

# **Standardizing Technical and Vocational Education and Training (TVET): A Force Multiplier for Regionalism**

**Fahad Khan**

Economist, Regional Cooperation and Integration Division  
Economic Research and Regional Cooperation Department (ERCD)  
Asian Development Bank

**Third CAREC Think Tanks Development Forum**  
17 July 2018 | Bishkek, Kyrgyz Republic

# OUTLINE

- SETTING THE CONTEXT
- TVET AS A FORCE MULTIPLIER FOR REGIONALISM
- TVET STANDARDIZATION INSTRUMENTS
- TVET IN CAREC: OPPORTUNITIES AND CHALLENGES
- ISSUES AND CHALLENGES IN TVET STANDARDIZATION
- PRIORITY AREAS FOR REFORM AND WAY FORWARD

# Primary References

- ADB. 2018. Tapping Technology to Maximize the Longevity Dividend in Asia.
- ADB. 2017. CAREC 2030: Connecting the Region for Shared and Sustainable Development.
- Batalova, J., A. Shymonyak, and G. Sugiyarto. 2017. Firing up regional brain networks: The promise of brain circulation in the ASEAN economic community. ADB.
- Maclean, R., S. Jagannathan, and J. Sarvi. 2013. Skills Development for Inclusive and Sustainable Growth in Developing Asia-Pacific. ADB.
- Mendoza, D. and G. Sugiyarto. 2017. The long road ahead: Status report on the implementation of the ASEAN mutual recognition arrangements on professional services. ADB.
- Mendoza et al. 2017. Reinventing mutual recognition arrangements: Lessons from International Experiences and Insights for the ASEAN Region. ADB.
- Papademetriou, et al. 2015. Achieving Skill Mobility in the ASEAN Economic Community: Challenges, Opportunities, and Policy Implications. ADB.
- Ra, S., B. Chin, and A. Liu. 2015. Challenges and opportunities for skills development in Asia: Changing supply, demand, and mismatches. ADB.

# SETTING THE CONTEXT

# Demographic Shift and Labor Supply

*Reduced fertility and increased life expectancy*

## Aged, Aging

- PRC, Georgia, Kazakhstan
- 29% - 41% of population under the age of 25
- Increasing labor demand that outpaces labor supply

## Young

- Afghanistan, Azerbaijan, Kyrgyz Republic, Mongolia, Pakistan, Tajikistan, Turkmenistan, Uzbekistan
- At least 37% of population under the age of 25
- Sustained population growth will continue to expand labor forces

*Regional solution*



*Greater mobility of workers across the skills spectrum*

# Educational Trends

## *Rising Levels of Education*

**Table 1: Enrollment in Tertiary Education, 1981 versus 2014**

	1990	2014	Change: 1990 to 2014	
			Number	% Change
Afghanistan	24,333	262,874	238,541	980.3
Azerbaijan	160,900	195,401	34,501	21.4
China, People's Rep. of	3,924,546	41,924,198	37,999,652	968.3
Georgia	-	120,923	-	-
Kazakhstan	541,000	727,401	186,401	34.5
Kyrgyz Republic	105,300	267,920	162,620	154.4
Mongolia	40,038	175,205	135,167	337.6
Pakistan	304,922	1,931,875	1,626,953	533.6
Tajikistan	107,280	209,170	101,890	95.0
Turkmenistan	42,000	44,411	2,411	5.7
Uzbekistan	331,600	260,453	(71,147)	-21.5
<b>CAREC</b>	<b>5,581,919</b>	<b>46,119,831</b>	<b>40,537,912</b>	<b>726.2</b>

CAREC = Central Asia Regional Economic Cooperation.

Note: Years refer to the earliest and latest years in which data are available for all member countries.

Source: MPI tabulations of World Bank. Education Statistics. <http://databank.worldbank.org/data/reports.aspx?source=education-statistics~-all-indicators> (accessed July 2018).



# Educational Trends ...

**Table 2: Share of Adults with Completed Secondary and Tertiary Education, 1980 versus 2010**

	% of Population Age 15+ with Completed Secondary Schooling		% of Population Age 15+ with Completed Tertiary Schooling	
	1980	2010	1980	2010
Afghanistan	1.2	8.7	2.0	3.7
China, People's Rep. of	9.4	22.9	0.5	2.7
Kazakhstan	32.1	66.3	5.0	14.0
Kyrgyz Republic	31.1	65.0	5.5	9.0
Mongolia	25.1	45.6	8.6	19.7
Pakistan	7.5	19.1	1.5	4.4
Tajikistan	41.4	62.3	4.8	3.7

Note: Data for Azerbaijan, Georgia, Turkmenistan, and Uzbekistan are unavailable.

Source: MPI tabulations of World Bank. Education Statistics (accessed July 2018).

# Educational Trends ...

**Table 3: Annual Number of Graduates—Total and with Degrees in Select Professional Sectors**

	Annual Graduates	Engineering, Manufacturing and Construction	Health and Welfare
Afghanistan	24,315 (2014)		
Azerbaijan	51,594 (2016)	8,079 (2016)	2, 578 (2016)
China, People's Rep. of	12,443,378 (2016)		
Georgia	22,711 (2016)	1,687 (2016)	2,007 (2016)
Kazakhstan	250,411 (2017)	48,016 (2017)	29,399 (2017)
Kyrgyz Republic	56,273 (2016)	7,668 (2016)	6,486 (2016)
Mongolia	35,658 (2016)	4,642 (2011)	3,135 (2011)
Tajikistan	47,631 (2017)	5,885 (2017)	10,309 (2017)
Uzbekistan	67,498 (2017)	13,630 (2016)	3,294 (2016)

Notes: Data for Pakistan and Turkmenistan are unavailable.

Source: UNESCO Institute for Statistics. <http://data.uis.unesco.org/> (accessed July 2018).

# Educational Trends ...

**Table 4: Skill Levels as Share of Total Employment, by Country (2017)**

	High (%)	Medium (%)	Low (%)
Afghanistan	3.9	83.1	13.0
Azerbaijan	23.2	61.1	15.7
China, People's Rep. of	12.4	79.4	8.2
Georgia	25.9	68.8	5.3
Kazakhstan	33.5	47.3	19.2
Kyrgyz Republic	18.3	73.0	8.8
Mongolia	24.7	67.9	7.4
Pakistan	21.0	61.6	17.5
Tajikistan	16.2	76.5	7.4
Turkmenistan	19.4	71.5	9.1
Uzbekistan	19.8	71.8	8.4

Note: Data are ILO-modelled estimates.

Source: ILO. Key Indicators of the Labour Market: Employment by Occupation Dataset. [http://www.ilo.org/global/statistics-and-databases/WCMS\\_424979/lang--en/index.htm](http://www.ilo.org/global/statistics-and-databases/WCMS_424979/lang--en/index.htm) (accessed July 2018).

# Economic Trends

- ❑ Huge wage disparity
- ❑ Services are an important emerging sector in CAREC, with the group recording an annual average growth of about 15% in 2000-2016. There is scope to expand intraregional trade in some services—especially to tourism, transport, and other business services.

# Implications of Megatrends

- ❑ Opportunities for greater human capital development and skills circulation within CAREC
- ❑ Regional and domestic labor forces are interlinked



*Greater labor mobility within the region given the right incentives and supporting mechanisms*

# TVET AS A FORCE MULTIPLIER FOR REGIONALISM

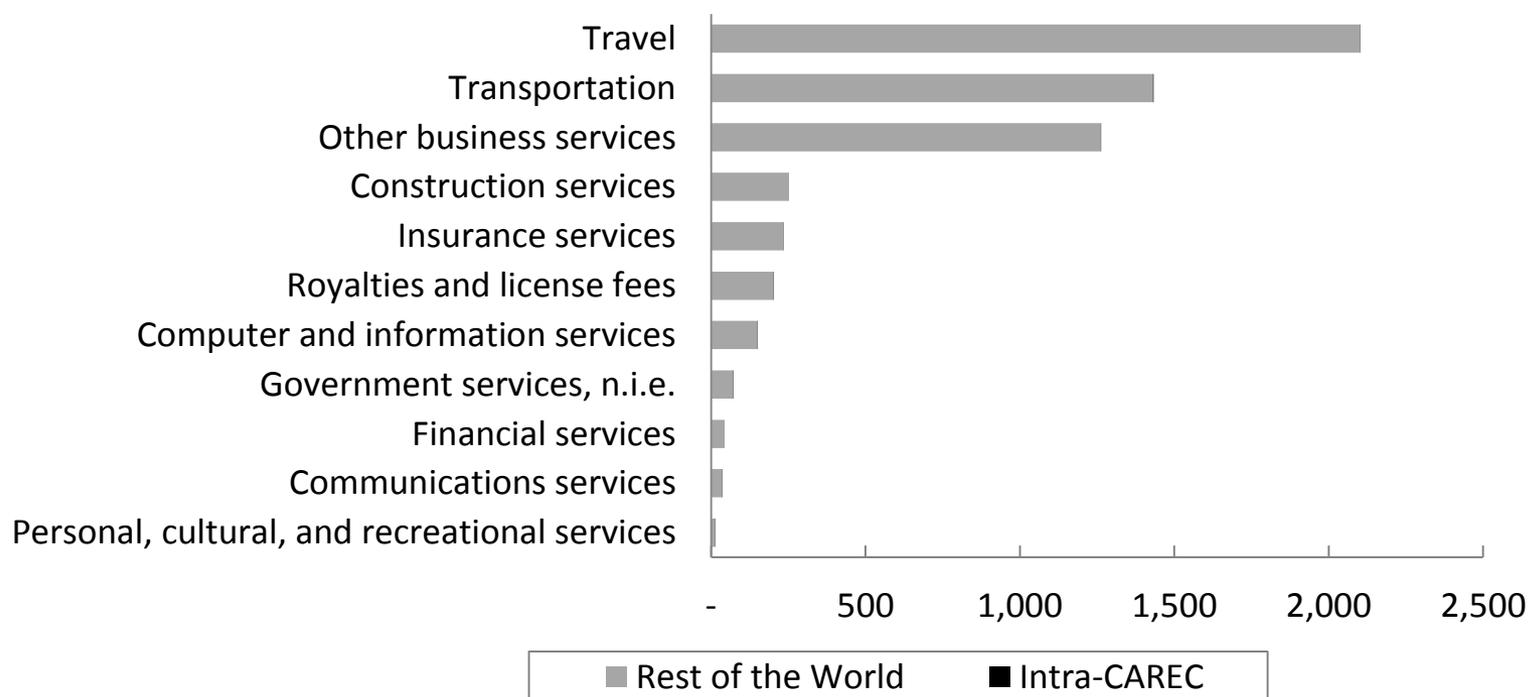
# TVET and its Benefits

## *TVET in UNESCO's Education 2030 Agenda*

- A deeper level of economic integration calls for regional cooperation in skills development
- TVET can help address labor market skill needs, close skills gaps, and enhance productivity
- Systematic strategies at the policy level and development of common tools and principles fundamental to better facilitate labor migration and encourage skills mobility

# TVET helps promote liberalization under Mode 4 Trade in Services

**Figure 1: Total Services Trade By sector (2000—2016)**



Note: Services classifications are based on the Extended Balance of Payments Services (EBOPS) 2002 Classification.  
Source: ADB calculations using data from UNComtrade. <https://comtrade.un.org/> (accessed July 2018)

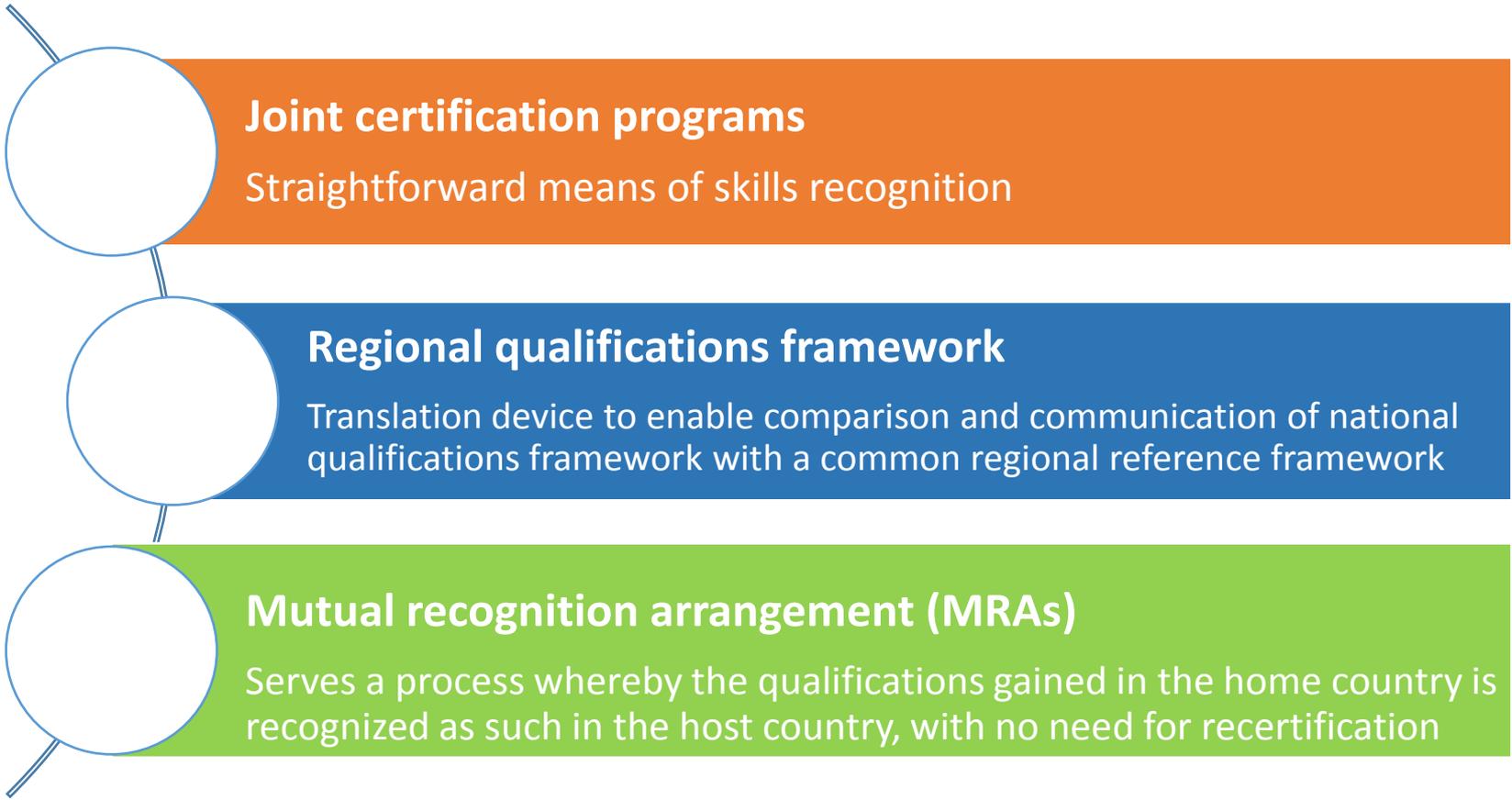
**TVET's important role in technology diffusion through knowledge and skills transfer**

**TVET systems enhancing the management of labour migration**

**TVET systems responding to migration through frameworks for mutual recognition of qualifications**

# TVET STANDARDIZATION INSTRUMENTS

# Supporting mechanisms for mutual recognition



## Joint certification programs

Straightforward means of skills recognition

## Regional qualifications framework

Translation device to enable comparison and communication of national qualifications framework with a common regional reference framework

## Mutual recognition arrangement (MRAs)

Serves a process whereby the qualifications gained in the home country is recognized as such in the host country, with no need for recertification

## Figure 2: Three Mutual Recognition Arrangements Routes



MRAs = mutual recognition arrangements.

Source: Mendoza et al. 2017. Reinventing mutual recognition arrangements: Lessons from International Experiences and Insights for the ASEAN Region. ADB.

# Key Lessons from International Experiences on MRAs

- The harmonization of training standards is hard to achieve and even harder to maintain.
- Centralized MRA systems require enormous resources to implement, while a decentralized approach, although less resource intensive, is difficult to monitor.
- Partial recognition can only be effective if guidelines for compensatory measures are clear and not unnecessarily complex.
- Umbrella agreements offer a promising, alternate approach to MRA negotiations—but only if there is political will at the highest levels.

*MRAs are living documents that require constant revision, improvement, and even periodic renegotiation. Signing an MRA is just the critical first step. Without constant monitoring, evaluation, and revision, an MRA will not stand the test of time and could become easily irrelevant and costly to maintain.*

# Mobility Agreements covering TVET

**Table 6: Mobility Agreements covering TVET**

Region	Regional Bloc	Mobility Agreements	Coverage / Description
<b>Oceania</b>	Australia-New Zealand Closer Economic Relations Trade Agreement (ANZCERTA)	Trans-Tasman Mutual Recognition Arrangement	a person is entitled to practice an equivalent occupation in the other country without the need for further testing or examination
<b>Caribbean</b>	Caribbean Community (CARICOM) Single Market and Economy (CSME)	Arrangements for technical/trade occupations	Applicants can apply for a certificate to go elsewhere and be employed in CARICOM countries
<b>Europe</b>	European Union	European Union Common Labor Market Recognition Arrangements for Trade Professional / Technical Occupations	Upon Issuance of Certificate of Competence based on training or work experience, EU Citizen can move, reside and seek employment within EU. No visas or work permits are required for movement within the EU although residence permits may be required.

Source: Papademetriou, et al. 2015. Achieving Skill Mobility in the ASEAN Economic Community: Challenges, Opportunities, and Policy Implications

# Examples of regional cooperation in TVET from outside Asia

## ASEAN MRA System

- develop mutually recognized professional qualifications
- complete MRAs in identified professions
- develop required core competencies and qualifications for occupations

## European Union

- Europass
- European Qualifications Framework (EQF)
- European credit system for vocational education and training (ECVET)
- European quality assurance in vocational education and training (EQAVET)

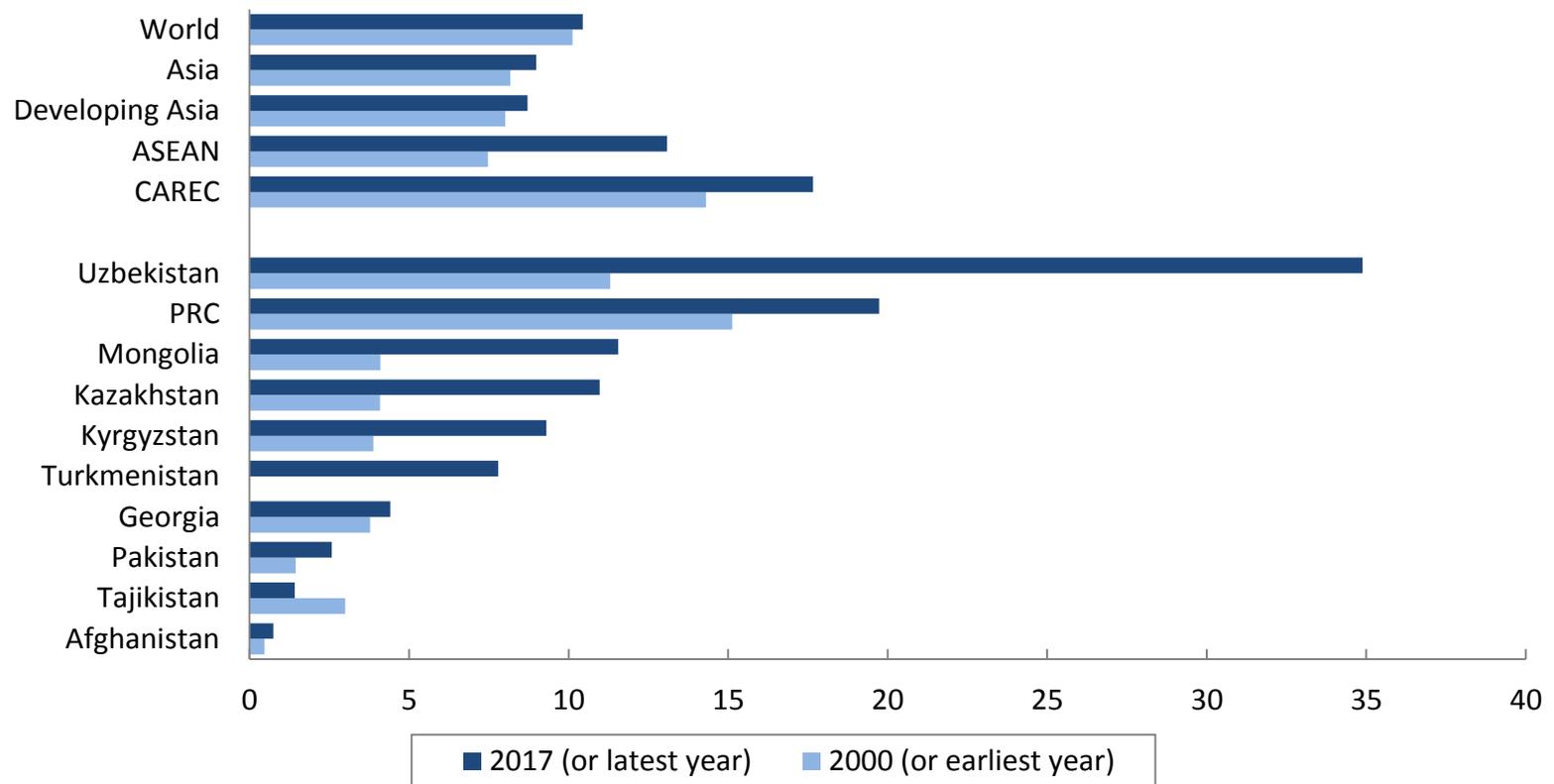
## Caribbean Community (CARICOM)

- redefining TVET
- developing a CARICOM training system underpinned by a quality assurance framework

# TVET IN CAREC: OPPORTUNITIES AND CHALLENGES

# Growth in TVET enrolment rates

Figure 3: Proportion of Vocational Enrolment to Total Enrolment in All Programmes at the Secondary Level (%)



Note: The latest year for the global average and regional aggregates is 2016. Percentage of vocational enrolment refers to the total number of students enrolled in vocational programmes at a given level of education, expressed as a percentage of the total number of students enrolled in all programmes (vocational and general) at that level.  
Source: UNESCO Institute for Statistics. <http://www.uis.unesco.org/Pages/default.aspx> (accessed July 2018).

# ISSUES AND CHALLENGES IN TVET STANDARDIZATION

- **Differences of countries in practice of profession:** Simply signing MRA between governments is not enough. Detailed occupation-by-occupation analysis is necessary
- **Recognition of school diploma is not the same as recognition of qualifications**
  - For instance, to obtain full qualifications recognition and access to professional practice in Quebec, French-qualified nurses and medical doctors must perform a three-month internship in a Quebec hospital.
- **Negotiation / Recognition Process is a highly complex system and politically difficult because of wide range of stakeholders**
- **Inadequate legislative and institutional frameworks**

# PRIORITY AREAS FOR REFORM AND WAY FORWARD

## ***CAREC 2030's Operational Priorities on Education***

- ✓ Cross-border accreditation
- ✓ Program and degree or diploma harmonization
- ✓ Mutual recognition of skills and qualifications
- ✓ Development of higher education and TVET institutions networks
- ✓ Development of an integrated labor market information system to promote greater labor mobility and match employment opportunities in the region

***Developing TVET quality assurance, accreditation systems, and qualification frameworks***

***Good governance, TVET policy reforms, networking within the region***

***Improving evidence base for TVET policy and practice***

# Thank you!

**Fahad Khan**

Economist, Regional Cooperation and Integration Division  
Economic Research and Regional Cooperation Department  
Asian Development Bank  
Email: [fkhan@adb.org](mailto:fkhan@adb.org)