

# The Right Skills, Right Now: Future Proofing ASEAN's Workforce

Akkanut Wantanasombut  
Institute of Asian Studies  
Chulalongkorn University

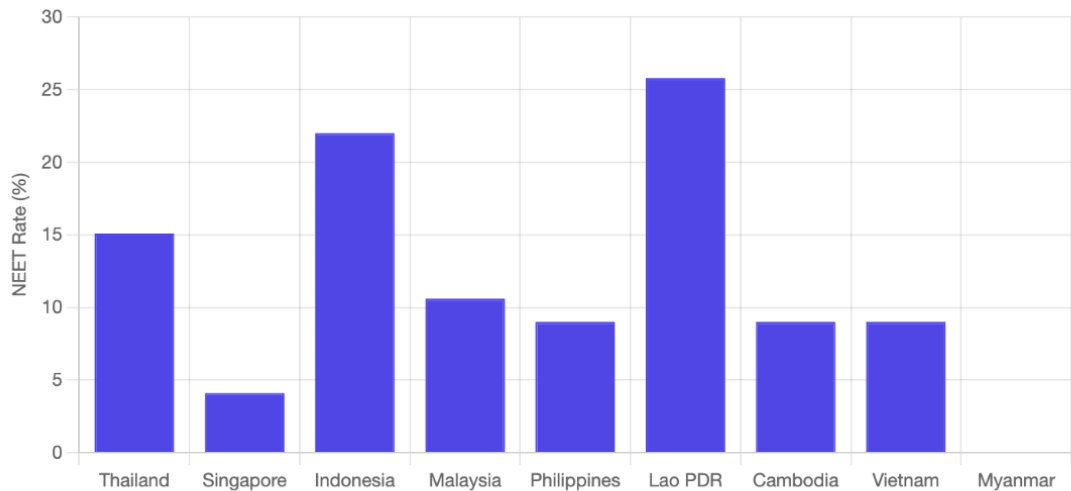


Empowering ASEAN's Future: Investing in Skills  
for Inclusive Growth and Sustainable Development

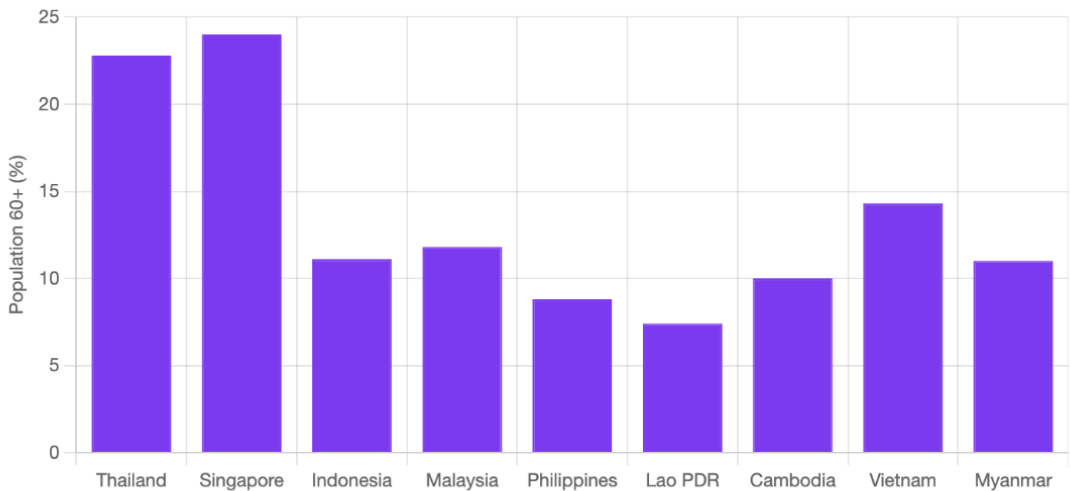
# Key Challenges Shaping Workforce Transformation in Thailand and ASEAN

- A **growing NEET population**—especially among rural youth and urban poor—who are neither in education, employment, nor training.
- **An aging society** that demands new models for lifelong learning and skills recognition, including for older informal workers.
- **Digital transformation and automation** are disrupting traditional roles, especially in the **automotive sector**, which is shifting rapidly toward electric vehicles (EVs) and smart manufacturing.
- And a **skills mismatch that is widening**, not narrowing, due to fragmented policy and slow institutional adaptation.

Youth NEET Rates by Country



Aging Population Indicators



Youth NEET Statistics

Youth Not in Employment, Education, or Training (NEET) rates across ASEAN countries.

Highest NEET Rate Lao PDR (25.8%)

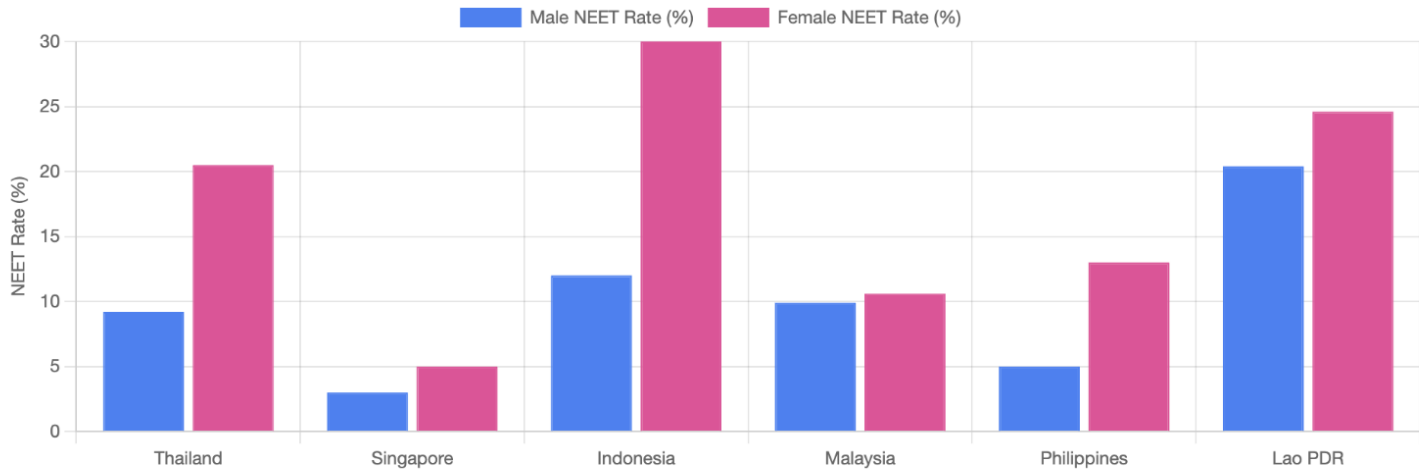
Lowest NEET Rate Singapore (4.1%)

Average NEET Rate ~13.1%

Gender Gap in NEET Rates

Female NEET rates are significantly higher than male rates in most countries, with Indonesia showing the largest gap (18 percentage points).

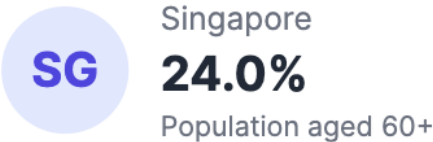
NEET Rates by Gender



Data: ILO 2023, ASEANstats, national sources

# Demographic Drivers of Labour Market Transformation

## Highest Aging Population



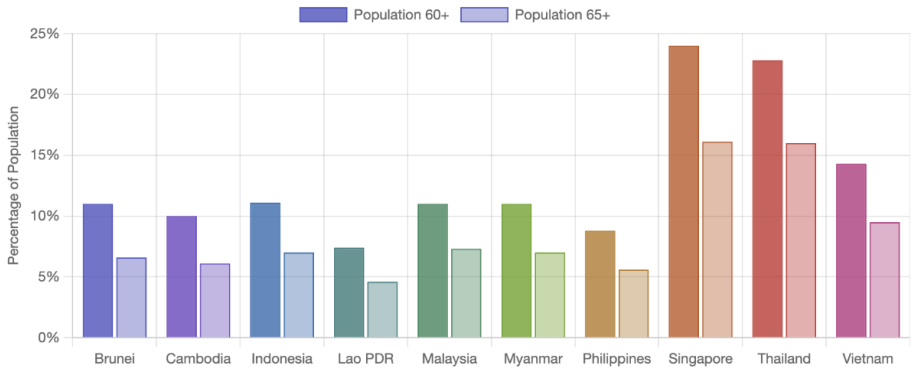
## Highest Aging Index



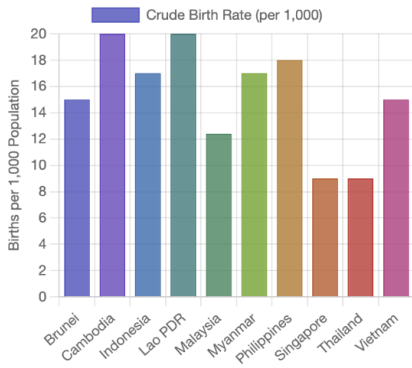
## Highest Old-age Dependency



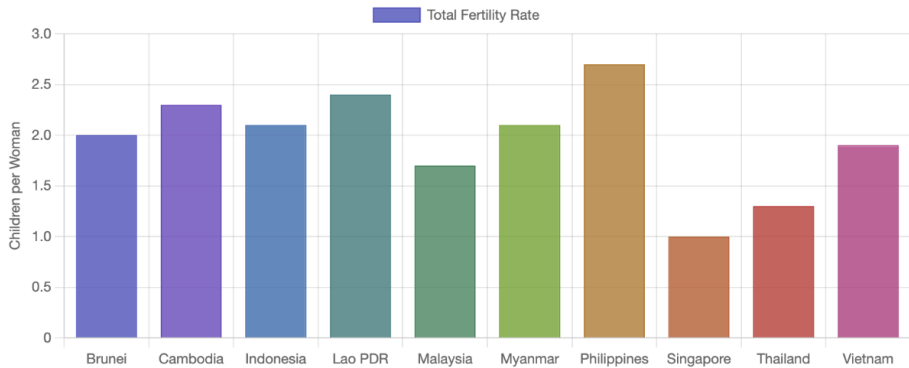
Population Age Structure by Country



Crude Birth Rates



Total Fertility Rates by Country



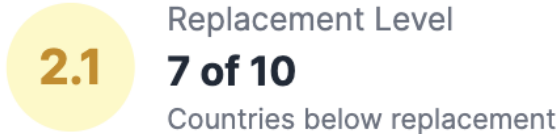
## Highest Fertility Rate



## Lowest Fertility Rate



## Replacement Level



Data: UNESCAP (2023), World Bank (2022), UNDESA (2022)

# Key Insights on Aging Population

- Singapore and Thailand have the highest proportions of elderly people (60+), at 24.0% and 22.8%, respectively.
- Lao PDR has the youngest population structure, with only 7.4% of the population aged 60+.
- Singapore's aging index of 2.05 indicates more than twice as many elderly people (60+) as children under 15.
- Thailand has the highest old-age dependency ratio at 23.3%, meaning approximately one elderly person (65+) for every four working-age people.
- These aging trends suggest increasing demand for care work across the ASEAN region, particularly in Singapore and Thailand.
- Most ASEAN countries are not yet prepared for a care workforce transition—there is a lack of training frameworks, recognition systems, and financing mechanisms for eldercare.
- This aging trend also increases regional demand for **migrant caregivers** from neighboring countries—especially women in informal care work, who are often excluded from skills development systems.

# Automotive Industry Overview

2023 2022 2021 2020 2019 2018 2017 2016 2015

Total Production

4,125,780

Vehicles produced in ASEAN region

Domestic/Export Ratio

63:37

Domestic vs Export sales

EV Adoption

3.9%

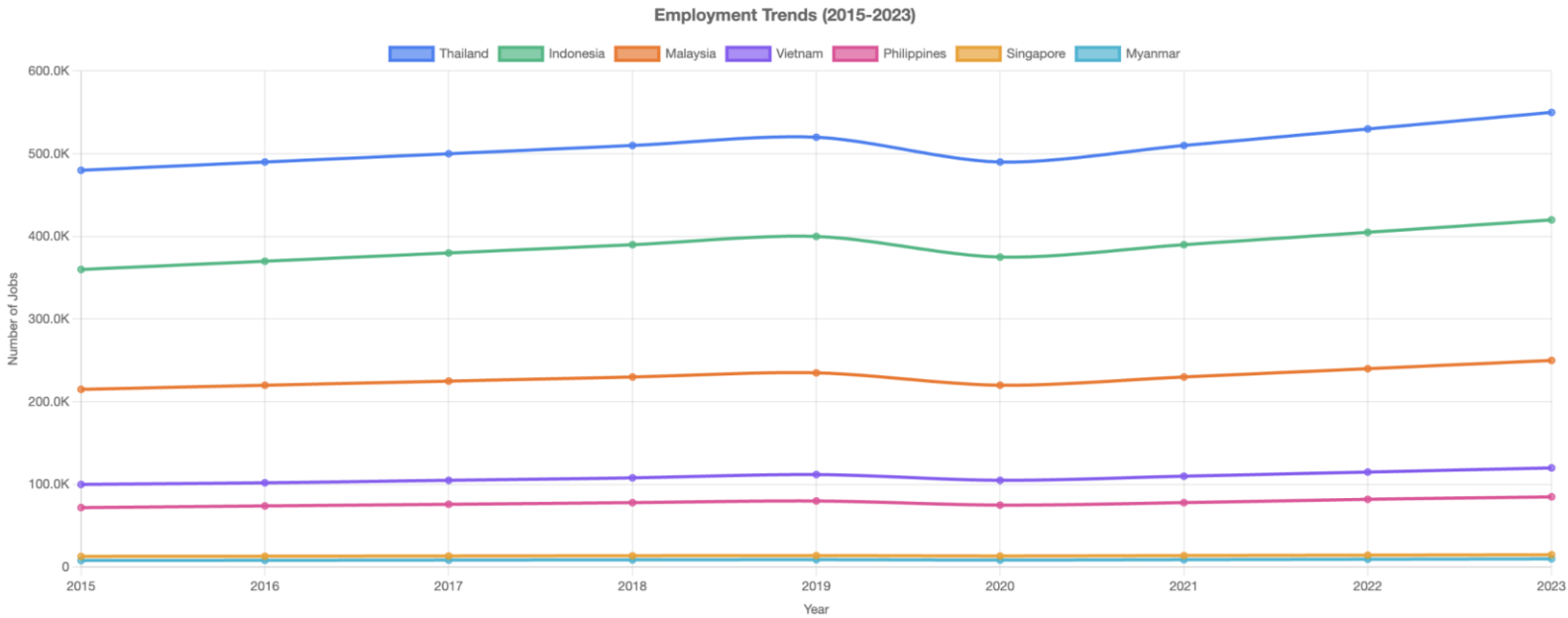
Of total vehicle sales

Employment

1.4M

Jobs in automotive sector

## Employment Trends (2015-2023)



## EV Transition Challenges

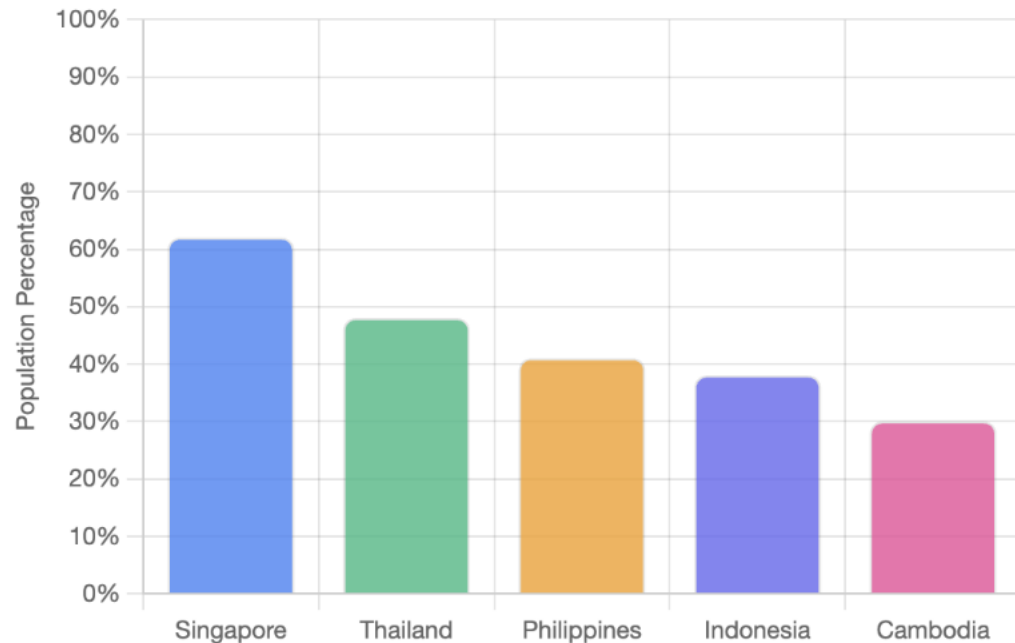
- ✓ Electric cars have far fewer parts than gasoline cars (no engines, fuel systems, or exhaust)
- ✓ Battery production is highly automated, requiring different skills than traditional manufacturing
- ✓ Jobs in engine factories, gearbox and exhaust suppliers will decline as EV production grows
- ✓ Not all displaced ICE workers can be absorbed; a surplus of manpower is expected during the transition

Sources: ASEAN Automotive Federation, Krungsri Research (2024), EVs in ASEAN Thailand vs Indonesia: Leading and Rising EV Production Hub



# Digital Skills Overview

## Basic Digital Skills by Country



### Note:

"Basic" = ability to use internet, email, basic apps, and evaluate information online

### Data Sources:

- Singapore: OECD, SkillsFuture 2023
- Thailand: ASEAN Digital Skills Survey 2023
- Indonesia: World Bank, 2022
- Philippines: UNICEF/ASEAN Foundation
- Cambodia: ASEAN Foundation 2023
- Laos, Myanmar, Brunei: Limited data available



## Digital Divide

Availability

Accessibility

Affordability

Digital Literacy

## Key Findings



### Digital Divide

Rural populations, women, and informal workers consistently score lower across ASEAN



### Access vs. Skills Gap

Many workers have internet access but lack functional digital skills



### Program Uptake

National programs exist (SkillsFuture SG, MyDigital, Thailand 4.0), but uptake remains low among informal and older workers



### High-Skilled Workforce

Only 28% of ASEAN workforce are considered high-skilled (ADB 2023)



# Universities as Enablers of Inclusive Workforce Transformation

- **Nurturing Skills for the Future:** Universities develop both hard and soft skills — from technical capabilities to critical thinking, collaboration, and adaptability.
- **Tackling NEET and Informality:** Universities can re-engage excluded groups — especially youth and informal workers — through flexible learning, recognition of prior learning, and pathways into formal training.
- **Adapting to Aging and the Silver Economy:** They support lifelong learning and care workforce development to meet the needs of aging societies across ASEAN.
- **Bridging Digital Divides:** Universities help prepare workers for the digital and platform economies, while promoting equitable access to digital tools and skills.
- **Supporting Sectoral and Green Transitions:** They align research and curricula with changing labor markets — including the shift to EVs, green jobs, and automation.
- **Strengthening Decent Work Dialogue:** Universities can act as neutral platforms where employers, workers, and the state co-design inclusive and evidence-based skill development systems.



## Nurturing Skills for the Future



**</issie>**  สถาบันเอเชียศึกษา  
INSTITUTE OF ASIAN STUDIES  
Chulalongkorn University

กลุ่มวิจัยนวัตกรรมเพื่อสังคมสถาบันและเครือข่ายทั่วทั้งแห่งเอเชีย  
สถาบันเอเชียศึกษา จุฬาลงกรณ์มหาวิทยาลัย

**รับสมัคร**  
**</Developer>**  
นิสิต/นักศึกษา หลายอัตรา

**Frontend  
Backend  
DevOps**

 **สมัครเลย**

ภายในวันที่ 31 ธันวาคม 2567  
สอบถามเพิ่มเติม :  
thaieconomap@gmail.com





## Tackling NEET and Informality





## Adapting to Aging, Care Economy, and Silver Economy



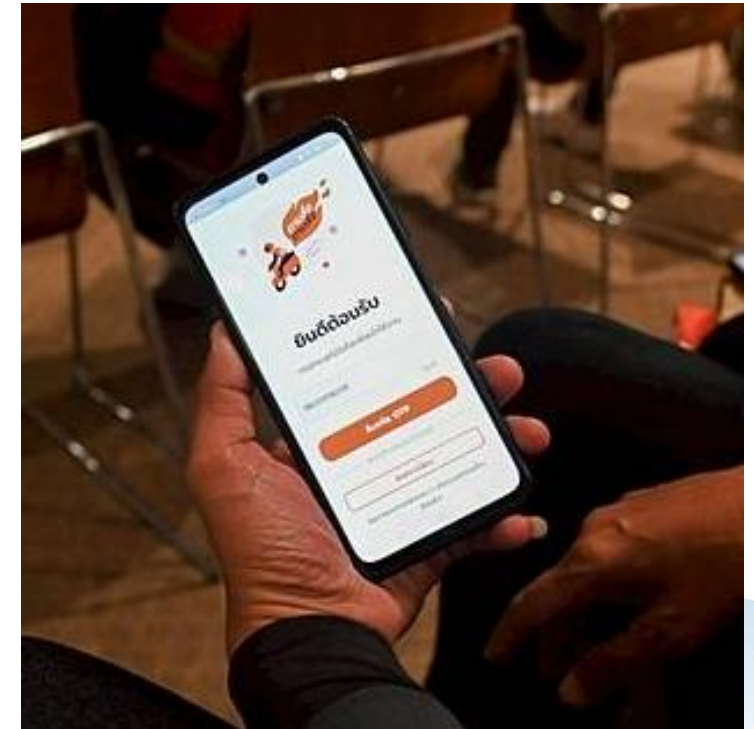
## Bridging Digital Divides



**Chula Researcher Pushes "Tamsang-Tamsong On-Demand Delivery" Platform to Foster Social Solidarity Economy**

Chula Communication Center (CCC)

 Chulalongkorn University





# Supporting Sectoral and Green Transitions



## Strengthening Decent Work Dialogue





# Public-Private Collaboration





Initiative	Full Name	Sector Focus	Type of Public–Private Collaboration
MARA	Manufacturing Automation and Robotics Academy	Advanced manufacturing, Industry 4.0	Co-governed by DSD and FTI; joint curriculum, equipment, and delivery
AHRDA	Automotive Human Resource Development Academy	Automotive, EV transition	Co-created with Thai Automotive Institute; industry-supported training and certification
DISDA	Digital Skill Development Academy	Digital literacy and enterprise ICT	MOU-based collaboration with tech firms (e.g. Huawei); co-certification and technical support
AMA	Automation and Mechatronics Academy	Mechatronics, smart controls	Founded via MOU with 26 public, private, and academic partners; co-governed and co-delivered
WeIDA	Welding Skill Development Academy	Welding, metal fabrication	Collaborative training with Welding Institute of Thailand and industry experts
DSD Wellness Academy	DSD Wellness Academy	Wellness and spa services	Public–private curriculum co-design and internship programs with wellness businesses
IISD	International Institute for Skill Development	Border economy, logistics, tourism, agriculture	Multi-sector consultation model with employers, chambers of commerce, and local industry
TGI	Thai-German Institute	CNC, industrial automation	Co-funded and co-governed PPP with German government and Thai industry
TAI	Thai Automotive Institute	Automotive standards, testing, HRD	Hybrid PPP; co-governed by Ministry of Industry and auto sector stakeholders