports innovation policy change in Viet Nam

CSIRO Impact Story | Kate Langford and Samantha Stone-Jovicich | 2025

The Challenge

Viet Nam has one of the world's fastest growing economies and has set itself a goal of becoming a developed, industrialised nation with a high-income by 2045¹. Enhancing the capacity and effectiveness of Viet Nam's innovation system is key to achieving this goal.

The development of Viet Nam's science and technology market (i.e. the country's commercialisation environment and a key component of its innovation system) is the responsibility of the National Agency for Technology Entrepreneurship and Commercialisation (NATEC) under Viet Nam's Ministry of Science and Technology (MoST).

NATEC sought support, through the Aus4Innovation program, on how to strengthen the translation of Viet Nam's research results into practical solutions aligned with the country's socio-economic needs and within Viet Nam's legal, business and cultural context. NATEC wanted to understand what policies, incentives, support, training, and collaboration were needed for Viet Nam's innovation system to better enable the country's development ambitions. The agriculture sector was a key focus for NATEC due to its substantial growth potential. Despite being one of the world's 15 largest exporters of agricultural produce and ranking second in Southeast Asia, Viet Nam's agricultural exports are mainly confined to raw commodities.

Feedback on past investments by donors and international research organisations to support Viet Nam's science and technology market is that they focused on transferring models from their respective countries to Viet Nam for adoption. For example, commercialisation training programs based on the contexts of donor countries. As a result, there has not been broad scale adoption of these approaches within the Viet Nam context.

CSIRO and partners' response

Australia and Viet Nam both recognise that knowledge and innovation will underpin future sustainable growth and prosperity for our respective countries. We also share a long-standing diplomatic relationship and common challenges when it comes to science, technology and innovation. This alignment led to the Aus4Innovation program, funded by DFAT and in partnership with MoST, to help strengthen the capability of Viet Nam's innovation system toward accelerating economic development. The program was designed to draw on Australia's experience of different models of mobilising technology for industry innovation and our long history in public agricultural science.

¹ Resolution of the 13th Viet Nam National Party Congress, January - February 2021

In 2018, CSIRO was chosen as the implementing partner for Aus4Innovation, given CSIRO’s proven track record in driving innovation and a strong science base, especially in the field of agriculture. Aus4Innovation came soon after the Applied Research and Innovation System in Agriculture (ARISA) program that CSIRO had been implementing for DFAT in Indonesia with the Government of Indonesia, private sector and research institutions. ARISA (2014 – 2019) was successful² in building institutional and individual capacity to achieve systemic and sustainable agricultural productivity improvements and increase incomes.

Supporting NATEC to strengthen Viet Nam’s science and technology market was identified as a priority from the beginning of the Aus4Innovation program. This impact story focuses on the partnership established between CSIRO and NATEC through the Science Commercialisation Partnerships (SCP) component in Phase 1 of Aus4Innovation and built on through the Resilient Agriculture and Food (RAF) workstream in Phase 2. The partnership explored how Australian expertise could enable Viet Nam’s science and technology market policies to better translate knowledge and technology created in Viet Nam into real world, sustainable and inclusive impact.

Key outcomes

The partnership between CSIRO and NATEC, which has been running for seven years, has helped progress Viet Nam’s goal of enhancing the capacity and effectiveness of its science and technology market.

<p>Enhanced capacity to drive changes in Viet Nam’s innovation system</p>	<p>The development of a strong partnership between CSIRO and NATEC built trust and facilitated knowledge sharing. This led to increased understanding of innovation systems, ways to overcome barriers and facilitate innovation suitable to the Vietnamese context.</p>
<p>Policy and regulatory changes that better support innovation in Viet Nam</p>	<p>The enhanced capacity developed through the partnership enabled NATEC to catalyse revisions to several policies to remove bottlenecks to commercialisation, strengthening the enabling environment for Viet Nam’s science and technology market.</p>
<p>Strengthened Australia-Vietnam collaboration on innovation</p>	<p>The partnership and co-development by NATEC and CSIRO of a range of knowledge products to progress sustainable and inclusive commercialisation and innovation systems within the Vietnamese context has strengthened collaboration and built trust between the two countries on innovation. This provides a solid platform upon which to build relationships between Australian and Vietnamese innovation and R&D agencies, organisations and businesses.</p>
<p>Strengthening of Australia and Viet Nam’s diplomatic relationship</p>	<p>The NATEC-CSIRO partnership has helped strengthen the diplomatic alliance between Australia and Viet Nam in science, technology and innovation; a core area of cooperation underpinning the strategic partnership between the two countries.</p>

Enhanced capacity to drive changes in Viet Nam’s innovation system. The trusted relationship that was built between CSIRO and NATEC and the understanding of each other’s needs, capabilities and approaches facilitated knowledge to be shared on both the Viet Nam context and Australian and international commercialisation insights and practices. Through an improved understanding of innovation systems and options for enabling innovation, NATEC was equipped to develop recommendations to the Vietnamese

² [Impact evaluation of the Applied Research and Innovation System in Agriculture \(ARISA\) program](#), March 2020.

Government and National Assembly on how bottlenecks could be addressed through policy and regulatory reforms.

Policy and regulatory changes that better support innovation in Viet Nam. The enhanced capacity developed through the partnership enabled NATEC to push for policy change in Viet Nam. In February 2025, Resolution 193 (*Piloting a number of special mechanisms and policies to create breakthroughs in the development of science, technology, innovation and national digital transformation*) was enacted. It includes significant changes that address several of Viet Nam’s major commercialisation issues, removing existing bottlenecks and speeding up the process of taking products to market. The Resolution puts forward solutions that were debated in capability building activities (knowledge sharing, advice and expertise to key policy makers) undertaken through Aus4Innovation.

“This initiative [resolving policy bottlenecks] will transform our approach to policymaking and, with the National Assembly’s approval, allow the government to pilot new policies within universities and institutes. This will enable scientists to invest capital, form spin-off enterprises at universities, and take a more proactive and assertive role in collaborating with universities and commercializing and transferring technology.”

- Vietnamese Government official

Strengthened Australia-Viet Nam collaboration on innovation. Through the co-development by NATEC and CSIRO of a range of knowledge products, including the Commercialisation PLUS Guide, training workshops and seminars, tech match-making workshops, and reports to support government policy making processes, the partnership has strengthened collaborations between Australian and Vietnamese organisations working on innovation. This has established a solid base upon which collaboration between Australian and Vietnamese businesses and public research and development organisations can be built to help address innovation challenges common to both countries and capitalise on opportunities for growth in sectors of shared interest. The collaboration has aided the establishment of a Horticulture Innovation Club, the Sustainable Development for the Mekong Delta 2025 Innovation Hub, including the Mekong Aquaculture Innovation Cluster, the Coffee Innovation Cluster for the Central Highlands region and the smallholder Pig Biosecurity Innovation Alliance.

Strengthening of Australia and Viet Nam’s diplomatic relationship. The strong partnership that developed between CSIRO and NATEC is representative of the changing nature of Australia’s relationship with Viet Nam, evolving from an aid provider/recipient relationship to a collaborative partnership, in this case focused on jointly addressing innovation challenges. Aus4Innovation has been a major Australian investment in policy in Viet Nam and its work with the Vietnamese Government has contributed to the elevation of Australia and Vietnam’s relationship to that of a comprehensive strategic partnership³, which deepens the bilateral ties between the two countries. The collaboration between NATEC and CSIRO underpins one of the six core areas of cooperation outlined in the bilateral strategic partnership: ‘Supporting Science, Technology, Innovation and Developing Digital Transformation’.

“The potential for technology transfer and application between Australia and Viet Nam is substantial. Viet Nam’s science and technology market, having moved past its initial formation stage, is now entering a phase of accelerated development.”

- Vietnamese Government official

³ <https://www.pm.gov.au/media/joint-statement-elevation-comprehensive-strategic-partnership-between-vietnam-and-australia>

How the outcomes were achieved

Capability

The CSIRO team involved in Aus4Innovation brought a combination of science expertise and other skillsets critical for improving understanding of, and helping catalyse, innovation systems. The skills of CSIRO innovation brokers in partnerships, facilitation, problem-solving and mediation have been particularly important for connecting different actors in the system and facilitating collaboration, knowledge exchange, and the development of new ideas. The team spent time with different actors, including NATEC, to understand constraints, capacity and potential partners. Using this knowledge, combined with their experience, the innovation brokers were able to identify opportunities for catalysing innovation in the context of Viet Nam's policy and R&D system.

CSIRO expertise in innovation policy analysis was important in diagnosing innovation systems and how they operate, helping NATEC and others in government understand different policy mixes that could be used to strengthen innovation systems, how to build innovation capability and how to mobilise science and technology towards addressing industry challenges and therefore facilitating economic growth.

In addition to innovation brokering skills and innovation policy analysis expertise, the inclusion of a Viet Nam-based partnership manager has been instrumental to the success of the NATEC-CSIRO partnership. They brought a deep understanding of the Vietnamese context and helped CSIRO better understand the innovation system in the country and the needs of NATEC. The partnership manager has also been key to helping identify where CSIRO is best able to respond and provide expertise, and where it is not. They continue to maintain relationships with key partners in-country and CSIRO.

The combination of Australian innovation brokers with broad experience working alongside a local partnership manager and broker willing to experiment and without fixed ideas has enabled solutions to commercialisation bottlenecks to be proposed that are informed by expertise and grounded in the context of Viet Nam.

Connectedness and responsiveness

CSIRO's engagement with NATEC drew from previous work through the Applied Research and Innovation System in Agriculture (ARISA) program in Indonesia, specifically the incorporation of a policy arm of the project that worked with the Indonesian Ministry of Research, Technology and Higher Education (RISTEK DIKTI) to support the review and refinement of innovation policy. Insights from this work were incorporated into Aus4Innovation, including working with university intermediation units and on public-private partnerships.

Building a strong relationship has been critical to achieving outcomes through the NATEC-CSIRO partnership. Initially, the partnership consisted of CSIRO responding to NATEC's requests, such as for information on commercialisation laws and policies in other countries, and NATEC telling CSIRO what they wanted, such as to generate more start-ups. As individuals from both organisations spent time together understanding each other's capability, knowledge and approaches, CSIRO's role in the relationship shifted from one of delivering reports to that of mentor and advisor. CSIRO and NATEC began to undertake joint activities, such as developing the Commercialisation PLUS guide and worked collaboratively to understand the Vietnamese context. This built trust and led to new priorities and requests for new expertise, including sharing knowledge on innovation enabling factors in other countries, including Australia.

CSIRO supported NATEC as they engaged with actors across the innovation system, including with government, research, private sector and the National Assembly. CSIRO also responded to NATEC's requests

for support in sharing knowledge and experiences from Australia and other countries in the context of what was required to support Viet Nam in improving its innovation system. NATEC valued CSIRO's willingness to respond to their needs rather than an approach of telling them what they needed to do.

CSIRO was able to connect NATEC to expertise or knowledge (including from within CSIRO, Australia's innovation system more broadly and policy experts) and supported NATEC to use this knowledge to identify potential fit-for-purpose solutions to address key policy and regulatory bottlenecks constraining Viet Nam's science and technology market development. This expertise and knowledge transfer occurred through: study tours to Australia to learn about Australia's innovation system; a range of technical reports used as evidence in policy papers; presentations and contributions by experts to national policy dialogues; and technical advice to Technology Transfer Offices within Viet Nam's universities and research organisations (see the following section on *Science excellence and research & technology offerings* for more detail).

CSIRO's collaborative and responsive approach was appreciated by NATEC and enabled them to effectively draw on the evidence of international practices in innovation from around the world that they obtained through the partnership to push for policy change in Viet Nam. What began as a project-based collaboration evolved into partnership-based innovation delivery, which allows for greater flexibility, openness, and responsiveness to new ideas, rather than being limited by the constraints of a project framework.

“Working with our partners, especially experts from CSIRO, we have recognised that the practical experience successfully implemented in Australia is highly relevant and beneficial for Vietnam. This collaboration will assist Vietnam in creating new policies that are practical, concrete, and evidence-based, and that address practical needs.”

- Vietnamese Government official

Science excellence and research & technology offerings

Interpreting, synthesising and debating innovation approaches that could be applied in Viet Nam was a key offering from policy and innovation experts at CSIRO. These were collated in a range of knowledge products (see Appendix 3) which have supported NATEC to better understand innovation approaches and mechanisms for strengthening the science and technology market in Viet Nam. A few key examples are highlighted here.

The knowledge products targeted specific needs identified under the CSIRO-NATEC partnership. The first identified priority was to build the capability of its public research organisations and universities to apply research results to support industry address its challenges. It was agreed that a guide would be co-created by CSIRO and NATEC with input from three key Vietnamese research organisations and universities to guide researchers through a practical commercialisation approach. The resulting Commercialisation PLUS Guide⁴ tailored international good practices to the context of Viet Nam's innovation system, including its legal frameworks. The Guide went beyond standard technology transfer commercial principles, highlighting the equal importance of looking into social inclusion and environmental impacts in the co-development of technologies and innovation processes to achieve innovation outcomes that support Viet Nam's sustainable development goals. The Guide has been used as a Training of Trainers material and distributed to research institutes, universities, and science and technology organisations throughout the country. NATEC has now taken over the Guide and continues to use it to train researchers and inform their thinking on commercialisation.

⁴ <https://commercialisationplus.org/>

“The Commercialisation PLUS process helped us change our mindset. When you create a product, we ask what benefits it can offer users. We also need to consider the possible negative impacts of a product which are rarely mentioned. While developing and implementing our technology we considered how it would affect the local people. We listened to their comments and have made ongoing improvements to our product. We recently received more orders and have provided more products and services to help farmers.”

- Vietnamese researcher

Another key knowledge product was a report entitled *Promoting Knowledge Transfer and Commercialisation* (2022)⁵ which synthesised and transferred knowledge on commercialisation approaches. The report provided an overview of knowledge transfer policy and practices from universities and public research organisations to industry and other users in four countries: USA, Australia, China and Taiwan. It included barriers that have impeded effective knowledge transfer. Findings and insights from this report were included in a number of papers submitted to the government, forming part of the knowledge base that led to the Viet Nam National Assembly’s removal of existing bottlenecks to speed up the process of taking products to market.

The *Australian Innovation Systems Overview* (2023) responded to NATEC’s interest in understanding key reforms, initiatives and incentive schemes underpinning commercialisation deregulation policy in Australia. This work was presented to Viet Nam’s National Assembly and instrumental in supporting NATEC in pushing for policy reforms (see next section).

Delivery and scaling

Working in partnership with NATEC and responding to the specific needs of Viet Nam, CSIRO was able to provide the foreign expertise on international innovation systems that NATEC required as evidence to push for policy change in Viet Nam. This evidence came in the form of the range of knowledge products and associated presentations and training workshops (see above and Appendix 3) on how innovation systems worked in different countries and mechanisms to facilitate commercialisation.

CSIRO took a co-creation approach that built capacity and improved shared understanding of innovation systems in Viet Nam. This approach did not adhere to a fixed work program but rather enabled activities to be tailored to emerging knowledge needs as capacity developed and there was a need to respond to changes in local contexts. This process enabled the co-design of specific knowledge to support policy needs.

“[Aus4Innovation] was structured to avoid an overly rigid focus on detailed indicators, which has enabled Vietnamese government agencies to actively engage in the implementation process. This flexibility allows us to design specific content, select sub-topics, and tailor detailed implementation strategies to our needs.”

- Vietnamese Government official

A key catalyst for policy change was the National Conference on Science and Technology Market Development in 2022 chaired by the Vietnamese Prime Minister, which brought the highest level of attention to the issue. CSIRO was the only bilateral organisation invited to this conference.

Following the conference, the Vietnamese Prime Minister issued instructions to relevant Vietnamese ministries and agencies, including MoST to work together to remove bottlenecks to research

⁵ <https://research.csiro.au/aus4innovation/wp-content/uploads/sites/294/2023/03/Scott-Kemmis-Knowledge-transfer-and-Commercialisation.pdf>

commercialisation and science and technology market development. NATEC worked closely with relevant departments under MoST and leading experts to develop recommendations to the Vietnamese government and National Assembly, drawing on local and international expert opinions and international commercialisation insights and practices facilitated through Aus4Innovation.

Looking back: Key reflections and lessons learned

Taking time to engage and build relationships enhances impact. Building strong relationships, especially internationally takes considerable time and investment. It can take five to ten years before concrete results are gained from a partnership. However, investing in relationship building enables the development of a shared understanding of the system, opportunities and challenges across different scales which paves the way for developing solutions that can facilitate change at scale. Building the relationship and trust with NATEC rested heavily on having a local partnership manager who acted as a critical intermediary between NATEC and CSIRO.

Sustaining partnerships requires openness and flexibility. Being aware of a partner's strengths and emerging needs, and being open to jointly discuss possible responses is critical to create mutual benefits. This can open up new opportunities, carrying the partnership beyond existing partnership boundaries to move into novel areas of collaboration.

Start the policy dialogue early. Working closely with NATEC to co-create the Commercialisation PLUS guide from the outset increased the scale to which Aus4Innovation was able to have influence. The guide continues to be used by NATEC.

A new form of partnership. Science, technology and innovation have always been an important part of Australia's trade and economic diplomacy in the region. Establishing new types of partnerships offers an opportunity for Australia to form regional collaborations where the primary purpose is to co-develop innovation capacity.

More capacity building to improve partner understanding of innovation. There remains a challenge in getting researchers to think of innovation beyond a technology solution, i.e. the importance of developing the innovation system through connections, policy, networks and collaboration across government, research and the private sector.

Looking forward: Where to next?

Phase 2 of Aus4Innovation will run until April 2028 and the Resilient Agriculture and Food (RAF) workstream is building on the achievements of Science Commercialisation Partnerships (SCP) in Phase 1. This includes supporting NATEC with what is required for the Viet Nam National Assembly to amend policies relating to commercialisation. In addition, there will be ongoing capacity building activities in commercialisation and trialling of different approaches, tools and frameworks for MoST related to innovation policy. These will be implemented by NATEC with support from CSIRO as required.

Learnings and experiences from Aus4Innovation are informing CSIRO's Pacific Agrifood Futures (PAF) initiative. Knowledge gained from Viet Nam on the importance of networking and collaboration to work across the system has guided the focus of PAF. The co-design / co-creation approach of understanding local needs and developing solutions or bringing in solutions to specifically address these is being adopted in PAF, noting this is not just technology solutions but includes policy or network building solutions that facilitate change at scale. There are lessons from experimentation in Viet Nam that may have application to the Pacific, such as around clusters and innovation platforms that connect the private sector with policy and farmers. There are also common themes where the experience from Viet Nam will be useful, such as climate change, social inclusion and resilience.

There is interest from DFAT in replicating the approach of Aus4Innovation in building a strategic collaboration in innovation. The Philippines and Thailand are countries where there is potential to adopt a similar approach.

Science, technology and innovation have always been an important part of Australia's trade and economic diplomacy in the region. Establishing new types of partnerships offers an opportunity for Australia to form regional collaborations where the primary purpose is to co-develop innovation capacity.

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Appendix 1. Sources of information and additional resources

CSIRO. Aus4Innovation website. [online]. Available at: <https://research.csiro.au/aus4innovation/>

Commercialisation PLUS Guide. (2021) Enhancing impact from your research through inclusive commercialisation. [online] Available at <https://commercialisationplus.org/> [Accessed 29 Aug. 2025].

Scott-Kemis, D (2022). [Promoting Knowledge Transfer and Commercialisation](#): Strategies for Knowledge Transfer from Universities and Public Sector Research Organisations in Vietnam. CSIRO.

The Growth Drivers (2023). Australian Innovation Systems Overview.

Appendix 2. Summary of projects involved

Project name and WBS	Aus4Innovation Phase 1: Science Commercialisation Partnerships Phase 2: Resilient Agriculture and Food	R-12837 R-20421
CSIRO team (lead + team members)	Jennifer Kelly Vu Huong Mai	Nguyen Thi Hoang Ha Kim Wimbush Andy Hall
Funders	Australian Department of Foreign Affairs and Trade (DFAT)	
Key partners	Australian Department of Foreign Affairs and Trade (DFAT) Viet Nam Ministry of Science and Technology (MoST) Viet Nam National Agency for Technology Entrepreneurship and Commercialisation (NATEC)	
Duration	Phase 1: 2021-2023	Phase 2: 2024-2028

Appendix 3. Knowledge products developed through the NATEC-CSIRO partnership

Training workshops and seminars between 2019 and 2021 with Can Tho University, Viet Nam National University of Agriculture, Viet Nam Academy of Science and Technology and Tay Nguyen University to help researchers better understand the needs of the private sector and improve their research pitching skills.

Workshops in 2020 with national government officials and experts on policies to support development of the startup ecosystem.

Tech match-making workshop series in 2020-2021 bringing together businesses, industry, research, government, associations and financial institutions to explore collaboration opportunities to identify or co-design solutions to innovation challenges faced by Viet Nam.

Report: *Promoting Knowledge Transfer and Commercialisation* (2022), providing an overview of knowledge transfer policy and practices from universities and public research organisations to industry and other users in four countries: USA, Australia, China and Taiwan. It includes barriers that have impeded effective knowledge transfer. Findings and insights from this report were included in a number of papers submitted to the government.

Workshops in 2022 chaired by the Ministry of Science and Technology on “Promoting cooperation between research institutes, universities and enterprises in commercialisation of research results and intellectual property” and “Attracting private investment in science, technology and innovation development in Vietnam, towards sustainable development goals”.

Papers and presentations in 2022 at the National Conference on Science and Technology Market Development, chaired by the Vietnamese Prime Minister.

Report: *Australian Innovation Systems Overview* (2023), highlighting key reforms, initiatives, incentive schemes underpinning commercialisation deregulation policy in Australia. This work was presented to Viet Nam’s National Assembly.

Appendix 4: The NATEC-CSIRO partnership mapped against the Theory of Change for A&F Secure Food Systems Impact Area

The partnership between CSIRO and NATEC, under the Aus4Innovation program, has helped progress Viet Nam’s goal of enhancing the capacity and effectiveness of its science and technology market. It provides an example of how CSIRO’s partnership-based, capacity building-focused, and co-design and co-delivery approach to RD&I (research, development & innovation) is helping advance secure agrifood systems in the region.

