This year marks ten years of a strong partnership under the Agreement Establishing the ASEAN-Australia-New Zealand Free Trade Area (AANZFTA) since it was signed by the Economic Ministers of ASEAN, Australia and New Zealand in February 2009 in Thailand. Established in November of the same year, the AANZFTA Economic Cooperation Support Programme (AECSP) has been the highlight of the AANZFTA implementation and recognised as a key success—a ‘backbone’—in significantly narrowing the capacity gap among the Parties of AANZFTA and assisting them to maximise the benefits of the Agreement.

The AECSP’s vision is that the full benefits of AANZFTA are realised. To achieve this vision, AECSP’s goals are to operationalise and implement the AANZFTA (including enhancing ASEAN Secretariat’s capacity to support ASEAN FTA implementation); progress AANZFTA’s built-in agenda; promote business utilisation of AANZFTA opportunities; and advance economic integration amongst the Parties.

Through supporting various capacity development initiatives since 2010 and following a result-oriented approach to programme and project management, AECSP has been successful in enhancing capacity for government officials and agencies as well as businesses in implementing and utilising the Agreement. Sustainability and gender considerations, on the other hand, are at the heart of the design and implementation of engagement activities and have well been embedded in AECSP Project Management Guidelines. As the AANZFTA has evolved, a great range of quality project management resources and toolkits including online learning management systems has been developed, distributed and maintained to outlast project cycles in sustaining the achieved outcomes and strengthening institutional as well as individual capacity going forward.

This publication indulges in retrospection of ten years of partnerships under the AANZFTA. It demonstrates key results that the AECSP has achieved under each component of the Economic Cooperation Work Programme while also draws out their relevance and implications for the ASEAN economic integration agenda. More importantly, these achievements exemplify ASEAN Secretariat’s successful delivery and management of the AECSP for results—contributing to a greater economic cooperation under AANZFTA for years to come.
Since its inception, AECSP has facilitated utilisation of the AANZFTA commitments through supporting an efficient and transparent administration of rules of origin requirements and other aspects of implementation of tariff commitments, as per the objective of economic cooperation in this area.

AECSP has supported diverse capacity development initiatives, benefitting over 3,000 ASEAN officials, business individuals and other frontline actors, encompassing rules of origin, transposition of tariff reduction schedules and product-specific rules, monitoring the utilisation of tariff preferences and tariff and trade data analyses, contributed to enhancing sustainable capacity for the important disciplines of trade in goods.

Noticeably, AECSP had supported the successful transposition of AANZFTA tariff reduction schedules and product-specific rules from Harmonised System (HS) 2012 to HS 2017 through in-country trainings and development of AANZFTA transposition guidelines.

To date, most Parties have started implementing their transposed product-specific rules and completed the verification process for the transposed tariff reduction schedules, both in HS 2017 nomenclature, in a collective effort to aid businesses and prevent disruption to trade.

AECSP also assisted the development of a regional approach to monitoring the utilisation of AANZFTA tariff preferences.

Through pilot tests and series of training workshops, eight Parties have provided the utilisation data, and, among them, Australia and the Philippines provided full data as required in the agreed template, demonstrating the feasibility and importance of establishing a region-wide mechanism to capture, report and monitor the utilisation data of AANZFTA tariff preferences.

Most recently, AECSP supported series of in-country training on Declaration of Origin which is an alternative to certificate of origin.

This process, if adopted, enables traders to claim preferential treatment based on an origin declaration made by the exporters or manufacturers. Eight in-country training seminars were conducted benefiting all ASEAN Member States (AMS) and a workbook was created to enhance understanding of the concept and benefits along with the knowledge on the importation of final goods and risk management related to the application of declaration of origin.
Further, AECSP supported in-country training on Full Cumulation for AANZFTA rules of origin, benefiting nine AMS.

This new method, if adopted, would allow the accumulation of originating costs for a good incurred in one AANZFTA Party to count in the costs of production of a subsequent good in another AANZFTA Party, regardless of whether the processing of the original good is sufficient to confer originating status. A workbook was also produced to inform AMS about the Full Cumulation concepts, documentation and its possible application in AANZFTA rules of origin.

AECSP supported technical discussions leading to the formulation, approval and effective implementation of First Protocol to Amend the AANZFTA Agreement in 2014.

As part of the process, the procedures for application and issuance of the certificate of origin were significantly streamlined through continued improvements of the form, enhancing administrative efficiency and making the FTA more transparent and business-friendly.

Likewise, findings from AECSP-supported research on AANZFTA Non-Tariff Measures (NTMs) informed official recommendations to Ministers in 2017—making NTMs an ongoing part of AANZFTA’s work programme while enforcing good regulatory practice and strengthening business engagement.

This research entailed a business survey involving comprehensive consultations with 110 companies, most of which were small- and medium- enterprises in seafood and wood and timber furniture sectors. Key recommendations include the need to have (i) an online provision that enables traders to access information about trade regulations and requirements; (ii) an AANZFTA members Trusted Trader Network; and (iii) a review of the trade regulations and practices of each AANZFTA Party to identify, replicate and implement best practice across the region.

AECSP facilitated the dissemination and sustainability of knowledge with a focus on the non-English speaking communities.

The Programme has supported the translation and publishing of the following essential guiding documents in rules of origin: ‘Guide for ASEAN Business’ (2009) and ‘Primer on AANZFTA Rules of Origin’ (2009) are available in five languages: English, Khmer, Laotian, Burmese, Thai and Vietnamese. The AANZFTA Rules of Origin Training Modules (2013) are available in seven languages: Burmese, English, Khmer, Indonesian, Laotian, Thai and Vietnamese. A total number of 6,800 copies of these publications were printed for wide and far distribution, aiding AMS further aiding AMS further in-country knowledge sharing.
Since 2011, the multi-phase ‘ASEAN Regional Diagnostic Network’ (ARDN) project has significantly improved ASEAN diagnostic resources and provided scientific impetus to initiatives that expedite better quarantine systems and remove unwarranted phytosanitary barriers to trade.

The project has significantly enhanced the capacity of AMS to identify plant pests and diseases; stimulated the adoption of new diagnostic techniques; facilitated access to some key markets for agricultural products; and promoted regional collaboration and trade. Particularly, the ARDN project:

- Assists crop protection through developing skills and tools for AMS to identify plant pests of high significance to trade. Following a series of training, mentoring and field activities all ASEAN National Plant Protection Organisations have been able to use these newly acquired resources and advanced technologies to draw up scientifically credible, national and regional pest lists for particular pest groups or commodities, meeting one of the key SPS requirements of importing countries.

- Improves market access and scientifically-based quarantine policies. As credible pest lists are required by both exporting and importing countries for market access negotiations and the development of trade protocols, AMS with strong diagnostic capacity can assess the potential risks associated with a commodity and develop robust export strategies or import requirements. Specifically,
  - The Project has assisted Laos to define pest status for its corn and cassava and thereby gained market access to China and Thailand for corn and to Cambodia, Thailand and Viet Nam for cassava, its third most important agricultural crop.
  - Cambodia also credited the ARDN project for assisting the country in gaining market access to China for its rice and banana exports.
  - The Project opened market access of Philippine papaya to New Zealand.
  - Viet Nam can now use remote microscopy to assess detections by quarantine officers of insects in imported goods and clear consignments more quickly when there is no quarantine threat.

Field trip: ARDN expert with two officials from the Cambodian General Directorate of Agriculture in a maize field | Chiang Mai, Thailand, 30 January 2018

SANITARY & PHYTOSANITARY (SPS)

Parties were committed to build the capacity of agencies responsible for the implementation of SPS policies and procedures; build awareness of the application SPS measures consistent with the principles in the SPS chapter; and support strengthened cooperation between authorities responsible for dealing with the matters covered by the chapter. Successful initiatives supported by AECSP since 2010 have contributed achieving these objectives, through streamlining and improving quarantine systems and procedures as well as harmonising international standards and regulations, benefiting about 700 ASEAN officials and more than 1,500 farmers.
AMS’ regulatory capacity was enhanced facilitating domestic and regional trade of dairy products under the multi-phased Regulatory Cooperation in Dairy Project.

The Project assisted AMS in their implementation of international regulatory standards to ensure their supply of safe and quality dairy products. It assisted with the set-up of a dairy cow association in Cambodia and delivered customised orientation training on proposed new dairy regulations and controls to key stakeholders and farmers in the Philippines. In Myanmar, a revision of the country’s existing Animal Health and Development Law took place to ensure its alignment with the National Dairy Development Plan. The project supported Thailand to complete a revision of Good Agricultural Practice checklists for dairy cattle farms and delivered training on dairy processing. Good Agricultural Practice for farmers and Good Manufacturing Practice for milk collection centres.

AECSP supports the development of ASEAN Regional Guidelines for the implementation of international standards related to SPS measures (the ASEAN SPS Guidelines), assisting AMS in their development of national SPS standards in compliance with international standards and guidelines, and meeting their international obligations under the World Trade Organisation’s SPS Agreement, ASEAN Strategic Plan of Food, Agriculture and Forestry 2016-2025 as well as ASEAN Economic Community Blueprint 2025. To date, the Project has helped identify challenges faced by AMS implementing the SPS Agreement and international SPS standards; and provided key policy recommendations to guide the development of ASEAN SPS Guidelines. Current efforts are being put in developing ASEAN SPS Guidelines as well as for risk analysis and risk management.

Through an interactive training workshop combined with field visits, equipped SPS officials from AMS with better knowledge and skills in import risk analysis and the application of the Qualitative Risk Analysis Framework, narrowing the competency gap among the AMS and reducing barriers to the importation of animal and animal products in the region.

AECSP in Focus

AECSP enhanced AMS’ technical capacity to conduct import risk analysis for the importation of animal and animal products based on World Organisation for Animal Health risk analysis framework.

The Project, led by Malaysia and having experts from Australia and New Zealand and
AECSP has heightened support to STRACAP, with an aim to promote mutual understanding of each Party’s STRACAP measures; and strengthen information exchange and cooperation among the Parties.

Most recently, AECSP has been supporting the multi-year ‘STRACAP Workplan Implementation Programme’ aiming to (1) improve the understanding and arrangements for implementing and advancing Good Regulatory Practice, (2) enhance cooperation in international standards engagement; and (3) build technical capacity for standards and conformance technical infrastructure to address capacity and policy gaps and needs in the targeted sectors.

Sectors currently in focus are food and beverage, cosmetic and health supplements. As part of the ‘STRACAP Workplan Implementation Programme’, in 2017, New Zealand lead a successful initiative on Good Regulatory Practice focusing on food and beverage sector, which significantly improved Parties’ understanding of the radical and

innovative practice models from various regulatory systems and successfully paved the way for more in-depth engagement in Good Regulatory Practice.

Regulatory officials from Cambodia, Lao PDR and Myanmar gained better understanding of important and relevant initiatives in standards and conformance being conducted by other AANZFTA Parties and a broader region of APEC, through their AECSP-supported participation in the APEC Sub-Committee Meeting on Standards and Conformance as well as technical conferences on Good Regulatory Practices and enhancing regulators on the WTO Agreement on Technical Barriers to Trade.

AECSP is assisting micro, small and medium enterprises (MSME) in the AANZFTA region to augment their practical knowledge and technical expertise in international standards of prepared food.

Current support focuses on marking and labelling, authorisation of food ingredients, contaminant limits and analytical methods, enhancing MSME expertise in these standards and enabling their greater market access and integration into the global supply chains.
AECSP has been instrumental in assisting the development of the ASEAN Qualifications Reference Framework (AQRF), endorsed by ASEAN Ministers in 2014 and 2015, the institutionalisation of the AQRF governance in 2017 and the successful completion of referencing national qualification frameworks to the AQRF by Malaysia and the Philippines in 2019.

Through a multi-phase project, AECSP has been supporting AMS in referencing national qualifications frameworks against the AQRF criteria, underpinned by quality assurance principles and standards, towards enabling comparisons of education qualifications across all AMS. The robustness of the referencing process raises the level of transparency and trust in ASEAN qualifications within the international community, promoting greater mobility of students and workers within ASEAN.

AECSP has been supporting analytical studies to facilitate ASEAN policy-making process at both regional and domestic levels. The 2017 AECSP report: ‘AANZFTA Health and Education Policy Review’ highlighted the barriers to trading health and education services and the benefits of international cooperation in these services. Similarly, AECSP has amplified the awareness of the benefits of services liberalisation through a report ‘Impact of Services Liberation: Case Studies of Five Countries’ commissioned in 2017 which looked into the various aspects of services liberalization and showcased the successes of Australia, Indonesia, the Philippines, Thailand and Vietnam in undertaking liberalisation measures in the sectors of business services, financial services, logistics, telecommunications and tourism.

More recently, AECSP supported the reviews of transport and logistics policies and institutional arrangements for Malaysia and the Philippines and the development of Policy Institutional Framework for these two pilot countries.

The comprehensive reviews mapped out the laws and regulations affecting trade and investment in transport and logistics services in the two countries, identified parameters for a coherent and well-functioning transports system, and served as the basis for drafting the Policy Institutional Framework as well as a Strategic Action Plan for the Framework for Malaysia and the Philippines. The Frameworks and Strategic Action Plans will consist of options available to policymakers wishing to enhance transport and logistics services regulations, requirements and means of implementing each option. The experience of these pilot AMS can vitalise the development of ASEAN-wide framework and strategic action plan to address the identified hurdles in improving connectivity, trade and investment flow across ASEAN.
Since 2010, more than 1,000 officials mainly from ASEAN investment promotion agencies have benefited from various AECSP capacity-building activities focusing on reservation list, market access, streamlining business licensing procedures, and investment disputes resolution and prevention, as part of all Parties’ effort to address impediments to expanding investment in the AANZFTA region.

With technical assistance from OECD, AECSP has supported the ‘Investment Policy Reviews’ for Cambodia, Lao PDR, Malaysia, Myanmar, the Philippines and Viet Nam, contributing to momentous changes to investment regimes.

These reviews provided comprehensive analyses of each country’s investment environment and supported the process of policy formulation and adjustment as well as promoting inter-governmental and public-private dialogue in removing barriers to foreign investments as follows.

- **Lao PDR** implemented the recommendations from Lao Investment Policy Review, completed in 2017, to improve the country’s investment environment, particularly reducing domestic restrictions on investment such as the elimination of minimum capital requirements for investors in some sectors.

- **Myanmar** addressed key recommendations from its 2014 Investment Policy Review to ameliorate the country’s investment climate. These included enacting the Myanmar Investment Law in 2016, promulgating the Myanmar Investment Rules in 2017 and issuing notifications to facilitate the implementation of the law. The Myanmar Companies Law also came into effect in 2018 aiming to ease the business registration process.


- Viet Nam’s Investment Policy Review was completed in late 2018 with key recommendations to further improve its investment climate and coordination on investment promotion and facilitation; enhance corporate governance, transparency and predictability of legal frameworks and enforcement, and mainstream responsible business conduct and promote green growth. Viet Nam is in the process of revising its Investment and Corporate Law.

- The First Investment Policy Review for Cambodia recommends the Country to use Official Development Aid to expand its infrastructure and diversify the economy, refine investment climate, promotion efforts, public and corporate governance, promote entrepreneurship, MSMEs, investor protection, improving capacity and regulatory quality, competition policy and the application of technologies, as well as explore green growth sectors.
Correspondingly, in early 2019, AECSP supported a short-term technical assistance provided to Myanmar Investment Commission to assist the country in the implementation of its international investment commitments including AANZFTA. This short-term technical assistance helped Myanmar with their preparation of market access investment offers and enhance officials’ understanding of the country’s investment obligations in international treaties, particularly the Investor-State Dispute Settlement and its implications, improving Myanmar officials’ ability to avoid and better manage investment disputes.

An AECSP-supported the ‘Regional Forum on Investment Disputes, Resolution and Prevention’, organised in late 2018, enhanced Parties’ knowledge and understanding about the latest developments on investor-state dispute settlement, hence further improved their capacity on dispute prevention and resolution in the context of implementing the Investment Chapter of the AANZFTA. At this Forum, AANZFTA government representatives gained a deeper understanding of key issues encompassing dispute prevention and resolution, investment retention, and an awareness of common challenges faced by member states. AANZFTA officials also discussed possible measures and tools for effective investor-state disputes settlement which can elevate investor confidence in AANZFTA investment environment and government confidence in investment policy-making.

Since 2010, through multiple sustainable capacity development activities, AECSP has enhanced knowledge for over 1,300 officials, mainly from ASEAN intellectual property offices, and supported AMS in strengthening their organisational capabilities in the process of creation, utilisation, protection, and enforcement of intellectual property rights, contributing to the objective of supporting the development of sound and balanced intellectual property systems in the AANZFTA region.

From 2011 to 2017, AECSP assisted AMS in their accession to and implementation of the Protocol Relating to The Madrid Agreement Concerning the International Registration Marks (or the Madrid Protocol), facilitating trademark protection for businesses in the region and achieving the AEC 2025 goal of ASEAN’s complete access to the Madrid Protocol. Key results from this support project included:

- Technical assistance to Myanmar aiding future accession through facilitating the development of its national legislative and organisational capability; and
- Provision of post-accession support to Viet Nam and the Philippines for their implementation of the Protocol.
The ‘Regional Patent Examination Training’ (RPET) project, run from 2013 to 2018, has trained 45 examiners from Indonesia, Malaysia, the Philippines, Thailand and Viet Nam to the international standards of the Patent Cooperation Treaty.

Winner of three prestigious international and national awards for its blended and competency-based learning model, RPET has enabled these participating ASEAN Intellectual Property offices to consistently conduct patent search and examinations by adopting international best practices and Patent Cooperation Treaty standards. Further, trainees from this two-year training programme have participated in an online Community of Practice to share experiences and progress among the AMS.

Complementing the RPET, an ‘Ideal Patent Examination Training (IPET) Model’ was materialised to develop an online learning management system as a sustainable approach to high-quality patent examination training in the region.

The complex Learning Management System, since its inception in 2017, has served as an effective interactive learning platform and an open-source depository for training resources covering key areas identified in the curricula under IPET and RPET programmes. Participating AMS have received technical backing in customising training materials on this system to suit their national circumstances.

To ensure the sustainability of the aforementioned training outcomes, the ongoing ‘RPET Mentoring Programme’ has assisted AMS in adapting training models and materials from RPET and IPET to their domestic practices and legislation.

Under ‘RPET Mentoring’, experienced Australian mentors have conducted in-country consultations in Indonesia, Malaysia, the Philippines, Thailand, and Viet Nam and subsequently developed a work plan for capacity development for each intellectual property office. Taking a sustainable approach, these AMS has now established and customised a competency-based training programme for new examiners. Set in motion by ‘RPET Mentoring’, the Philippines and Viet Nam have successfully piloted the first phase of the competency-based training programme with new patent examiners. Other intellectual property offices are planning to pilot such programme to their new trainees later in 2019.
In parallel, the ‘Regional Intellectual Property Public Education and Awareness Strategy’ equip AMS with knowledge and toolkits through the development of IP informational materials and digital distribution platform, raising awareness of their respective business communities and IP creators about strategic IP management.

The project, now in Phase 2, supports the development of an “IP for Business” webpage and three key publications: (1) Regional IP Public Education and Awareness Strategy: Raising Awareness and Practical Knowledge of Strategic IP Management (completed in 2015), for both IP Offices and Stakeholders in ASEAN; (2) A Business Guide to Intellectual Property Institutions, Laws and Filing Processes in AANZFTA Parties (expected 2019) and (2) A Handbook on Intellectual Property Commercialisation: Strategies for Managing Intellectual Property Rights and Maximizing Value (expected in 2019), which aim to help businesses particularly small and medium enterprises reap the benefits AANZFTA through applying for and using their intellectual property rights.

Through various projects since 2010, AECSP has contributed to the exchange of information between and the development of competition policies, laws, and institutions within AANZFTA Parties.

Benefiting over 3,500 OFFICIALS mainly from ASEAN national competition agencies

Since its inception in 2011 until 2017, nearly 1,300 participants, mostly from ASEAN national competition agencies and the private sector, participated in seven ‘ASEAN Competition Conferences’, forming part of regional acceptance on the importance of competition policy.

The annual thematic ASEAN Competition Conferences have served as an effective forum for ASEAN competition officials, practitioners and academicians in and outside the region to discuss challenges in the implementation of their respective competition policy and law, exchange of experiences and strategic discussions, drawing lessons from one another. With a theme specifically chosen each year, the series ASEAN Competition Conferences was an enabler, instrumental in fostering the promotion of competition policy for regional development and in shaping the direction of competition policy and law implementation within ASEAN.
Since 2014 the Competition Law Implementation Programme (CLIP) has contributed to the implementation of the AANZFTA chapter on competition as well as achieving the strategic goals of ASEAN in establishing a competitive, innovative, and dynamic ASEAN with an effective and progressive competition policy.

CLIP has supported AMS with an array of capacity-building activities: regional and sub-regional training workshops; expert placements; secondments; study programmes; and e-learning modules. Results from these activities include:

- **CLIP improves competition laws and institutions in the ASEAN Member States.**
  
  CLIP has supported AMS to enact national competition law or pursue law reform in support of more effective implementation. For example, a CLIP Resident Advisor to the Vietnam Competition and Consumer Authority aided in drafting an implementing decree under Viet Nam’s new Competition Law (2018). A CLIP expert to the Myanmar Ministry of Commerce Competition Division produced a detailed assessment of legal issues to be addressed for Myanmar competition law to be effectively applied and interpreted by the courts.

- **CLIP strengthens capacities of competition-related agencies to effectively enforce competition policy and law.**
  
  CLIP-designed activities have reached over 2,100 officials, helping AMS build effective practices to identify and enforce contraventions of competition laws. CLIP champions gender diversity by ensuring equal participation of men and women and by proactively discussing gender issues. CLIP e-learning modules on topics including competition law, economics, enforcement and investigations have helped extend and sustain learning outcomes. In collaboration with Federal Court of Australia and OECD, CLIP has also delivered enduring tools such as the Competition Primers for ASEAN Judges.

- **CLIP has been fostering advocacy efforts toward a competition-aware ASEAN region.**
  
  The CLIPPINGS online newsletter reaches a wide audience sharing highlights of competition development and cooperation in the region. CLIP also produces other communication materials to support its advocacy efforts: media releases, videos, posters and pamphlets.

- **CLIP facilitates regional cooperation arrangements on Competition Policy and Law.**
  
  CLIP has supported regional cooperation including through delivering the AANZFTA Heads of Agency Roundtable (2018) and Commissioners’ Retreat (2019). ASEAN Capacity Building Roadmap for Competition (2017-2020), and ASEAN Regional Cooperation Framework (ARCF).

In 2019, AECSP has started supporting the Consumer Protection Scoping Project, designed to foster strengthened interface between consumer protection and competition law in the AANZFTA and exploring the potential for ongoing cooperation on consumer protection under the AANZFTA.

The Consumer Protection Scoping Project has delivered an information paper to be considered by negotiators in determining their approach to upgrade the Competition Chapter under AANZFTA.
PROGRAMME BREAKDOWN

RULES OF ORIGIN, IMPLEMENTATION OF TARIFF AND NON-TARIFF COMMITMENTS
- Transposition of AANZFTA Tariff Reduction Schedules and Product Specific Rules from Harmonised Commodity Description and Coding System (HS) 2002 into HS 2017 Nomenclature
- Capacity Building to support the negotiation of a Pilot Programme for a Declaration of Origin under AANZFTA
- Development of a Regional Approach to Monitoring Utilisation of AANZFTA Tariff Preferences
- Development of Training Modules and Training for Trainers on AANZFTA Rules of Origin
- Policy Dialogue on Future Transposition of the HS of the AANZFTA Tariff Reduction Schedules and Rules of Origin Product Specific Rules
- Joint Session to Discuss Implementation of the First Protocol to Amend the AANZFTA Agreement
- Enhancing SMEs’ Awareness and Participation in AANZFTA – Capacity Building for Cambodia, Laos, and Myanmar
- Training on Tariff and Trade Data Analysis for Government Officials

CUSTOMS PROCEDURES
- Review of Non-Tariff Measures
- Capacity Building on Risk Management
- Capacity Building and Technical Assistance in Advance rulings on Rules of Origin, Tariff Nomenclature and Customs Valuation
- STRACAP Work Plan Implementation Programme - Work Stream I: Good Regulatory Practice on Food and Beverage sector
- Rapid Response: Training on Trade and Tariff Analysis for Cambodia and Indonesia
- Rapid Response Training on Transposition of AANZFTA Tariff Reduction Schedules from Harmonised System 2007 to 2012 for Cambodia, Laos, Myanmar, and Viet Nam
- STRACAP Work Plan Implementation Programme - Work Stream I: Good Regulatory Practice on Food and Beverage sector
- AANZFTA Parties’ Participation in the APEC Workshop on Harmonised Electrical Equipment Regulatory Risk Assessment Tools
- Workshop on International Standards Development Best Practices
- Workshop on Priority Setting for AANZFTA Standards, Technical Regulations and Conformity Assessment Procedures
- Rapid Response: Cambodia, Laos, and Myanmar participation at APEC Sub-Committee on Standards and Conformance

SANITARY & PHYTOSANITARY MEASURES
- ASEAN Regional Diagnostic Network (Phase II)
- ASEAN Regional Guidelines for the Implementation of International Standards related to Sanitary and Phytosanitary Measures
- ASEAN Regional Diagnostic Network (Phase I)
- ASEAN Import Health Standard Priority List and Capacity Development
- Capacity Building Programme for the Development of Skills in Import Risk Analysis for Importation of Animal and Animal Products
- Sanitary and Phytosanitary Regulatory Cooperation in Dairy
- ASEAN Regional Diagnostic Network (Phase I)
- Education and Health Services Policy Review
- Capacity Building on Collection and Management of Statistics of International Trade in Services (Phases II, II, and III)
- Case Study on the Benefits of Services Liberalisation
- Technical Assistance: ASEAN Logistics in Services Sector
- Workshop on Enhancing Domestic Regulations in Services

STANDARDS, TECHNICAL REGULATION AND CONFORMITY ASSESSMENT PROCEDURES
- STRACAP Work Plan Implementation Programme - Work Stream I: Good Regulatory Practice on Cosmetics sector
- Capacity Building Programme for MSME on International Prepared Food Standards
- STRACAP Work Plan Implementation Programme - Work Stream I: Good Regulatory Practice on Cosmetics sector
- Capacity Building Programme for MSME on International Prepared Food Standards

INVESTMENT
- Investment Policy Workshop for AANZFTA Policy Makers
- Handbook for Implementing International Investment Commitments – Stage One: Pilot in Viet Nam
- Investment Policy Review of Cambodia
- Investment Policy Review of Lao PDR
- Investment Policy Review of Malaysia
- Investment Policy Review of Myanmar
- Investment Policy Review of the Philippines
- Investment Policy Review of Viet Nam
- Investment Facilitation and Technical Assistance for Newer ASEAN Member States
- Study on Investment Trends, Issues, and Prospects in AANZFTA
- Regional Forum on Investment Disputes, Resolution and Prevention
- Seminar on Two-Annex Approach in the Scheduling of Reservation Lists under the Investment Chapter
- Workshop on Investment Commitments in International Agreements
- Workshop on Investment Disputes, Resolution, and Prevention
- Workshop on Non-Mode 3 Investment in Services
- Capacity Building for CLMV to Facilitate the Implementation and Business Utilisation of AANZFTA
- Rapid Response: Knowledge exchange on understanding and application of international investment commitments for Myanmar

INTELLECTUAL PROPERTY
- Regional Patent Examination Training Mentoring Programme
- Intellectual Property Policy Review of Myanmar
- Intellectual Property Policy Review of Malaysia
- Intellectual Property Policy Review of Cambodia
- Intellectual Property Policy Review of Indonesia
- AANZFTA Intellectual Property Crime Conference
- Workshop on Access to the Madrid Protocol
- Intellectual Property Training for Small to Medium-Sized Enterprises
- Intellectual Property Experts Supporting the implementation of the AANZFTA IP Committee work programme
- Policy workshops on IP and Genetic Resources, Traditional Knowledge, and Traditional Expressions

COMPETITION
- Competition Law Implementation Programme (Phase I)
- Competition Law Implementation Programme (Phase I and II)
- Competition Regulatory Experts Secondment to Malaysia and Viet Nam
- Building Competition Law Enforcement Capability through Investigation Skills Training
- Workshops I and II on Competition Policy and Law
- 1st to 7th ASEAN Competition Conferences

*Note: Most AECSP projects have been co-initiated by more than one Party.
THE ASEAN REGIONAL DIAGNOSTIC NETWORK PROJECT

Enhancing ASEAN Capacities to Reduce Phytosanitary Impediments to Trade

Background

Under Chapter 5 of the ASEAN-Australia-New Zealand Free Trade Agreement (AANZFTA), Parties commit to apply the principles of the WTO’s Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) in the development, application or recognition of any sanitary or phytosanitary measures to facilitate trade among the Parties while protecting human, animals and plant health. The architecture of AANZFTA, coupled with effective collaboration across the borders, is among the important existing mechanisms to assist Parties in overcoming SPS obstacles to trade.

Against this background, one of the major impediments to trade in agricultural commodities in ASEAN and with other major trading partners including Australia and New Zealand was the lack of diagnostic capabilities in the National Plant Protection Organisations (NPPOs) and other relevant agencies to identify plant pests and diseases. Without credible documentation and information proving that plant products, especially food products, are free from specific pests and diseases, farmers and food producers are unable to sell their goods into overseas markets. Nevertheless, many plant pests and diseases are not easily identified, require scientific methods and the use of specific equipment to ensure an accurate diagnosis.

ASEAN agriculture had been adversely affected by widespread limitations in the ability to produce credible lists of the plant pests and diseases present in production areas and to identify quarantine interceptions. Further, there was an absence of a regional mechanism to make the aggregate diagnostic capability available, nor one to enable more developed countries to assist other countries in addressing capacity gaps.

In 2011, Parties agreed to implement the ASEAN Regional Diagnostic Network (ARDN) Project, under the AANZFTA Economic Cooperation Support Programme (AECSP), in order to establish an ASEAN-wide, cooperative system for delivering credible, plant pest and disease diagnostic services.

Benefits of Correct Identifications of Plant Pests and Diseases

- Enables diagnosticians and farmers to better understand the issues and to control potential damages inflicted by pests and diseases
- Facilitates the development of appropriate and defensible quarantine measures to better protect national SPS conditions
- Strengthens trust between trading partners and enhance market access

In 2011, Parties agreed to implement the ASEAN Regional Diagnostic Network (ARDN) Project, under the AANZFTA Economic Cooperation Support Programme (AECSP), in order to establish an ASEAN-wide, cooperative system for delivering credible, plant pest and disease diagnostic services.
## ASEAN Regional Diagnostic Network

### Project Information

**Supported by:**
AANZFTA Economic Cooperation Support Programme

**Proponents:** Australia, Malaysia and Singapore

**Implementer:**
Department of Agriculture of Australia in consultation with AANZFTA Sub-Committee on Sanitary and Phytosanitary Measures

**Phase I:** July 2010 to June 2016

**Phase II:** May 2017 to October 2019

**Total Budget:** AUD 2,750,413

### Main areas of support:
Training and mentoring activities at regional, sub-regional and national levels, development of diagnostic resources and modernisation of diagnostic technologies, and promotion of national and regional diagnostic networks.

### Project Key Activities

#### Phase I (2010 – 2016)

**Front-line Diagnostic Skills**
- Nematodes (including mentoring in Thailand, Laos, Cambodia); Coccoidea (scale insects and mealybugs); Diptera; immature Lepidoptera; ascomycete fungi; Aleyrodidae (whiteflies); weeds.

**Specialist Diagnostic Skills**
- Phytophagous & stored product mites; phytoplasmas; viroids; viruses.

**Diagnosis Techniques and Resources**
- DNA extraction and barcoding, sequencing, interpretation; digital imaging; remote microscopy.

**Diagnostic Resources**
- Cotton leaf roll dwarf virus; bacterial wilt of corn; palm and mango weevils; factsheets on plant pathogenic fungi.

**Regional Networking**
- Nematodes; Aleyrodidae (whiteflies)
  - Formation of ARDN Advisory Committee and establishment of ARDN website; initiation of ASEAN Diagnosticians Forum.

**National Networking**

**Laboratory Equipment**
- Microscopes with imaging attachments, electronic devices, minor items and consumables.

**Others**
- Professional development and recognition framework for ASEAN diagnosticians.

#### Phase II (2017 – present)

**Front-line Diagnostic Skills**
- Tephritid fruit flies; downy mildews (Oomycetes) (including mentoring in Laos); nematodes (mentoring in Lao PDR, Myanmar, Viet Nam).

**Specialist Diagnostic Skills**
- Colletotrichum (including mentoring on collection management).

**Diagnosis Techniques and Resources**
- Lucid technologies; dichotomous keys; DNA-based diagnostics, including use of high-throughput sequencing services and bioinformatics skills; techniques for depositing reference cultures in globally recognised, culture collections.

**Diagnostic Resources**
- Colletotrichum diagnostic guide; Aleyrodidae (whiteflies) Lucid key; factsheets on weed seeds.

**Regional Networking**
- Nematodes; Aleyrodidae (whiteflies); weed seeds
  - Updating of regional database of diagnostic expertise; updating of compilation of reference collections which support diagnostics.

**National Networking**

**Laboratory Equipment**

**Others**
- Proficiency testing; development of governance arrangements for Clearing House; protocols for handling samples and specimens.
ARDN Project Underpins Existing Trade Commitments

The ARDN project has supported ASEAN’s cooperation on food, agriculture and forestry through the development of strategic measures that ensure product safety, quality and compliance with global market standards (Strategic Measure 5, Food, Agriculture and Forestry, 2025 AEC Blueprint). The project also enables AMS to streamline and improve quarantine systems and procedures and harmonize standards and regulations, a key commitment under the Strategic Plan for ASEAN Cooperation on Crops (2016 – 2020).

The ARDN project supports the implementation of AANZFTA and ATIGA commitments to develop pest and disease notifications in emergency situations. Regional diagnostic networks allow members to exchange information in situations of food safety crisis, interception, control of pests and/or disease outbreak and its SPS measures (Article 83 of the ATIGA and Article 7, Chapter 5 of the AANZFTA).

The ARDN project supports the implementation of AANZFTA and ATIGA SPS economic cooperation commitments through strengthening national and cross-border cooperation for the control and eradication of pests and disease outbreaks and the provision of technical assistance (Article 85 of the ATIGA, Article 8 of Chapter 5 and Chapter 12 of the AANZFTA).
KEY OUTCOMES OF THE ARDN PROJECT

**Improved Capacity in Plant Pest Identification**

The ARDN project has significantly enhanced the capacity of the participating AMS in the identification of plant pests. This has provided scientific credibility to pest lists requested by trading partners, enabled notifications required under international phytosanitary obligations and brought transparency to quarantine operations.

"Pest lists are important for farmers and local agricultural staff in giving the range of pests they might expect and should prepare to manage. They are important for quarantine officials at the border and for agricultural scientists in central laboratories for determining what are exotics and what are indigenous pests, including new incursions and eradication campaigns. They are important for exporters, trade negotiators and external trading partners to show whether potential quarantine pests are present in a country or not. This is essential for them to assess the risks of accepting produce from a country, and any treatments or certification that may be required. Most importantly for trade, having a pest list gives importing country confidence that the exporting country knows what pests it has, and has the expertise to identify them. Without this, the risks involved in trade and import testing would both be much higher"

— Ms Wilma Reano – Chief Agriculturist, Department of Agriculture of the Philippines

Along the process, the Project increased awareness of the importance of modern diagnostics technology and methodology in plant pests’ identification. The project has also enhanced diagnostic capacities of over 500 front-line diagnosticians and specialists in agriculture and quarantine agencies in ASEAN, as well as networking this capacity. With enhanced skills and confidence, the NPPOs are also able to aid their provincial laboratories and farmers in assessing potential risks associated with a commodity or crops, meeting key SPS requirements of importing countries.

"ARDN project provided us with new knowledge for proper identification and practices of pest surveillance and monitoring that resulted in a credible identification of specimens as well as identification of which specimens should be referred to specialists for further examination. Also, by proper identification, monitoring and surveillance result in reliable nation pest list"

— Mr Arnel Villena Somolostro, Agriculturist, Bureau of Plant Industry, Plant Quarantine Service of the Philippines
ARDN project has improved the skills of the participants especially in the diagnostics of the plant pests

— Dr Surmsuk Salakpetch, Director-General, Thailand Department of Agriculture

Through in-country training and mentoring workshops, provincial laboratories and farmers in the participating AMS have improved their skills in plant pests’ identifications, hence crop protection. As cases in points:

- Thai officials have used the knowledge gained under the ARDN project to conduct in-country trainings on biological control of nematode pests. This has benefited over 1,500 Thai farmers since 2013.

- Officials from the Lao Department of Agriculture used the knowledge gained to share with their provincial peers and farmers about nematodes problems and various effective management options, such as crop rotation, when pest nematodes occur.

- Philippine Crop Pest Management Division has used remote microscopy in its laboratory equipped by the ARDN project to help their farmers in diagnosing their pests, and also applied the surveillance knowledge to train Philippine farmers in preparing and protecting their cocoa, coffee and papaya crops in both wet and dry seasons.

During the capacity building for papaya, we were able to find a new pest species for papaya. That was the first time we know we had that pest. That is one important outcome of the ARDN project

— Ms Wilma Reano, Chief Agriculturist, Department of Agriculture of the Philippines

The ARDN project is supporting to NPPOs to improve the capability of identification of pest that is associated with exported or imported agricultural commodities, intrinsically difficult to identify and are constraining or have the potential to constrain trade in ASEAN countries. With enhanced knowledge in plant pests, quarantine officers at the border are able to prevent pests coming into the country; at the same time local produces would have fewer chemical pesticides, therefore safer foods for domestic consumption

— Dr Pyone Pyone Kyi, Deputy Director and Head of Quarantine, Plant Protection Division, Department of Agriculture, Ministry of Agriculture and Irrigation, Myanmar

Improved Market Access and Import Risks Assessment

In some participating AMS, the ARDN project contributed to the establishment of a national surveillance system for the detection of exotic fruit fly and monitoring of endemic fruit fly species.

To date, the ARDN project has contributed to the improved quarantine measures and market access for agricultural produces as follow:

- Enabled Thailand to promote confidence among diagnostics laboratories of other ASEAN NPPOs in a diagnostic protocol that Thailand had developed for bacterial wilt of corn. Acceptance of this protocol enabled Thailand to demonstrate that it was free of this seed-born pathogen, which, in turn, provided the country with market advantage for high-value exports of seed corn.

- Assisted Laos to define pest status for its corn and cassava. As a result, Laos gained market access to China and Thailand for corn and to Cambodia, Thailand and Viet Nam for cassava, its third most important agricultural crop.
Likewise, Cambodia credited the ARDN project for assisting the country in gaining market access to China for its rice and banana exports. These trade deals would not be feasible if Cambodian exporters could not provide the required information on the pests associated with bananas, including pest fruit flies, which were the subject of diagnostic training courses supported by the project.

The ARDN project assisted the Philippines to identify a new pest species for its papaya, enhancing the country’s transparency and surveillance capacity in papaya pests. This, in turn, has contributed to opening market access of Philippine papaya to New Zealand.

Viet Nam can now use remote microscopy to assess detections by quarantine officers of insects in imported goods and clear consignments more quickly when there is no quarantine threat.

“
Australia and New Zealand are strong trade partners to ASEAN. We see that there are a lot of market potentials in the region and it is important to be able for us to engage with ASEAN at a similar level of scientific basis. We are all members of the International Plant Protection Convention which is set to ultimately let us have the same level of consistency and approaches to biosecurity. From one country to another, a consistency in understanding will ultimately lead to better outcomes and market access for all countries including Australia and New Zealand.

— Mr Peter Creaser, Assistant Secretary, Australian Department of Agriculture

Enabled Inter-Agency and Cross-Border Collaboration

Successful implementation of the ARDN project has enabled an effective means for co-operation, collaboration and exchange of diagnostic knowledge and information, narrowing the capacity gap within and between AMS.

We think this is our commitment as an ASEAN Member to help level up other AMS in the capacity to identify plant pests, which will in turn help increase the level of produce we are receiving from them.

— Ms Mei Lai Yap, Director of Plant Science and Health, National Parks Board of Singapore

The project has complemented the operations of a Clearing House in Malaysia and has helped to develop its communication strategies and trade development activities supported by other cooperation partners. Through a series of training workshops and mentoring activities, the ARDN project has created a range of formal and informal networks of specialist diagnosticians, who can now support each other and share information. For example, in 2017, the project successfully started a national diagnostic network in Thailand, and a Whitefly Facebook group following a regional workshop on whiteflies in 2015 for participants from AMS to stay updated on new developments, challenges, and discoveries about whiteflies in the region.

ARDN project provided the knowledge and platform for plant protection officials from the region to learn from one another during the workshop and also in the future. Thailand would like to develop and enhance such network for cooperation among the ARDN members, and to develop the diagnostic testing capability, to support the formulation of the phytosanitary policies.

— Dr Surmsuk Salakpetch, Director-General, Thailand Department of Agriculture

The development of informal and formal networks under the ARDN project has enabled the community of diagnosticians to efficiently discuss high-priority SPS challenges, share possible solutions, and communicate about the concerned SPS regulations when needed.
Nematode Identification: Enabling AANZFTA Trade Facilitation and Biosecurity

Capacity-building under the ARDN project focused on identification of 40 specific plant pests or pest groups of high phytosanitary significance to trade, for which diagnostic capacity was still lacking in some ASEAN Member States. The nematodes are notable among these groups and have been one of the main targets for mentoring programmes under the ARDN project.

Plant nematodes are taxonomically challenging and difficult to detect. They damage the subterranean parts of crops such as rice, vegetables, fruit trees, vines and ornamentals. They are also commonly associated with aquatic plants, roots and tubers, and can be of major quarantine importance for commodities traded either for ornamental purposes (e.g. aquarium plants), consumption (e.g. garlic) or planting (e.g. seed potatoes). Nematodes are very small, ubiquitous and very diverse. The ARDN project progressed from elementary nematode diagnostics sessions to nematode identification workshops and mentoring programmes in a quarantine and SPS regulation capacity. Following are key outcomes from the project activities that specifically targeted plant nematodes:

The ARDN project enhanced knowledge and strengthened the diagnostic capacity and resources for plant nematodes.

Trainees evaluated at the commencement of the ARDN nematode workshop assessment revealed that only 33% of the participants correctly identified a nematode from a leech or planarian. Following each workshop, practical testing showed that the participants’ ability to accurately identify nematodes and their characteristics (i.e. harmful pest, beneficial soil saprophytes) had improved to 100%.

The project also supported surveys in farming areas to increase understanding of nematodes and the significant differences between the nematode faunas of crops in different provinces of agriculture-based countries in the region. Alongside increased diagnostic ability and knowledge amongst participants, the project team also worked to develop a key to major groups of pest nematodes in ASEAN, which has been progressively revised with each subsequent nematode workshop.

In addition, high-resolution compound microscopes supplied by the project were helpful for diagnosticians in accurately identifying nematodes. In Myanmar, an ultrasonic machine for nematode extraction, provided by the ARDN project, helped shorten the identification period of nematodes from a full day to just half an hour. This has reduced the amount of time required to accurately identify nematodes by 48 times for Myanmar diagnosticians.

The ARDN project empowered farmers and enabled sustainability and market access for Myanmar.

Identifying nematodes is important, but the real impact comes from limiting the spread of the pest in the fields. Hence, getting farmers to know more about these pests was critical. In Myanmar, the ARDN project particularly focused on equipping farmers and provincial officials with the scientific knowledge, skills and technologies to cope with nematode spread. ‘Farmers were actually able to identify nematode instead of just saying it was a bad year,’ Dr Michael Hodda noted regarding his interaction with farmers.

It is not just plants that need to be certified as free of nematodes. Increasingly, seed exporters are also required to show pest free status. For Myanmar, the ARDN project team worked to help extract and identify nematodes in rice seeds and conduct pre-shipment testing for presence of plant-parasitic nematodes. These activities not only increased diagnostic confidence in Myanmar diagnosticians, but also significantly increased Myanmar’s market access potential.

"With better knowledge and technologies, we can identify nematodes much faster. The compound microscope that supported by the ARDN project gives a clear image of nematodes that helps a lot in the identification of plant nematodes. We can also make posters using high-quality images to train plant protection and extension staff as well as farmers on how to identify and control plant pests."

— Dr Pyone Pyone Kyi, Deputy Director and Head of Quarantine, Plant Protection Division, Department of Agriculture, Ministry of Agriculture and Irrigation, Myanmar
SUCCESS FACTORS OF THE ARDN PROJECT

The ARDN project placed a strong emphasis on narrowing the diagnostic capacity gaps within and between AMS through raising awareness of the importance of accurate identification of plant pests as well as of the regional/national networks in facilitating trade while better protecting national SPS conditions. In particular, the project sought to enhance the knowledge and technical capacity of NPPOs in each AMS, with a focus on Cambodia, Lao PDR and Myanmar, through tailored mentoring programmes in concert with regional knowledge-sharing workshops and networking activities. In addition to sharpening diagnostic capacities of front-line diagnosticians, officials and farmers, the ARDN project also equipped NPPOs with laboratory equipment, copies of diagnostic keys, and thousands of pages of technical literature not available in AMS, and technical know-how for them to more accurately and effectively identify plant pests and diseases.

Customised Mentorship Programme

Complementing the regional and sub-regional training workshops, the laboratory-based mentoring by regional experts was also programmed to assist individual NPPOs to deliver in-house training, field work and plant pest identification. Participating NPPOs found this mentorship, tailored to varying circumstances, to be very practical and engaging in bolstering their knowledge and skills.

The ARDN project Mentor and us worked together to upgrade the skills of my staff who are still new and we improved a lot

— Dr Pyone Pyone Kyi, Deputy Director and Head of Quarantine, Plant Protection Division, Department of Agriculture, Ministry of Agriculture and Irrigation, Myanmar

Mentoring is showing people how it’s done and then having them do it. Mentoring activities were fairly advanced where people can see you doing it and do it while I am there

— Dr Michael Hodda, ARDN project Mentor and Associate Professor of Nematode Biosystematics and Ecology, Commonwealth Scientific and Industrial Research Organisation of Australia

Strong Focus on Building Technical Knowledge and Laboratory Capacity

The ARDN project Mentor and us worked together to upgrade the skills of my staff who are still new and we improved a lot

— Dr Pyone Pyone Kyi, Deputy Director and Head of Quarantine, Plant Protection Division, Department of Agriculture, Ministry of Agriculture and Irrigation, Myanmar

Mentoring is showing people how it’s done and then having them do it. Mentoring activities were fairly advanced where people can see you doing it and do it while I am there

— Dr Michael Hodda, ARDN project Mentor and Associate Professor of Nematode Biosystematics and Ecology, Commonwealth Scientific and Industrial Research Organisation of Australia
Sustainable Approach to Training

The ARDN project adopted a sustainable approach to training ASEAN NPPOs and their diagnosticians by developing an important and sustainable source of technical expertise, guidance and networks to outlast the project cycle. These included the development of online diagnostics tools and training materials, transfer of laboratory equipment and capacity as well as the embedding of these resources and best practices into daily diagnostics works. This led to the development of institutional capacity as well as individual skills. As part of the training outcomes, some officials from the participating NPPOs have published the following academic reports, contributing inter alia to the identification of species, the definition of pest status, and host-plant associations of pest species:

- 11 taxonomic publications, 2 conference presentations and 1 poster on the taxonomy of scale insects, mealybugs and their associates;
- 8 taxonomic publications on the taxonomy of plant-feeding mites, including a comprehensive national checklist of species; and
- 5 taxonomic papers on pest fruit flies.

Further, equipping diagnosticians and technical officers across participating NPPOs with technical know-how and laboratory capacity, who in turn, have applied them to benefit provincial laboratories and farmers in their respective countries. These multiplier effects have contributed to narrowing the capacity gap within the country.

"Because the needs are great, relative to the available expertise, training those people with expertise to connect with farmers, extension workers, trainees and provincial staff is essential to making sure that they can be involved at a basic level, thus spreading some of the workloads and alleviating the capability shortfall"

— Dr Michael Hodda, ARDN project Mentor and Associate Professor of Nematode Biosystematics and Ecology, Commonwealth Scientific and Industrial Organisation of Australia
Effective Diagnostic Networks

The ARDN project focused on supporting the development of national and regional networks and effective sources of mutual support for diagnosticians in the region. Participants have been able to seek advice from colleagues after making connections at various training workshops and in-country mentoring activities. In other situations, ARDN members have cooperated with others in the region to solve specific obstacles to improve outcomes. For example, countries without adequate DNA sequencing equipment have been able to acquire DNA of pathogens and pests through using relatively simple methods taught through the project, ship these samples to a DNA sequencing facility, and receive results within a few days. This has effectively eliminated an immediate need for local DNA sequencing equipment, which is financially viable and can improve diagnostic capabilities.

Gender Inclusiveness

The ARDN project provided particular attention to fostering female participation in science, technology and bioengineering. As a result, 70% of the project’s individual beneficiaries were female.

The project also provided ample opportunities for female scientists and managers as role models for leadership. For example, female scientist assumed significant leadership roles in the fruit fly workshop and follow-up training on downy mildews, weed seeds and South American leaf blight.

Individual Beneficiaries

- Female: 70%
- Male: 30%

Workshop and Diagnostic Guide on Identification of Plant Pathogenic Species of Colletotrichum, 26–30 March 2018, Bangkok, Thailand
CONCLUSION

"The outcome of the ARDN project is aligned with the objectives of SPS of AANZFTA Agreement by supporting trade facilitation, greater transparency, and strengthen co-operation among the competent authorities of the Parties.

— Dr Pyone Pyone Kyi, Deputy Director and Head of Quarantine, Plant Protection Division, Department of Agriculture and Irrigation, Myanmar

Diagnostic capacities to identify plant pests and diseases are foremost in overcoming key phytosanitary impediments to trade in the AANZFTA region. Support activities under this multi-phased ARDN project are highly valued by the participating AMS and have contributed to strengthening crop protection, quarantine systems and import risks assessment in ASEAN. The Project has also fostered collaborations among competent authorities at both national and regional levels.

Findings of this case study demonstrate the significant contributions of the ARDN project in supporting the implementation of the SPS Chapter of AANZFTA through improving pest diagnostic capacities. They also demonstrate the need for all Parties to sustain their efforts to apply this improved capacity to achieve overall AANZFTA goals."
With special thanks to and acknowledging the efforts of the following offices and committees:

The following national agencies from AANZFTA Parties:

- **Australian Government Department of Agriculture**
  - Department of Agriculture of Australia
- **Department of Agriculture and Agrifood, Ministry of Primary Resources and Tourism, Brunei Darussalam**
- **Plant Protection Sanitary and Phytosanitary Department, General Directorate of Agriculture, Ministry of Agriculture, Fisheries and Forestry, Cambodia**
- **Indonesian Agricultural Quarantine Agency, Ministry of Agriculture**
- **Department of Agriculture, Ministry of Agriculture and Forestry, Lao PDR**
- **Department of Agriculture, Malaysia**
- **Department of Agriculture, Ministry of Agriculture and Irrigation, Myanmar**
- **Ministry for Primary Industries, New Zealand**
- **Bureau of Plant Industry, Department of Agriculture, The Philippines**
- **The Agri-Food and Veterinary Authority of Singapore, now National Parks Board of Singapore**
- **Department of Agriculture, Thailand**
- **Plant Protection Department, Ministry of Agriculture and Rural Development, Viet Nam**

- AANZFTA Sub-Committee of Sanitary and Phytosanitary Measures
- ASEAN Expert Working Group on the Harmonisation of Phytosanitary Measures
- ASEAN Sectoral Working Group on Crops
- Technical Advisory Committee of the Clearing House (Malaysia)
- The Southeast Asian Network on Taxonomy (ASEANET)
- Centre for Agriculture and Bioscience International
Background

Developing strong intellectual property (IP) regimes throughout ASEAN is necessary to foster dynamic international trade and investment. When the requirements of IP rights are consistently applied, investors and traders will have more confidence to trade and invest in innovation, research and development as well as technology transfer throughout the region. Adopting a consistent and robust practice of patent examination plays an integral role in enhancing ASEAN competitiveness with predictable, efficient and accessible IP systems.

The ASEAN-Australia-New Zealand Free Trade Area (AANZFTA) commits the 12 Parties to reduce trade and investment impediments through the effective and adequate creation, utilisation, protection, and enforcement of intellectual property rights. In this light, developing and delivering a consistent and high-quality training in patent examination requires intensive resources and there was a notable capacity gap in ASEAN in this area. Without the efficiencies created by having effective patent examination training in place, examiners faced various technical difficulties in coping with increasing demand and volume of patent applications.

To operationalise and implement IP commitments in AANZFTA, Parties agreed to support two complementary projects: (1) Capacity Building for Patent Examiners – An Ideal Training Model (IPET) and (2) Regional Patent Examination Training Mentoring (RPET Mentoring). These interrelated projects aimed to develop and embed a consistent and sustainable approach with tailored resources to patent examination training in the participating ASEAN Member States (AMS) towards a shared goal of enhancing the internal training capacity of AMS and the overall quality of patent examination standards throughout the region.

Project Information

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<th>IPET</th>
<th>RPET Mentoring</th>
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<td>Supported by</td>
<td>AANZFTA Economic Cooperation Support Programme</td>
<td></td>
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<td>Timeline</td>
<td>April 2013 to present</td>
<td>July 2017 to present</td>
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<tr>
<td>Total Budget</td>
<td>AUD 337,069</td>
<td>AUD 247,835</td>
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<td>Proponents / Implementers</td>
<td>Intellectual Property Corporation of Malaysia</td>
<td>IP Australia</td>
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<td>Participating ASEAN Member States</td>
<td>All ASEAN Member States</td>
<td>Indonesia, Malaysia, the Philippines, Thailand, and Viet Nam</td>
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Patent examination training in ASEAN has evolved significantly since AANZFTA Parties agreed to support the implementation of the Regional Patent Examination Training (RPET) project in May 2012. Led by IP Australia, RPET assisted participating AMS in building their patent examiners’ capabilities at par with the international standards of the Patent Cooperation Treaty. This award-winning project developed and exposed ASEAN IP Offices to a competency-based patent training programme. As a result, 45 ASEAN patent examiners were trained through this two-year programme. RPET has played an important role in building a foundational understanding of competency-based training, which has influenced training practices within these participating IP Offices and in the region.

Building on the success of RPET, An Ideal Training Model (IPET) and RPET Mentoring projects were established in 2013 and 2017, respectively, and have resulted in complementary outcomes to the patent examiners, training materials and networks established under RPET. IPET considered the national application of the RPET materials and has successfully centralised all material to an online learning management system to support consistency in patent examination training in the region. As a result, the IPET system has effectively served as an interactive learning platform and an open-source depository for training resources. RPET Mentoring, serving as the next phase of the RPET, further built upon the IPET learning management system and online content, by designing a training framework and material for domestic implementation with an aim to set in motion in-house training to new and existing examiners in the participating IP Offices.

The nexus between the three Projects: RPET, IPET and RPET Mentoring in improving ASEAN capacity in patent examination
The key outcome from the implementation of both IPET and RPET Mentoring projects has been the enhanced capacities of all participating IP offices to develop, maintain and deliver their own patent examination programme. Local trainers in each office have noted that their new examiners, who have participated in the new training programme developed through RPET Mentoring, have a strong understanding of the foundation concepts of patent examination and are well prepared to transition to the next phase of adopting high-quality patent search and examination practices. Improved patent examination capabilities have contributed to increased efficiencies in the examination and prosecution process, and grant of higher quality patents, as well as flow-on effects of increased business and inventors’ confidence throughout the ASEAN region.

The ‘Ideal Training Model’ (IPET) project has strengthened the training infrastructure for IP Offices by developing a regional training model and framework for all ASEAN IP Offices. IPET has developed an effective and interactive online management learning system to host and accumulate training resources for ASEAN IP Offices. This system is actively used by patent examiners in Indonesia, Malaysia, the Philippines, Thailand and Viet Nam. IPET also exposes newer ASEAN Member States namely Cambodia, Lao PDR and Myanmar, who do not yet conduct a substantive examination but have the ability to access and use this material for internal training purposes.

To ensure the sustainability of training outcomes under IPET, ‘RPET Mentoring’ has assisted AMS in adapting and embedding the training infrastructure and contents from RPET and IPET to their domestic practices and legislations. RPET Mentors have worked with local Activity Managers and Training Teams to initially design customised work plans and milestones for capacity development for each participating IP Office. The Mentors also provide tailored guidance on training future local trainers with the aim of improving the internal training capacity and self-sufficiency in these IP Offices. In particular, ‘RPET Mentoring’ has assisted participating IP Offices in addressing country-specific needs, resulting in the following key outcomes:

- Each office has a comprehensive competency-based patent examination training programme that includes online modules, a curriculum and training tools.
- IP Offices in Viet Nam, the Philippines and Malaysia have commenced a pilot of the new training programmes. The first eight new examiners in Viet Nam and six new examiners in the Philippines have completed their first phase of the programme. Indonesia and Thailand IP Offices intend to start piloting by October 2019.

> The RPET Mentoring is a very useful and relevant training programme that complements the RPET for patent examiners and can provide standard training materials and modules to be used in training patent examiners

> Ms Melanie Binauhan, Activity Team Leader, The Intellectual Property Office of the Philippines

> IPET and RPET Mentoring increased the knowledge and skill of patent examiners in conducting search and examination to international standards. The settlement of examinations is now faster and is of good quality; the backlog is also decreased. It is expected that these projects can encourage the development of innovation

> Mr Aribudhi Nugroho Suyono, Patent Examiner/Activity Manager for RPET Mentoring, Directorate General of Intellectual Property Rights of Indonesia

The ability to deliver consistent and high-quality patent examination training to new intakes using internal resources demonstrates long-term sustainability of the projects. For example, with further coaching under RPET Mentoring, many RPET graduates have now become trainers and are leading on the development and implementation of these country-specific patent examination training.

> In the long term, we anticipate the sustainable approach adopted by RPET Mentoring will have a positive impact on patent quality standards at Thai Department of Intellectual Property

> Ms Baahini Sivakumar, IP Australia mentor for the Thai Department of Intellectual Property
The ‘Ideal Training Model’ (IPET) and ‘RPET Mentoring’ projects have supported ASEAN economic integration on IP under the ASEAN Economic Community 2025 Blueprint and the Strategic Goal 1 of the ASEAN IP Action Plan 2016-2025.

IPET and RPET Mentoring also contribute to the realising the built-in agenda and objectives of the AANZFTA Chapter 13 on Intellectual Property:

- Training under IPET encourages ASEAN IP Offices to raise standards to the international practice established through the World Intellectual Property Organization (WIPO) Patent Cooperation Treaty (Article 1);
- The contextualisation of training materials under RPET Mentoring ensure that patent examination systems consider different levels of capacity development and needs in national legal systems, ensuring examiners adopt high-quality of examining patents when prosecuting cases in their countries (Article 1); and
- Improved competency and patent examination systems support the party’s commitment to cooperation to improve the efficiency of respective IP administration and registration systems (Article 9).

Results of IPET and RPET Mentoring: The Experience of Viet Nam

The ‘Ideal Training Model’ (IPET) and the ‘Regional Patent Examination Training (RPET) Mentoring’ have assisted participating IP Offices in enhancing their capacities in delivering quality patent examination training. For Viet Nam, the implementation of these projects has increased the speed and quality of patent examinations and enabled patent examiners at the Intellectual Property Office of Viet Nam (IP Viet Nam) to customise a consistent and sustainable patent examination training programme for their new examiners.

In recent years, IP Viet Nam has received an increasing number and complexity of patent applications. In 2018, they received over 6,000 international applications and approximately 1,000 domestic applications. The processing time for these applications ranges from 4 to 5 years. Furthermore, the three different divisions within IP Viet Nam had previously provided different approaches to patent examination training, leading to issues with maintaining consistency.

In light of this, ‘RPET Mentoring’ has assisted IP Viet Nam to develop Viet Nam Patent Examination Training Programme or ViPET. After adapting the learning system and resources materialised under IPET, this programme has been delivered to their new cohort of trainees across all technology backgrounds since March 2019.

The competency-based training framework developed under RPET Mentoring is so valuable as it minimises the gaps between our three divisions

- a RPET Mentoring Trainer, IP Viet Nam

To date, IP Viet Nam has been able to complete the first phase of its 21-month pilot training programme for eight new trainee examiners. Trained by RPET graduates, the ViPET trainees have already demonstrated their increased confidence in applying the skills gained to deliver better quality patent examination. Feedback from IP Viet Nam trainees has suggested that the adoption of the structured and consistent competency-based training programme under RPET Mentoring is very useful in minimising discrepancies in training practices among the three divisions.

The RPET graduates’ familiarity with this competency-based training also allowed them to be in the driver seat in contributing to the organisational changes required to implement RPET Mentoring at IP Viet Nam. As the programme progresses, they are confident the program will deliver increases in efficiency and quality of patents granted by IP Viet Nam.
SUCCESS FACTORS OF IPET AND RPET MENTORING

“RPEM allowed offices to share experiences in training development based on mentoring programmes from the expert/consultant that are beneficial to meet the specific needs of Malaysia. As a result, we managed to mark a significant improvement in the quality of patent examination as well as to increase the level and number of well-trained examiners who are up to the world standard.

- Yusnieza Syarmila Yusoff, Senior Director, Policy and International Affairs Division, Intellectual Property Corporation of Malaysia.

Focus on Competency-Based Examination

The competency-based examination framework, used in all three projects, takes a flexible approach to learning that allows trainees to proceed with their assignments when they can demonstrate their competency at the task on hand. In the case of RPET Mentoring, trainees undergo a variety of online and on-the-job assessments, and the requirements are made transparent from the early stages of the programme. Continuous assessments ensure that trainers can assess at any point whether trainees are performing up to standard, allowing them to identify and focus their attention on those who are falling behind and make early interventions as appropriate. The assessments also provide evidence that a trainee is competent and able to meet international patent examination requirements. The transparency, objectivity, and consistency of the competency-based framework were raised by IP Australia mentors as reasons for its success.

Success Factor

- Focus on competency-based examination
- Customised to country needs
- Blended approach to learning
- Strong mentoring network

RPEM Mentor Mission to the Intellectual Property Corporation of Malaysia, July 2018
**Customised to Country Needs**

Complementing the regional approach of Regional Patent Examination Training and IPET, RPET Mentoring conducted a gap analysis and recognised that each of the five participating IP Offices was at varying stages of development and would, therefore, require an individualised approach according to the office’s requirements. The guidance was accordingly focused on how each training programme was designed, developed, implemented and evaluated by factoring in the needs of each country. The customisability of RPET Mentoring work plans also allowed IP Offices to tailor their own versions of online learning tools which included national laws, provisions or focus areas. This flexible and demand-driven approach allowed IP Australia mentors to address country-specific capacity needs for optimal results which will be sustained by the offices in the long term.

**Blended Approach to Learning**

The blended learning approach combines face-to-face lectures, on-the-job training, and online learning platform and management systems used in IPET and RPET Mentoring. Incorporating all these aspects, the in-house training programmes now cater to trainees with diverse skillsets and enable them to access to all learning resources at any time through an online learning management system. This flexibility provided by the online modules is beneficial because trainees can learn at their own pace, which is supported through face to face training sessions. The blended learning approach has increased content retention among participants and contributed to the sustainability of the capacity built under RPET, IPET and RPET Mentoring.

**Strong Mentoring Network**

RPET Mentoring’s is an in-country and virtual mentoring programme, following a country-specific work programme, involving experts from Australia and local training teams. The mentoring and guidance were a critical factor in contributing to the effectiveness of RPET Mentoring and enabled organisational change to embed the training approach of RPET and IPET. The strong mentoring network and relationship of trust built between IP Australia and each of the five IP Offices during RPET ensured that IP Australia was able to provide relevant insight during the planning and implementation stages of ‘RPET Mentoring’.

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CONCLUSION

Consistent and robust patent examination services give businesses and investors increased confidence to trade and invest in research and development across the AANZFTA region. Findings of this case study exemplify the significant contributions of the IPET and RPET Mentoring in supporting the implementation of the IP Chapter of AANZFTA. Supports activities under both projects are well recognised by participating AMS and have complementarily contributed to improving the quality of patent examination and internal training capacity in all participating IP Office. More importantly, both projects have provided ASEAN IP Offices with robust training model and lasting resources for them to effectively carry out training of new patent examiners.

"The outcomes achieved under IPET and RPET Mentoring are in line with the commitment of the AANZFTA to reduce trade and investment impediments through the effective creation, utilisation, protection, and enforcement of IPR. Patent and innovation will profit inventors by preventing others from copying and commercially using their product without their consent. Having a good quality patent examination, therefore, is a key foundation of a credible patent system based on international standards.

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