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# ICT for Skills Development in the Changing World of Work

Innovative Strategies for Development Summit 2016

8 Jul 2016

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# Outline

- Issues and challenges in skills development in AP
- UNESCO and skills development
- ICT for innovative skills development: Cases
- Recommendations



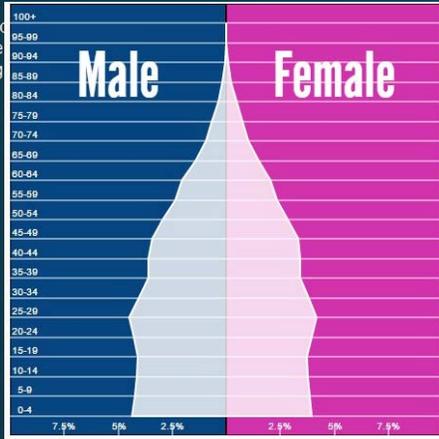
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# Issues and challenges in skills development in Asia-Pacific

# demographic shifts: Diverse demographic patterns within Asia-Pacific



1) Southern and Central Asia have a “youth bulge” and may face challenges educating youth and providing jobs.

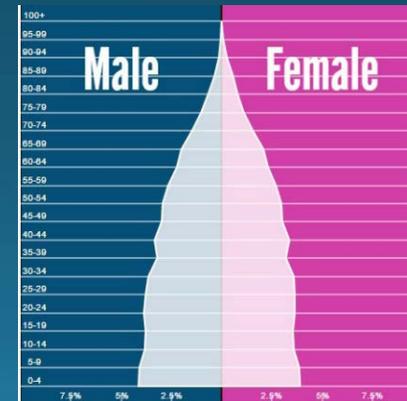
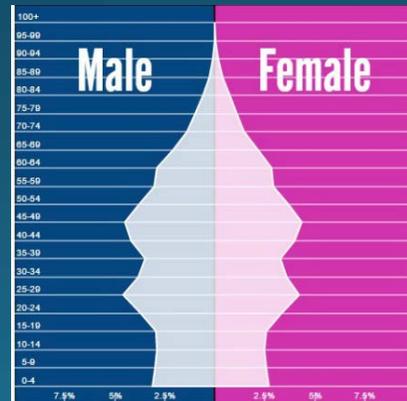
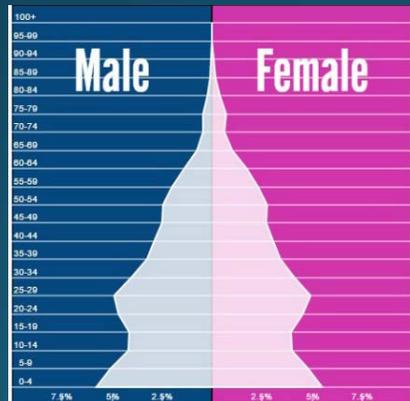
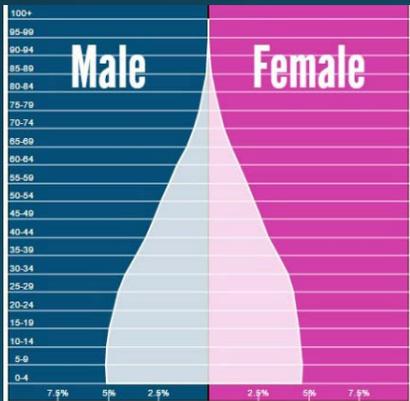
2) Eastern Asia has “population pillars” and is seeing an increasing population of aging but active citizens.

Southern Asia

Central Asia

Eastern Asia

Oceania

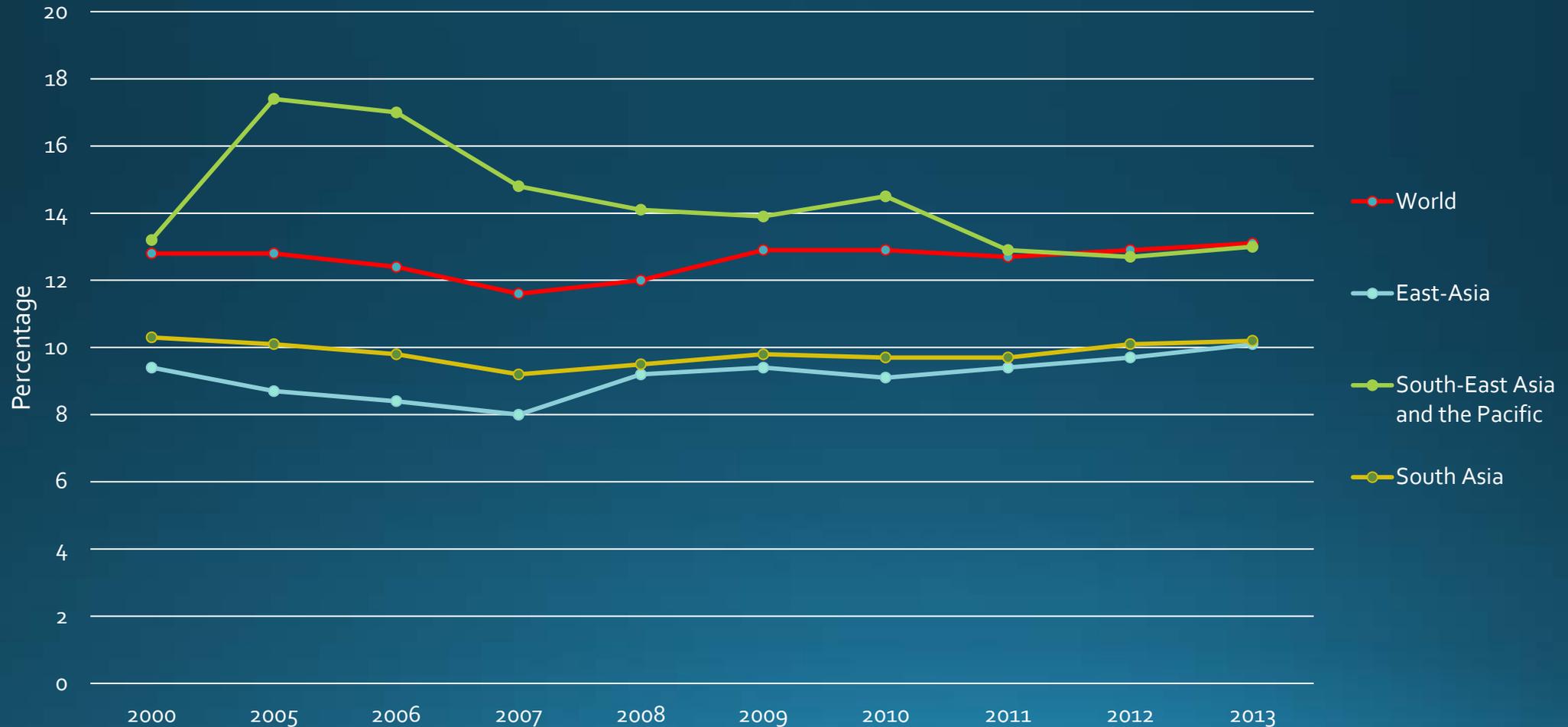


Source: [Populationpyramid.net](http://Populationpyramid.net) (accessed in May 2016); UNDP (2016), Asia-Pacific Human Development Report. Data source : UN DESA(2015), World Population Prospects: The 2015 Revision.



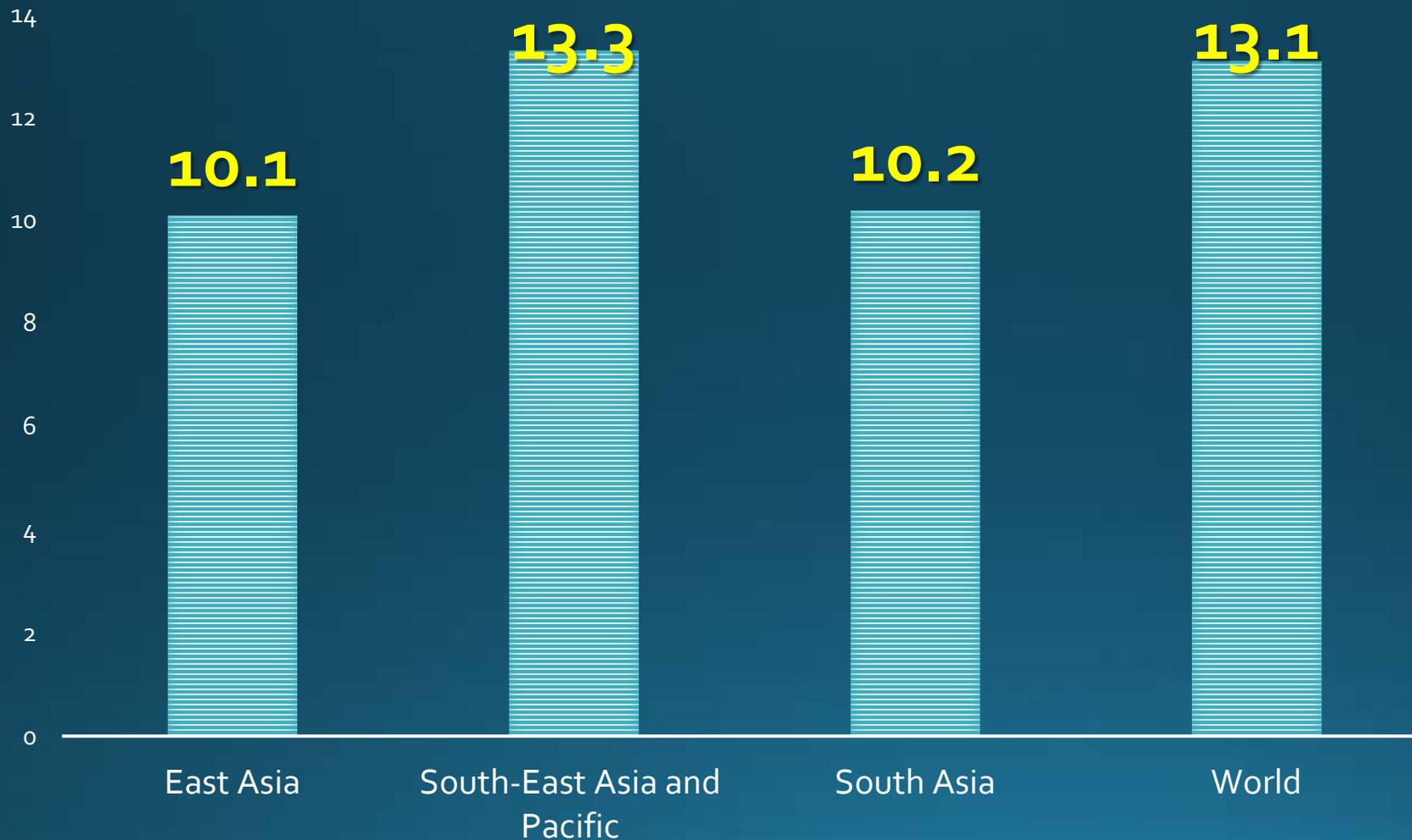
# Persistent youth unemployment

Youth unemployment rate





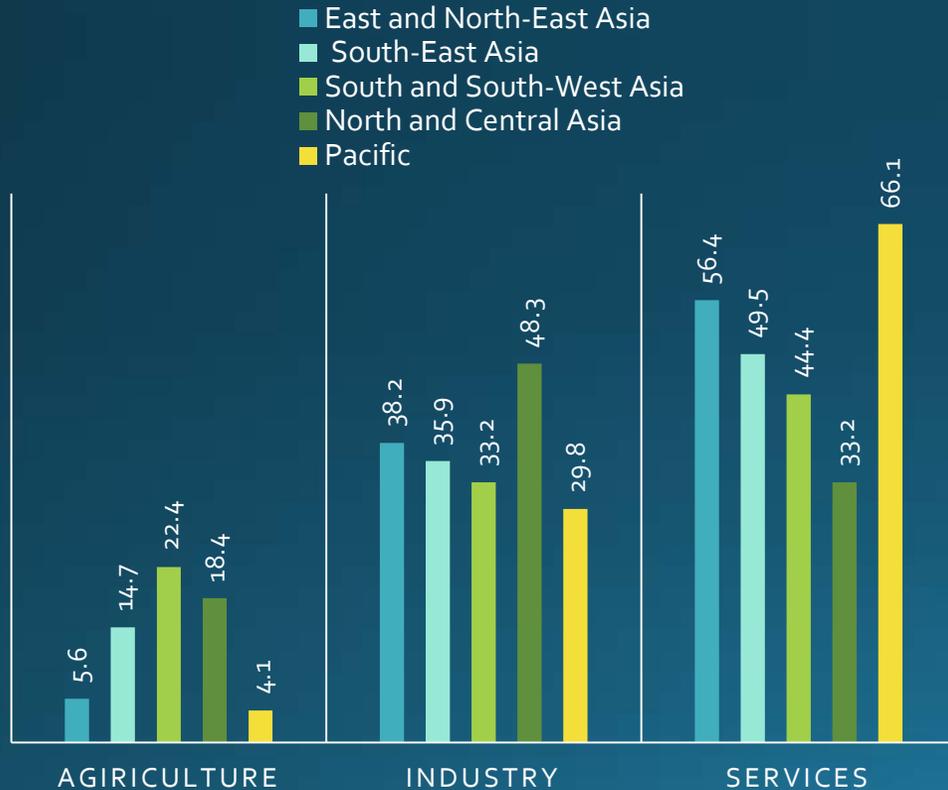
# Youth unemployment rate of Asia-Pacific



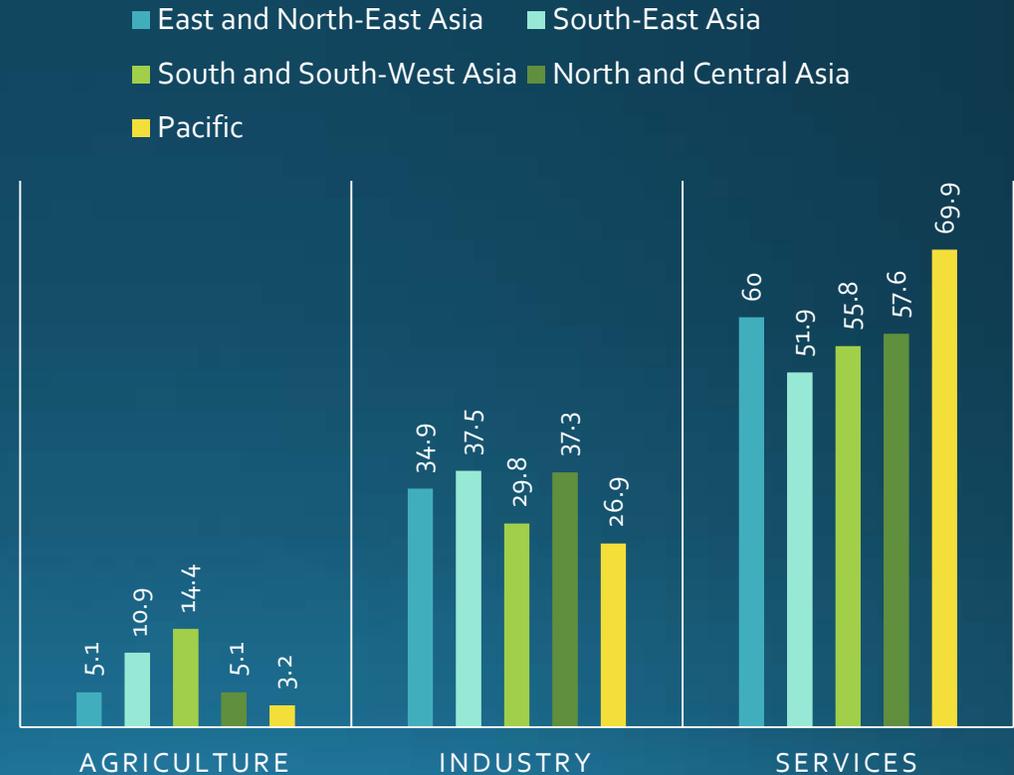
Source : ILO global employment trends 2014

# Changing added values by sector

## VALUES ADDED BY SECTOR 1990

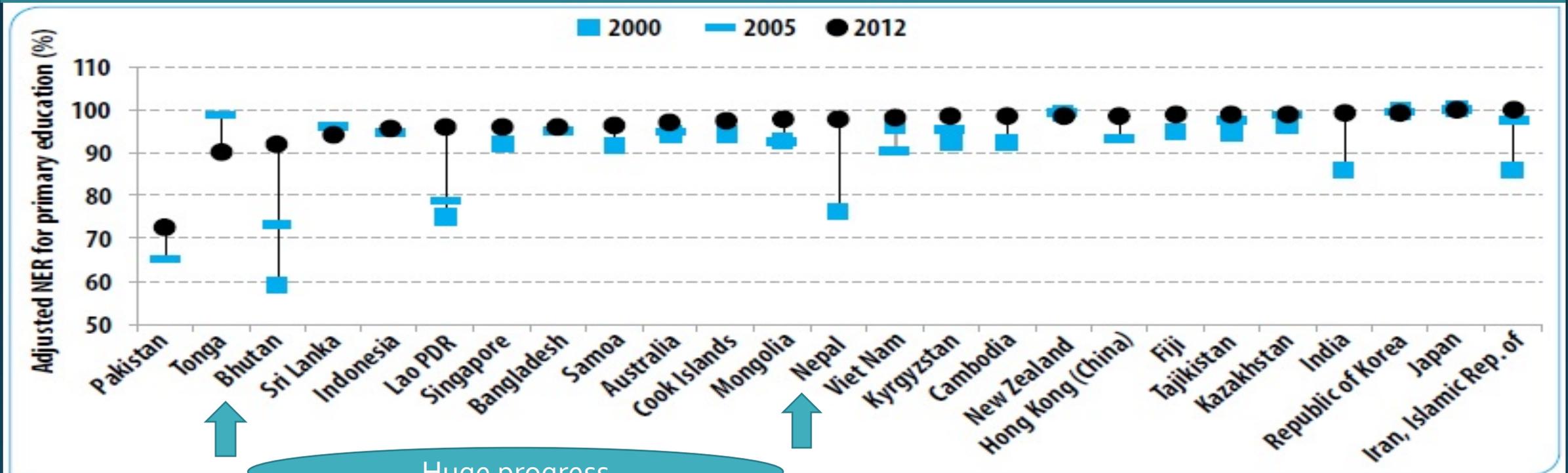


## VALUES ADDED BY SECTOR 2014



# Increasing enrollment in basic education

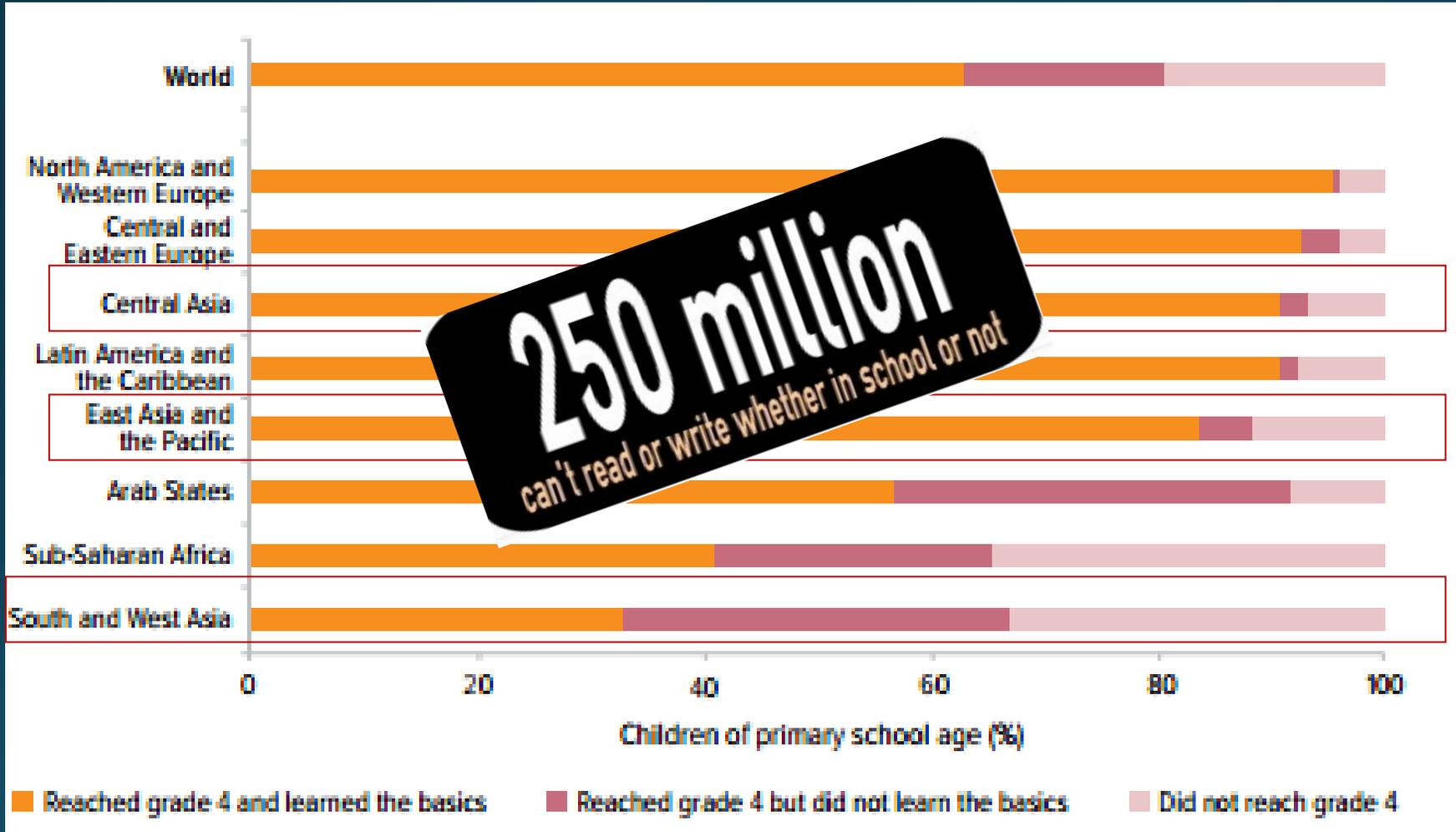
Adjusted net enrolment rates (ANER) in primary education in selected countries in 2000, 2005 and 2012



**Note:** Countries are ranked based on the data for 2012.

**Source:** Statistical Table 2, UNESCO Institute for Statistics, July 2014.

# A Global Learning Crisis



A big number of primary school children are not meeting minimum learning standards.



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# UNESCO and Skills Development



On 25 September 2015,  
193 Member States  
adopted the 2030  
Agenda for SD.





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# Setting New Agenda for Post 2015



“Ensure inclusive and equitable quality education and lifelong learning for all”

- Final big push for the unfinished EFA agenda
- Re-focus on “**Quality**” and “**Relevance**” of learning for the 21<sup>st</sup> century



# New Targets (By 2030, ensure that..)

1. all girls and boys **complete free, equitable and quality primary and secondary education** leading to relevant and effective learning outcomes.
2. all girls and boys have access to quality **early childhood development, care and pre-primary education** so that they are ready for primary education.
3. equal access for all women and men to affordable quality technical, vocational and **tertiary education**, including university.
4. all youth and adults have relevant skills, including **technical and vocational skills, for employment**, decent work and entrepreneurship.
5. **eliminate gender disparities** in education and ensure **equal access** to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples, and children in vulnerable situations.
6. all youth and adults, both men and women, achieve **literacy and numeracy** sufficient to fully participate in society.
7. all learners acquire the **knowledge and skills needed to promote sustainable development** (e.g. global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development)



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# UNESCO: Providing a platform for policy dialogue

## Global Level

The Third International Congress  
on TVET  
Shanghai, 2012



Shanghai Declaration  
7 recommendations on TVET transformation

Asia-Pacific Training  
Kuala Lumpur, 2015



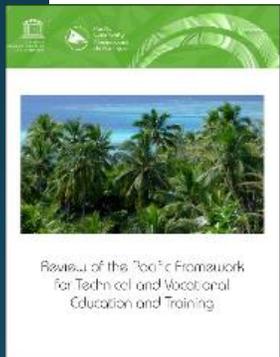
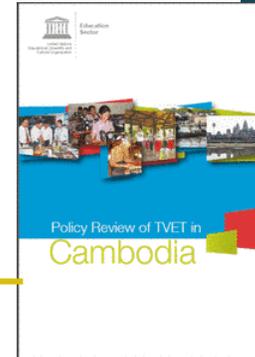
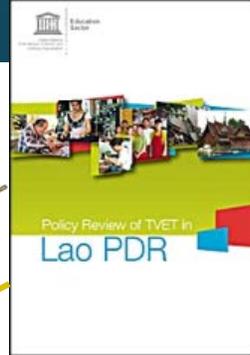
**Kuala Lumpur Declaration**  
8 actions to advance TVET in Asia-Pacific  
Endorsed by delegates from 27 countries



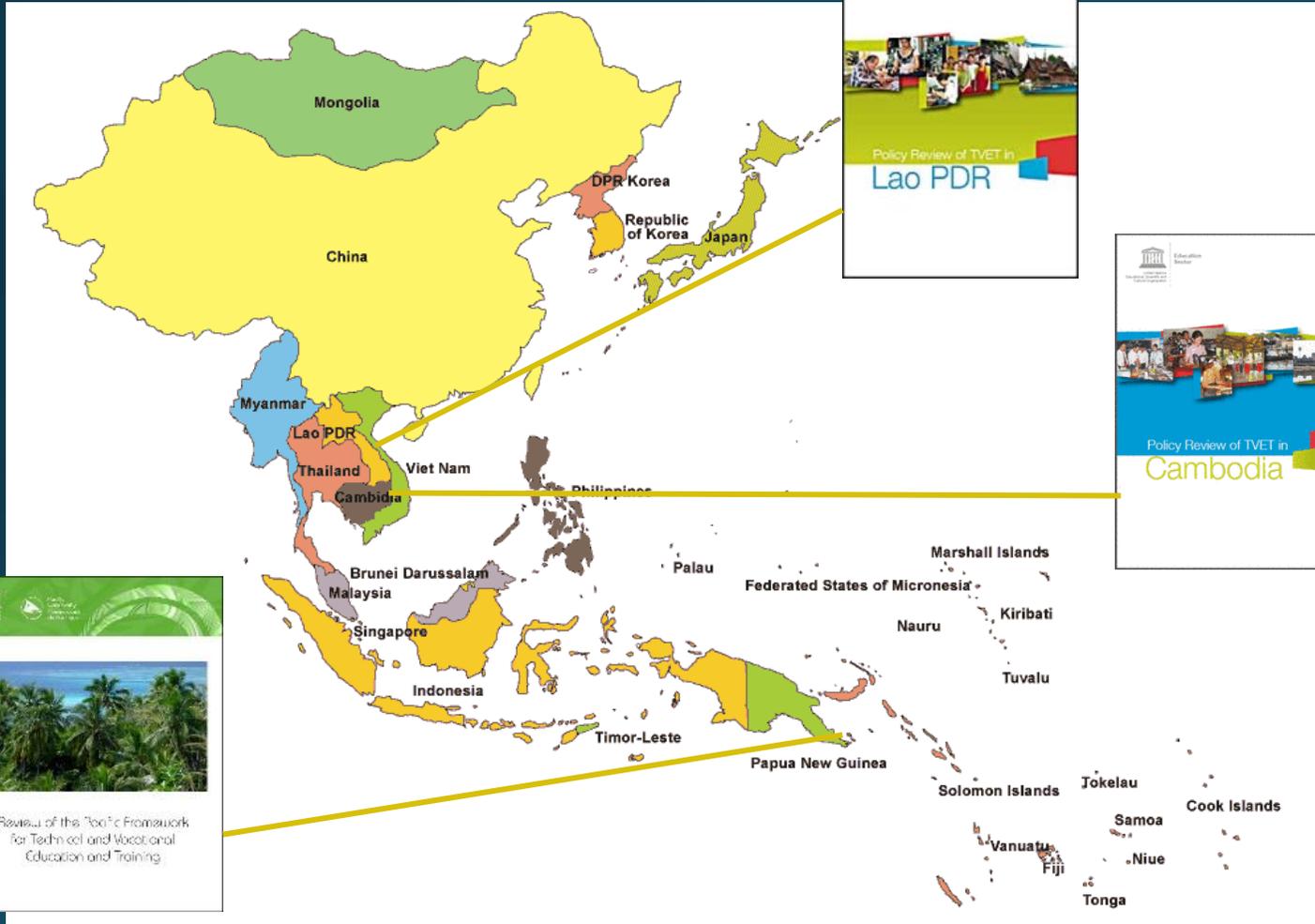
Leverage the potential of ICT to transform teaching and learning in TVET

# ANALYTIC WORK: TVET POLICY REVIEWS

Ongoing study:  
ICT-enhanced  
Innovative Pedagogy in  
TVET: Case Study



Review of the Pacific Framework  
for Technical and Vocational  
Education and Training





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## ICT for innovative skills development

- **Improving access**
- **Enhancing relevance**
- **Data-informed TVET policy making**



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# ICT to improve access to learning opportunities



# ICT for flexible learning paths for lifelong learning

## Technical Education and Skill Development Authority (TESDA) in Philippines

<http://e-tesda.gov.ph/>

The screenshot displays the TESDA Online Program website interface. At the top, the TESDA logo and 'Online Program' text are visible, along with a user login status and language selection. A navigation bar includes links for Home, TESDA News, My Courses, Downloads, and FAQs. The main content area is titled 'Course categories' and lists various courses with their respective counts. A sidebar on the left contains a 'Main Menu' with links to the TESDA Website, How Tos, FAQs, and Site news. On the right, there are sections for 'Latest News' and a 'Calendar' for June 2016.

Course Category	Count
<b>Maritime</b>	
Ships' Catering (Beta)	2
<b>Information Technology</b>	
Basic Computer Operation	1
Web Development using HTML5 and CSS3	1
CAD / CAM Operation	2
Animation (3D DIGITAL)	3
<b>Microsoft Online Courses</b>	
Game Development	
Game Production Basics	1
Developing 2D Games with HTML5	1
Developing 2D & 3D Games with Unity	1
Software Development Fundamentals	1
C# Fundamentals for Beginners	1
<b>Udacity - Google Courses</b>	
Android Development for Beginners	1
UX Design for Mobile Developers	1
<b>SMART SWEEP Lecture Series</b>	1
<b>Tourism</b>	
Food and Beverage Servicing	
Waiter Servicing	7
Room Attendant Servicing	5
Bus Boy Servicing	4
<b>Housekeeping</b>	
Provide Housekeeping Services to Guests	2
Guest Room Attendant Servicing	9
Valet Servicing	1
Public Area Attendant Servicing	4
Laundry Servicing	1
<b>Cookery</b>	
Preparing Sandwiches	4
Preparing Egg Dishes	2
Preparing Vegetable Dishes	3
Preparing Starch Dishes	3
Preparing Salads and Salad Dressing	5
Preparing Appetizers	1
Preparing Desserts	4
<b>Electronics</b>	
Cellphone Servicing	4
Solar Night Light Assembly	4
<b>Agriculture</b>	
Fruit Grower	2



### Main Menu

- TESDA Website
- How Tos
- FAQs
- Site news

### Course categories

- Information Technok
- Basic Computer O
- Computer Hardwa
- Game Programmir
- Tourism
- Waiter Servicing
- Valet Servicing
- Bus Boy S
- Room Attendant Servicing
- Guest R
- Electronics
- Cellphone Servici

## Room Attendant Servicing



Module2: Lesson1: Taking an Order Taking Guest Order

### Taking Guest Order

When taking orders, always use the following guidelines: Always speak politely and

1. Pick up the phone and greet the guest. Be sure to introduce yourself and offer greetings with a smile.

2. Write the guest details on the order slip. This includes the name and room number of the guest.

Sample script:

"Room Service. Good Morning!"

"This is....( mention your name) . How may I help you?"

"May I know who is on the line please?"

"May I know your room number?"

### Getting the order

1. Ask for the order of the guest. If you are not

Previous Topic: Materials needed

Next Topic: Lesson2:Communicating Orders

**Over 84,000 registered users  
15,000 overseas registrants**

### Site news



**TESDA online storms**  
by eTESDA PMU - Friday, 22



**Video-Based Demonstrations**



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# ICT to enhance relevance of TVET learning

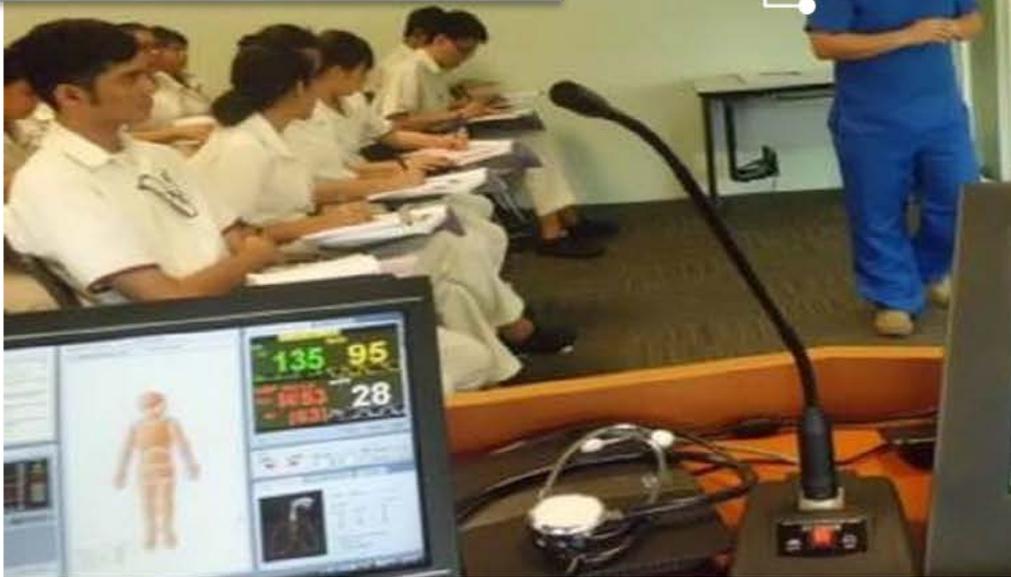
# Simulation Training - Centre for Healthcare

## Authentic or simulated learning



Learner centric, experiential, applied learning

Teacher's roles  
as facilitator and  
coach;  
co-learner



Passive waiting transforms into active learning in



Student collaborating to find a solution to a real world problem



# ICT for authentic and relevant learning

Virtual training package from Online Lifelong Education Institute, Korea University of Technology & Education

## Aim of the virtual training package

Developing virtual training contents

Infrastructure of H/W and S/W platform for virtual training system

Dissemination of virtual training system





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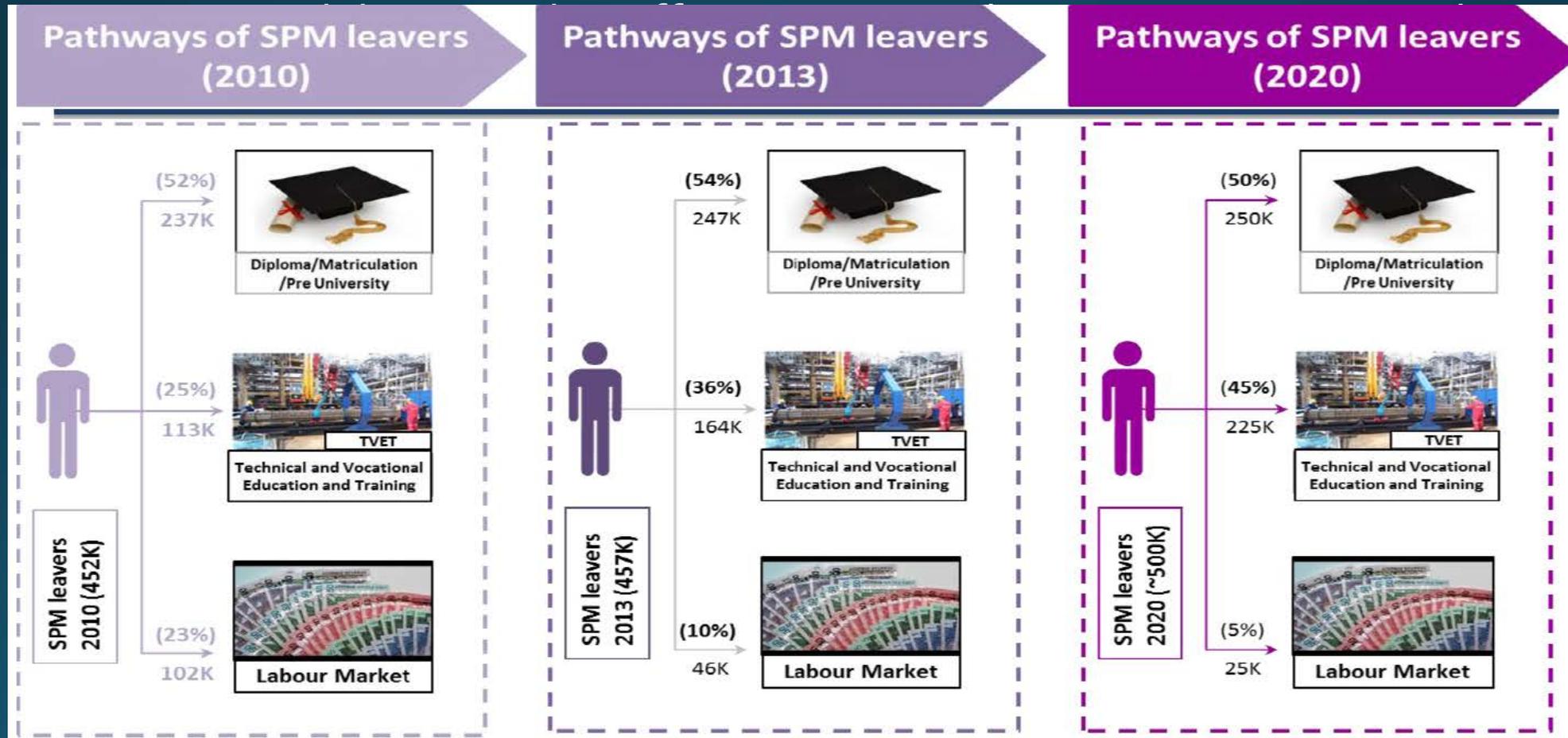
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# ICT to facilitate data-informed TVET policy making

# Malaysia

- Eleventh Malaysia Plan 2016-2020



- Institute of Labor Market Information & Analysis (LMIA) as centre for LMI data warehouse (demand-supply) and analytics

**ilmia** Institute of Labour Market Information & Analysis

**ILMIA Dashboard**  
Gateway to Labour Market Information

**Key Labour Statistic Table**

	2012	2013
Working Age Population (15-64), ('000)	20,017.0	20,335.4
Labour Force ('000)	13,119.6	13,634.6
Labour Force Participation Rate (%)	65.5	67.0
Employment (%)	97.0	96.9

**Key Indicator**

\* Hover your mouse cursor over the picture to see details

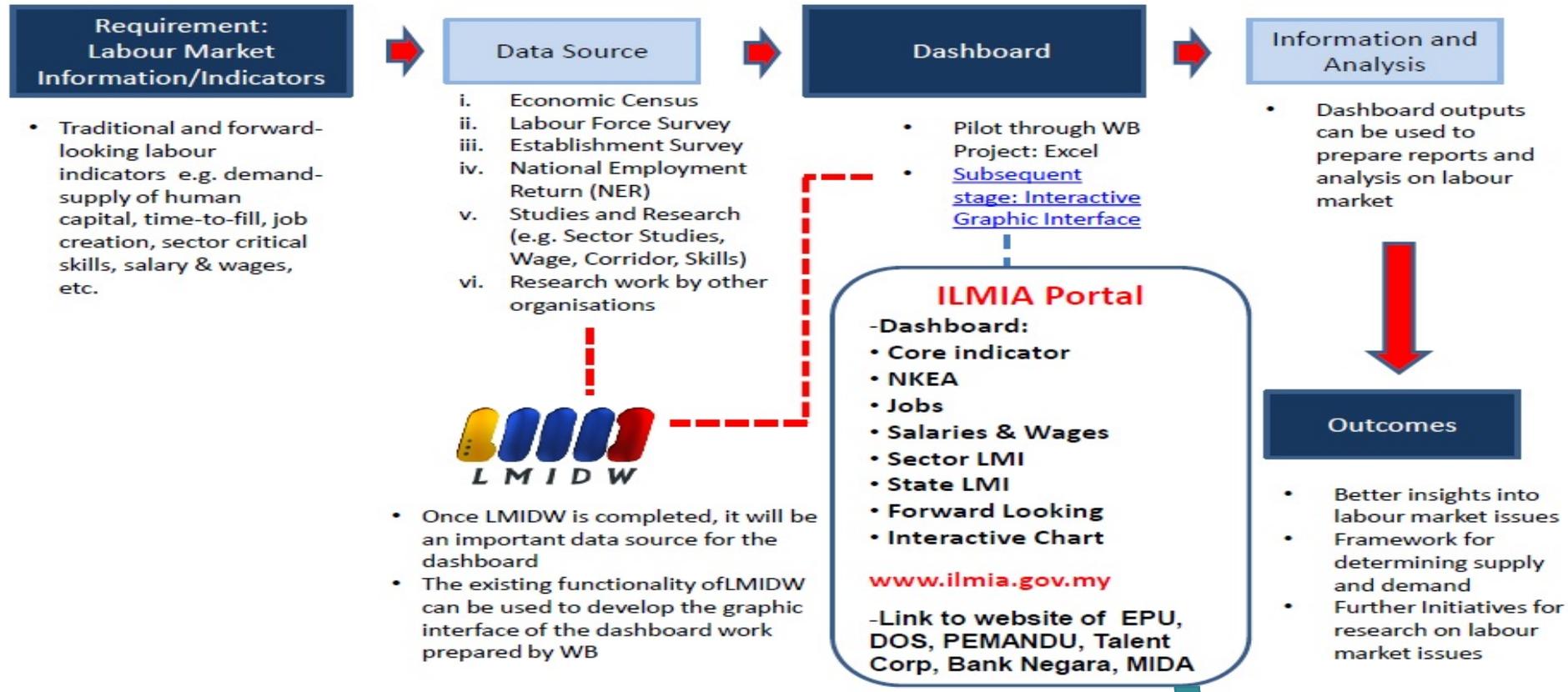
- Female Labour Force Participation Rate: 52.4%
- Youth Unemployment Rate: 10.3%
- Skilled Workers: 24.8%
- Higher Institutions Graduates: 273,893

[More Key Indicators](#)

# ICT for strengthening data-informed TVET

## Labour Market Framework

**Workforce Dashboard: Easy-to-retrieve and easy-to-read format for a quick snapshot of the country's labour market situation**





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# Recommendations



# ICT for Skills Development

## Strategic Readiness

- Vision and Goals

## Organizational Readiness

- Committees and taskforces

## Technical Readiness

- One-stop learning management system
- Data-informed programme design

## Pedagogical Readiness

- Teacher development
- Innovative pedagogy

## Operational Readiness

- Learning support
- Involving community



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# Thank You.

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