SEAMEO CENTRES POLICY RESEARCH NETWORK (CPRN) SUMMIT 2025

Building Bridges to a Sustainable Future: Inclusive Collaboration and Innovation in Education, Science, and Culture

Employment Study of Graduates in the Agri-Food Sector in ASEAN

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Introduction to SCOPE-HE

The EU-ASEAN Sustainable Connectivity Package – Higher Education (SCOPE-HE)

- Aims to **enhance exchanges and people-to-people connections** in **Higher Education, TVET, and research** within ASEAN and between the EU and ASEAN.
- Includes a dedicated result area focused on **strengthening ASEAN's regional network** of vocational education institutions and businesses, with an emphasis on **green and digital skills**.
- This study, **commissioned by SCOPE-HE** and conducted by **SEAMEO VOCTECH,** explores the **employability of vocational graduates in the agri-food sector** – a vital pillar of ASEAN's **economic resilience and food security**.

Why This Study Matters

Enhancing Graduate Employability in the Agri-Food Sector

- **Identify critical skills gaps** in the workforce
- **Highlight best practices** in training and education
- **Provide actionable recommendations** to align TVET systems with industry needs

Focus Areas:

- Digital transformation
- Green and sustainable skills

Key Impact: This study serves as a strategic resource for **policy makers**, **TVET institutions**, and **industry stakeholders** to:

- Drive **TVET reform**
- Strengthen **public-private partnerships**
- Build a **future-ready workforce** for a **sustainable and inclusive ASEAN**

Introduction of the study

Critical Sector for ASEAN Economies

- Agriculture and food processing: significant employment sources (ERIA, 2019)
- Contributed $717 billion in 2019
- Supports 127 million jobs in major economies (Indonesia, Thailand, Vietnam, Philippines)

Rising Demand & Population Growth

- ASEAN population projected to reach 767 million by 2040
- Food demand expected to double by 2030, driving need for innovation in food security and productivity

Increasing Relevance

- Vital role of TVET graduates for modernisation efforts, with growing focus on digital and technical skills

Alignment with Industry Needs

- TVET programmes essential for training in precision farming, aquaculture, and food processing
- Digital skills integration in curricula to meet evolving industry requirements and support economic goals

Objectives of the study

1. Assess Graduate Employability

- Understand employment outcomes
- Measure the alignment between demand and supply

2. Map Private Sector Engagement

- Examine private sector collaboration with TVET institutions
- Identify opportunities to strengthen industry involvement

Methodology

Desk review: **Conducted across all 10 ASEAN Member States**

Survey: **Implemented in 5 ASEAN Member States** (Cambodia, Indonesia, Lao PDR, Thailand, and Vietnam)**.** Target groups included:

- TVET graduates
- TVET institutions
- Industry representatives

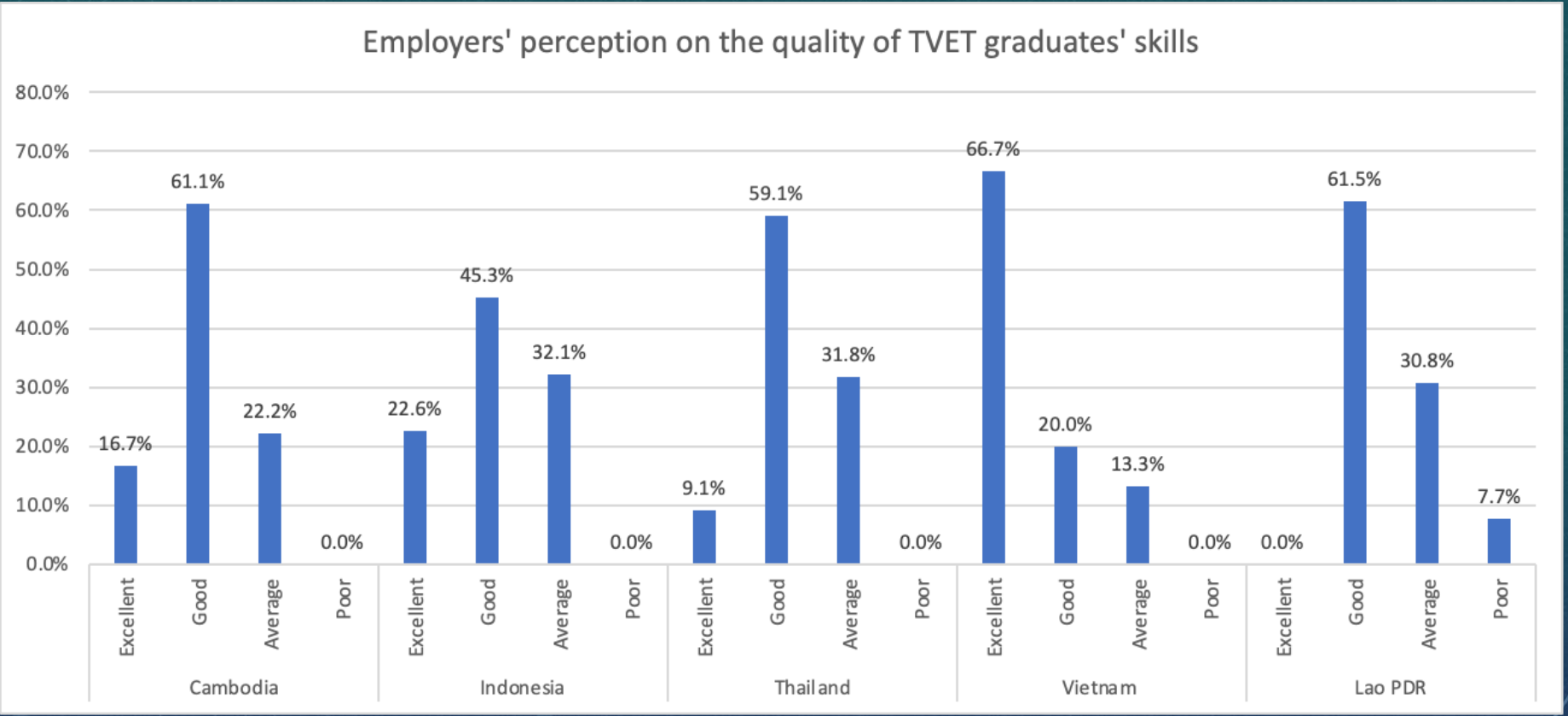
Stakeholder engagement: Engaged a broad range of , including **Government Agencies, TVET Institutions, Private Sector Actors & International Organisations**

- Hybrid Meeting & Workshop (Jakarta, Indonesia & Online)
- "Closing the Gap" Workshop (Bangkok, Thailand)
- Regional Policy Dialogue (Vientiane, Lao PDR)

Key findings

- **High Employment Rates:** E.g., Indonesia (93.7%), Thailand (95%), Vietnam (100%).
- **Entrepreneurial Pathways:** Notable self-employment among graduates, esp. in Cambodia.
- **Digital shift:** Growing inclusion of precision farming, IoT, and AI in curricula.
- **Skill Mismatches:** Employers report persistent gaps in digital competencies, adaptive and soft skills, and job-specific technical skills.
- **Weak Industry Collaboration:** Minimal involvement in curriculum co-design and feedback mechanisms.
- **Uneven TVET System Maturity:** Disparities in funding, digital infrastructure, and teacher training and capacity.
- **Fragmented Governance:** Overlapping mandates hinder cohesive reform.

Specific Findings from the Survey conducted in 5 Countries



63.0%

(Range: 50.0% - 88.9%)

Employers believe that TVET graduates possess sufficient digital skills

Specific findings from the Survey (contd.)

	Employed graduates
Cambodia	77.4%
Indonesia	93.7%
Lao PDR	64.3%
Thailand	95.0%
Vietnam	100.0%

79.9%

(Range: 53.3% - 100.0%)
Employers collaborated with private sector

In terms of:

- Internship programmes
- Curriculum development
- Joint training initiatives

64.5%

(Range: 38.3 - 78.6%)
Graduates found digital skills as **very useful** for their jobs

The workforce supply in this sector is relatively straightforward to assess; however, measuring the demand presents greater challenges, as many graduates are employed within the informal sector.

Recommendations for strengthening TVET in the Agri-Food Sector

1. Invest in Modernised Food Systems

- Upgrade agri-food production and training systems to meet international standards.
- Emphasise value-added processing, traceability, and sustainability.

2. Advance Policy Reforms for Food Safety & Quality

- Strengthen national policies on food safety, value-chain development, and quality assurance.
- Promote inter-ministerial coordination for integrated agri-food and TVET strategies.

3. Expand Digital Infrastructure and Technologies

- Invest in IoT, AI, broadband connectivity, and smart tools in TVET institutions.
- Support tech-enabled pedagogy for digital agri-food competencies.

4. Support Continuous Professional Development (CPD)

- Provide CPD for educators in emerging agri-tech, pedagogy, and green skills.
- Introduce graduate-focused digital certification and micro-credentialing.

Recommendations (contd.)

5. Promote Youth Engagement and Awareness

- Launch targeted awareness campaigns and integrate agri-tech success stories into media and educational content.
- Rebrand agriculture as a high-impact, tech-forward career path.

6. Adopt Data-Driven Decision-Making

- Strengthen tracer studies and Labour Market Information System (LMIS).
- Establish clear KPIs to monitor graduate employability and TVET effectiveness.

7. Strengthen Strategic and Long-Term Planning

- Align TVET development with national economic strategies, green growth agendas, and regional labour mobility frameworks.
- Promote regional specialisation of TVET centres in specific agri-food niches.

Recommendations (contd.)

8. Strengthen Regional Collaboration and Knowledge Sharing

- Establish ASEAN-wide platforms for policy dialogue, joint training programmes, and resource sharing.
- Promote co-development of regional qualification frameworks and shared teaching materials.

9. Enhance Teacher and Trainer Innovation Ecosystems

- Create innovation labs or “green TVET hubs” to foster experimentation in pedagogy, technology, and sustainability.
- Encourage teacher-led innovations through competitions and recognition schemes.

10. Improve Inclusivity and Equity in Agri-Food TVET

- Promote gender-sensitive curricula and expand access for rural/underserved youth.
- Design flexible learning pathways, including modular and blended options.

Thank you