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IMPROVING EDUCATION, SKILLS, AND EMPLOYMENT IN TOURISM

ALMATY-BISHKEK ECONOMIC CORRIDOR

MAY 2019



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Notes:

In this publication, “\$” refers to United States dollars.
ADB recognizes “Kyrgyzstan” as the Kyrgyz Republic.

On the cover: **Alpine potential**. A scenic view from the Kok-Tobe Mountain in Almaty, Kazakhstan (photo by Andrey Terekhov).

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Abbreviations

ABEC	Almaty–Bishkek Economic Corridor
ADB	Asian Development Bank
CAREC	Central Asia Regional Economic Cooperation Program
COE	center of excellence
ES-EDU	entrepreneurship education
EU	European Union
GDP	gross domestic product
HEI	higher education institution
ICOE	international center of excellence
INSETT	in-service teacher training
I-ES	institutional entrepreneurship
OECD	Organisation for Economic Co-operation and Development
PPP	public–private partnership
PRC	People’s Republic of China
PRESETT	pre-service teacher training
S4T	Skills for Tourism
SDF	Skills Development Fund
TOT	trainer of trainers
TSA	tourism satellite account
UNWTO	United Nations World Tourism Organization
VET	vocational education and training
WBL	work-based learning
WEF	World Economic Forum
WTTC	World Travel and Tourism Council

Key Findings

The Almaty–Bishkek Economic Corridor (ABEC) region is characterized by pristine mountain ranges and lakes, rich cultural heritage, and fast-growing urban centers which underline its tourism potential. To fully exploit this potential, investments in hard and soft infrastructure are required. This publication measures the tourism skills gap in ABEC and identifies skills as a major constraint for this fast-growing and employment intensive sector. The report suggests several measures to address the skills gap and to promote internationally competitive and sustainable tourism development in ABEC.

The skills gap analysis identifies an annual lack of skilled workforce in tourism occupations in the magnitude of about 8,500 workers. This has dire implications on tourism service quality. This skills gap is of a structural nature as the region lacks both semi skilled and higher qualified tourism professionals.

To address this binding constraint for tourism development in ABEC, the authors suggest a long-term twinning-project with an internationally renowned tourism education center of excellence. The essence of this approach is to ensure solid practical skilling in basic tourism occupations in combination with higher level specializations such as eco-, adventure, or nomadic tourism.

Reference is made in this report to the European Region Tyrol, South Tyrol, and Trentino—an alpine tourist region spanning across Austria and Italy. The success of this region as a tourism destination is attributed to joint efforts of both countries in developing and promoting it as a top destination of choice for tourists around the world. The region started with ski and winter tourism but has successfully diversified into a year-round tourism destination. Apart from joint institutions, recognized tourism schools are based in the region to drive high-quality tourism product offerings.

Key Facts

- Almaty–Bishkek Economic Corridor is among the top 10 growth destinations in tourism development worldwide.
- The Kyrgyz Republic is globally top ranked in terms of estimated tourism growth and its contribution to gross domestic product growth.
- Travel and tourism's direct contribution to employment is predicted to grow per annum by 4.3% in Kazakhstan.
- The estimated annual gap of about 8,500 tourism professionals is causing an opportunity cost of more than \$30 million per year in the Almaty–Bishkek Economic Corridor region.

Sources: World Travel and Tourism Council and authors.

Skills for Tourism Sector Overview

“We are looking for potential rather than skills.”

- General manager of five-star hotel in the Almaty–Bishkek Economic Corridor

The Almaty–Bishkek Economic Corridor (ABEC) has an exceptional heritage and wealth of culture and nature. This combination results in a high potential for tourism development, which is largely untapped. Only the historically developed mainstream beach and health tourism at Lake Issyk-Kul may to some degree be considered as a more intensive form of developed tourism in ABEC.

Limitations and delimitations of this report—additional sector overview with focus on skills for tourism (S4T). Even though tourism data and methodology are patchy in Kazakhstan and the Kyrgyz Republic, various reports and publications, mostly by bilateral and multilateral development partners, exist and are listed in the references section of this report. The focus of this research is on skills and, to some extent, jobs. Therefore, those components, data, and reports of the tourism sector will be primarily highlighted insofar as they are relevant for skills development and employment. In addition, new employment and skills data, and data on the tourism industry in general, will be offered if respective data were not available in existing reports.

On the importance of skills for sector development. Skills development is an important binding constraint for almost any sector development. The more labor-intensive and complex a given sector, the more important skills of the respective workforce become. Put into context, for tourism sector development in ABEC, a greater in quantity and better skilled workforce is paramount. Tourism products in ABEC are presently suffering from a low quality-of-service reputation while perceived as relatively expensive. Improved skills will be essential to develop the sector, improve client satisfaction, develop niche markets, and attract more regional and international tourists. Marketing communication and branding is another key activity for sector development, especially for regional tourism. However, if the quality of the tourism products is not improving, it would be difficult to build up and sustain the sector's image.

1.1 Structure of Tourism Market in Almaty–Bishkek Economic Corridor

Generally, the tourism industry has had a robust 4% long-term growth over the last decades. In recent years, the industry grew worldwide at about 6% (ITB 2016). According to the World Economic Forum (WEF), the Kyrgyz Republic recorded 3,051,000 international tourist

arrivals, which accounted for the tourism industry's about \$100 million gross domestic product (GDP). On the other hand, Kazakhstan received reportedly 4,559,500 international tourist arrivals, leading to the tourism industry's \$3,077 million GDP. For the Kyrgyz Republic, the data suggest only about \$33 spent per tourist arrival, while in Kazakhstan, each tourist spent about \$667, about 20 times as much. Given economic disparities, this difference still appears to be very high indeed. It seems more realistic to assume that the Kyrgyz Republic's tourism GDP is about \$1 billion, when comparing the arrivals of both countries.

For ABEC, but also for both countries individually, by far, the biggest existing tourism markets are the domestic ones. Domestic tourists in Kazakhstan account in 2015 for 83% of tourist arrivals. In the Kyrgyz Republic, this figure is estimated at 73% (Choi 2016; and UNWTO 2017a, 2017b, 2017c, 2018). Another high concentration is revealed when unpacking the international tourist arrivals. The following regional breakdown applies according to United Nations World Tourism Organization (UNWTO) data (UNWTO 2017a, 2017b, 2017c, 2018) and is illustrated in Tables 1 and 2. International leisure tourists account only for about 50,000 tourists a year in Kazakhstan. The vast majority of international arrivals are business tourists who also consume leisure tourist offers to some extent.

Table 1 illustrates the high regional concentration of incoming (business) tourists to Kazakhstan. When comparing the estimation above of 83% arrivals being domestic, 6.5 million international arrivals, on the other hand, result in a very high proportion of domestic travel—close to 40 million domestic arrivals. Relative to the population size of about

Table 1: Overview of Incoming Tourists to Kazakhstan by Country

Kazakhstan incoming International Tourists 2016: 6,509,390		
Top 3		%
	1 Uzbekistan	37.79
	2 Russian Federation	24.39
	3 Kyrgyz Republic	21.72
Total	Central and Eastern European countries (CEE non-EU) and Commonwealth of Independent States	91.44
Top 3 EU		
	1 Germany	1.39
	2 United Kingdom	0.31
	3 Italy	0.24
Total	EU	2.94
Other		
	Turkey	1.38
	People's Republic of China	1.80
	India	0.21
	Rest of the world	0.61

EU = European Union.

Source: United Nations World Tourism Organization data, calculations by authors.

Table 2: Overview of Incoming Tourists to the Kyrgyz Republic by Country

Kyrgyz Republic incoming International Tourists 2016: 2,930,200		
Top 3		%
	1 Kazakhstan	56.49
	2 Russian Federation	14.71
	3 Uzbekistan	11.90
Total	Central and Eastern European countries (CEE non-EU) and Commonwealth of Independent States	91.65
Top 3 EU		
	1 Germany	0.37
	2 United Kingdom	0.27
	3 France	0.21
Total	EU	2.73
Other		
	Turkey	1.82
	People's Republic of China	1.27
	India	0.35
	Rest of the world	0.56

EU = European Union.

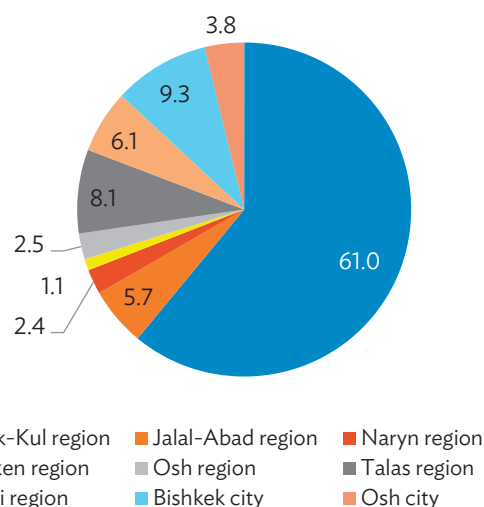
Source: United Nations World Tourism Organization data, calculations by authors.

18 million, this accounts for more than two arrivals per capita, a high value in international comparison. However, Kazakh culture is traditionally mobile, and people travel frequently to attend extended family functions (baptisms, initiation festivities, marriages, funerals, commemoration ceremonies, etc.). Those functions may fall mostly under the internationally unified tourism category of visiting friends and relatives; however, in Kazakhstan, considerable spending in addition to travel cost is involved for presents, monetary contribution, clothes, and hospitality. Special venues exist also in the Kyrgyz Republic to representatively host such festivities.

For the Kyrgyz Republic, the situation is similar, but leisure travel is likely to be a major motivation for visitors. Arrivals from Central Asian countries, especially Kazakhstan, contribute to more than 90% of international arrivals. Incoming tourists from the European Union (EU) yet present a niche market, which can and should be considerably expanded. There are historical linkages with Turkey, and a market share of 1.82% has been established. The tourism market of the People's Republic of China (PRC) is developing at a pace of around 10% per annum. However, it remains at less than 40,000 incoming tourists per year in 2016. Other markets, such as tourism from India, remain infant in terms of market share.

Other than for Kazakhstan, leisure tourism plays a significant role in the Kyrgyz Republic's economy. The Kyrgyz Republic statistical committee's staff estimates 1.1 million visiting tourists or about one-third of visitors being leisure tourists. This proportion of leisure tourists seems reasonable since the Kyrgyz Republic has about half (or more) the number of international tourist arrivals than Kazakhstan. However, the economy, population, and

Figure 1: Tourism by Region in the Kyrgyz Republic, 2013



Source: National Statistical Committee.

geography are multiple times smaller which, in turn, suggests a sizable quantity of incoming leisure tourism.

A high concentration of tourism around Lake Issyk-Kul is observed (61%) compared with the large business tourism to Bishkek that is relatively less developed (9.3%). Other regions currently play a minor role in tourism.

On potential markets. High potential markets may be grouped geographically as Western, Indian, or PRC markets; or along tourism products, such as ecotourism and adventure tourism, health and beauty tourism, business tourism, and cultural tourism. Depending on national and corridor priorities, respective specialist skill sets could be trained at work and in educational institutions. Support to improving education and skills training in tourism is outlined in Chapters 3 and 4 of this report.

In tourism development and international arrivals, the current situation is characterized by about 73%–83% domestic tourists. In regions or countries with high tourism development, the share between domestic and international tourism is reversed, with most tourists coming from abroad. For instance, in Tyrol, Austria, 89% of tourists are international tourists (Vögele 2016). Nonetheless, domestic tourism development is not to be disregarded. Domestic tourism needs to be developed in parallel and should complement international arrivals. The market for international tourism is simply bigger and can, therefore, outnumber the domestic guests without competing with them.

On the importance of domestic tourism. Domestic tourists are typically the least volatile tourism group and should, therefore, be regarded as a key subsector. Domestic tourists may not bring foreign exchange to countries, but they remain a steady group even in politically difficult times when international tourists very quickly turn to other destinations. Therefore,

domestic tourism should be regarded as a robust segment even though the amount of money spent per day may be lower. In addition, and depending on the level of sector development, domestic tourists may request for largely similar tourism products. The authors conservatively estimate the base capacity of the Issyk-Kul region at about only 10 million arrivals per year, suggesting that even though the Issyk-Kul region is the most developed tourist destination in ABEC, its potential is only used by about 10%. In comparison, the Government of the Kyrgyz Republic (2016) and international experts also estimate that the tourism potential is used at only about 15%.

1.2 Good Practice in Regional Tourism Cooperation

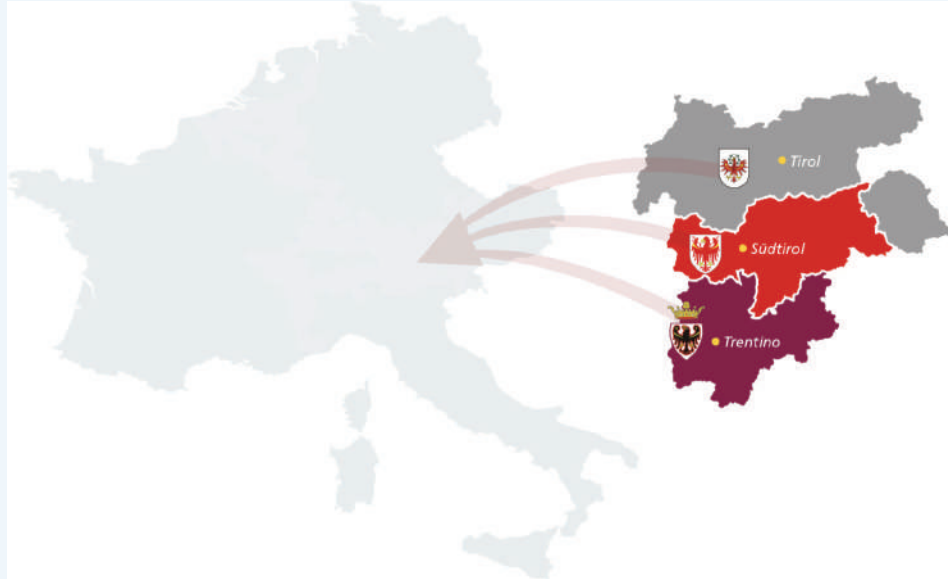
The Austrian state of Tyrol as relevant good practice. The Austrian region of Tyrol (about one-third the size of the Issyk-Kul region, with a similar population of less than 1 million inhabitants, but not having a big alpine lake) receives 11 million guests per year, who generate close to 50 million overnight stays. Tyrol is also a mountainous region and developed its tourism industry, particularly in the last 60 years, as a year-round destination.¹ Therefore, Tyrolean tourism and Austrian tourism education will generally be focused when assessing international good practices. This approach was taken as it allows the reader to more coherently follow examples of one region rather than describing international best practices with little connection to one another. From a regional cooperation perspective in tourism and tourism education, Tyrol, South Tyrol, and Trentino in addition present an interesting case of cross-border cooperation of one European Region between Austria and Italy (see later in this subchapter and in Box 1).

When returning to the state of Tyrol, first, the strategy is no longer to attract more guests, but to hire enough skilled workers to maintain and develop the quality of tourism products. The strategic direction in tourism development has changed. In the 1950s to the 1980s, the development of tourism volume was the focus. In the 1990s, more structured year-round tourism was established with similar numbers of winter and summer tourists (and away from the cradle of skiing image). Since the 2000s and in the nearer future, the third wave of tourism development can be described as shifting the standards from three- to four-star tourism, to four- to five-star tourism. Thereby, the inclusion of the long-term and fast-growing strategic tourism trends of ecotourism, adventure tourism, and health tourism play a key role (Government of Tyrol 2015).

The key pillars of Tyrol's tourism strategy 2021 are as follows: (i) the region as a place to live and to relax, (ii) keeping the tradition of family-run tourism enterprises, and (iii) Tyrol as the renowned leader in alpine tourism. All dimensions request for a high skill set in the sector in addition to basic skills needed for line staff in the subsectors. Certainly, Tyrol benefits from its geographic location in the center of Western Europe and the positive political developments and probably mainly due to joining the EU. Similar geographic and in the longer-term political potential is also present in ABEC and its tourism development. The Eurasian Economic Union could ease border crossing and further improve bilateral relations between Kazakhstan and the Kyrgyz Republic and its neighbors, and could generally facilitate the development of

¹ Tyrol is the region with the highest overnight stays per capita (61) in the world.

Box 1: Integrated Tourism in the European Region of Tyrol, South Tyrol, and Trentino



Key characteristics:

- Shared history
- Joint efforts and act in a coordinated manner at European level
- Similar levels of tourism development
- Synergies of regional cooperation develop members faster
- Recognition of prior learning and qualifications obtained
- Regional tourism pass to promote tourism products of its members (see below)



Sources: EGTC “European Region Tyrol-South Tyrol-Trentino,” EuregioFamilyPass image by “European Region Tyrol-South Tyrol-Trentino,” and Helmuth Rier.

Box 2: On the Advantage of Regional Cooperation in Tourism

Regional cooperation in tourism is typically beneficial for all countries involved and helps develop an integrated cross-border region. Unequal population and economic sizes can play even a mutually beneficial role. For example, on the one hand, Austria is among the top three destinations for Germans traveling abroad and Germans account for 46% of tourists going to Austria. On the other hand, Germany is also among the top three destinations for Austrian travelers (WKO 2018 and Reinhard 2018). Guests spend on average between €152 in winter and €125 in summer in Austria. The spending for the main categories of accommodation (ca. €50), travel (ca. €20), and food (ca. €20) are similar throughout the year, the difference between spending in summer and winter is mainly due to increased transportation cost spent for skiing resorts in winter.

The benefit for both countries is a well-developed tourism industry and infrastructure. Mutual income is generated, and value is added by its regional tourists who prefer to stay in the region rather than traveling further away. This regional tourism approach in which more than 50% of international tourists come from neighboring countries is a key ingredient of tourism development in the Alps. For Tyrol, more than 60 overnight stays per capita are generated each year. This results in sum to more than triple the number of overnight stays than in the capital of Vienna while having less than half the number of inhabitants. The tourism sector is a highly export-oriented key industry with gross domestic product contribution of 25% in Tyrol and Austria at large (WKO 2018).

WKO = Wirtschaftskammer Österreich (Austrian Economic Chamber).

Sources: WKO and authors.

travel and tourism in Central Asia. The population size of neighboring countries, especially the PRC, the Russian Federation, and Uzbekistan could provide for a similarly conducive environment.

A precondition to reap the mutual benefits of tourism development (see Box 2) of neighboring countries is infrastructure development and reduction of border-crossing time. Substantial and sustainable improvements are only possible if tourists can move freely and quickly within a region. Therefore, a more direct connecting road from Almaty to Issyk-Kul and airport development around Lake Issyk-Kul are particularly worth mentioning.

Different skills sets are needed for different tourism groups. Different tourism groups will likely appreciate tailored tourism products. To satisfy the expectations of different client groups, specializations in respective fields such as eco- and adventure tourism or tangible and intangible cultural tourism will be important. Respective on-the-job training as well as matching specializations in training institutions would help improve skills. For instance, tourists from the PRC prefer shopping, Indian tourists tend to appreciate tours tailored around tangible cultural heritage, while “Western” tourists more often look for ecotourism and adventure tourism, and in combination with tangible and intangible cultural heritage.

However, government support to develop those potentially biggest tourism markets remains limited given some mixed experience with specific incoming tourists. On the other hand, further development of eco-, adventure, health, and cultural tourism seems to be unequivocally supported.

On long-term strategic partnerships with similar regions. As part of the EU European regions program, the European Region of Tyrol, South Tyrol, and Trentino could be a twinning region. European Region usually refers to a transnational cooperation structure between two contiguous territories located in different European countries (in this case: Tyrol is politically located in Austria, while South Tyrol and Trentino belong to Italy). European Regions represent a specific type of cross-border region that shares socioeconomic history (www.europaregion.info). ABEC is also characterized by similar socioeconomic and historical attributes. Other potential twinning regions with potentially high cross-border tourism cooperation could be identified in the South Caucasus or the Himalayan region of Bhutan and Nepal.

The Central Asia Regional Economic Cooperation (CAREC) program, to which the Asian Development Bank (ADB) serves as the secretariat, could strengthen its mandate in this regard. Tourism could most certainly serve as a key sector of such regional integration as outlined in the new CAREC 2030 strategy (ADB 2017). The notion of a corridor may, in the long run, even change into a guiding metaphor of a greater Ala-Too region.

Different twinning partnerships could be established. For example, tourism associations in ABEC could create partnerships with tourism associations of other regions such as, for instance, the Tyrol, South Tyrol, and Trentino region. Given that tourism development is a long-term undertaking, support from development partners is recommended to facilitate such twinning arrangements and establish strategic partnerships which could be run independently in the long run and after a substantial period of institutional twinning support.

1.3 Jobs and Nature-Based Tourism

On year-round employment opportunities. Leisure tourism in ABEC is highly seasonal. Most of leisure tourism and overnight stays in ABEC takes place in the months of July and August at Lake Issyk-Kul. However, both governments and the private sector undertake considerable efforts to develop winter tourism. The Government of the Kyrgyz Republic has been developing a skiing cluster concept, and various additional and large-scale skiing resorts are being developed in the Almaty oblast. Therefore, skiing infrastructure can be used year-round for hiking, cycling, summer tobogganing, and many more activities.

On ecotourism and adventure tourism. According to UNWTO, nature-based tourism accounts for more than 20% of total international travel and the sector is continuing to grow rapidly. Between 2009 and 2012, the adventure tourism market had an estimated average yearly growth of 65% and was worth more than \$263 billion globally. This sector of tourism is also one of the most important for local economic benefits as more income is retained in the destination than with classical package tours.

ABEC is already recognizing the eco- and adventure tourism potential and it is a key part of the offers of many of the best incoming tour operators in both countries. Nature-based tourism products are more developed in the Kyrgyz Republic, probably as a combination of its greater percentage of mountain coverage and the support of several international donor projects in the past 10 years. Ecotourism and adventure tourism are at the heart of the well-developed community-based tourism products connected to the nomadic lifestyle (Bell 2017).

For instance, and both for domestic and international tourism, the highly popular and prestigious nomadic tradition of *kok boru*, known in English as nomadic polo or sheep polo, certainly has more tourism and event potential than currently used. A similar sport, which is marketed as high society events and in some World Cup Tournament modus, is the “regular” polo or snow polo (see the photos below). By no means do the authors want to suggest a full commercialization of cultural traditions such as *kok boru*; however, more and organized access for interested visitors, as well as income for local communities and protagonists, may be increased if *kok boru* was supported and regionally developed.

The World Nomad Games at Lake Issyk-Kul are a biennial event, which is professionally and regionally organized (worldnomadgames.com). Given the popularity, fascination, and complexity of nomadic sports such as *kok boru*,² a regional league or more frequent series of events would certainly attract more domestic, regional, and international visitors.

Nature-based tourism could be developed as a main tourism product in ABEC, and cross-border tours through the Ala-Too massif could be offered. Few offers exist of crossing from Great Almaty Lake to Cholpon Ata by heavy-duty all-wheel vehicles, mountain bikes, or hiking. For instance, there are five national parks in the Almaty oblast alone; however, the few staff employed tend to report on the status of the respective national park to the regional and national administrations rather than actively taking care of nature, much less guiding tourists. When national park reforms include a more tourism-related and considerably



Popular and prestigious equestrian sports. The Central Asian traditional nomadic game *kok boru* in comparison with snow polo (photos by worldnomadgames.com and CNN International).

² A video with more explanation is available at youtube.com/watch?v=-pfWl5m-76o.

increased human resources concept, a sizable tourism skilling demand for national park staff may emerge.

The tourism industry creating jobs. Research shows that for every 30 new tourists to a destination, one new job is created. Yet, tourism's role in employment generation and entrepreneurship is often underestimated and undervalued in policy formulation and implementation (WEF 2017). However, jobs are only generated if the sector is growing faster than it is automated. Lack of automation can be regarded for decades to come as a minor constraint to job growth. Much more pressing is the need to improve the quality of tourism products through a better skilled workforce. Moreover, tourism is an important value chain for rural development; it can reach far into rural regions in ABEC when reducing underemployment and unproductive self-employment.

Box 3 summarizes skills realities, which will be analyzed in more detail in Chapter 2, and the proposals of Chapters 3 and 4 will suggest concrete steps on how tourism skills can be improved.

Box 3: Skills Realities in the Almaty–Bishkek Economic Corridor

- Employers consider only to a minor extent official qualifications as a reason for hiring (e.g., college degrees).
- Instead, employers should ask in job interviews to showcase skills (e.g., navigation in the booking system Opera or the ability and knowledge of guiding a tour, cooking a certain dish, or mixing a certain drink).
- As a result, incumbents start their tourism careers mostly as line staff (e.g., waiter, receptionist, tourist agency back office worker, etc.).
- Tourism workers do not give much regard to career progression.
- General managers of five-star hotels in ABEC are typically expatriate professionals with relevant skills and experience.
- Much anecdotal evidence suggests that turnover of tourism line staff is about 50% per annum in ABEC.
- Also in the tourism sector, the large majority of jobs is for line staff; fewer jobs are in administration and management.

Source: Authors.

Skills Supply and Demand in the Tourism Industries of Almaty–Bishkek Economic Corridor

2

“Even though we employ more staff in comparison with other hotels in other countries, we have one of the least staff cost at about 21% of total.”

– Human resources manager of five-star global hotel chain in ABEC

2.1 The Skills Shortage in the Sector and Employer Constraints

The general skills gap of ABEC is also reflected in the tourism sector and will be elaborated on in this chapter. In Kazakhstan, the share of firms identifying skills as a major constraint to their business is between 50% and 60% (World Bank 2016). In the Kyrgyz Republic, 33% of firms identified an inadequately educated workforce as a major constraint to business development—well above the regional average of 22% (World Bank 2014).

Employers in ABEC perceive significantly higher constraints in workforce skills than most peers. Specifically, there is a perception that skills taught at universities and vocational institutions are poorly aligned with the needs of employers (World Bank 2016). These shortcomings are well acknowledged by the respective ministries of education, and in both education strategies, labor market orientation figures prominently. These realities of delinked education and economy also apply to the tourism sector. Various hotel managers interviewed for this report unequivocally responded that (i) educational attainment does not play a decisive role in their employment policy, (ii) cooperation with education institutions is little or nonexistent, and (iii) they hire on the basis of skills, with the result that new staff mostly start their careers in tourism at low levels (see also Box 4 in Chapter 3).

On-the-job training. In Kazakhstan, only 28% of firms offer formal training to their workers and only 3.4% of workers undertook training, retraining, or upgrading courses in 2013. This level of training compares poorly with regional and global peers across the firm size domain: while small firms are least likely to offer training (20%), medium-sized firms (around 30%) and large firms (60%) at least offer training to their staff (World Bank 2016). In the tourism sector, most employment is in micro, small, and medium-sized enterprises. Moreover, training appears to be highly biased toward higher-skilled workers.

In summary, the problem of relevance in tourism skills and education results from a predominately supply-driven orientation to skills development, weak linkages between education institutions and the labor market, and obsolete education standards and curricula (which are not based on occupational and functional analyses) (World Bank 2016).

The rationale for a possible investment in the tourism sector of ABEC will be informed by an analysis of the supply and demand side of the labor market. The supply side can be regarded as vocational education and training (VET) education institutions skilling graduates in upper-secondary (VET schools), post-secondary non-tertiary (VET colleges), and tertiary (academies and universities) levels. The demand side consists of employers (e.g., hotels, travel agencies, tour operators, and transport enterprises), and their needs for unskilled, semiskilled, and skilled workers and professionals.

Hence, the chosen methodology for assessing any given or emerging skills needs is a meta-level skills gaps analysis. Therefore, the authors did not analyze competencies needed in different tourism occupations, but assessed how many graduates are produced in Kazakhstan and the Kyrgyz Republic. The chosen methodology would entail a bigger research project, which was not the scope of this report, and such detailed occupational and functional analysis is not needed at this stage to draft informed proposals to improve skills for tourism (S4T).³ From the number of graduates produced in vocational schools, colleges, and universities, estimations were calculated on how many graduates ABEC produces and how many jobs in tourism exist in ABEC. Therefore, Chapter 3 on improving S4T and the proposals of Chapter 4 are mainly informed by international good practices in tourism education of relatively broad skilling in key tourism occupations as a basis for all students, and only in the second part of studies specializing in one field of tourism (see Chapter 3). This broad practical skilling approach assumes that hygienic, culinary, hospitality, and tour operating skill sets and standards are internationally similar and can be tailored to regional particularities. Based on the current skills analysis, estimations on the future development of the tourism labor market in the sector were also conducted.

2.2 On Data Availability and Quality for Conservative Estimations

Before elaborating on the findings of the skills gaps analysis, a preliminary note on the availability and quality of data in the tourism sector shall be provided.

Both countries do not use standardized methodologies of collecting tourism-related data. While both governments have taken actions to improve quality of data and increase data collection in the tourism sector, tourism data and methodology remain patchy. Therefore, the data underlying Table 3 are to be regarded as a comprehensive compilation of sources mostly from UNWTO, WTTC, both countries' statistical agency and/or committee, respective line ministries' data (mostly ministries mandated with education and tourism), WEF, and authors' estimations. Generally, the authors have taken conservative data sources and estimations. For instance, the number of direct jobs in tourism for Kazakhstan was estimated at 140,000, which is from data provided by UNWTO. WTTC estimates 181,500 jobs in the sector and WEF estimates 150,585 jobs—both numbers considerably higher than the UNWTO number. In addition, international agencies and organizations typically do not collect data themselves, but take the data provided by the national statistical agency and/or committee

³ The approach outlined in Chapters 3 and 4 suggests broad skilling in all basic tourism occupations before studying one specialization. Hence, graduates would have relevant qualifications in the most typical job profiles, which is expected to significantly raise their employability.

and feed their mostly economic models and/or extrapolate data and methodology from one country (in tourism, often the United Kingdom) to other countries. Therefore, the authors took scientific liberty of selecting the most accurate source according to their views, and when triangulating GDP, population size, and international arrivals.

In addition to the largely evidence-based Table 3, the authors also made their own estimations based on personal judgment and subjective rectification of data which seems most accurate to them. This spreadsheet can be found in Appendix 1, but does not form part of the more evidence-based main body of this report.

In addition, and keeping the example of jobs (see above) as a key indicator of the tourism sector, it has to be noted that tourism is a crosscutting sector in which, for instance, jobs exist directly in the sector (e.g., in hotels), but also indirectly (e.g., restaurants in which not only tourists are served). Therefore, data collection is often more complex than in more straightforward sectors. To account for those particularities, most countries use the methodology of the UNWTO Tourism Satellite Account (TSA), which allows for methodologically harmonized analysis of the sector and for international benchmarking. Both countries' statistical committees and/or agencies have taken steps and received capacity building to implement TSAs. Further technical support would be appreciated to improve the quality of data in the tourism sector (see also Chapter 3).

As mentioned above, the tourism sector cuts across other sectors such as transportation or construction. Therefore, it is important to consider both the tourism sector's direct and total contribution to GDP and employment. **Direct contribution** can be regarded as GDP and employment generated by industries that deal directly with tourists. **Total contribution** also factors in (i) indirect contribution to GDP and jobs of capital investment, government collective spending, and supply-chain effects; and (ii) induced contribution to GDP and employment of spending by those who are directly and indirectly employed by travel and tourism (WTTC 2017a). For a more comprehensive overview, refer to Figure 2 and the glossary of this report in Appendix 3. Given those direct and indirect sector employment opportunities, however, Chapters 3 and 4 only outline S4T for direct employment in the sector.

The tourism sector has an important multiplier effect on other industries, which are accounted for in the direct and total contribution to GDP and jobs. For ABEC, this multiplier effect is robustly estimated as factor of 3, which is an average, but highly important factor of further value addition through the tourism industry.⁴

2.3 Findings of Supply- and Demand-Side Mapping

Contribution of tourism to GDP. Generally, the figures of direct and total contribution to GDP vary considerably, depending on the data source. WEF, WTTC, and UNWTO, in cooperation with the national statistics committee and agency estimates, differ considerably. The GDP data in Table 3 are largely extracted from WTTC (2017a, 2017b). As mentioned,

⁴ Multiplier effects in tourism typically range between 3 and 7 (WKO 2018).

Figure 2: Composition of Tourism Spending



Source: World Travel and Tourism Council. 2017. *Travel and Tourism Economic Impact Kazakhstan*. London: World Travel and Tourism Council.

different sources calculate key indicators for the tourism industry differently. For instance, WEF suggests that the tourism industry contribution to GDP of Kazakhstan is only about half the amount (\$3.077 billion). Without overly interpreting the macroeconomic proportions of direct and total contribution of the sector to respective GDPs, both the relative and absolute amounts can be regarded as relatively low, given the potential of the region. For example, Austria, also a landlocked country and topographically high like the southeast of Kazakhstan and the Chui and Issyk-Kul region, has increased over the last 50 years direct contribution to 5.6% and total contribution to 15.6% of GDP.

Employment in tourism. Given sensitivities in data accuracy, an estimated 101,000 jobs directly in the tourism industry exist in ABEC. The Kazakhstan figure ranges between 130,000 and 181,500 (see the preceding discussion) in comparison to a frequently low

estimate for the Kyrgyz Republic. As far as skills and employment are linked, the general assumption also applies that jobs directly in the sector also need skills, which are trained in respective courses, specializations, occupations, or degrees. The total employment in the tourism sector in ABEC can be conservatively estimated at around 350,000. It seems likely this figure might be closer to half a million jobs when considering the Kyrgyz Republic's conservative job estimates and the higher tourism development, especially in the Issyk-Kul oblast. Therefore, it is assumed that 75% of tourism activity and employment of the Kyrgyz Republic are in Bishkek, Chui, and, most importantly, Issyk-Kul. For Kazakhstan, 55% of tourism activity and employment is estimated for Almaty city, Almaty oblast, and Zhambyl oblast.

Graduates for tourism. Both in Kazakhstan and the Kyrgyz Republic, a variety of primary, secondary, and tertiary vocational institutions exist to train in tourism trades. In Kazakhstan, 47 higher education institutions (HEIs) offer tourism degrees and 41 vocational colleges train skilled workers and technicians for the tourism sector (Government of Kazakhstan 2017).⁵ The total number of students enrolled in tourism specializations at colleges and universities is about 12,000.⁶ This is more than four times as many enrolled as in the Kyrgyz Republic's three vocational lyceums, 10 colleges, and 11 universities teaching tourism profiles. The total enrollment of about 14,000 students may appear relatively high. However, when considering 15% attrition, an average 3-year duration of studies, and an assumption that about 50% of students can be regarded as underskilled; therefore, deducting another 50% of the number of qualified graduates, the number decreases significantly. In addition, only an estimated 50% of graduates who took a tourism qualification end up working in the sector. Hence, the number of reasonably skilled graduates is reduced significantly to below 700 per year for ABEC. Forced and desired labor force mobility was not considered in this context.

Labor force replacement rate and widening skills gap. Even when assuming a conservative labor force replacement rate of only 10% of staff leaving their jobs annually, a considerable skills gap emerges and is widening. The main reason for leaving a job in the tourism sector is largely due to employees resigning. According to various employers, they very seldom let go of their (mostly line) staff due to poor performance and bad attitude, which on its face is a severe problem. Instead, the opposite happens: it is typically the underperforming staff who decide to leave their jobs. In addition, hotel and restaurant managers estimated their staff turnover at about 50%, higher than the conservative estimation in this skills gap mapping of 10%. However, a portion of resigning employees remain in the sector and in ABEC and, therefore, apply their acquired skill set in other jobs, which supports, to some extent, the assumed moderate labor force replacement rate.

The resulting mismatch is high between graduates produced and labor market needs in the sector. A skills gap of more than 9,000 persons per year emerges each year, according to Table 3 and the underlying assumptions and methodology. This does not mean that more than 9,000 jobs in tourism remain unfilled each year. Positions are likely to be filled; however, underskilled workers result in dire consequences on the quality of tourism products, and moreover, they are also less productive. Both dimensions of quality and efficiency are essential if the tourism sector is to be further developed. On quality and reputational

5 Primary (upper secondary) vocational schools were merged into secondary (post-secondary non-tertiary) vocational colleges in Kazakhstan. Therefore, vocational colleges provide both worker and technician training.

6 Kazakhstan Ministry of Education and authors' estimates.

risks of tourism destinations, cost estimations are difficult and complex to calculate. The productivity of underqualified staff may be quantified if we assume that a qualified tourism professional is 25% more productive. If then multiplied with the average value added of a worker,⁷ calculated at about \$2,000 for the Kyrgyz Republic and \$6,000 per worker for Kazakhstan (ADB 2014),⁸ an annual direct cost of the skills gaps of more than \$10 million seems realistic. Therefore, the direct cost of the skills gaps is calculated as the number of graduates enrolled in the countries, deducted by 15% drop-out rate, and the deduction of half of the amount of the assumed 50% of underskilled graduates produced. From the resulting qualified labor force produced per annum, only about 50% enter the tourism labor market, and when applying a regional ratio of 75% of employment in tourism in the Kyrgyz Republic's corridor oblasts and 55% in Kazakhstan's corridor oblasts, the number of qualified workforce produced per year is further reduced to less than 1,000 in total.

On the demand side (last part of Table 3), the 10% labor force replacement rate mentioned above is applied to the countries' direct employment in the sector and deducted by 25%, factoring in jobs in the sector not requiring much skills and adding jobs created according to WTTC's estimations of 1.4% job growth for the Kyrgyz Republic⁹ and 4% for Kazakhstan. After applying ABEC ratios of 75% (Kyrgyz Republic) and 55% (Kazakhstan) of labor force replacement in ABEC oblasts of the countries, and deducting the supply-side workforce produced, the skills gap in persons per year is calculated at 8,473.

When applying the moderate assumption that a skilled worker in tourism is 25% more productive and multiplying the skills gap in persons with the respective value addition per worker, the resulting productivity gain of one-quarter can be quantified as mentioned above at more than \$10 million directly, and well above \$30 million indirectly per annum.

The total cost due to the tourism multiplier effect of 3 might be well above \$30 million per year for ABEC even at ABEC's current stage of tourism development.

Tourism in 2027. Given the growth forecast of the tourism sector (see also Key Findings, page vi), direct GDP contribution will be growing by about 50% in Kazakhstan and will double in the Kyrgyz Republic. The same growth scenario is expected for total contribution to GDP. More than 100,000 jobs are expected to be created in the tourism industries of Kazakhstan and the Kyrgyz Republic in the next 10 years (WTTC 2017a, 2017b). One key challenge for tourism industry development will be if the countries manage to better skill its existing and future workforce in the sector. If forces are joined in this respect, and highly demanded fundamental skills in tourism and hospitality, as well as in innovative specializations, such as strategic tourism development, adventure tourism, or health tourism are offered, those challenges will be more likely turned into opportunities (see Chapters 3 and 4). Such an integrated approach is also one of the megatrends in destination management that the Organisation for Economic Co-operation and Development (OECD) predicts (OECD 2018).

7 Defined as GDP per worker as value added.

8 In 2010 prices and rounded to nearest thousand dollar.

9 While the job creation in Kazakhstan seems realistic, the authors are again pointing to seemingly low job creation in the Kyrgyz Republic when comparing the numbers of international arrivals.

Table 3: Supply and Demand Mapping

Key Indicators Tourism Sector (Supply and Demand Mapping)	Kyrgyz Republic (KGZ)	Kazakhstan (KAZ)	Total for Corridor
	2016	2016	2016
Share of Gross Domestic Product (GDP) in % DIRECT CONTRIBUTION	1.4	1.9	
Amount in DIRECT CONTRIBUTION billion \$	0.1	2.4	
Share of GDP in % TOTAL CONTRIBUTION	4.5	6.2	
Amount in TOTAL CONTRIBUTION billion \$	0.3	7.9	
Number of people DIRECTLY employed in sector	32,000	140,000	
Corridor direct employment in sector (75% for KGZ, 55% for KAZ)	24,000	77,000	101,000
Share of total employment	1.3	2.1	
Employment: TOTAL contribution of sector %	3.7	6.0	
Employment: TOTAL contribution of sector amount	89,500	521,000	
Corridor total employment	67,125	286,550	353,675
Number of students enrolled (vocational and higher education) directly in tourism sector	2,436	12,212	14,648
Drop-outs 15%	365	1,832	
Number of graduates produced p/a (vocational and higher education)	690	3,460	
Share underskilled 50%	345	1,730	
Underskilled deducted (50% of underskilled)	173	865	
Qualified labor force produced p/a	518	2,595	
Skilled graduates entering the sector 50%	259	1,298	
Almaty–Bishkek Economic Corridor (ABEC) geographically relevant (75% for KGZ, 55% for KAZ)	194	714	908
Assumed annual labor force replacement rate 10% in the country	3,200	14,000	
Minus 25% unskilled labor force employed in sector	800	3,500	
Additional jobs created p/a (1.4% KGZ; 4% KAZ)	448	5,600	
Assumed annual labor force training and qualification needs in the sector	2,848	16,100	
Relevant annual labor force replacement for ABEC (75% for KGZ, 55% for KAZ)	2,136	7,245	9,381
SKILLS GAP in PAX P/A	-1,942	-6,531	-8,473
<i>Assumption: A better skilled worker is 25% more productive</i>			
Annual DIRECT cost in \$ of skills gap (value addition per worker \$2,000 p/a in KGZ; \$6,000 in KAZ)	-970,941	-9,797,063	-10,768,003
Annual TOTAL cost in \$ (multiplier effect of 3)			-32,304,009

PAX = persons, p/a = per annum.

Sources: Asian Development Bank, Asian Development Bank estimates, National Statistics Committees, Ministries of Education, United Nations World Tourism Organization, World Travel and Tourism Council.

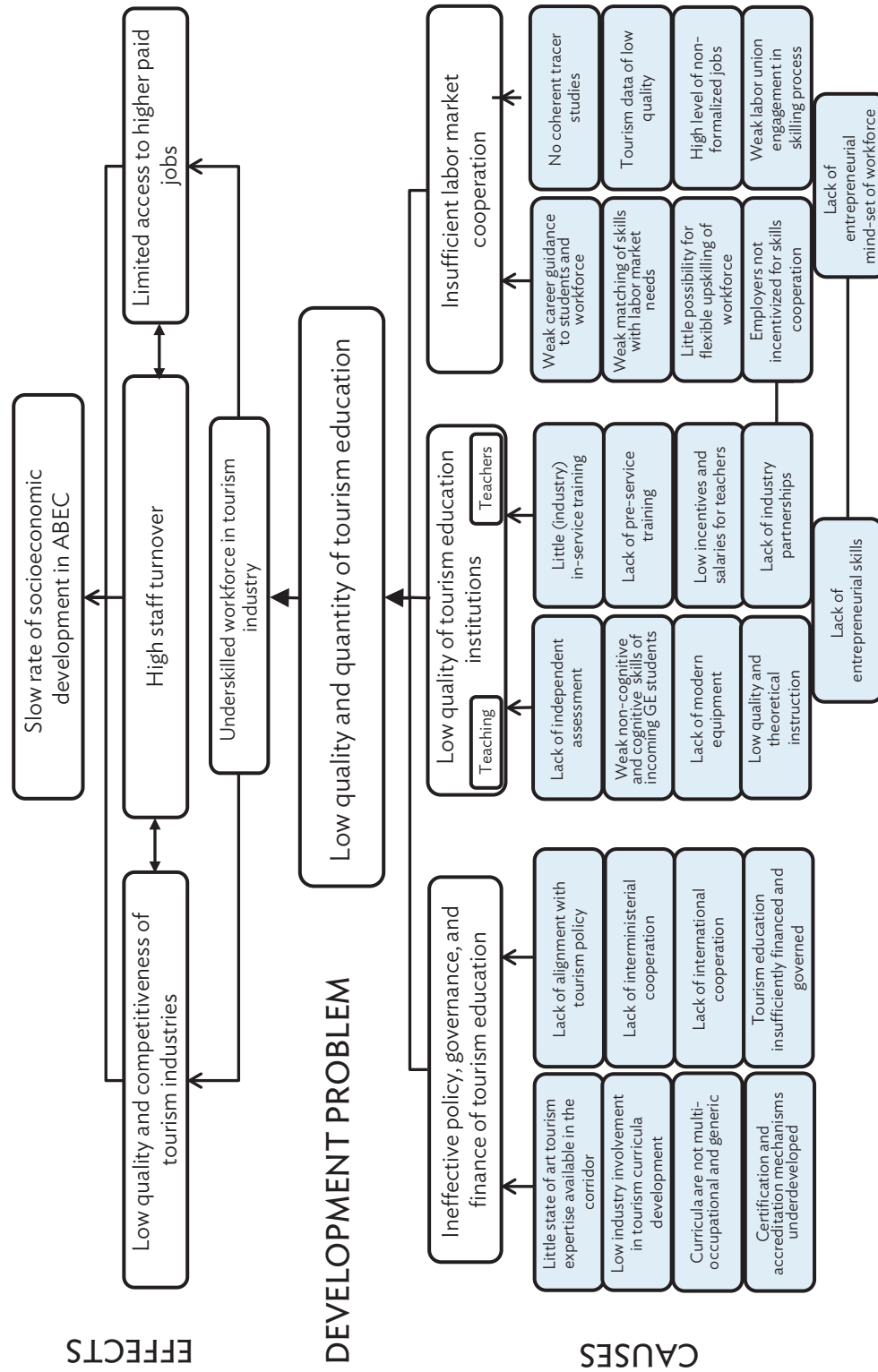
On employment, unemployment, and underemployment. Both countries are characterized by a considerable share of informal economy and employment. In Kazakhstan, a minimum of 30% of total employment is informal; in the Kyrgyz Republic, estimates are higher than 50% (Ajwad et al. 2014; and World Bank 2016). Therefore, the tourism sector can be regarded as a sector in which at least average informal employment takes place. A binary understanding of either employed or otherwise unemployed is not suitable for Central Asian labor markets. Especially in rural parts of ABEC, people are more often underemployed. The rural population may have a small formal job in public administration (e.g., part-time teacher) and do subsistence farming to feed their families and sell agricultural and handcrafted products locally or even to tourists. However, the rural and, to lesser extent, the urban population, frequently do not have full-time formal employment. These underemployment realities can also be described with the terms self-employment and (forced) entrepreneurship when people, out of economic necessity, become self-employed and forced entrepreneurs. Those employment categories are frequently recorded as “employed” in respective statistics (GIZ 2013).

These angles can be important when it comes to improving life realities through tourism. “Employment” in tourism can probably help most to decrease underemployment. Employment in tourism may not only be considered when formal full-time jobs in the sector are being directly created. More often, mountain guides who ideally work both in summer and winter can decrease their underemployment, before they could become full-time professionals who may be self-employed and, therefore, voluntary entrepreneurs.

Given the seasonality of tourism in ABEC and in general, year-round employment opportunities are scarce. An exception to this, for instance, is the *oblast* (region) of Karakol, where winter and summer tourism is developed. Statistically, the TSA transforms part-time employment into full-time employment equivalents to more correctly account for employment in tourism and to compare it with other sectors and internationally.

The problem tree in Figure 3 summarizes the key development problem of the low quality and quantity of tourism education with its effects on the labor market and, more generally, on sector development. The causes of the key development problem are structured into (i) ineffective policy, governance, and finance; (ii) low quality of tourism education; and (iii) insufficient labor market cooperation.

Figure 3: Problem Tree of Tourism Education, Skills, and Employment



GE = general education.
Source: Authors.

3

Key Issues for Improving Tourism Skills in Almaty–Bishkek Economic Corridor

“I do not know if we have a hospitality degree in Kazakhstan. Do we?”

– Manager of five-star hotel in Kazakhstan

This chapter will outline the key issues to improve S4T, which equally underlie both brief project proposals as they are regarded as essential to improving the quality of tourism education. The difference is the way private and/or public initiatives tackle these. Hence, this chapter outlines the contents of tourism education reform, while Chapter 4 “only” addresses possible structures.

3.1 Institutionalized International Cooperation for Regional Cooperation in Tourism Education

Since there is limited art tourism expertise and specialized tourism scholars within ABEC, we are suggesting a strong and institutionalized international partnership in the following to facilitate knowledge transfer and peer learning. International cooperation may be regarded as a conventional and, at times, outdated approach to capacity building; however, in the tourism contexts of ABEC, the authors consider internationally facilitated capacity building for sector development as having the greatest potential.

Our two proposals are built on the principle of international cooperation when a renowned international center of excellence¹⁰ (ICOE) in tourism education and research engages and leads the development of Central Asian counterparts. However, each proposal will take a different angle on international cooperation.

Proposal 1 elaborates on private sector investments to establish tourism centers of excellence (COEs) in ABEC. Key elements here are (i) an ICOE would be contracted and mandated to establish and manage COEs in ABEC, (ii) a COE would be a university of applied sciences with an associate or bachelor’s degree of 5 years duration, (iii) basic tourism occupations

¹⁰ COE is a contemporary international buzzword also in the field of education. For the given context, a differentiated and realistic excellence approach should be taken when breaking down dimensions of excellence. Therefore, supported education institutions should be in comparison to other tourism education institutions in ABEC excellent in dimensions such as (i) practical instruction, (ii) entrepreneurship, (iii) innovative financing, (iv) work-based learning, (v) industry partnership, (vi) teacher training, and (vii) equipment.

reflecting the sector needs will be taught in the first part of studies, and (iv) a specialization reflecting the tourism specifics in ABEC will add in-depth knowledge and skills in the second part of the degree. This will also be shortly highlighted as a public–private partnership (PPP) option.

In Proposal 2, we describe a government tourism education option in which the project partners would be the ministries of education and tourism of Kazakhstan and the Kyrgyz Republic. This option would assess the viability of rehabilitating existing colleges and universities in ABEC into a network of tourism education providers. For example, on Kazakhstan’s side, a network of a vocational college and two universities in Almaty, a university and a college in Taraz, and a university and a college in Taldykorgan could be identified and established on the one hand. On the other hand, in Bishkek, Chui, and Issyk-Kul, three colleges, and two universities could complement such a network of education institutions to improve S4T as outlined in more detail below. In this proposal, an ICOE would also be initially hired as a consulting firm and, in a possible second phase, as a twinning partner to ensure high-quality capacity building and project implementation.

Both proposals pedagogically share a similar concept, which is aligned with both governments’ present education policies. The main difference is ownership, which may be private, public, or public and private. Therefore, international cooperation will also facilitate regional cooperation when the established corridor COEs cooperate in educational pathways, student and faculty exchange, teacher training, dual degrees, or carrying out joint research projects.

3.2 Education Industry and Policy

A more conducive policy environment for tourism is being established in ABEC. Both countries have newly approved tourism development strategies (Government of the Kyrgyz Republic 2016; Government of Kazakhstan 2017) and both national development strategies and economic policies consider tourism as a key economic sector (Government of the Kyrgyz Republic 2017; Government of Kazakhstan 2015). For example, the Government of the Kyrgyz Republic supports the establishment of a skiing cluster in Issyk-Kul, while the Kazakh government assists the construction of various and larger-scale skiing resorts in Almaty oblast. In education reform and improving the relevance and quality of tourism education, the Kazakh Ministry of Education tasked the Chamber of Entrepreneurs to evaluate all tourism specializations and degrees in colleges and universities in 2018.

Education reforms are underway in ABEC. In addition, both countries are implementing education strategies which aim to improve access, relevance, quality, and efficiency of the respective education systems. The improvement of occupations in priority industries, such as tourism through increased labor market orientation, is a priority. Therefore, the governments will likely support the revision of educational standards (named typical study programs in Kazakhstan) for tourism and the introduction of updated or new curricula and occupations.

State of the art. Currently, tourism is often taught by economists or other related faculty as general business and management courses with a tourism appendix or prefix added. Examples for such general business courses adapted to tourism are accounting in tourism,

tourism marketing, tourism management, etc. However, courses of tourism management do not demonstrate much difference in its content from a conventional management course of a business administration program, and its indicated prerequisites (history of tourism, techniques and tactics of active tourism, and basics of “tourismology”) are inconsistent with the course content. The travel and food and beverage dimensions of tourism education is often lacking since these require more expensive laboratories and workshops. The education standards offer little practical specializations, and the literature from the 1970s and 1980s are largely outdated. In addition and as illustration, the tourism education standard in Kazakhstan was written by an author with a PhD in geology. Private sector involvement in defining necessary competencies is low.

Education sector as an industry. One important dimension, which adds momentum to tourism education, is the general dynamic development of the education sector. According to a World Bank survey, the education sector currently creates, after the construction industry, the second most number of jobs in Kazakhstan (World Bank 2016). When self-mirroring the education sector development into tourism education, education tourism can be generated within and beyond ABEC also by (inter)national students studying for tourism degrees at various COEs. When analyzing the higher education landscape of ABEC only, about 50% of vocational colleges and universities are privately owned. This does not imply that jobs in education are mostly found in the private sector, but that a sizable industry has developed in addition to state education institutions.

Thereby, public HEIs also charge tuition fees similar to private HEIs’ tuition fees. The actual amount of tuition fees vary and depend on the degree chosen, the quality of education offered, and the HEI’s reputation. Typically, an amount of about \$1,500 for reasonable education quality in the Kyrgyz Republic, and approximately double the amount in Kazakhstan can be assumed per academic year. Scholarships are offered to about 10% of students and mostly for technical, medical, and education degrees. Given that about 800,000 students are enrolled in HEIs in both countries and enrollment is about 50% in private universities, it can be estimated that only the private higher education sector generates tuition fee revenues per year of at least \$150 million in the Kyrgyz Republic and about \$900 million in Kazakhstan. Almaty and Bishkek are by far the biggest national higher education hubs.

3.3 Tourism Labor Markets and Skill Sets Needed

When looking at jobs (wage employment) in general, tourism, gastronomy, and hotels represent most of the jobs, with about 75% of employment opportunities. Health, leisure, and sports tourism are key specializations employing higher-skilled workers. Thus, hospitality can be regarded as basic tourism in which less tourism content is provided. Tourism contents (also called tourism products) can be regarded as services that add value to plain “eating and sleeping.”

For content provision, both subsectors of health and leisure, and sports tourism employ about 15% of people in the sector. Travel agencies employ only about 5% of people in the tourism sector. Those current employment opportunities, in combination with anticipatory labor market forecasting, should typically be mirrored by educational offers at different levels

of the education ladder. Hence, most jobs are for unskilled and skilled worker levels; and about a quarter of employment opportunities are for the managerial level.

For education offers in tourism, those labor market needs translate typically as follows: unskilled and semiskilled training are not covered by formal education and accounts for about 25% of total employment opportunities in the sector (see Chapter 2); the remaining 75% of skilled workers, technicians, and professionals are best allocated in upper- and post-secondary vocational schools and colleges and, to some extent, in universities. A ratio of 3:1 of non-tertiary to tertiary education offers may generally cater to the needs of tourism labor markets. In addition, there is high labor mobility geographically, and in terms of job rotation in the sector.

To respond to the dynamic tourism labor market, on the supply side, modern tourism colleges train more than one occupation since job profiles in tourism have big overlaps and because jobs in the tourism sector are changed easily in the subsectors (Villa Blanca 2018). For instance, a receptionist of a hotel may work the next season as a head wait staff in a restaurant or as an agent in a travel agency. Besides skilling for standard tourism professions, students should also specialize in key tourism subsectors. Most relevant for ABEC are ecotourism and adventure tourism, health and beauty tourism, or business tourism.

This approach of multiple skilling in standard tourism occupations and specializing in one area of tourism will be described in the next section. The authors assume that a well-skilled graduate of such a program would also be considerably better remunerated and would be highly likely to be formally employed. For instance, in the hospitality sector, employment opportunities well above the current entry salaries of about \$300 per month in the Kyrgyz Republic are highly likely to emerge since hotel managers need skilled graduates and are willing to pay about double the salary of an underskilled graduate.

3.4 Certification of Multiple Obtained Skill Sets and Accreditations

The state of the art in tourism education is to not only award an overall diploma or degree at graduation, but also to obtain certifications of explicit professional qualifications. Basic professional qualifications in tourism are typically for the following jobs: (i) cook, (ii) travel agent, (iii) qualified worker in hospitality, and (iv) qualified food and beverage service staff. In a 5-year program starting after grade nine and equivalent to an associate degree, all four occupations and an in-depth specialization can be obtained (Villa Blanca 2018). Modern tourism education provides students with a broad basis of general and professional education along those four occupations, and specializations toward the end of studies add in-depth tourism skills. Such specializations could include, for instance, adventure and ecotourism, eTourism, regional tourism, or health tourism. In addition, graduates attain a business license in the tourism field to enable them to start their own business, if desired.

Those qualifications will increase employability of graduates in the main areas of the sector and reflect good international practice in other tourism programs. Such an interdisciplinary and multidisciplinary skilling approach is better suited to respond to the dynamic labor market needs than a narrow skills approach in which one occupation (e.g., cook) or even a certain

area of a single occupation is deepened (e.g., pastry cook). Besides a degree in tourism with a respective specialization, each graduate obtains four basic occupational degrees. Therefore, the certification of skills should be conducted in cooperation with tourism associations or respective chambers of commerce or entrepreneurs. The certifying authority (e.g., the Kyrgyz Mountain Guides Association) should use internationally recognized standards (e.g., the ones from the Association of Canadian Mountain Guides) to add credibility to qualifications obtained (see also Choi 2016). The direct certification of skills by a respective international association or chamber, for instance, the Association of Canadian Mountain Guides, is technically and financially not feasible. However, the international accreditation of the COE degree program of tourism management is regarded as possible even though it is a complex and lengthy process.

Moreover, a national and international accreditation of the college or university adds to the credibility of the qualifications obtained. International accreditation will be especially important for corridor COEs as it grants them more liberties toward their respective model of excellence school. By adhering to international standards, national authorities are less likely to request full compliance to often outdated education policy.

For example, the Dubai campus of the tourism university Modul is certified by the Agency for Quality Assurance and Accreditation Austria (Modul 2018). Accreditation generally plays a key role in assuring quality of education. However, international accreditation is a complex undertaking when quality standards must be introduced, reached, and maintained. Moreover, international accreditation needs independent assessment in addition to self-evaluation, which requires significant human and financial resources. A relatively fast and reputable international certification in tourism is the UNWTO TedQual Certification System for tourism education institutions (<http://themis.unwto.org/content/unwtotedqual-certification-system>), which is based on an organization's self-assessment and an in-situ and on-site audit. This certification can be obtained as well, but is not a full-fledged international accreditation as it does not, among others, certify general and entrepreneurship aspects of curricula. Areas of analysis are employers, students, tourism curricula and pedagogic system, faculty, and management. The cost varies depending on whether public and private tourism education providers, the number of programs to be certified, and the level of human development of the country according to the United Nations Development Programme human development index. Kazakhstan is in the category of countries with high human development while the Kyrgyz Republic is categorized as a medium human development country. Certification cost per COE would roughly range between \$12,500 (Kazakhstan) and \$6,000 (Kyrgyz Republic). When obtained, the certificate is valid from 1 to 4 years, subject to renewal and reassessment.

3.5 Pedagogy, Curricula, and Teacher Training

Good practice in structuring modern vocational curricula is the following: one-third general education, one-third technical education, and one-third economic and entrepreneurship education.¹¹ In addition to school-based learning, a minimum of about 32 weeks of

¹¹ In most of the Commonwealth of Independent States region, including in ABEC, vocational curricula are typically loaded with general education, are highly theoretical, hardly work-based, and not entrepreneurial.

work-based learning, such as summer internships, is mandatory in post-secondary tourism programs. Besides studying foreign languages in stand-alone subjects, tourism subjects should also be taught in foreign languages. As Russian is fortunately still mastered bilingually by most youth and adults, English as the most spoken second language in the world may be regarded as best-fitting for corridor COEs.

Furthermore, each specialization could also be studied individually in separate courses, which will be offered in addition, and individually to the full 5-year degree. Such courses could be offered on a part-time basis to extend access especially to the working population. A third skills component could be short courses for reskilling and upskilling of tourism skills, such as nomadic culinary arts master classes, new trends in health tourism, or training of ecotourism tour provision. In addition, language certificates could be obtained such as Test of English as a Foreign Language or Cambridge Assessment English.

A typical tourism syllabus of a 5-year program is as follows:

- General education:
 - Language (national)
 - English
 - Second foreign language
 - Applied information management
 - Civic education
 - Natural sciences and food technology
 - Applied mathematics
- Gastronomy and hoteling:
 - Nutrition
 - Cooking
 - Service, serving, and beverages
 - Specialization (elective)
 - Applied project management and work-based learning
- Tourism and economics:
 - Tourism geology and travel agency operations
 - Tourism marketing and customer relations management
 - Arts and culture
 - Business administration and economics
 - Accounting and controlling
 - Law
 - Hotel and tourism management

Various donors and development partners, especially in the Kyrgyz Republic, have conducted many projects in tourism. Most prominently, the United States Agency for International Development has worked establishing destination management offices all over the country. Also, ADB, Helvetas, GIZ, the World Bank, and other donors have implemented tourism or tourism-related projects in the last 20 years (see Bell 2017; and Choi 2016). With regard to tourism education and S4T, a detailed occupational standard for ecotourism was developed

with the support of the EU; and various other training material and manuals were developed in different projects. The present material can be a valuable contribution with more systematically and systemically developing curricula for formal (degrees), but also informal (short courses and professional training) education by COEs. This would literally start with physically collecting all produced material.

In teacher training, a long-term strategic training approach would likely be necessary for corridor COEs. In a first step, ICOE experts could facilitate a training needs analysis. On the basis of the findings, teacher training curricula would be designed and national trainers of trainers identified and qualified by international experts. A regional in-service tourism teacher training department as part of the national in-service teacher training (INSETT) centers would be established to cater sustainably to the continuous training needs of tourism teachers in ABEC. In the long run, a pre-service teacher training (PRESETT) master program should be established at one of the COEs to improve the competencies of future teachers and to reduce the training needs of teachers in-service.

3.6 On the Importance of Entrepreneurship Education

Key also in member countries of the Commonwealth of Independent States is entrepreneurship and entrepreneurial education. Against the background of often highly theoretical instructions, more interactive and real economy-oriented teaching methods need to be trained and introduced into the curricula. The training firm method¹² (see also photos below) is one prominent entrepreneurship education (ES-EDU) method that can be introduced into occupational curricula. The underlying notion is not that students having enjoyed ES-EDU should become entrepreneurs (even though this is very welcome). Rather, it is more of the idea that graduates with an entrepreneurial mind-set and entrepreneurial skills are more sought after by employers and, hence, their employability is increased. A second notion is that an entrepreneurial mind-set and entrepreneurial skills can only be taught to a certain extent, and practical application is more important.

Therefore, ES-EDU can be taught as stand-alone subjects or can be integrated into other vocational subjects. For instance, in the skeleton syllabus above the subject training firm is not explicitly a subject, but is intersubjectively used when different subjects are taught in training firms. However, a tourism training firm which is founded, for example, as an ecotourism hotel or a travel agency for adventure tourism can cover all subjects of the tourism and economics fields and beyond, starting from legally founding the company, operating it with all necessary invoicing, payroll, marketing research and communication campaigns, design and sales of tourism products to other training firms, to controlling business processes. In training firms, the students deepen their knowledge and gain operational knowhow.

A very important “side-effect,” as also outlined in Box 4, is the improvement of social skills by managing business processes in teams and in competition with other teams of other training firms. International networks of training firms exist (e.g., <http://www.penworldwide.org/practiceenterprise.html>) and when doing international trade, important language and

¹² Also called practice enterprise in some countries.

Box 4: The Training Firm Method

A training firm (also known as practice enterprise, practice firm, or virtual enterprise) is a virtual company that runs like a real business silhouetting a real firm's business procedures, products, and services. A practice enterprise resembles a real company in its form, organization, and function. Each training firm trades with other training firms, following commercial business procedures in the training firm's worldwide economic environment.

A training firm is a simulated company set up by trainees, with the assistance of a facilitator, to undertake commercial activities. It provides trainees with hands-on business skills and enhances their knowledge and experience of business practices.

Working in a training firm provides trainees with the necessary skills and knowledge to become entrepreneurs or find employment after they finish their work in a training firm. Training firms foster entrepreneurial attitudes and skills among students.

Although there is no actual transfer of goods or money, other transactions take place: orders are made, invoices issued, and financial records maintained—including creditors, debtors, stock holdings, and so on. A training firm is very often assisted by at least one real mentor company whose products and services the practice firm silhouettes. Mentor companies supply information on technical and management issues.

A training firm researches the market, advertises, buys raw materials, transports, stocks, plans, manufactures simulated goods, sells simulated products or services, and pays wages, taxes, benefits, etc.

A couple of the objectives of the training firm methodology are to train the ability to take initiative, be self-reliant, and also to deliver knowledge on how to establish and run a company. Training firms' trainees learn how to work in a team, take on responsibility, develop self-initiative, and improve their soft, professional, and technical skills.

Trading with other training firms is an essential component of the concept. Training firms trade with each other in a closed economy according to strict commercial principles. The global practice enterprises network consists of thousands of training firms that also conduct training firm fairs in various countries.

Source: EUROPEN-PEN International. 2016. *What is a Practise Enterprise*. <http://www.penworldwide.org/practiceenterprise.html> (accessed 6 April 2018).



The training firm method. When the teacher becomes a business coach of simulated enterprises (photos by EUROPEN-PEN International).

intercultural skills are learned; besides making learning simply more exciting for students. Hence, the teacher takes the role of a business consultant and respective teacher training needs to be in place to teach teachers skills in facilitative teaching methods and ensure the high quality of ES-EDU.

Another method of ES-EDU is simulated enterprises as a computer software in which virtual companies are run by students as an edutainment game (e.g., <http://www.infinitech-intl.com/en/page/software-solutions-for-travel-and-tourism>). Such management simulations are more virtual than training firms and can didactically be used in the first years of training and prior to the training firm method, which is better suited for the second part of studies when a deeper understanding of the tourism industry is already gained.

The training firm method has been introduced successfully in several countries from the former Soviet Union, especially countries in the Black Sea region (particularly in Bulgaria, Georgia, Moldova, and Romania) and in most countries of the Balkans. Regional capacity building, peer learning, and regional trade, and the joint organization of training firm fairs would be activities that could help the tourism COEs to establish the training firm method quickly with quality assurance. Both models of excellence schools could also introduce this method systemically when introducing training firms and ES-EDU in all technical and vocational education and training institutions. The recently approved and now implemented ADB sector development program, Skills for Inclusive Growth for the Kyrgyz Republic (ADB 2017), includes a training firm concept which may generate additional synergies. More generally, the new ADB project also follows a COE approach for key industries. However, the selection committee under the model of excellence school has not designated an explicit tourism COE yet.

3.7 Education Facilities and Institutional Entrepreneurship

In all COEs, facilities will be constructed or rehabilitated to improve practical instruction and training. Besides provision of modern classrooms and dormitories, laboratories and workshops for practical tourism education need to be equipped.

Such laboratories and workshops should include

- school hotels in which hospitality training could take place;
- school restaurants and bars in which food and beverage training could be practically provided;
- information and communication technology laboratories to train tourism-relevant computer programs, simulate call centers, conduct tourism research, etc.;
- language laboratories to intensively train students in English and other languages relevant for tourism in ABEC;
- junior companies, training firms, and simulated enterprises co-working spaces in which students start up and run real and virtual enterprises; and
- adventure and ecotourism laboratories and gymnasiums to train students in first aid, outdoor equipment, etc.

On embedded entrepreneurship at COEs. Less for income generation, but more to improve the quality and relevance of tourism education, the institutions should engage intensively in economic activities. A quality tourism school can and should use its expertise and facilities. Almost all modern tourism schools run restaurants, hotels, or offer tours. Those tourism products are offered to the public at market price so as not to distort competition.

Institutional entrepreneurship (I-ES) is a social entrepreneurship approach based on the idea that a vocational institution should not only have expertise in the occupations it is teaching but should also produce on small scale the respective product or provide services in the respective fields.

For example, in an agricultural livestock profile, students could and should produce cheese, etc. On the one hand, this generates extra-budgetary income when the state's budget provision is tight. On the other hand, income-generating activities help the education institution to become more entrepreneurial in nature. In the tourism context, the school facilities just outlined could be run as small enterprises while providing real learning experiences to the students when serving real guests in training hotels, restaurants, travel agencies, and tour operators.

A more entrepreneurial institution is more dynamic and provides better quality of instruction because the students produce a real product in their practical instruction and are not just practicing production or service steps separately; and teachers are instructing in more realistic environments and apply their often outdated theoretical knowledge practically. Therefore, the focus should be on improved quality of education, as it is the core mandate of a vocational institution, and not profit maximization. However, an entrepreneurial orientation helps improve the quality of education and contributes to financing VET. Since tourism is a highly entrepreneurial sector, I-ES can be regarded as particularly suited from both a pedagogic and an operational perspective.

A smart combination of ES-EDU and I-ES could be the provision of finance for tourism start-up enterprises as a logical development of training firms. Business incubators could be established at COEs to facilitate and coach start-ups in open and co-working spaces.

3.8 Research and Statistics in Centers of Excellence

The envisaged COEs in tourism are well suited to carry out tourism research and to function as a knowledge hub for tourism research and statistics in ABEC. Tourism statistics and research will be highly important for strategic tourism development. As outlined in Chapters 1 and 2 of this report, and even more prominently in other reports on tourism in ABEC (Bell 2017; Choi 2016), tourism policy making and its strategic development need to be more evidence-based. Therefore, joint or individual institutions need to collect more and better data that can then be triangulated in a more complex fashion, allowing for profound insights into current and future tourism developments.

Major fundamental dimensions in tourism research and statistics in ABEC are likely to be

- arrivals and overnight stays (also separated in countries of origins);
- travel motivations;
- service quality, customer relations, and tourist satisfaction;
- top destinations; and
- tourism economics.

Key additional dimensions in tourism research and statistics for ABEC are likely to be

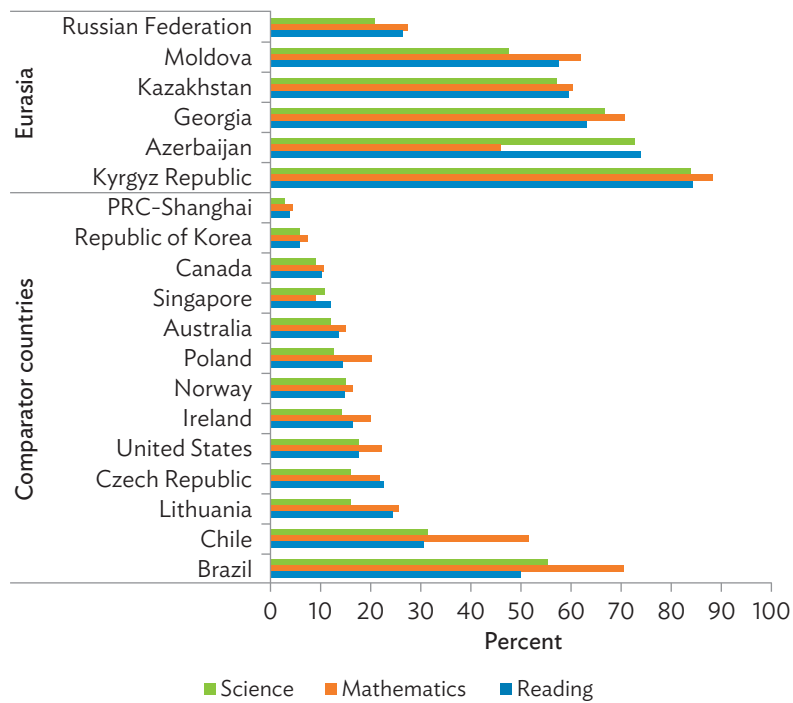
- establishing and updating tourism satellite accounts;
- social media in destination management;
- micro, small, and medium-sized enterprises in tourism management;
- destination performance and research labs;
- alpine summer tourism;
- alpine winter tourism;
- ecotourism and nomadic tourism;
- beach tourism; and
- thematic studies on request about innovations in tourism.

With increasing sector development, ABEC tourism research institute(s) could be cofunded and comanaged by the respective tourism associations and destination management offices. Examples for respective tourism research and statistics are on a suprasternal level (tourMIS.info) and on a regional level (ttr.tirol). The latter is an applied and relatively simple portal managed by the regional tourism COE (a university of applied sciences) that cooperates with tourism associations and receives funding from the respective chamber and the regional government. Furthermore, a specialization in tourism research and statistics could be offered in one of the COEs to qualify experts in the field.

3.9 On the Cost of Quality Higher Education

Private universities have mushroomed in ABEC in the last 25 years. Even though there are also considerable quality and relevance issues among private education providers, a wage premium of about 50% for higher education exists (World Bank 2016; and ADB 2014), but a “social dividend” also exists for degree holders in countries from the former Soviet Union since access to higher education was restricted. In both countries, higher education enrollment is well above 50% of the relevant age cohort (ADB 2015). However, both wage and social premium are not direct indicators that more or better skills attainment is provided by HEIs. Generally, severe quality and relevance concerns prevail both in private and public education providers, which are reflected in low performance in international tests, such as the Programme for International Student Assessment or Trends in International Mathematics and Science Study (see Figure 4).

Figure 4: Comparative Programme for International Student Assessment Results



PRC = People's Republic of China.

Note: A large portion of Eurasian 15-year-olds are functionally illiterate (scores of 2 or less on the Programme for International Student Assessment, 2009).

Source: World Bank staff calculations based on data from the Programme for International Student Assessment, 2009–2010.

Hence, parents have gotten used to paying for private higher education or to pay for public HEIs, which also charge relatively high tuition fees. The approximate cost of high-quality tourism education is estimated at around \$2,000 per academic year for Kazakhstan and \$1,500 for the Kyrgyz Republic. These amounts can be regarded as average tuition fees for higher education at state universities. Decent tertiary education costs are double or triple of these amounts on average.

4

Structures for Improving Skills for Tourism

“International accreditation helps you, first of all, not to have to deal with outdated education requirements of the country.”

– Senior management of Kazakh University

After outlining the pedagogic components of tourism education in the previous chapter, in this chapter we will briefly elaborate on two possible implementation structures. The contents of the previous chapter will be designed into two proposals as they are regarded as most pressing, independent of the structural form an intervention would take (public and/or private).

Investment cost. While it is premature to estimate the cost of possible project designs that are yet very provisional, the authors assumed an investment volume of about \$50 million in Kazakhstan and about \$20 million in the Kyrgyz Republic. The investment volumes take into consideration the following assumptions: (i) a well-equipped tourism school for about 500 students to cost about \$5 million each, (ii) about five to seven tourism colleges to be established or upgraded in ABEC, (iii) international cooperation and twinning partnerships, (iv) large-scale teacher pre-service and in-service training, and (v) industry partnerships (see section 4.3 below for more details).

4.1 Internationally Managed Private Centers of Excellence in Tourism Education (Proposal 1)

Key issues. In this proposal an internationally established and reputable tourism education COE will lead S4T in ABEC. Such an ICOE would likely be one or two leading tourism colleges and universities of applied sciences in Australasia, Europe, North America, or the highly developed centers of East and Southeast Asia. Quality tourism education providers are established even beyond the regions mentioned above. Newly found or existing education institutions in ABEC will be developed into COEs. Possibilities vary from a greenfield investment of literally building new tourism COEs and training new teachers and lecturers, to developing existing education institutions and their staff and management into tourism COEs. In addition, a tourism COE may be an education institution that may decide to offer or already offers other specializations or degrees.

Matching ICOEs and S4T needs in ABEC. One key issue will be the criteria to evaluate ICOEs for similarities of education systems, international expertise, matching tourism specializations, and excellence in teaching and industry cooperation. The outlined campus approach is currently being offered by few tourism education providers.

The key issue will be to attract high-quality international tourism education providers that are not only excellent in teaching and industry cooperation, but who also have experience in international education cooperation and consultancy. Renowned ICOEs typically have various academic international cooperation supported by bilateral and multilateral exchange, and mobility programs, such as Erasmus+. However, only a few ICOEs have consultant teams that more structurally work on improving tourism education than only for short-term teaching assignments, and that form an additional, often independent, part of a college or university. The necessary institutional entrepreneurship of education cooperation and consultancy is sufficiently developed only in a few ICOEs that would be able to professionally lead a larger-scale international financial institution project.

Management by ICOE versus investment of ICOE. The most realistic private sector investment scenario would probably be that one or more of ABEC's many private higher education providers would be willing to invest in tourism COEs. Such private investors from ABEC could receive finance and support from ADB. After some initial stakeholder consultations, it seems less likely to attract the investment of, for instance, private ICOEs. The main reasons reportedly are lack of international and profit orientation of ICOEs, little knowledge about Central Asia, and investment climate concerns. On the ICOEs' lack of international and profit orientation, private ICOEs are often established as private entities; however, stakeholders may be public or public-private ones. For instance, ICOEs may be owned by industry associations or chambers of trade and commerce and not by a specialized private education company. Their members may be companies, yet the entity they collectively form may not be run for profit. On the limited knowledge about Central Asia and the political economy of ABEC influencing the investment climate, potential international investors are still uncertain about Central Asia precisely because of their very limited knowledge about the region and its (tourism) potential.

The more likely option for private sector investment seems to be domestic investment as it is common practice in Kazakhstan and the Kyrgyz Republic for HEIs. Most universities in Kazakhstan and, to a large extent, also in the Kyrgyz Republic are under private or private-public ownership.

A likely scenario could, in a nutshell, look like this:

- A private investor on higher education from Kazakhstan and/or the Kyrgyz Republic to invest in tourism COEs in ABEC.
- The consulting branch of an ICOE would lead the establishment, accreditation, and quality assurance of COEs in ABEC.
- Corridor COEs are run as campuses of ICOEs.
- ADB to provide finance and technically support the investor and the COEs.

As mentioned in Chapter 1, regional initiatives to tourism development appear in the long run to be more successful since international tourists are especially interested in visiting Central Asia as a region rather than to only go to Southeast Kazakhstan, Bishkek, Chui, or Issyk-Kul. Therefore, tourism products need to cater to the client needs and must be of satisfactory quality to them. Satisfactory quality is ensured by a sufficiently skilled workforce. Hence, it seems logical that S4T training would be coherent and, therefore, through a regional approach.

Good practices of regional and international tourism education can be found across the world. Starting from student and faculty exchanges over dual and international apprenticeships to dual degrees or even campus solutions, various modes of possible cooperation exist. For ABEC and in this proposal, a campus approach is suggested in which the following key pillars of quality development and assurance in S4T would be supported by ADB finance and technical assistance:¹³

- An internationally renowned ICOE to lead S4T in ABEC (like an ADB project implementation consulting firm) and granted academic authority to establish fully operational pilot institutions.
- ICOE to be the certificate issuing authority and under respective policy of the Agency for Quality Assurance and Accreditation of the respective country of origin (external campus solution).
- In the midterm, possibility of establishing a contractual twinning relationship between ICOE and S4T institutions in ABEC and continued international accreditation (comanaged campus solution still in ADB procurement plans).
- In the long run, establishment of comanaged campuses or dual degree programs with ICOE under international accreditation (which would mean academic authority given to corridor COEs).
- ICOE to consult on and lead selection of education institutions, equipment, training of trainers (pre- and in-service teacher training).

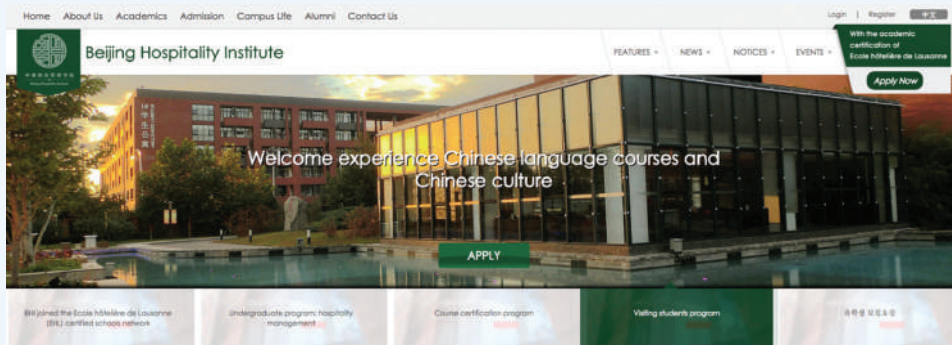
Depending on the strategic approach to skills development in tourism, a branch campus solution (see also Box 5) with international academic oversight could be transformed into national independent education institutions. However, international academic management as a subsidiary of a reputable ICOE might be an advantage for quality assurance and academic excellence more generally even though it is relatively expensive and provides fewer freedoms to ABEC COEs. Legally binding cooperation agreements ensure clearly stipulated study and examination regulations, financing, subsidiary management structures, staffing, and quality assurance. For a sample agreement of a branch campus cooperation, see the references section of this report (Modul 2016).

In case national academic management is desired, transfer of academic authority could be facilitated through a twinning component in which the ICOE would—after a supervisory role for some years—take on a role as a twinning partner. In this consulting role under ADB finance and as part of ADB procurement plans, the twinning partner would still be remunerated like a project-implementing firm. Consulting and capacity-building services could be rendered to the management of COEs. Eventually, the ICOE could become an academic and exchange partner of ABEC COEs without external finance.

¹³ On the technicalities of ADB grant support, finance, and technical assistance, see Appendix 2.

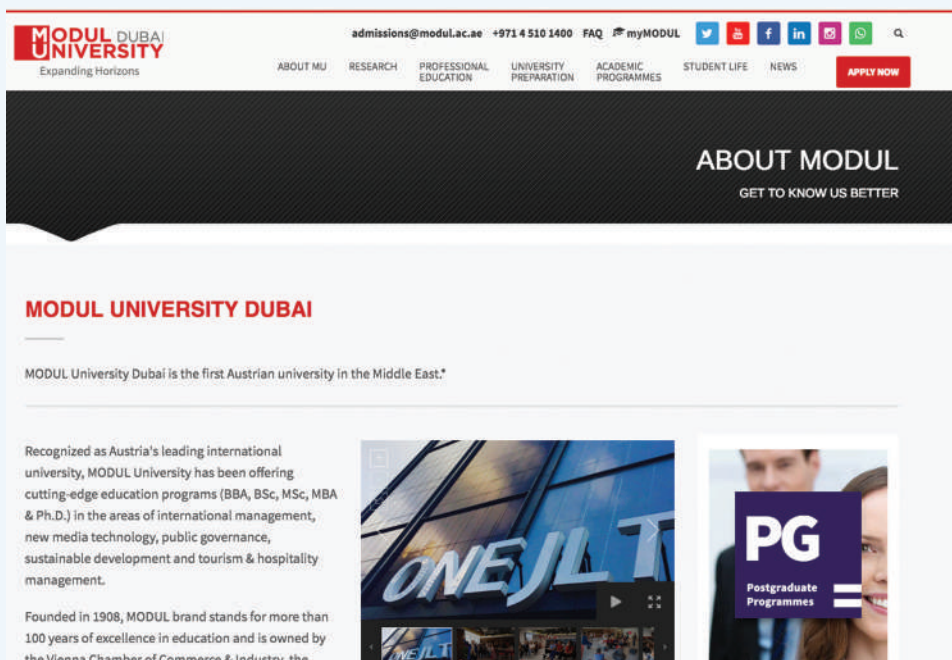
Box 5: Examples of Branch Campus Tourism Education Providers

Ecole Hotelier Lausanne: ehl.edu (college and university in Lausanne, Switzerland with campuses in India; Hong Kong, China; and the People's Republic of China [PRC])



Source: <http://english.bhi.edu.cn/>.

Modul University: modul.ac.at (college and university in Vienna, Austria with campuses in Dubai, United Arab Emirates; the PRC; and Thailand)



Source: <http://modul.ac.ae/about-mu/general-information/about-mudubai/>.

As mentioned above, ICOEs with relevant international experience, preferably also with international financial institutions, are likely difficult to identify in addition to their mandate as education, rather than consulting, institutions. Well-prepared confidence-building activities, exchange programs, and study trips would need to lay the ground for long-term cooperation and (co-)leadership. To improve coherence of general tourism development in which a twinning partnership with a partnering region's tourism association or chamber would be established, the education twinning organization would ideally come from the same region to generate maximum synergies.

4.2 State-Owned Network of Centers of Excellence (Proposal 2)

In this second proposal, the approach will remain a COE one. Special emphasis will be put on institutionalizing a strong network of all tourism COEs in ABEC and a tourism skills development fund. An ICOE would still play an integral part in developing good-quality corridor COEs. In this model, existing colleges and universities in ABEC would be selected to become COEs in tourism. The major difference will be the public ownership of existing education institutions.

This approach would be well suited for three highly interlinked concepts which are less pronounced in Proposal 1: (i) an institutional network of tourism COEs, (ii) pathways in tourism education, and (iii) a tourism skills development fund.

Institutionalized network of tourism COEs. When applying a governmental ownership structure to COEs, a particularly coherent institutional network of tourism COEs might be established more easily. Institutionalized cooperation between different COEs in ABEC may be established in the fields of teacher training, student exchange, pathways in education, management and lobbying, industry cooperation, and other fields. Many areas of cooperation can likely be identified. Emphasis should be on institutionalizing cooperation beyond simple memoranda of understanding, which are legally not binding, but to formulate and sign precise agreements.

Such agreements could be reached between corridor COEs for faculty exchange and teacher training. It could be clearly stipulated that one COE would serve as an INSETT training center, in addition to being a full-fledged COE. Other COEs could be granted access to having a minimum number of their staff trained.

Another area of binding cooperation could be the differentiation and spread of specializations in COEs as a tourism cluster. A cluster approach has different aims from a scaling approach in the division of tasks among different stakeholders. As a result, cluster stakeholders typically specialize in products that are complementary, rather than each stakeholder copying and duplicating the same products. When transferring this analogy to tourism education COEs, each COE could specialize in certain areas of tourism, instead of each COE trying to cover the whole sector. For example, a COE for adventure and health tourism could be established in Issyk-Kul region. A COE for business tourism may be well located in Bishkek and Almaty. A COE for cultural tourism may be established in Taraz, and a COE for ecotourism and culinary arts may be suitable in the Chui and/or Almaty oblasts. Given respective agreements are in

place for student exchange and acceptance, COEs could complement one another, rather than compete for students in offering similar specializations in high demand by the students, but not necessarily in high demand by tourism labor markets.

A council of COE directors could represent their interest to the government and industry. Such a council could also facilitate the above-mentioned specializations of COEs. Moreover, special interest groups could be formed for students in tourism occupations or among tourism education teachers.

Pathways in tourism education. Of special importance in education is a permeable pathways policy for when students can proceed in their education with recognition of their prior learning. Pathways are important within respective fields and beyond. In the tourism COE context, this covers, among others, the following: (i) admission to COEs should be open to students from both Kazakhstan and the Kyrgyz Republic, (ii) students may change COEs according to their preferred specialization with full recognition of prior learning (see section 3.4 basic occupations which would need to be harmonized in all COEs), (iii) international transfer of credits obtained at partner institutions, and (iv) pathways to master's and PhD degrees in relevant fields such as business administration, entrepreneurship, or nutrition.

Tourism Skills Development Fund. To respond quickly to emerging and dynamic labor market needs in the industry to which formal education offers can only respond to with considerable timely delay, a tourism Skills Development Fund (SDF) might be an appropriate instrument. Examples for such needs might be that (i) a new booking software is introduced in travel agencies and the staff needs skills upgrading, or (ii) an international event is being organized and future workers need tailored training. To respond quickly to such demands, a fund could organize short courses to upskill relevant workforce. The SDF could also be used for the skilling of the underemployed and unemployed workforce for the tourism industry, including people with special needs.

Different from formal education offers, training under an SDF will facilitate workforce development and pre-employment training. Therefore, the SDF would finance updating of skills and upskilling of existing workforce, or training of future workforce in tourism. In the case of pre-employment training and to ensure that trainees will be hired if they pass the course successfully, a training contract scheme in which companies would clearly commit to hiring the future staff should be built into an SDF mechanism. In the long run and for sustainability, the tourism industry should share the cost of the fund by introducing a training levy into the payroll of tourism workers. Alternatively, the fee, which tourism companies pay to the respective industry association, could consist of a contribution to cover workforce development.

Legal status and financing. The HEIs in both Kazakhstan and the Kyrgyz Republic enjoy partial economy, which allows them to generate income from collecting tuition fees and provision of other services, like a private education provider (see also sections 3.2 and 3.9). Well-established schools of tourism of this sort are the Caucasus School of Tourism as a part of Caucasus University in Tbilisi, Georgia (cu.edu.ge/en/schoolss/cts); and the Kyrgyz-Turkish Manas University in Bishkek (manas.edu.kg). The school of tourism and hotel management at Manas University is well equipped with laboratories and workshops, and operates a training hotel. Manas University enjoys a special status since it was established by an intergovernment agreement which, among others, ensures full recognition of diplomas in

Turkey and the Kyrgyz Republic. Tourism education at Manas University, which also operates an upper-secondary tourism education program, is of high quality and can be regarded as a good practice in ABEC. Many elements described above, such as twinning and international cooperation, are applied at Manas University. Advanced universities in tourism education in Almaty are Al-Farabi University (kaznu.kz) and KIMAP University (kimap.kz). Their programs focus more on tourism management. Practical training is mostly work-based, through internships since these education providers have few laboratories or workshops for practical, school-based instruction. Even though not located in ABEC, the newly established International University of Tourism “Silk Road” in Samarkand, Uzbekistan could prove itself as a strong cooperation partner with the established corridor COEs (UzDaily 2018). The first batch of students is planned to start in the academic year 2018/2019 in which the university will also legally be more fully established and faculty will be hired.

Public-private partnership options. The government COE network outlined above could likely also be designed as a public-private partnership (PPP). Two options are typically possible through which private enterprises could partake in education provision: (i) as a service delivery contract of courses, and/or (ii) as private facility management of public education institutions. While the second option has a smaller effect on education quality, it may have a big effect on efficiency of facility management. For instance, in VET in the Kyrgyz Republic, the number of auxiliary staff for school maintenance is as many as the employed teachers. The first option may be operationalized by contracting an ICOE, as outlined in Chapter 3 and Proposal 1.

Government engagement in a PPP could be through asset ownership; being an equity provider; by becoming a shareholder of the special purpose vehicle (which is undertaking a project); or through providing guarantees for minimal operation, incurring losses, or loan default.

4.3 Project Components toward a Logical Framework

The project components toward a logical framework apply to both proposals. This section will provide a basic overview of components which can inform a logical framework approach (in ADB terminology, a “design and monitoring framework”). To improve the quality and quantity in tourism education in ABEC (**outcome: establishment of a market-responsive, entrepreneurial, and inclusive S4T system in ABEC**), the following **outputs** and **activities** may be pursued:

- **Output 1: Strengthened S4T management, governance, and finance** (10% of investment cost)
 - o Legal and policy advice on establishment of partially autonomous COEs provided
 - o COE guidelines and cooperation agreements signed
 - o Revision and approval of education and occupational standards in tourism completed
 - o Financial framework for COEs established and approved for piloting
 - o Work-based learning strategy developed and approved for piloting
 - o Tourism SDF established and fully operational

- **Output 2: Improved teaching quality and learning environments** (60% of investment cost)
 - Trainer of trainers (TOT) trained and nationally certified
 - PRESETT and INSETT training institutions established
 - Curricula for basic and special tourism occupations developed and approved
 - COEs equipped and rehabilitated (workshops, classrooms, laboratories, co-working and open spaces, dormitories)
 - Mobility programs of faculty and students established (among COEs and internationally)
 - Different specializations in tourism development and management offered (among others, ecotourism, adventure tourism, health tourism, business tourism, and alpine tourism)
 - Applied tourism research units established in COEs
- **Output 3: Increased industry cooperation and entrepreneurship** (30% of investment cost)
 - Work-based learning (WBL) program developed and approved for piloting
 - Entrepreneurship education introduced in COEs and forms integral part of tourism education
 - Organizational entrepreneurship improved (income generation through provision of consulting services, provision of hoteling and catering services at institutions, etc.)
 - Business incubators established
 - Image of tourism vocational education improved

Key activities:

1. Strengthened S4T management, governance, and finance
 - 1.1 Hire ICOE as consulting firm under ADB procurement guidelines
 - 1.2 Establish four S4T working groups in and between line ministries (tourism and education) and support them through high-level policy advisors (quarterly meetings)
 - 1.3 Draft COE guidelines and cooperation agreements and discuss them in (inter-) ministerial working groups
 - 1.4 Organize 4 peer learning events of COEs per year to discuss challenges and share good practice
 - 1.5 Industry to define key competencies in basic and advanced tourism occupations; international experts with the support of local teachers and scholars to revise and draft education and/or occupational standards
 - 1.6 Deriving from approved standards draft and revise practice-oriented curricula of tourism qualifications and corresponding learning materials
 - 1.7 Draft financial framework of COEs aligned with relevant legal frameworks in ABEC which allows for (partial) financial autonomy of COEs
 - 1.8 Governing council of tourism COEs established to guarantee coordinated and diversified COE specializations
 - 1.9 Draft WBL strategy for tourism education and in coordination with (inter-) ministerial working groups including internship programs
 - 1.10 For pre-skilling and upskilling of current and future workforce short courses (between 2 weeks and 3 months) were designed and are being offered by COEs

2. Improved teaching quality and learning environments

- 2.1 International experts to train various groups of nationally certified TOTs for ES-EDU, I-ES, education and/or occupational standards development, competency-based curricula development, WBL, and learning material development (each group of TOT to receive about six training modules of 2–4 days per year over 1–3 years)
- 2.2 Establishment of a PRESETT degree in one COE to train teachers for tourism COEs (5 years, 480 ECTS, pedagogy for vocational education)
- 2.3 Establishment of INSETT training programs for teachers in COEs (two modules of 3 days duration per teacher yearly; one in pedagogy, one technical)
- 2.4 Expert groups develop competency-based and demand-driven curricula for each basic qualification and for specializations in quarterly working meetings
- 2.5 Industry representatives to lead the development of technical specifications for equipment of workshops and drafting of bill of quantities for civil works (classrooms and dormitories of COEs)
- 2.6 Recognition of prior learning in COEs and among COEs based on harmonized and recognized curricula and specializations in each COE (minimum by MOU)
- 2.7 Establish a faculty exchange program between COEs and with ICOE to support teaching and research in areas which need capacity building
- 2.8 Develop a student exchange and transfer program between COEs
- 2.9 Establish different specializations in relevant tourism fields in each COE
- 2.10 ICOE consultants to train in 8–10 modules of applied tourism research (3 days each) methods such as: analysis and measurement of tourism satisfaction, development of a TSA, destination management, tourism economics, and quantitative and qualitative research methods
- 2.11 Coaching of teachers/researchers of COEs by ICOE consultants in conducting and publishing a research project over 2 years after completion of research training modules

3. Increased industry cooperation and entrepreneurship

- 3.1 A structured WBL program implemented by industry representatives ensuring decent quality of internships of students
- 3.2 Internship coaches hired and trained to quality assure internships and support interns and staff
- 3.3 Procurement of tourism education simulation software completed on time and training of teachers conducted
- 3.4 Certified TOTs for ES-EDU train teachers in COEs on the training firm method and its combination with simulation software and business start-ups (eight training modules in total and 2 peer learning events per year)
- 3.5 TOTs for I-ES and business coaches to support COEs in provision of expert and research services to tourism industry and provision of tourism products
- 3.6 Each COE to host one business incubator, and one co-working and open space
- 3.7 Develop and conduct gender-sensitive industry partnership campaign to improve image of tourism VET

4.4 Narrative Description of Project Components

The above enumerated results chain of activities leading to outputs, outputs leading to outcomes, and outcomes resulting in impact of the possible project designs shall be narratively explained and summarized in this subchapter. Oftentimes development projects are characterized by challenges in finance and governance of a sector or subsector, quality and infrastructure issues, and insufficient cooperation and entrepreneurship. This logic is also followed in the above skeleton log frame and the respective outputs 1-3. In addition, a log frame typically mirrors the problem tree (Figure 3) and aims to translate a certain set of causes into activities and outputs, the development problem into a project's outcome and the effects into the project's impact. Thereby, a project is not able to improve, let alone solve, all of a sector's or subsector's development issues/causes, problems, and effects. A project tries to positively contribute to respective sectorial policy and sectorial development strategy to which likely also projects of other development partners contribute. Therefore, the outcome of "establishing a market-responsive, entrepreneurial, and inclusive S4T system in ABEC" was chosen. The impact could generically be described as "achieving inclusive growth through improved workforce skills and productivity in ABEC's key economic sector of tourism." However, a clear impact statement is at this preliminary stage probably not needed.

Output 1 and key activities: **Strengthened S4T management, governance, and finance.** This pillar will address key policy and financial issues in tourism education and skills development. To improve financial management and transparency, partial autonomy of the COE entities will be important in order to generate and manage extra-budgetary income. Respective guidelines and cooperation agreements between COEs and with ministries of education and tourism need to be drafted, piloted, and approved. Respective working groups in and between line ministries need to be established, high-level policy advisors will provide additional inputs and guidance where needed. To improve governance, finance, and management of S4T, it will be important that the industry leads on defining competencies of relevant occupational standards which expert lead teams of teachers and scholars then translate into competency-based curricula and educational standards. For the shorter pre-skilling and upskilling of current and future workforce, a tourism SDF will be established to not only focus on formal and longer-term education. In general and as outlined previously in the conceptual Chapter 3, it will be important that a renowned ICOE will lead the S4T project both in form and content.

Output 2 and key activities: **Improved teaching quality and learning environments.** Another central element in an education project is to improve the relevance and quality of education. Therefore, teacher training is a key element which should be structured into PRESETT and INSETT. A parallel approach seems important in the given context as the upskilling of current teachers is needed but also the pre-skilling of future tourism teachers and instructors. Solid and tailored PRESETT can reduce to a considerable extent INSETT, when in INSETT only new technical or pedagogic developments need to be taught and most of the fundamentals of tourism education are covered in PRESETT. However, in a first phase it would be important that TOTs are trained by trainers from ICOEs in order to develop considerable expertise in country which is conducting trainings for teachers in various key

dimensions of I-ES, standards and curricula development, WBL, and teaching and learning materials development.

In terms of investment volume, the financially biggest part of the project design would be placed in building, rehabilitating, and equipping workshops, laboratories, classrooms, incubators, or dormitories. An established state-of-the-art practice is the industry to lead the development of technical specifications for e.g., the equipment of laboratories or computer software. Only if the industry has co-ownership of education institutions that match their requirements it will “naturally” engage in supply-side processes of workforce development.

In the outlined COE network approach, it will be conceptually important that different COEs in ABEC complement another when they offer dissimilar specializations in each COE, rather than overly supply-side driven competing with another for students in the same specializations. Therefore, strong cooperation among COEs will be important, starting from their conceptual design.

In addition, capacity building in researching tourism and the housing of relevant applied research institutes in COEs will be key to ensure strategic sector development and improve relevance, quality, and industry cooperation of tourism education. ICOE trainers would provide intensive 3-day full-time training sessions on key issues in tourism research in the first years of the project. After completion of various tourism research modules, the researchers of COEs would start carrying out and publishing their own research projects. In the first years, senior researchers of ICOEs would coach capacitated corridor tourism researchers in their fields of interest and research.

Output 3 and key activities: **Increased industry cooperation and entrepreneurship.** In the last output of the envisaged project designs, industry cooperation and entrepreneurship of COEs should be substantially improved and sustainably anchored in respective education offers. To ensure this, a WBL program should be established which clearly describes internship mechanisms and ways to operationalize them. In many Central Asian countries, curricula in VET still mention a reasonable amount of internship-weeks to be spent in the industry. However, in practice little quality and quantity WBL is taking place.

In terms of ES-EDU, which improves the employability of graduates, it will be important to establish its various forms (software simulation, training firms, and business incubators) interconnectedly. Various types of TOT training, coaching, and regular peer-learning will be needed in the first 5 years to systemically anchor ES-EDU in tourism curricula and beyond. I-ES will be important to ensure that education institutions are well grounded and connected to the industry, besides I-ES being an important tool to improve the quality and relevance of education from an industrial angle.

As an overarching activity, it will last but not least be vital to improve the image of tourism VET as no longer an occupation that attracts low-performing students but as an international and regional career opportunity which now has internationally recognized COEs in the region. A respective marketing campaign will be implemented to document and communicate improvements in COEs.

References

- ADB. 2014. *The Kyrgyz Republic Strategic Assessment of the Economy*. Manila: ADB.
- . 2015. *Assessment of Higher Education: Kyrgyz Republic*. Manila: ADB.
- . 2017. *CAREC 2030 Connecting the Region for Shared and Sustainable Development*. Manila: ADB.
- . 2017. *Report and Recommendation of the President: Proposed Grants to the Kyrgyz Republic for the Skills for Inclusive Growth Sector Development Program*. Manila: ADB.
- Ajwad, M.I. et al. *The Skills Road: Skills for Employability in the Kyrgyz Republic*. Washington, DC: World Bank.
- Bell, G. 2017. *Institutional Development of Destination Management and Effective Protected Area Management in the Almaty–Bishkek Economic Corridor*. Unpublished.
- Choi, C. 2016. *Strategic Directions for the Almaty–Bishkek Corridor Initiative*. Unpublished.
- EUROPEN–PEN International. 2016. *What is a Practise Enterprise*. <http://www.penworldwide.org/practiceenterprise.html> (accessed 6 April 2018).
- Government of Kazakhstan. 2015. *Plan for the Nation – 100 Steps for implementation of Five Institutional Reforms*. Astana.
- . 2017. *Tourism Development Strategy 2023*. Astana.
- Government of the Kyrgyz Republic. 2016. *Program of the Government of the Kyrgyz Republic on the Development of Tourism until 2020*. Bishkek.
- . 2017. *Concept of the Regional Policy of the Kyrgyz Republic for 2018–2022*. Bishkek.
- Government of Tyrol. 2015. *Der Tiroler Weg 2021 – Kernbotschaft einer Strategie für den Tiroler Tourismus*. Dornbirn: Artpress.
- ITB. 2016. *World Travel Trends Report 2016–2017*. Berlin: Messe Berlin.
- Modul University. 2016. *Guideline of Academic Cooperation*. <https://www.modul.ac.at/branch-campuses/modul-school-of-tourism-and-hospitality-management-nanjing/> (accessed 13 April 2018).

- Organisation for Economic Co-operation and Development (OECD). 2018. *Tourism Trends and Policies*. Paris: OECD.
- Reinhard, U. 2018. *Tourismus Analyse 2018*. Hamburg: Stiftung für Zukunftsfragen.
- Schwegler-Rohmeis, W. 2013. *Labor Market and Employment Policy in the Kyrgyz Republic*. Eschborn: GIZ.
- United Nations World Tourism Organization (UNWTO) and International Labour Organization (ILO). 2014. *Measuring Employment in the Tourism Industries*. Madrid: UNWTO.
- UzDaily. 2018. International University of Tourism “Silk Road” is being established. <https://www.uzdaily.com/articles-id-44589.htm> (accessed 31 July 2018).
- Villa Blanca. 2018. *#schoolforlife*. Innsbruck: Villa Blanca.
- Vögele, J. 2016. *Tirol Werbung/Strategien & Partner*. Innsbruck: Tirol Werbung.
- Wirtschaftskammer Österreich (WKO) (Austrian Economic Chamber). 2018. *Tourismus und Freizeitwirtschaft in Zahlen*. Wien: WKO.
- World Bank. 2016. *Kazakhstan: Towards Development of a Jobs Strategy*. Washington, DC: World Bank Group.
- . 2014. *The Skills Road – Skills for Employability in the Kyrgyz Republic*. Washington, DC: World Bank Group.
- . 2016. *Kyrgyz Republic: Towards Development of a Jobs Strategy*. Washington, DC: World Bank Group.
- World Economic Forum. 2017. *The Travel and Tourism Competitiveness Report 2017*. Geneva: WEF.
- World Tourism Organization. 2017a. *Yearbook of Tourism Statistics Dataset Kazakhstan [Electronic]*. Madrid: UNWTO. Data updated on 21 July 2017.
- . 2017b. *Yearbook of Tourism Statistics Dataset Kyrgyz Republic [Electronic]*. Madrid: UNWTO. Data updated on 12 December 2017.
- . 2017c. *Compendium of Tourism Statistics Dataset Kyrgyz Republic [Electronic]*. Madrid: UNWTO. Data updated on 12 December 2017.
- . 2018. *Compendium of Tourism Statistics dataset Kazakhstan [Electronic]*. Madrid: UNWTO. Data updated on 12 January 2018.
- World Travel and Tourism Council (WTTC). 2016. *Global Talent Trends and Issues for the Travel and Tourism Sector*. London: WTTC.
- . 2017a. *Travel and Tourism Economic Impact Kazakhstan*. London: WTTC.
- . 2017b. *Travel and Tourism Economic Impact Kyrgyzstan*. London: WTTC.

APPENDIX 1

Supply and Demand Mapping: Authors' Estimations

Key Indicators Tourism Sector (Supply and Demand Mapping) Author's Estimation	Kyrgyz Republic (KGZ) 2016	Kazakhstan (KAZ) 2016	Total for Corridor 2016
Share of Gross Domestic Product (GDP) in % DIRECT CONTRIBUTION	1.4	1.9	
Amount in DIRECT CONTRIBUTION billion \$	0.3	2.4	
Share of GDP in % TOTAL CONTRIBUTION	4.5	6.2	
Amount in TOTAL CONTRIBUTION billion \$	1.0	7.9	
Number of people DIRECTLY employed in sector	70,000	140,000	
Corridor direct employment in sector (75% for KGZ, 55% for KAZ)	52,500	77,000	129,500
Share of total employment	1.3	2.1	
Employment: TOTAL contribution of sector %	3.7	6.0	
Employment: TOTAL contribution of sector amount	210,000	521,000	
Corridor total employment	157,500	286,550	444,050
Number of students enrolled (vocational + higher education) directly in tourism sector	4,000	12,212	16,211.8
Drop-outs 15%	600	1,832	
Number of graduates produced p/a (vocational and higher education)	1,133	3,460	
Share underskilled 50%	567	1,730	
Underskilled deducted (50% of underskilled)	283	865	
Qualified labor force produced p/a	850	2,595	
Skilled graduates entering the sector 50%	425	1,298	
Almaty–Bishkek Economic Corridor (ABEC) geographically relevant (75% for KGZ, 55% for KAZ)	319	714	1,032
Assumed annual labor force replacement rate 10% in the country	17,500	35,000	
Minus 25% unskilled labor force employed in sector	4,375	8,750	
Additional jobs created p/a (1.4% KGZ; 4% KAZ)	980	5,600	
Assumed annual labor force training and qualification needs in the sector	14,105	31,850	
Relevant annual labor force replacement for ABEC (75% for KGZ, 55% for KAZ)	10,579	14,333	24,911
SKILLS GAP in PAX P/A	-10,260	-13,619	-23,879
Assumption: A better skilled worker is 25% more productive			
Annual DIRECT cost in \$ of skills gap (value addition per worker \$2,000 p/a in KGZ; \$6,000 in KAZ)	-5,130,000	-20,428,313	-25,558,313
Annual TOTAL cost in \$ (multiplier effect of 3)			-76,674,938

PAX = persons, p/a = per annum.

sources: Asian Development Bank, Asian Development Bank estimates, National Statistics Committees, Ministries of Education, United Nations World Tourism Organization, World Travel and Tourism Council.

APPENDIX 2

Technicalities of ADB Support and Finance

On Technicalities of ADB Support

Skills for Tourism (S4T) architecture options. In general, various structural approaches for S4T are possible. The panorama stretches from government (sovereign), to public-private partnerships (PPPs, in which options between sovereign and nonsovereign exist), to private sector operations (nonsovereign). In the proposals, all three forms and possible combinations thereof are highlighted since a future project or program shall involve both sides of Almaty–Bishkek Economic Corridor (ABEC). Therefore, additional “nonsynchronic” options may be chosen, given the higher development of the private sector in Kazakhstan, especially in tertiary education and in tourism. In parallel, the per capita state budget is about three times smaller in the Kyrgyz Republic, which may have implications for the preference of sovereign lending modalities.

In addition to the structural approaches of governmental, PPP, and private, each approach has various options. For example, sovereign lending modalities could be a “standard” project loan, a sector development program, results-based lending, or program-based lending. Without going into too much technical detail, it should be highlighted that each region of ABEC has various lending options at hand which could be relatively flexibly combined to design education programs that best fit the socioeconomic contexts of both the education and the tourism industry. Moreover, different grant options may be available for innovative, green, or rural project designs. The Kyrgyz Republic has possible financing options from thematic grant support, Asian Development Fund grant finance and/or concessional lending.

A technical assistance (design TA), in addition to the ongoing analytical TA for all sectors of ABEC, would help prepare tailor-made investments to ensure the highest possible, most sustainable, and most inclusive impact to people living in ABEC.

APPENDIX 3

Glossary

KEY DEFINITIONS

TRAVEL AND TOURISM

Relates to the activity of travelers on trips outside their usual environment with a duration of less than 1 year. Economic activity related to all aspects of such trips is measured within the research.

DIRECT CONTRIBUTION TO GDP

Gross domestic product (GDP) generated by industries that deal directly with tourists, including hotels, travel agents, airlines and other passenger transport services, as well as the activities of restaurant and leisure industries that deal directly with tourists. It is equivalent to total internal Travel and Tourism spending (see below) within a country less the purchases made by those industries (including imports). In terms of the United Nations Tourism Satellite Account methodology it is consistent with total GDP calculated in Table 6 of the TSA: RMF 2008.

DIRECT CONTRIBUTION TO EMPLOYMENT

The number of direct jobs within Travel and Tourism. This is consistent with total employment calculated in Table 7 of the TSA: RMF 2008.

TOTAL CONTRIBUTION TO GDP

GDP generated directly by the Travel and Tourism sector plus its indirect and induced impacts (see below).

TOTAL CONTRIBUTION TO EMPLOYMENT

The number of jobs generated directly in the Travel and Tourism sector plus the indirect and induced contributions (see below).

DIRECT SPENDING IMPACTS

VISITOR EXPORTS

Spending within the country by international tourists for both business and leisure trips, including spending on transport, but excluding international spending on education. This is consistent with total inbound tourism expenditure in Table 1 of the TSA: RMF 2008.

DOMESTIC TRAVEL AND TOURISM SPENDING

Spending within a country by that country's residents for both business and leisure trips. Multi-use consumer durables are not included since they are not purchased solely for tourism purposes. This is consistent with total domestic tourism expenditure in Table 2 of the TSA: RMF 2008. Outbound spending by residents abroad is not included here, but is separately identified according to the TSA: RMF 2008 (see below).

GOVERNMENT INDIVIDUAL SPENDING

Spending by government on Travel and Tourism services directly linked to visitors, such as cultural services (e.g., museums) or recreational services (e.g., national parks).

INTERNAL TOURISM CONSUMPTION

Total revenue generated within a country by industries that deal directly with tourists including visitor exports, domestic spending, and government individual spending. This does not include spending abroad by residents. This is consistent with total internal tourism expenditure in Table 4 of the TSA: RMF 2008.

BUSINESS TRAVEL AND TOURISM SPENDING

Spending on business travel within a country by residents and international visitors.

LEISURE TRAVEL AND TOURISM SPENDING

Spending on leisure travel within a country by residents and international visitors.

INDIRECT AND INDUCED IMPACTS

INDIRECT CONTRIBUTION

The contribution to GDP and jobs of the following three factors:

- **CAPITAL INVESTMENT:** Includes capital investment spending by all industries directly involved in Travel and Tourism. This also constitutes investment spending by other industries on specific tourism assets such as new visitor accommodation and passenger transport equipment, as well as restaurants and leisure facilities for specific tourism use. This is consistent with total tourism gross fixed capital formation in Table 8 of the TSA: RMF 2008.
- **GOVERNMENT COLLECTIVE SPENDING:** Government spending in support of general tourism activity. This can include national as well as regional and local government spending. For example, it includes tourism promotion, visitor information services, administrative services, and other public services. This is consistent with total collective tourism consumption in Table 9 of TSA: RMF 2008.
- **SUPPLY-CHAIN EFFECTS:** Purchases of domestic goods and services directly by different industries within Travel and Tourism as inputs to their final tourism output.

INDUCED CONTRIBUTION

The broader contribution to GDP and employment of spending by those who are directly or indirectly employed by Travel and Tourism.

OTHER INDICATORS

OUTBOUND EXPENDITURE

Spending outside the country by residents on all trips abroad. This is fully aligned with total outbound tourism expenditure in Table 3 of the TSA: RMF 2008.

FOREIGN VISITOR ARRIVALS

The number of arrivals of foreign visitors, including same-day and overnight visitors (tourists) to the country.

Source: World Travel and Tourism Council. 2017. *Travel and Tourism Economic Impact Kazakhstan*. London: WTTC.

Improving Education, Skills, and Employment in Tourism

Almaty–Bishkek Economic Corridor

This report measures the skills gap among tourism industry workers and the resulting opportunity costs along the Almaty–Bishkek Economic Corridor in Central Asia. The skills gap analysis identifies an annual lack of about 8,500 trained professionals in the tourism industry along the region which is causing opportunity costs of more than \$30 million per year. The Almaty–Bishkek Economic Corridor has an exceptional heritage and wealth of culture and nature. This combination results in a high potential for tourism development that is largely untapped.

About the Almaty–Bishkek Economic Corridor

The Almaty–Bishkek Economic Corridor (ABEC) is the pilot economic corridor under the Central Asia Regional Economic Cooperation (CAREC) Program. The motivation for ABEC is that Almaty and Bishkek can achieve far more together than either can achieve alone. The two cities are only 240 kilometers apart with relatively high economic density concentrated in services in the cities and agriculture in their hinterlands. Both Kazakhstan and the Kyrgyz Republic have acceded to the Eurasian Economic Union and the World Trade Organization. CAREC corridors and Belt and Road Initiative routes cross ABEC. The historic Silk Route, mountain ranges, and Lake Issyk-Kul underline the potential for tourism. But trade, especially in agricultural goods and services, between the two countries is below potential, and the region does not yet benefit from being one economic space.

About the Central Asia Regional Economic Cooperation Program

The Central Asia Regional Economic Cooperation (CAREC) Program is a partnership of 11 member countries and development partners working together to promote development through cooperation, leading to accelerated economic growth and poverty reduction. It is guided by the overarching vision of “Good Neighbors, Good Partners, and Good Prospects”. CAREC countries include: Afghanistan, Azerbaijan, the People’s Republic of China, Georgia, Kazakhstan, the Kyrgyz Republic, Mongolia, Pakistan, Tajikistan, Turkmenistan, and Uzbekistan.

About the Asian Development Bank

ADB is committed to achieving a prosperous, inclusive, resilient, and sustainable Asia and the Pacific, while sustaining its efforts to eradicate extreme poverty. Established in 1966, it is owned by 68 members—49 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.



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