

# 中所得国における技能形成・ 産業人材育成の現状と課題： マレーシアの事例から

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第7回「これからの途上国の産業開発を考える」勉強会

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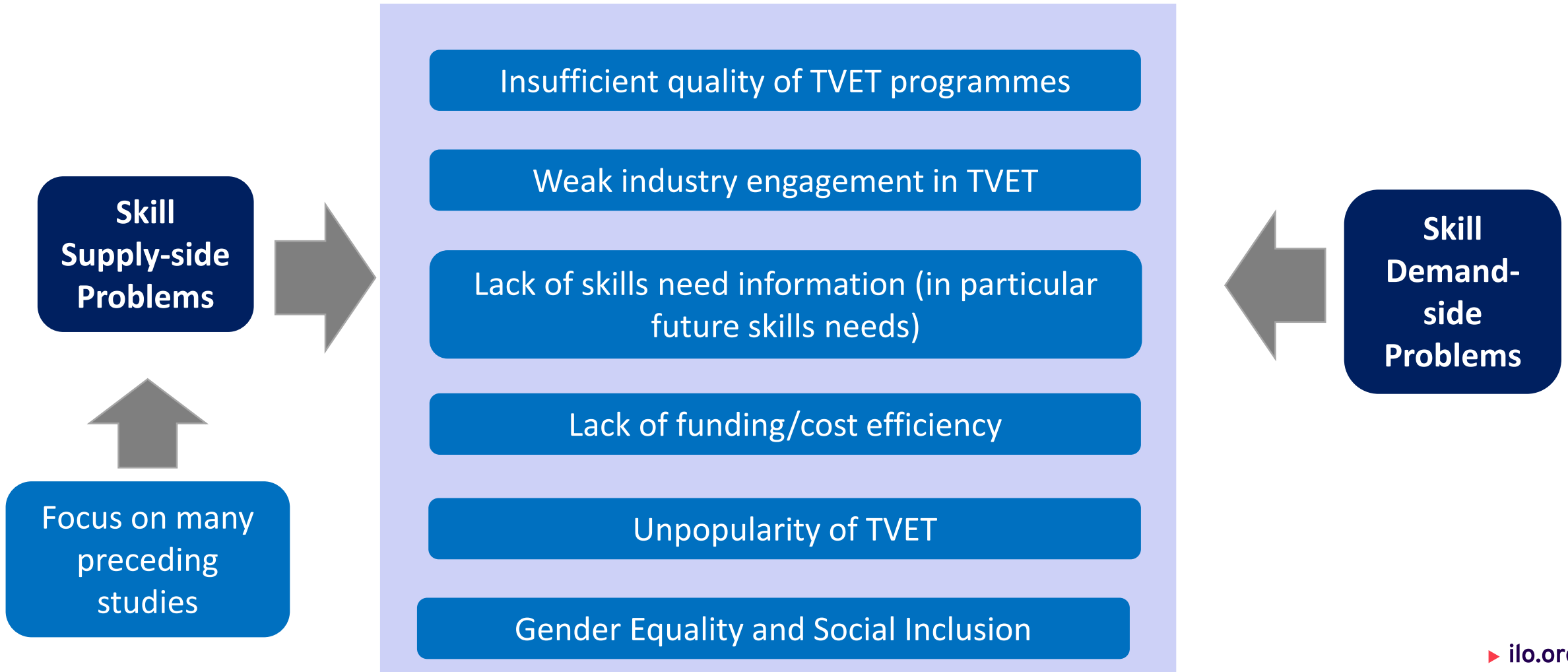


## 本日の議題

- 技能形成に関する一般的な課題
- 高中所得国としてのマレーシアの工業化と技能形成
- 開発協力の事例: Skills for Prosperity Programme in Malaysia の概要
- 高中所得国と低中所得国の相違と開発協力の相違
  - ベトナムとマレーシアでの経験から

# 技能形成に関する一般的な課題 と議論の潮流

# Common Challenges for Skills Development/Technical and Vocational Education and Training (TVET)



## スキル・ミスマッチに関する2つの主な理論的アプローチ

- **スキル・ミスマッチは供給側の問題に起因するとみなす「供給側のアプローチ」**
  - 人的資本論、市場の失敗理論、スキル偏向型技術進歩 (Skill-biased Technological Change Theory, SBTC)
  - スキルのある人材を供給すれば、産業界はそれを吸収する。スキル供給を増やせばおのずと需要はついてくる。
- **国家の技能向上に関する問題は供給側だけにあるのではなく、需要側の要因によっても引き起こされるとする、「需要側のアプローチ」**
  - 供給だけ増やしても、過剰スキル・資格を生む危険性が高い: 現実として、企業は常に高付加価値を求めるわけではなく、高スキル労働者を求めるわけではない。
  - 経済的競争力だけでなく社会目的や社会正義に関する視点から技能形成の問題を分析する一群の政治経済・社会学的な研究から発生している。

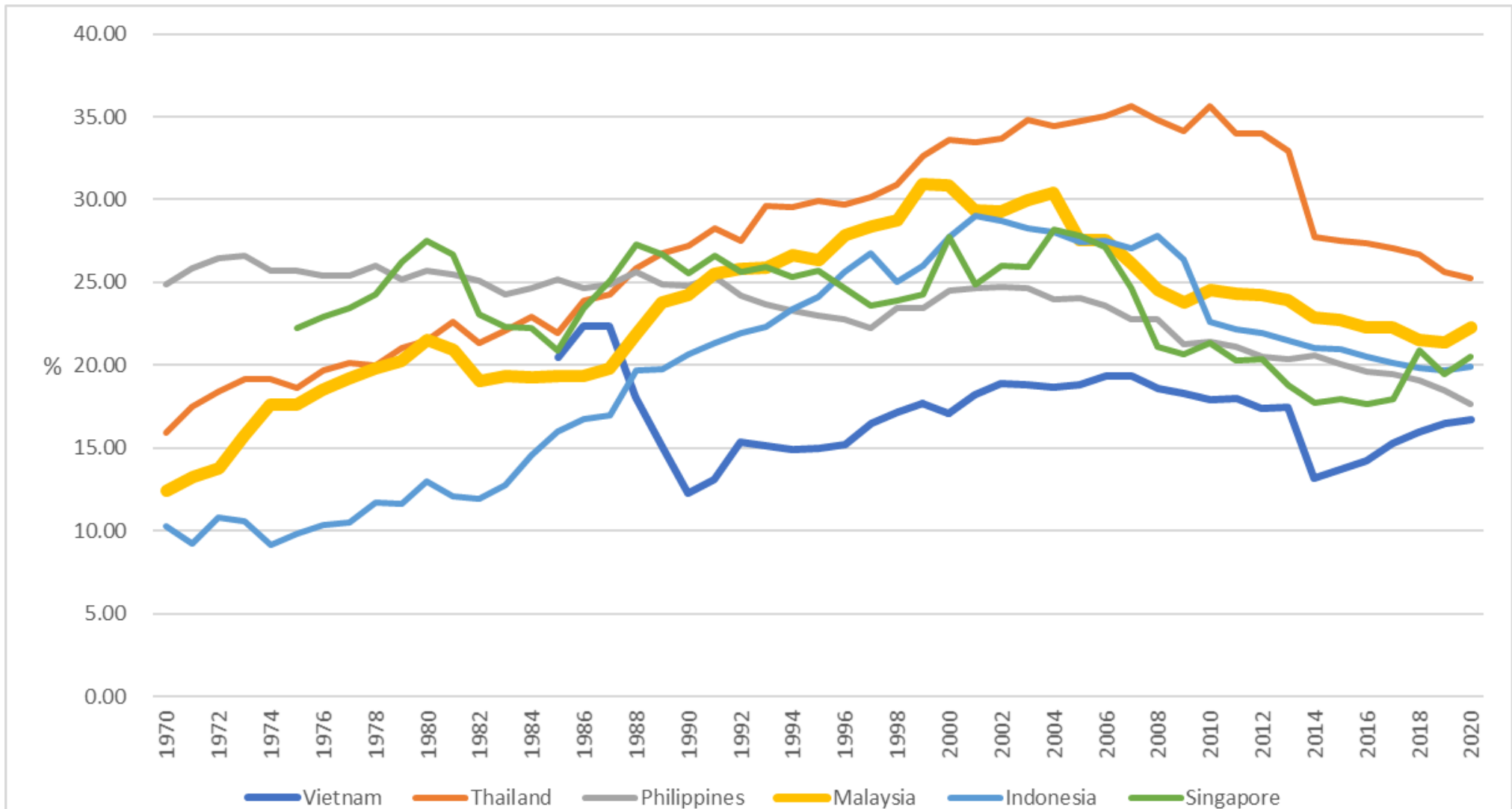
Refer to Lloyd and Payne (2002); Desjardins and Rubenson (2011); and Froy (2013); Brown et al (2021)

## 開発途上国の政策担当者の間では「供給側のアプローチ」の認知度が高い

- **既存の研究の政策提言 (e.g. World Bank 2013) :**
  - 雇用者主導型訓練システムの促進
  - 先進国のモデルの輸入 (例・カリキュラム、コンピタシーに基づく訓練(CBT)など)
  - 雇用者のスキルニーズに基づいた教育訓練、特に職業技術教育・訓練(TVET)の改善
  - 労働市場情報システムの改善
- **開発途上国政府はこれらの提言に従う傾向がある。**
  - 企業、特に外資系企業によるスキル偏向型技術進歩への貢献に関する強い期待。
- **一方で、需要側への効果的な政策は少ない**
  - 多くの産業政策が策定されたものの、その効果は疑問視されている。
  - 技能形成政策と産業政策を同期する試みは見られない。

# ▶ 高中所得国としてのマレーシアの 工業化と技能形成

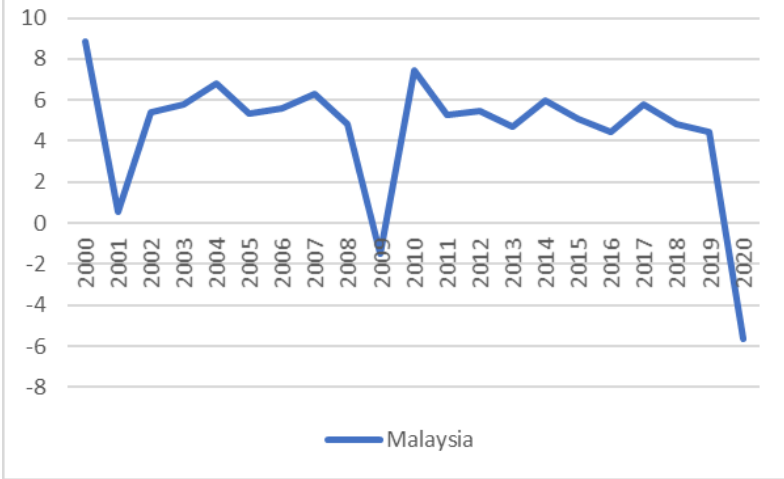
# Manufacturing Value Added (% of GDP)





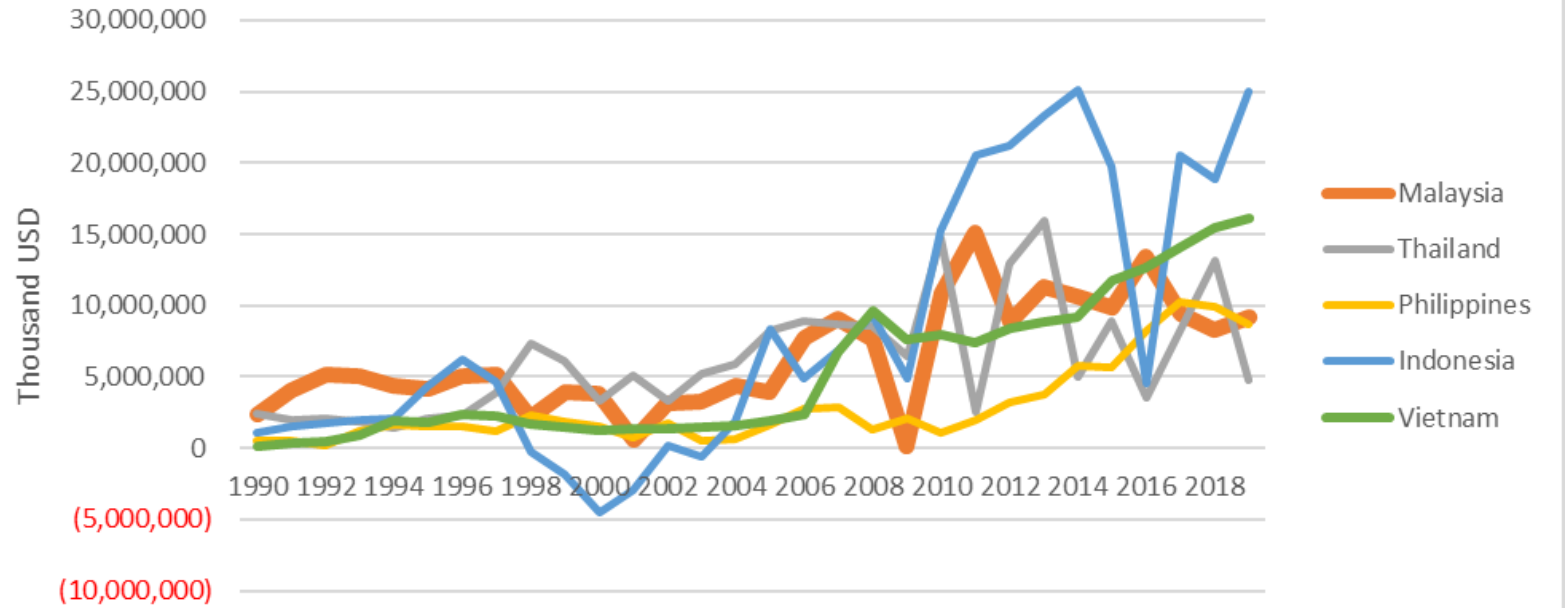
# GDP、FDIの推移

GDP growth (annual %)

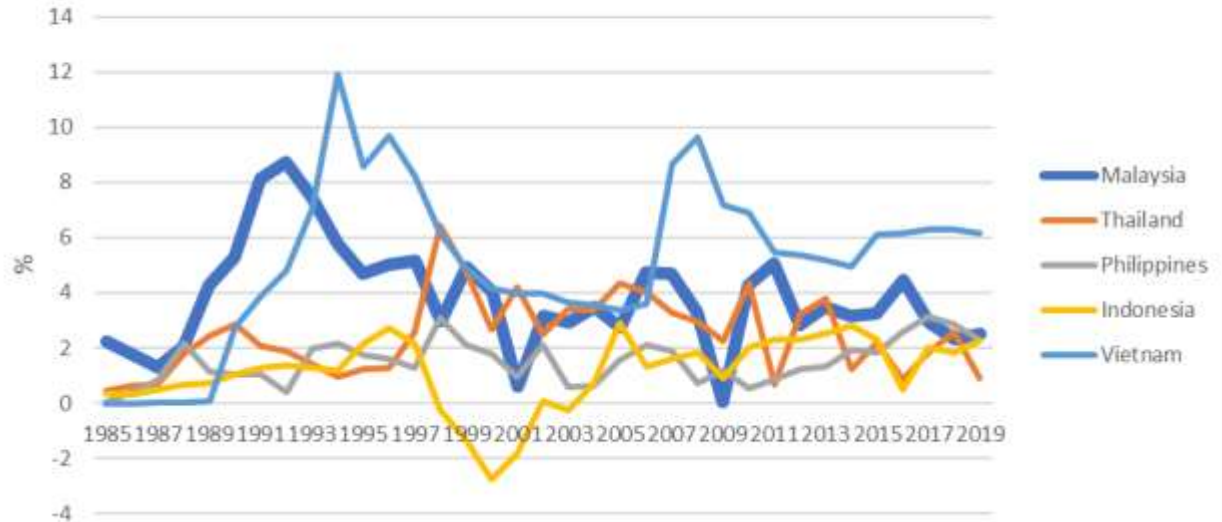


Source: World Development Indicator

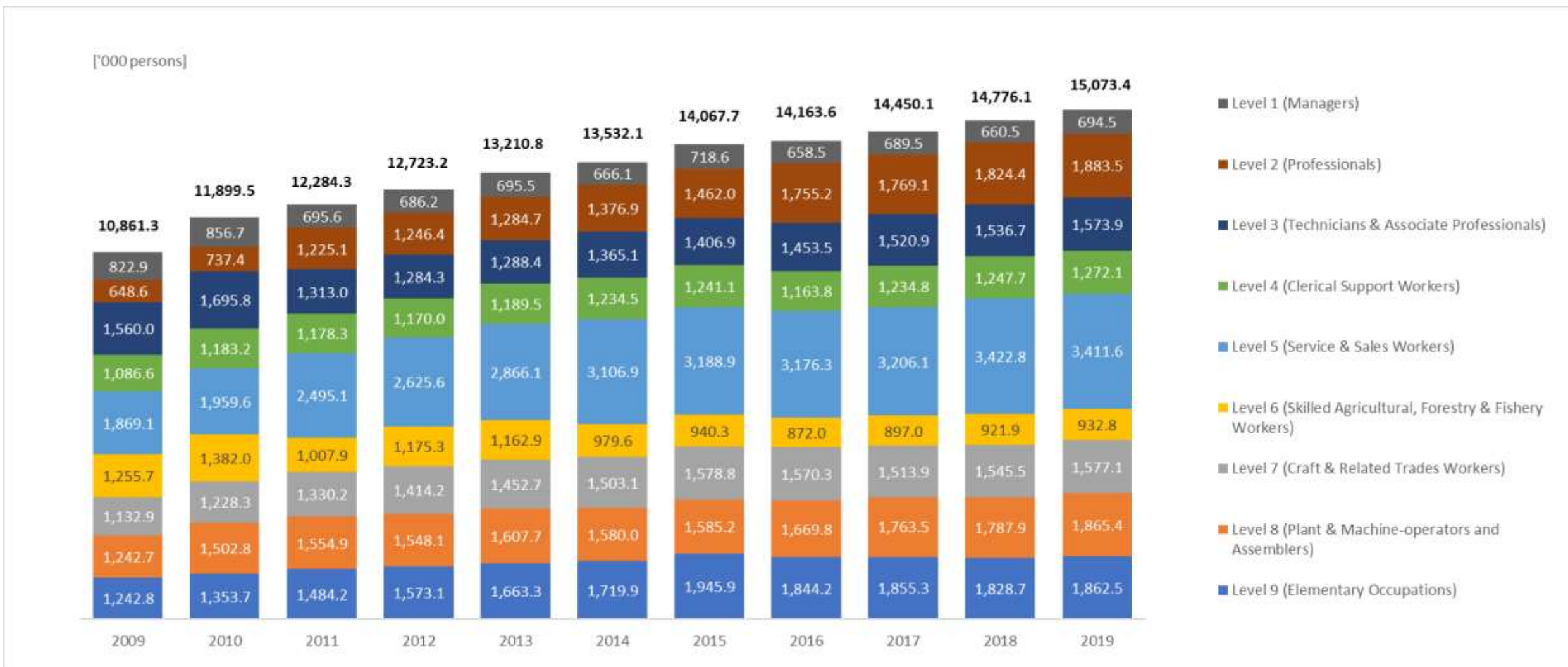
FDI, Net Inflow



FDI, Net Inflow (% of GDP)

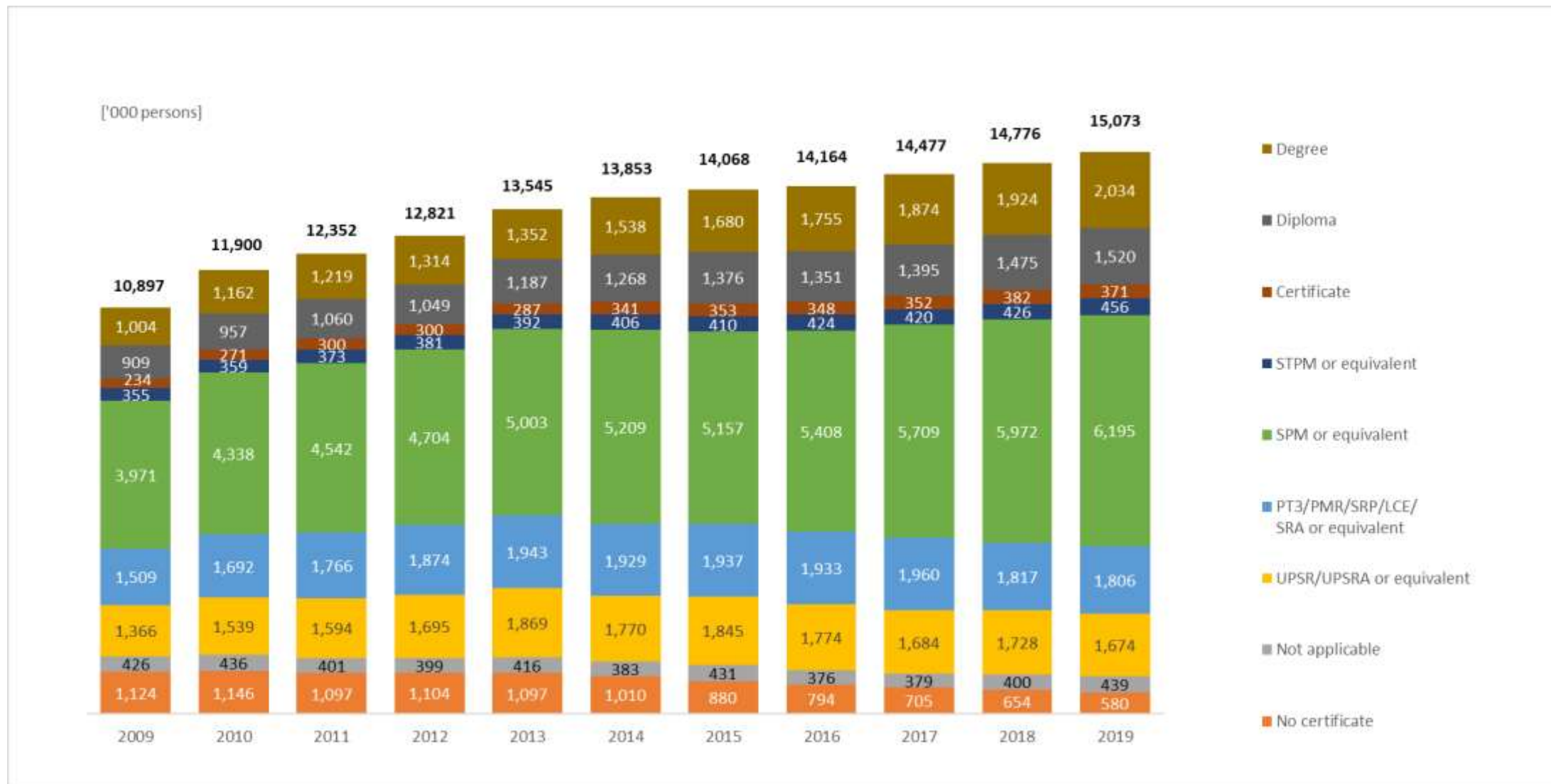


# 職種別雇用人口 (2009 – 2019)



Note: Occupational category is categorized according to the Malaysia Standard Classification of Occupations (MASCO), where Level 1 (Manager) down to Level 9 (Elementary occupations).  
Source: Department of Statistics, Malaysia (DOSM)

# 教育訓練資格別雇用人口 (2009 – 2019)



## マレーシアの職業教育・訓練(TVET)政策、プログラムの現状と課題

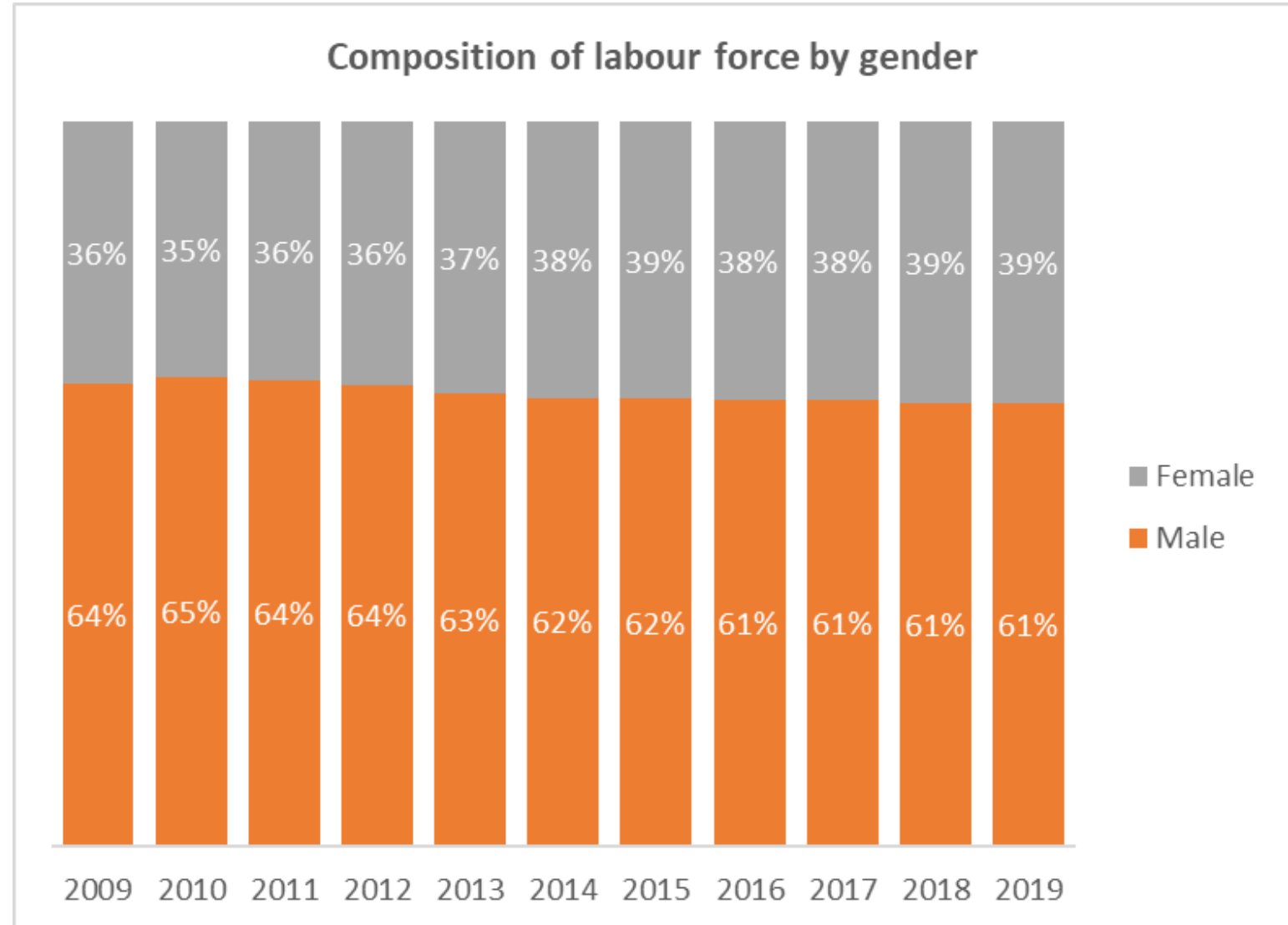
### ■ 整備されたTVET政策、プログラム

- 国家レベルの戦略政策： 12th Malaysia Plan - TVETの重要性に関する高い認識
- 国家職業技能標準(NOSS)/Ministry of Human Resources (MOHR), Malaysian Qualification Agency (MQA(/Ministry of Higher Education (MOHE)
- 産学連携体制 (Industry Lead Bodies/MOHR, Industry Advisory Council/MOHE, Sectoral Training Committees/HRD Corp)
- 徒弟(Apprenticeship)・インターシップ制度
- 財政資源 (Levy/Human Resource Development Fund、社会保険/SOCSO).

## マレーシアの職業教育・訓練(TVET)政策、プログラムの現状と課題

- **課題:** 高度人材も増加したと推測するが、以前と変わらない基本的な課題も多い
  - **Equity:** 男女平等・社会包摂、地域格差
  - **Quality:** NOSS、カリキュラムの質、更新の速度、実践的スキル、認知能力(問題解決能力、論理的思考力、気づきの力)、STEM (Science, Technology, Engineering, Mathematics) スキル、省庁間連携
  - **Relevance:** 政府主導の産学連携—産業界は「参加者」、SMEの参加、セクター別の差、政策と産業界の本当の声との乖離
  - **Cost Effectiveness:** 効率、効果のモニタリング。
  - **その他:** 外国人労働力への依存、TVETの不人気と卒業生の社会的・経済的地位。

あまり変化のない女性の労働市場参加。



## 教育訓練コース、職業選択とキャリア形成に関する課題

- **While the equality in access to TVET/skills training has been improved due to government efforts, there is still gender bias in the selection of courses and trades, particularly at subnational levels.**
  - In Kedah and Sabah, for example, the percentage of female graduates in manufacturing, construction and engineering training programmes are low. In Kedah, female graduates account for only 14 per cent of graduates in the aforementioned programmes, while they account for only 3.6 per cent in Sabah.
- **Skills utilization, upskilling and career progression opportunities are limited for women, youth and those in other vulnerable groups (e.g. persons with disabilities)**
  - In 2020 the labour force participation rate for women was 55.6 per cent as compared to 80.8 per cent for men. The rate of women peaks at age 25- 29, it declines gradually for all subsequent age groups.
  - Furthermore, a majority of persons with disabilities (PWDs) are working at the level of middle or low skilled occupations



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**Skills**  
for prosperity

# Skills for Prosperity Programme Malaysia (SfP Malaysia)

## Programme Overview

URL: [https://www.ilo.org/asia/projects/WCMS\\_750897/lang--en/index.htm](https://www.ilo.org/asia/projects/WCMS_750897/lang--en/index.htm)

**DRAFT**



## Programme Objectives:

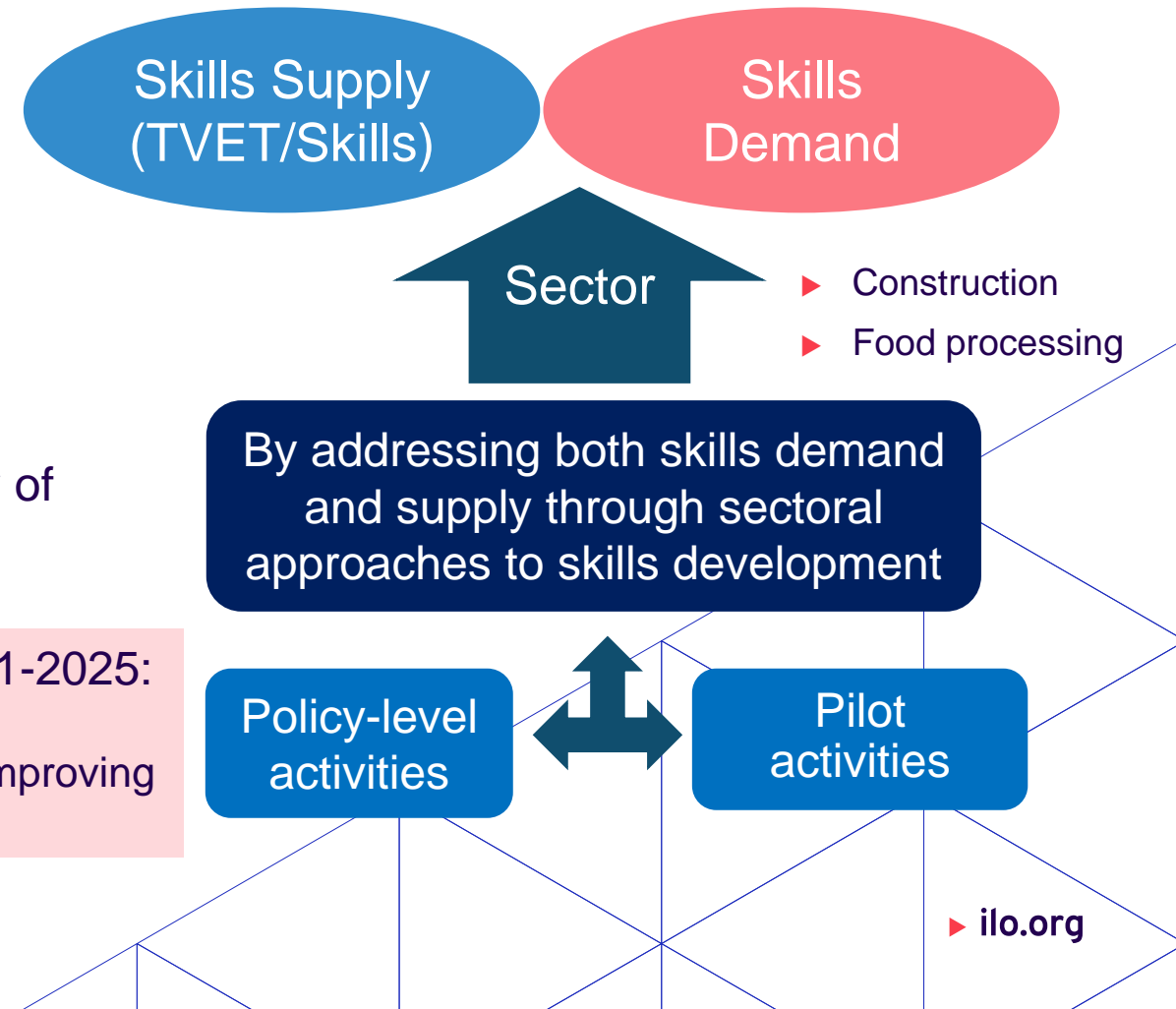
The programme aims to contribute to

- ▶ **Increasing national capacity for inclusive economic growth through more future-ready TVET/skills training systems and the promotion of equality and diversity.**

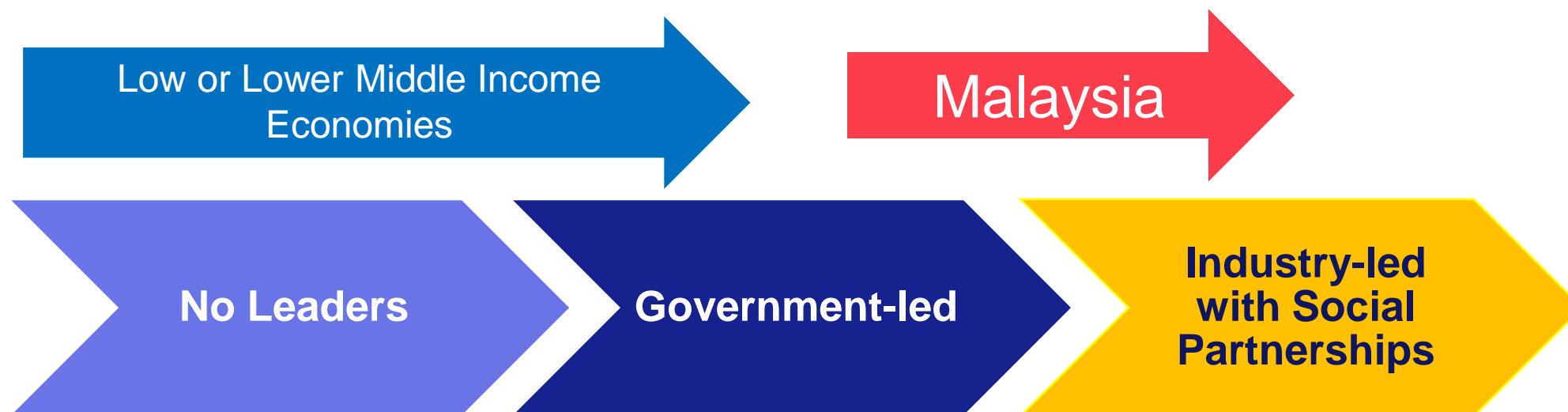
To improve employment outcomes, resilience and adaptability of beneficiaries.

The Programme is in line with the Twelfth Malaysia Plan 2021-2025:

- The objective: “a Prosperous, Inclusive, Sustainable Malaysia”.
- Policy Enabler 1: Developing Future Talent, Game Changer X - Improving TVET Ecosystem to Produce Future-Ready Talent.



## Key Theme: Transition to Industry-Led Skills Formation and TVET



**Government:** From Active Leaders to Facilitator

**Employers:** From Input Providers to Leaders

**Other Partners** (e.g. Workers' Organization): From Passive Followers to Active Contributors

**DRAFT: NOT FOR CIRCULATION**

## Programme Background

**Duration:** 3.5 years (November 2019 – March 2023)

### Key Partners

- ▶ Ministry of Human Resources; Ministry of Higher Education
- ▶ Malaysian Employers Federation, Federation of Malaysian Manufacturers
- ▶ Malaysian Trade Union Congress
- ▶ Sabah and Kedah State Governments, Industry, and TVET/skills training providers.

### Beneficiaries

- ▶ Youths (Ages 16-25)
- ▶ Women
- ▶ Other beneficiaries: Members of the B40; Persons with Disabilities; Individuals Not In Employment Education or Training (NEET); SMEs; Self-employed individuals; individuals employed in the Gig Economy

**Industry Sectors:** Manufacturing (food processing), Construction.

**Funded by and partnership with:** The United Kingdom Government as part of its Official Development Assistance.

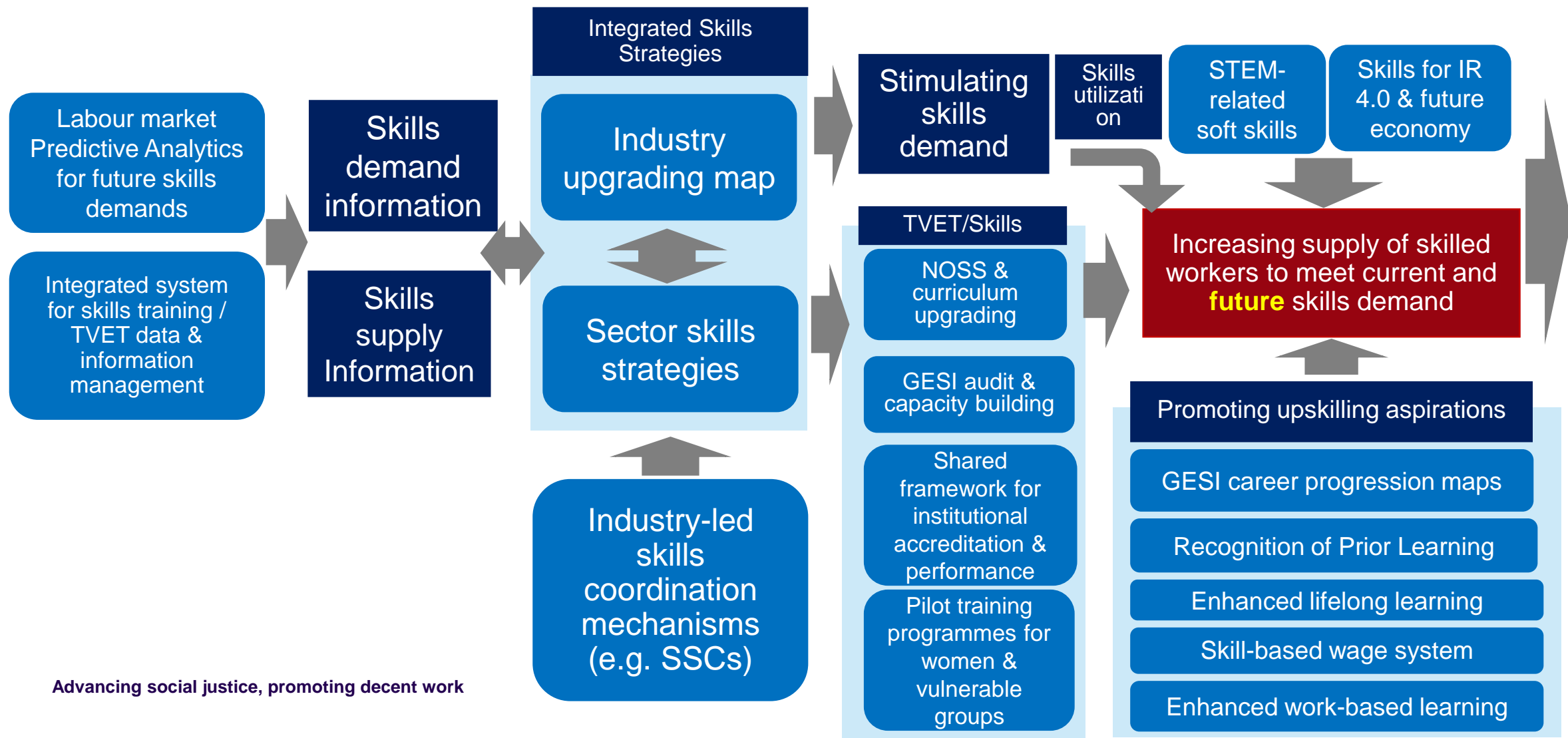
December 2019  
**National & Subnational  
Consultation**

January-September 2020  
**Programme Validation**

**Current  
Programme Implementation  
phase**

# Toward the development of sustainable and inclusive skills and TVET systems

## Gender Equality and Social Inclusion (GESI) strategies and mainstreaming



inclusive skills and economic development

## SfP Malaysia's Strategic Approaches



Evidence-based Policy Making



Mainstreaming of Gender Equality and Social Inclusion



Promoting Industry-led TVET/Skills Training

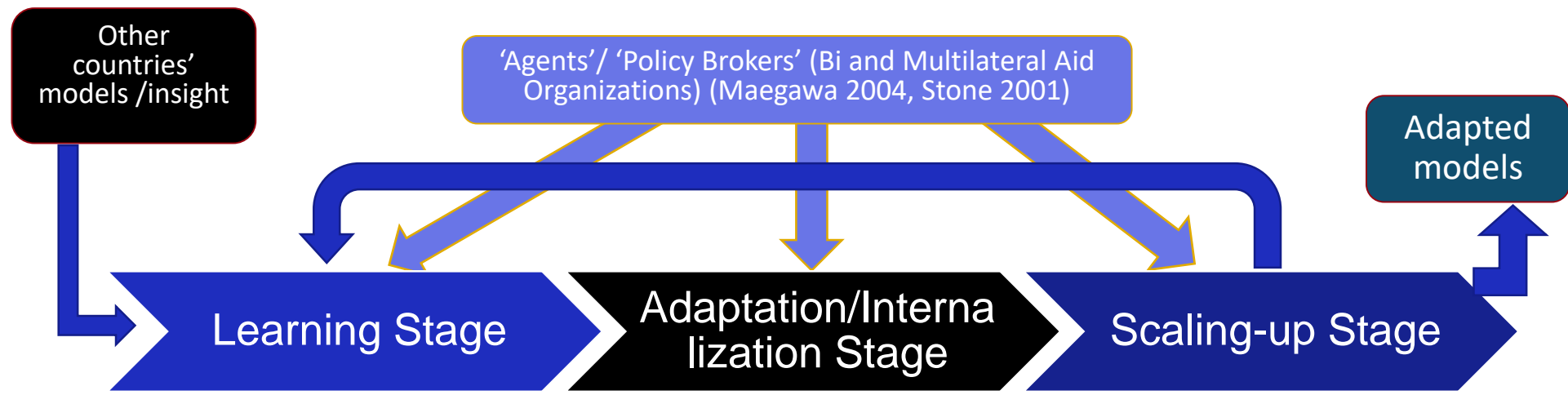


Building Technical Know-How



Localized Models based on International Examples

# “Translative Adaptation” Processes



- Reception stage (Steiner-Khamisi 2014)
- Obtaining and learning many countries' policies and practices for knowledge co-creation (Ohno 2016, 13).
- Learning both merits and demerits of each options (Chakroun 2010).
- The “best practices” may be at the “burnout” stage when later comers adopt them (Steiner-Khamisi 2006).
- Proactive national and local governments (Mori 2019).

- Strategic decision-making: Selection of policies learned from long-run viewpoints (Ohno 2014).
- Recontextualization, alignment, and synthesis: Adjusting selected policies in accordance with economic, social, cultural, and institutional contexts of each countries (Stone 2001; Steiner-Khamisi 2014).
- Improvement and finalization based on the results of pilot activities.

- Extension of policy application inside countries.
- Dissemination of translated models to other countries as a policy option.

Source: Drafted in reference to Kikuchi (2013) and discussion with Prof. K. Ohno, GRIPS.



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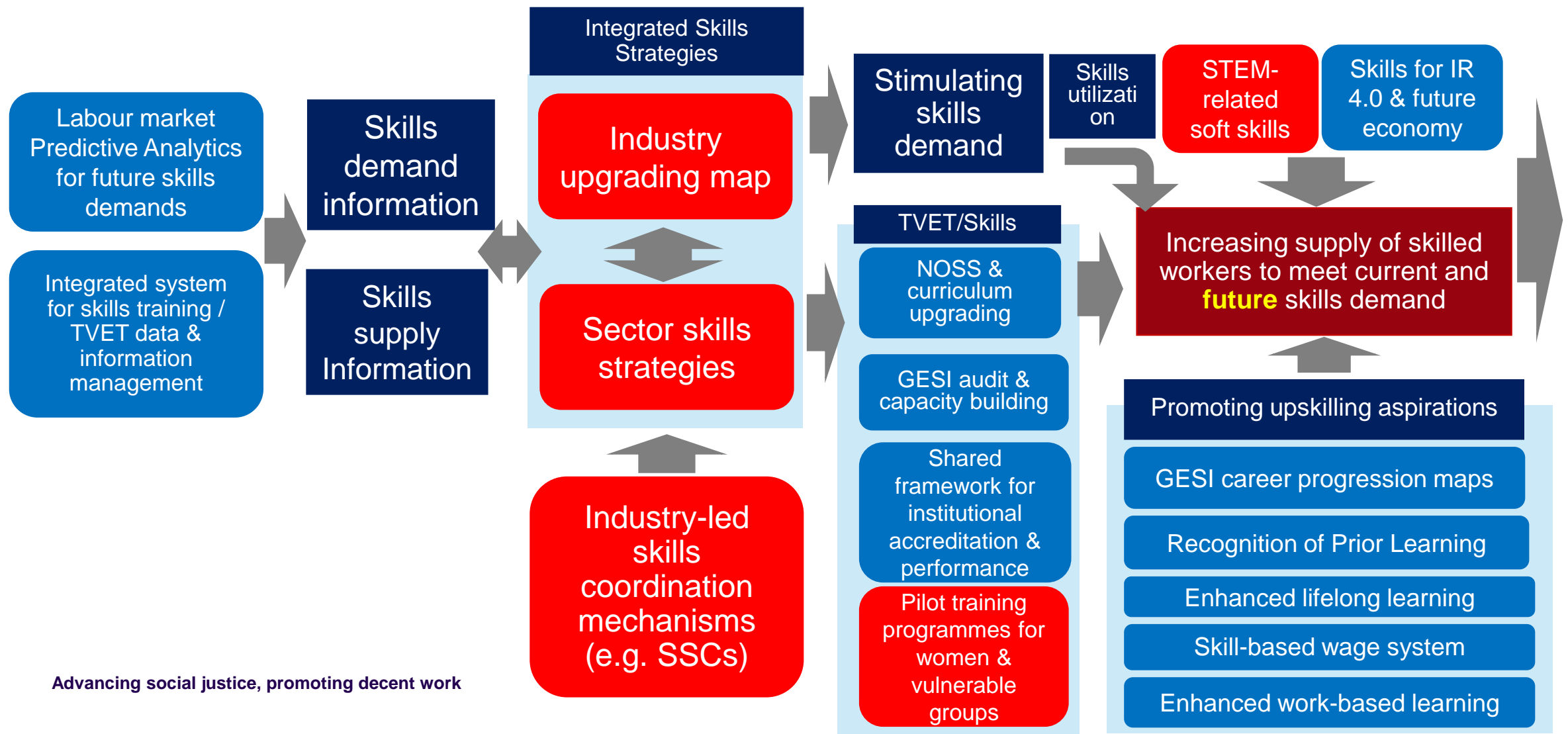
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# 活動事例

1. Sector Skills Strategies
2. Enhancement of Institutional Mechanism for Industry Engagement in TVET.
3. Pilot training in Sabah
4. Integration of STEM in TVET

# Toward the development of sustainable and inclusive skills and TVET systems

## Gender Equality and Social Inclusion (GESI) strategies and mainstreaming



inclusive skills and economic development



## 1. Sector Skills Strategy: 未来志向のスキル需給政策の擦り合わせ

- スキル供給の効果的な改善と活用促進のためには、技能形成政策と産業政策はその内容が調整され連動している、つまり「擦り合わされている」ことが理想的である。
- 近年の需要側アプローチの研究は、すべての産業を一律にターゲットするのではなく、セクター別の特徴を考慮し対応することで技能形成政策と産業政策を調整、同期できると提言する(Ashton and Sung 2015)。
- この産業政策と連動した「統合的な技能形成政策」は、産業構造の変化に応じてダイナミックに変容し、技能向上への高い可能性を秘めるセクターに集中することが求められる。
- 供給側アプローチも、セクター別の技能形成に注目してはいるものの、スキル需要面については企業任せで政府の干渉は想定していない。つまり、選択的産業振興策(大野2013, 46-47)とは連動していない。

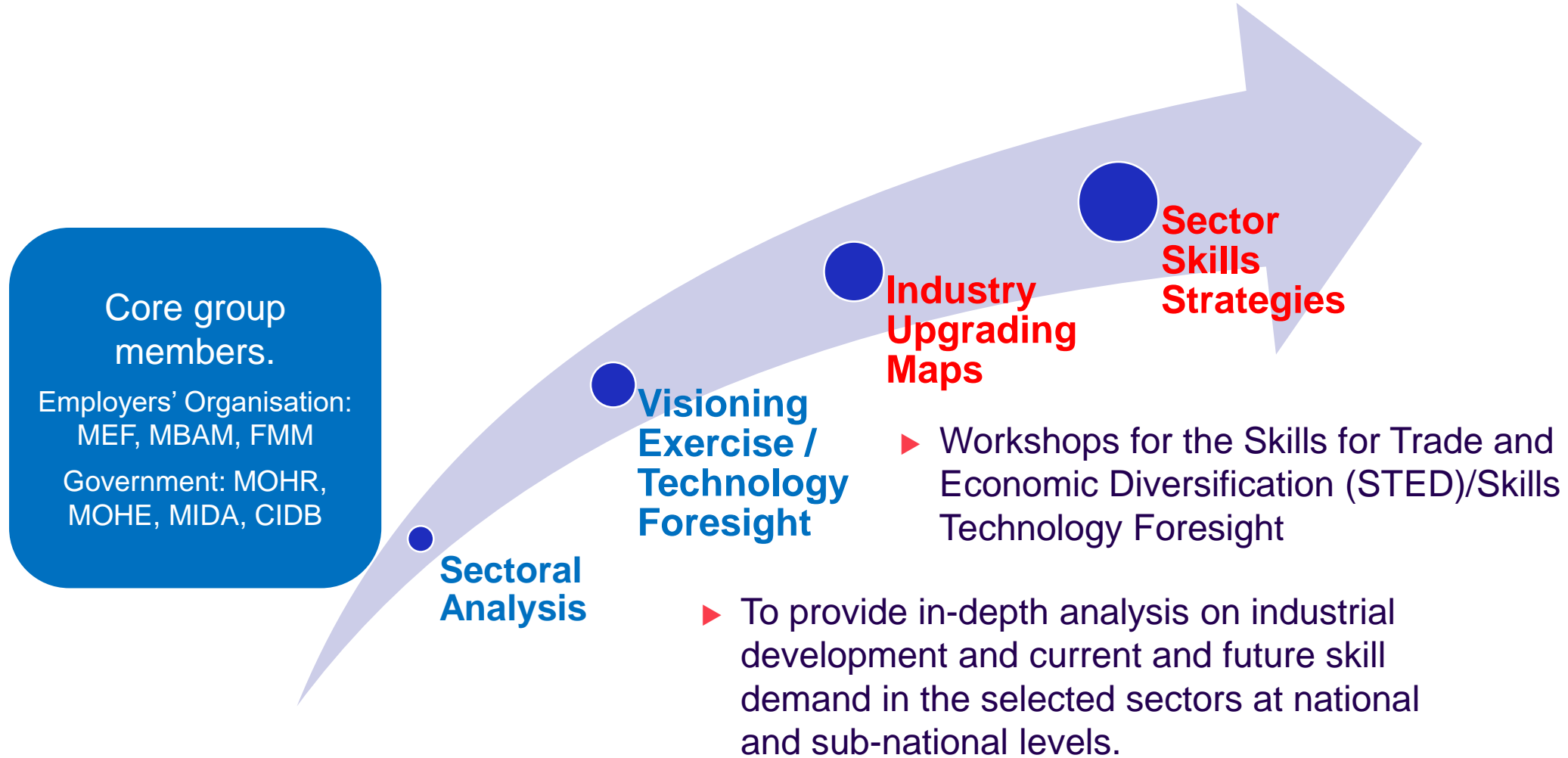
# 1. Enhancement of Sector Skills Strategies

- ▶ **For further growth of the construction and food-processing industries, it is necessary to develop or update the **sector-specific** and **integrated shared vision** for:**
  - Future growth drivers (products, processes, technologies), market drivers – Demand-side
  - Current and future skills needs in the sector – Demand and Supply-side
  - Roles of TVET/skills training – Supply-side
- ▶ **Stronger industry leadership** is required in skills strategy formulation, in order to:
  - Clarify their skills needs for sectoral growth.
  - Make more TVET/skills training programmes relevant to current and future industry skills needs based on prioritized occupations and skills.
  - Help workers achieve continuous upskilling and career development.

Sector Skills Strategies will support industry as a whole in securing skilled workers who meet current and future skills needs.



# Sectoral Analysis to Sector Skills Strategies



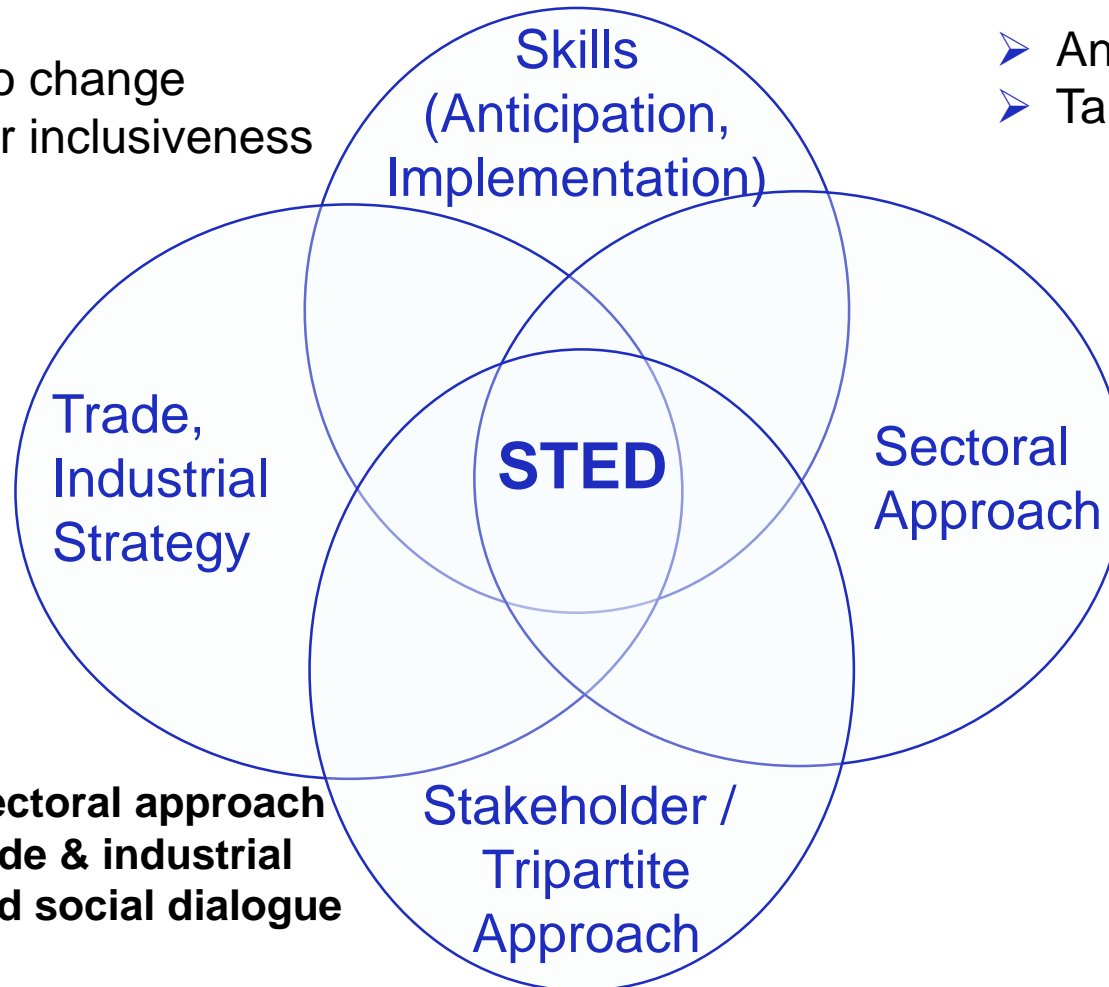
# What is Distinctive about STED?

## Need for collaboration is especially strong

- Exposure to change
- Potential for inclusiveness

## Sector – effective level for

- Analysing & anticipating skills needs
- Taking actions on these



## Companies they have

- Similar skills needs
- Similar occupations
- Similar E&T providers

To great extent

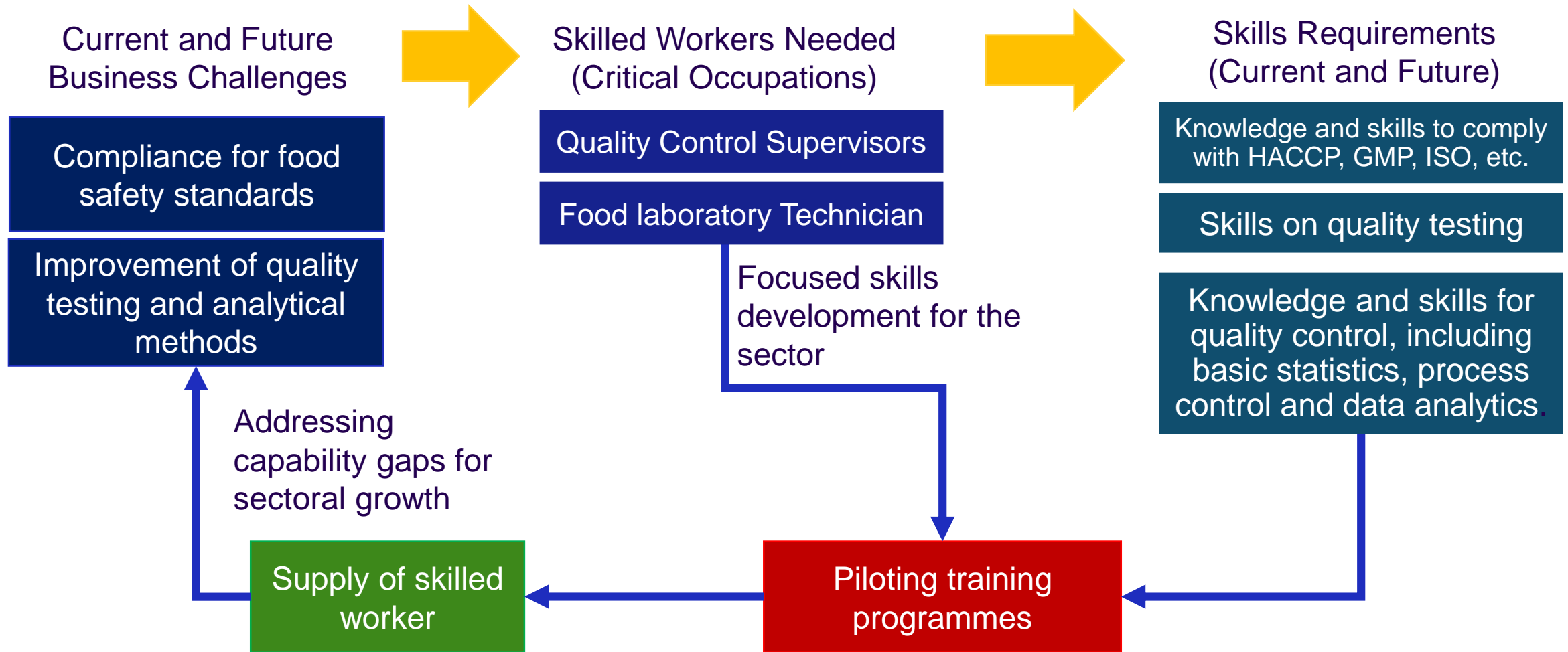
- Similar technologies
- Similar forms of work organization

It combines a sectoral approach to skills with trade & industrial perspective, and social dialogue

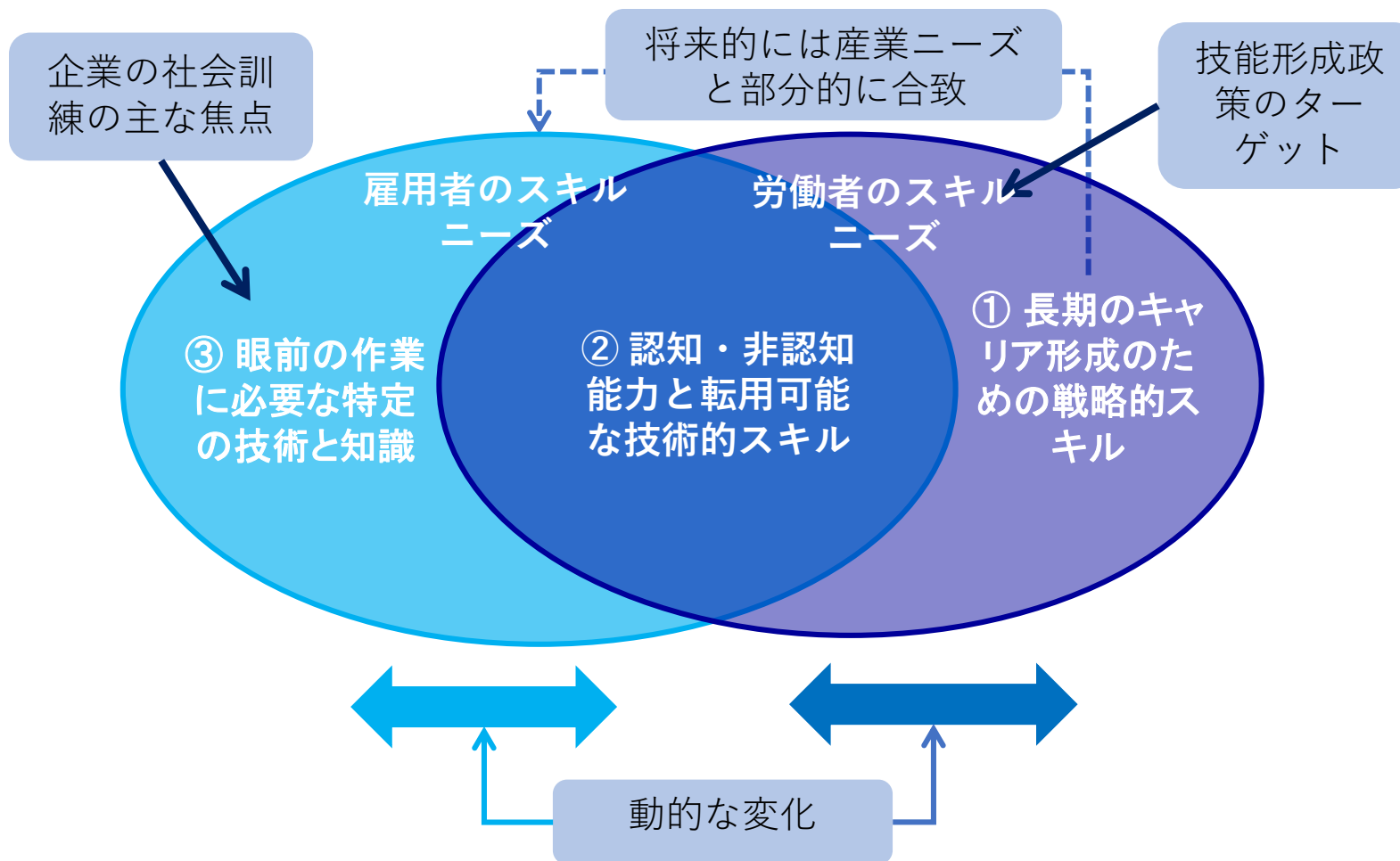
Refer to: <https://www.ilo.org/skills/projects/sted/lang--en/index.htm>

# Sector Skills Strategies will support industry as a whole in securing skilled workers who meet current and future skills needs

## Example: Enhancement of food safety and compliance to relevant standards

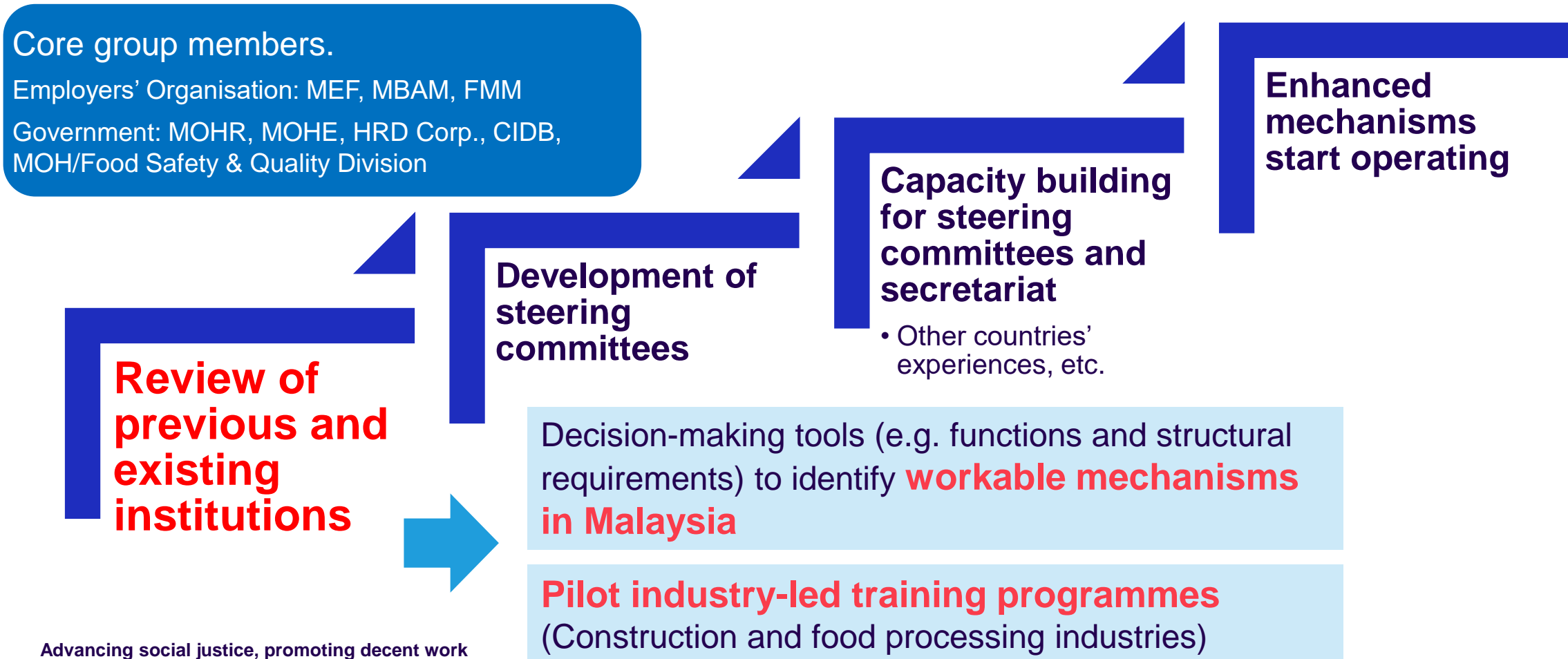


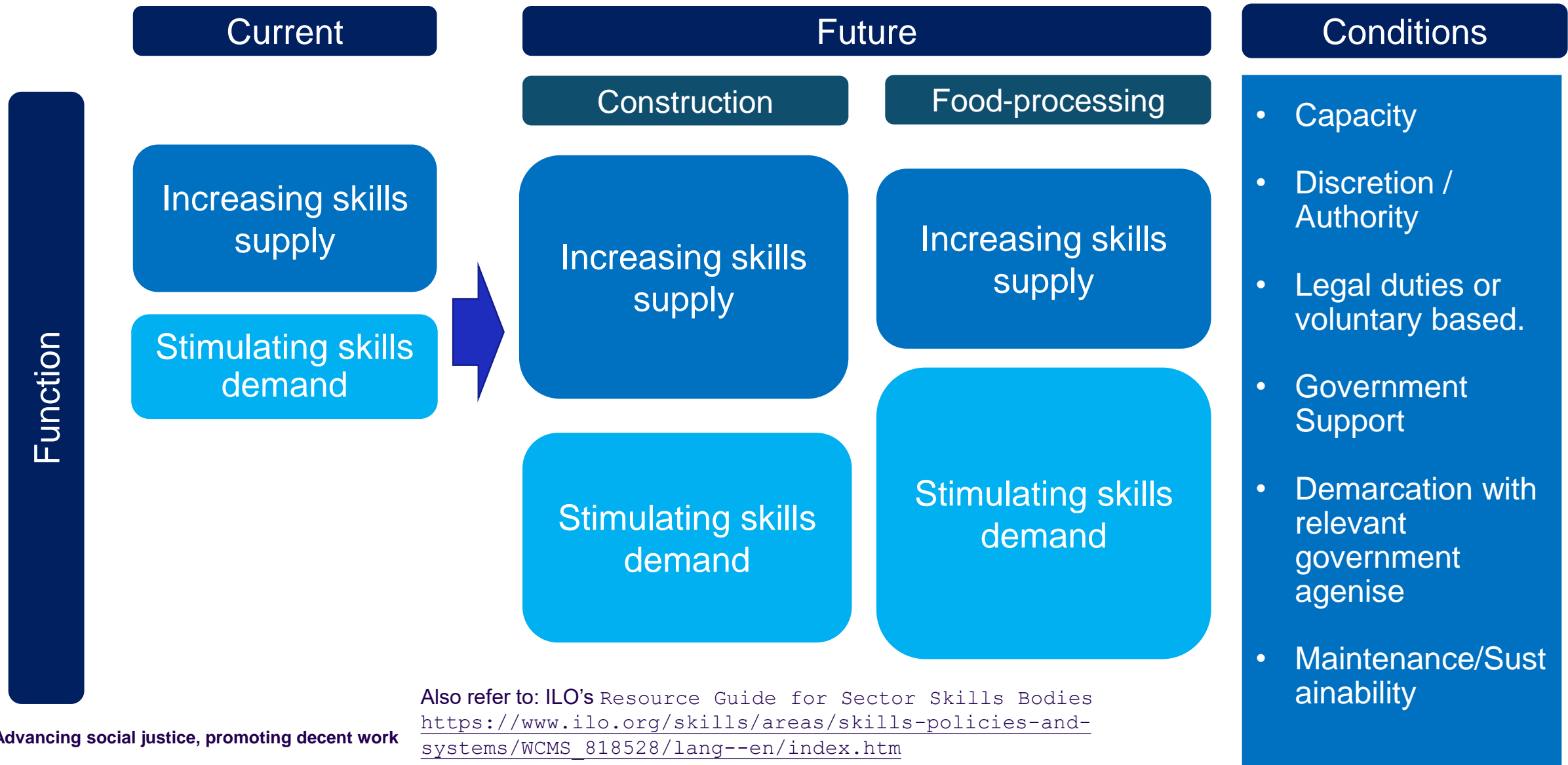
## 擦り合わせの課題： 産業界の直近のニーズと労働者の長期的なニーズのバランス



## 2. Development/Enhancement of Institutional Mechanism for Industry Engagement in TVET / Skills Training: For Enhancing the Functions of Sector Skills Bodies

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### 3. Pilot Training Course for “Inclusiveness” in Partnership with Sabah Skills & Technology Centre (SSTC): Entrepreneurial Skillset for Food Processing Industry

**Objective:** Improve skills utilisation, employment, and career progression opportunities of women and youth as target beneficiaries through the development of localized training delivery models for inclusion and future-readiness that are scalable, replicable and sustainable.

Key Fact	Description
Training Period:	<b>In Progress (1<sup>st</sup> training course completed): To be completed by Q1/ 2022.</b>
Location	<b>Ranau, Sabah</b>
Module Structure of training courses	<ul style="list-style-type: none"> <li>• Entrepreneurship Management (business model canvas, business plan etc.)</li> <li>• Digital Marketing Management (social media marketing, Search engine optimization)</li> <li>• Sustainable Skillset Management (branding, packaging and labelling, basic logistics)</li> <li>• Food Processing &amp; Preservation (quality control, hands-on training, food handling, etc.)</li> </ul>
Key Characteristics in terms of Inclusiveness	<ul style="list-style-type: none"> <li>• Flexible training module: content customized according to beneficiary needs.</li> <li>• Post-training coaching and mentoring support</li> <li>• Linkages with funding opportunities and other forms of future support (e.g. SME Corp)</li> <li>• On-site training with hands-on training (e.g. improvement of products, such as Tuhau sambal and kimchi)</li> </ul>

# 1st Pilot Training Course for “Inclusiveness”: Entrepreneurial Skillset for Food Processing Industry



# 4. Integration of Science, Technology, Mathematics, and Engineering (STEM) in TVET/Skills Training

**STEM skills will contribute to inclusive growth and business development through productivity and quality improvement, innovation, and gender equality and social inclusion**

## STEM-related Generic Skills

- Problem-solving
- Analytical and critical thinking
- Teamwork/Leadership
- Creativity
- Learning ability

- Scientific theory (e.g. applied engineering, materials sciences, basic physics, etc.)
- Statistics, data collection and analysis
- Design thinking and skills

### Productivity and Quality Improvement

Quality Control / Quality Control Circle (QCC)

Kaizen

5S

Industrial Engineering

Total Productivity Maintenance (TPM)

Occupational Safety and Health / Risk Assessment

### Innovation

Installation and maintenance of automation equipment

Development, validation, and utilisation software

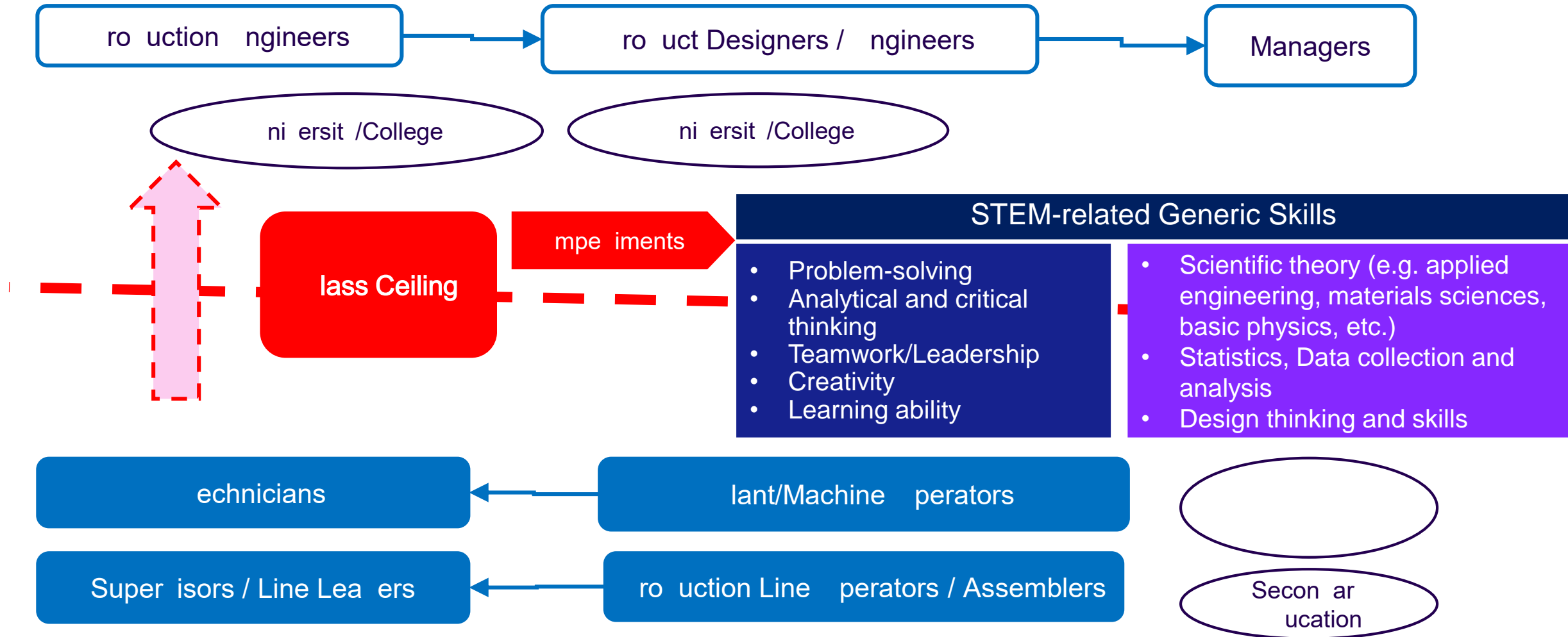
New product / service development

Internet of Things (IOT)

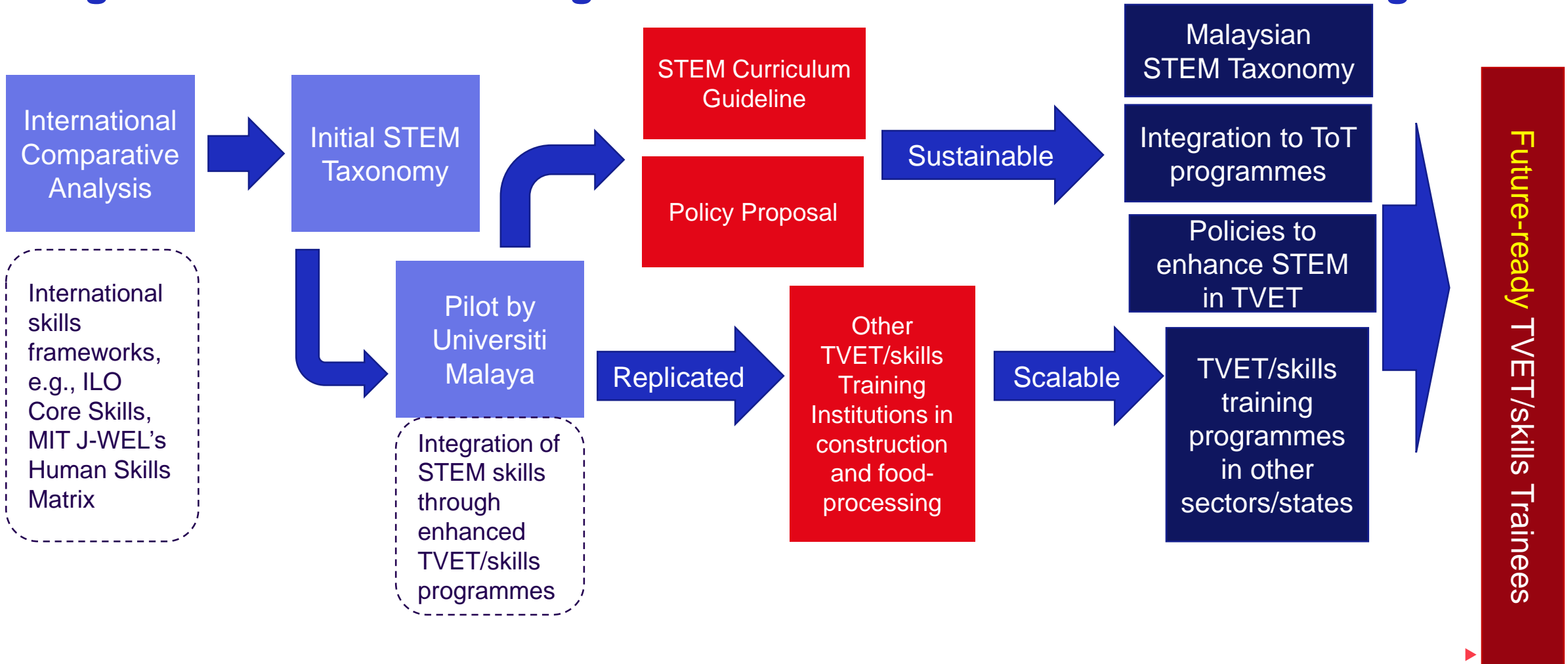
Big data analysis

Job and career progression opportunities for women and other people in vulnerable groups

# STEM skills will help TVET/skills graduates break the 'glass ceiling' of the academic-vocational divide and obtain career progression opportunities



# Developing **Replicable, Scalable, and Sustainable** Local Models of the integration of STEM-related generic skills into TVET and skills training





# ILO Global Framework for Core Skills

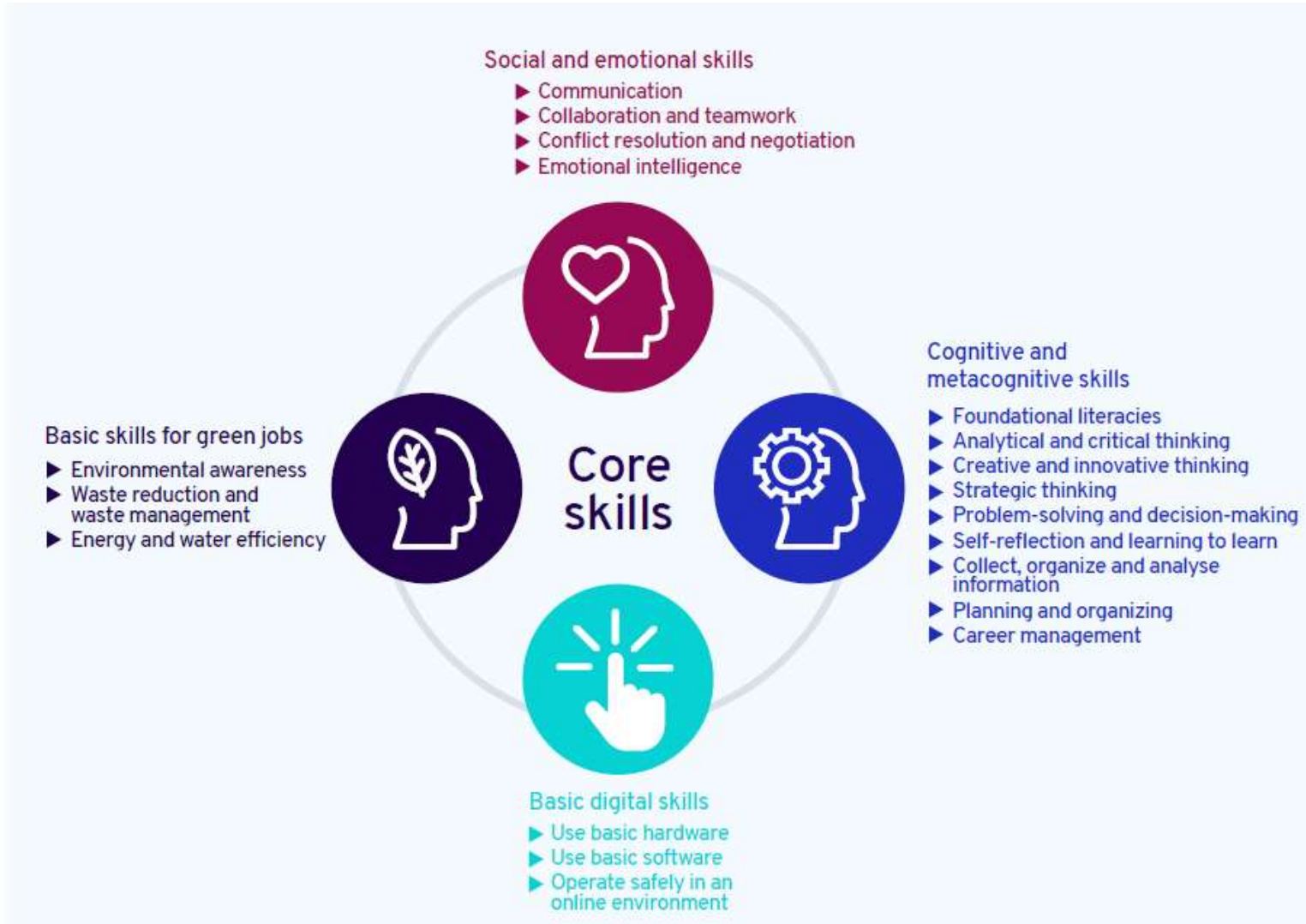


Photo from STEM Centre/ University Malaya

# 高中所得国と低中所得国の 相違・類似点と開発協力： ベトナムとマレーシアの経験 からの考察

## ▶ 政策と実施能力

- マレーシア： 高い戦略・国家レベル政策作成能力、ある程度の省庁間調整。実施とモニタリング・評価が課題。
- ベトナム： まだ多くの政策は未整備。ただアクターレベルでの実施能力(特に潜在力)は高い。



## ▶ 産学連携と産業界、業界・雇用者団体の能力

- 産学連携はどここの国でも課題があるが、ステージが異なる。
- マレーシアは政府主導から産業界主導へ、ベトナムはまだ政府主導体制の確立か。
- マレーシア
  - 雇用者団体、業界団体はある程度TVET政策にも関与し、業界の声をまとめる力もある。ただ、業界別に差があり（例：建設、食品加工）、技能形成を主導するには能力強化が必要。
- ベトナム
  - 産業界の関与自体がまだまだ限られている。業界団体の能力は業界により異なるが、一般的には技能形成に主体的にかかわる能力開発が必要と思われる。

## ▶ 労働者団体の関り

- マレーシア、ベトナムとの役割は限られており、今後の課題。
- Malaysia Trades Union CongressはSfP Malaysiaの活動には参加しているが、より主体的な活動は現在議論中。

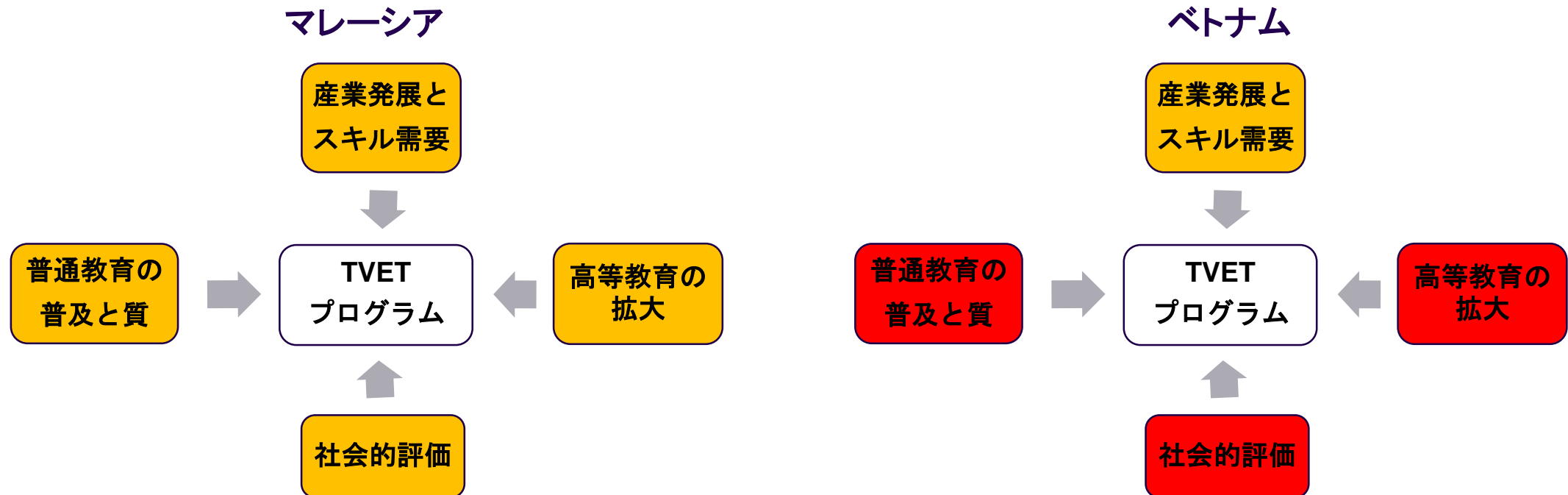
# TVETのポジションと役割、課題

## マレーシア

- 供給面： コアスキルと特定スキルをバランスよく持つ中間スキル労働者（ローカルタレント）を供給できるか、生涯学習に貢献できるか。財源をより効果的、効率的に活用できるか。
- 需要面： 中間・高スキル労働者の需要を持つ産業を振興できるか。

## ベトナム

- 供給面： 普通・高等教育と差別化できるか。財源を確保できるか。
- 需要面： 中間・高スキル労働者の需要を持つ産業を振興できるか（裾野産業など）。



- **TVETに関する課題の「項目」自体は低・高中所得国間で大きな相違はない。**
  - ただ、課題の状況、ステージは異なる。
- **発展に従い、政策の「ラインナップ」は充実する。**
  - いかに実施し、その成果を評価しつつより実効性の高い実施策を策定できるか。
- **需要側の課題は重要**
  - 産業界の参加とリーダーシップを高めることは重要だが、発展ステージにより政策の重点は異なる。
- **開発協力はどのように中所得国に寄り添いかつ知識共創を目指すのか**
  - プロセス・アウトプットもしくは中間成果の積み重ねとGrand Visionの両立。
  - 実施の補佐。能力を過小評価も過大評価もせずに。柔軟かつ迅速な対応。
  - 国際的な事例の効果的かつフェアな活用（成果と課題、考えるスペースの確保）。

## お知らせ： ILO駐日事務所の活動について

ILO Newsletter 「ビジネスと人権」:企業の人権デュー・ディリジェンス実施について—日本の状況

[https://www.ilo.org/tokyo/information/terminology/WCMS\\_834804/lang--ja/index.htm](https://www.ilo.org/tokyo/information/terminology/WCMS_834804/lang--ja/index.htm)

児童労働： 荻野目洋子さんが児童労働に関する楽曲提供を中心にILOのディーセント・ワーク広報活動に協力

[https://www.ilo.org/tokyo/information/pr/WCMS\\_831475/lang--ja/index.htm](https://www.ilo.org/tokyo/information/pr/WCMS_831475/lang--ja/index.htm)



# Thank you for listening!

For further information, please refer to SfP Malyaia Website:

[https://www.ilo.org/asia/projects/WCMS\\_761262/lang--en/index.htm](https://www.ilo.org/asia/projects/WCMS_761262/lang--en/index.htm)