

FOR PARTICIPANTS ONLY

UNITED NATIONS SPECIAL PROGRAMME FOR THE ECONOMIES OF CENTRAL ASIA (SPECA)

2016 SPECA Economic Forum "Enhanced Implementation of SDGs through Cooperation"

Ganja, Azerbaijan, 22-23 November 2016

North and Central Asia as a Transit Hub: Potential, Challenges and Way Forward

Session I: Reviving and Rebalancing Economic Growth: Review of Cross-Border Connectivity Initiatives and Priority Policy Reforms

Disclaimer: The document has been prepared by the staff of the ESCAP secretariat and issued without formal editing.

North and Central Asia as a Transit Hub: Potential, Challenges and Way Forward

Table of Contents

I. Introduction	3
II. Trade and Investment	
III. Infrastructure Connectivity	11
IV. Financial cooperation	20
V. Shared vulnerabilities	22
VI. A RECI agenda for NCA	24
References	27

I. Introduction

On the 25th anniversary of independence, the countries in North and Central Asia and the Caucasus (NCA) have made significant strides in establishing market economies and achieving socio-economic well-being. The problem is that most countries relied heavily on their rich natural resource base to drive growth. Rent from natural resources is estimated to have comprised as much as 30 percent of GDP in Azerbaijan, Kazakhstan, the Russian Federation, and Turkmenistan as economic growth soared above 8 percent during the early part of the millennium. With the Russian Federation generating 83% of subregional GDP, bilateral trade and investment ties with the Russian Federation played an important role in the majority of the countries' economic exchanges. Meanwhile, as young countries, a preoccupation with the consolidation of national sovereignty and competing geopolitical interests took precedence over any potential gains to be made through subregional economic cooperation.

But the marked fall in oil prices in recent years combined with the slowdown of the Russian economy, which saw its currency devalue by nearly 50 percent in 2015, have disrupted major sources of income both for the commodity exporters of Azerbaijan, Kazakhstan, Turkmenistan as well as Tajikistan, Kyrgyzstan, Armenia, Georgia and Uzbekistan (albeit to a lesser extent) which rely heavily on remittances from migrant workers in commodity exporting countries.

Amid the sobering economic realities now facing the NCA countries, China's Belt and Road Initiative (BRI) together with the Eurasian Economic Union (EaEU) spearheaded by the Russian Federation, have brought to the fore a slew of opportunities with prospects for enhanced connectivity and scaled up NCA participation in global markets. In line with ESCAP's forthcoming report entitled "Regional Integration: Enhancing Sustainable Development in Asia and the Pacific" which builds the case for greater regional integration, North and Central Asia emerges as a transit hub in the next phase of Asia-Pacific's transformative trajectory of development.

The BRI, with its land and sea transport corridors linking China to the Middle East, Africa and Europe through the landlocked NCA countries, offers the opportunity to establish trade partnerships and networks which include six main trade corridors while facilitating the delivery of East Asian exports to the subregion. NCA leaders have in recent years, through a number of meetings with Chinese President Xi Jinping, expressed a keen interest in collaborating on the rail, air, road, sea and oil and gas pipelines. This involves inter alia, China's \$40-billion Silk Road Fund and capital from Chinese lending institutions which importantly includes the newly-founded Asian Infrastructure Investment Bank (AIIB). Infrastructure connectivity remains a key priority for the subregion - notwithstanding recent improvements, the subregion still scores poorly on infrastructure and logistics indexes as east-west corridors, albeit burgeoning, still remain below potential and northward-bound arteries offer diminished growth prospects.

The China-Pakistan Economic Corridor, amounting to US\$46 billion of investments, as an extension of the Silk Road initiative has sparked interest in south-bound corridors that bring to the fore the true potential of multidirectional connectivity and the emergence of NCA as a transit hub. In particular, energy grids, with crucial initiatives for pipelines to transport hydrocarbon, gas and electricity exports to South Asia and Europe have emerged. The Turkmenistan-Afghanistan-Pakistan-India (TAPI) pipeline launched in December 2015 in Ashgabat, Turkmenistan, the Trans-Caspian linkages for a gas pipeline from Turkmenistan to new markets in Europe, and the Central Asia-South Asia (CASA-1000) high voltage electricity line linking the hydropower exporting countries of Kyrgyzstan and Tajikistan with energy deficient Afghanistan and Pakistan, launched in Dushanbe, Tajikistan in May 2016, are all expected to become operational in the next decade. ESCAP's Asia-Pacific information

superhighway (AP-IS), together with initiatives such as the Azerbaijan-led Trans-Eurasian Information Superhighway (TASIM), which aim to expand broadband internet infrastructure, will simultaneously boost digital connectivity, usher in investment and increase cross-border exchanges, while promoting the development of smart grids. Though trade integration has been slow as a result of past policies largely based on self-sufficiency and import substitution amid complicated border control procedures, it is increasingly evident that the best chance of developing a prosperous NCA, hinges upon countries' political will for cooperation. This paper identifies four priority areas for increased connectivity: (i) increased trade and investment; (ii) expanded infrastructure—in transport, energy, ICT; (iii) deeper financial cooperation and iv) reduced environmental vulnerabilities to heightened challenges posed by climate change.

II. Trade and Investment

The NCA subregion is amongst the least integrated in the Asia-Pacific region. It accounts for 6.6% of intraregional trade as compared to 32.1% for East Asia. Furthermore, the trade structure significantly lacks diversity, be it in export products, destination markets or exporters, and there has also been no significant change over the past two decades². Exports consist mainly of commodities with low value-added. It is estimated that parts and components as a percentage of manufactured goods exports in 2013 amounted to 2%-6%, compared to 23%-39% for emerging economies in East and Southeast Asia. Imports are similar, for example, Kazakhstan displays high import content for consumer items such as electrical equipment and cars. Low value-added is also reflected in complexity indices, which in 2008 ranged from a low of -1.96 for Mauritania and a high of 2.36 for Japan, while CCA countries ranged from -0.26 to -1.25. Most non-commodity exports are destined within the NCA subregion. Kazakhstan and Turkmenistan the biggest CCA exporters (mainly commodities) together account for around 80% of the subregion's exports. Labour is the primary export for the poorer countries. In 2013, Tajikistan's remittances/GDP ratio was 48.8% and Kyrgyzstan's was 31.5%, two of the world's highest².

Area/Country 2007 2008 2009 2010 2012 2013 2014 **ESCAP** 14 12.4 14.4 11.8 13.2 13.7 13.3 North and Central Asia 6.3 6.5 5.2 5.7 6.4 6.6 6.5 East and North-East Asia 14.4 14.3 11.3 13.2 13.7 13 11.5 Pacific 9.8 11.3 9.8 9.5 9.5 10 9.4 7.9 8.2 9 South and South-West Asia 7.9 9.2 8.9 8.4 34.9 29.3 36.9 31.5 31.9 32.1 **South-East Asia**

Table 1: Intraregional merchandise imports (1) [% of GDP]

Notes: The sum of intra-regional merchandise imports divided by the value of GDP, which is weighted by GDP in current USD. The GDP figures up to 2012 are sourced from UNSD National Accounts Main Aggregates Database. The 2013 figures are estimated by ESCAP. Missing data (for Turkmenistan and Uzbekistan) are not imputed

Source: ESCAP Database

Over the past decade, trade with China expanded rapidly, and China has become an important financier of infrastructure connectivity projects.

The double-edged sword of institution-driven trade

While East and Southeast Asian economies have flourished under a market-driven trade model, perhaps best epitomized by ASEAN's 'institution-light" informal network type of governance NCA trade has been driven by top-down agreements in which strategic priorities have taken precedence. Until a few years ago, a rash of treaties and agreements were signed to preserve the common economic space of the USSR-era but notwithstanding the flurry of activity, none seriously discussed preferential trade policies or posed a threat to multilateralism in trade policies. Consequently, the subregion is the only one in Asia-Pacific with no inclusive subregional institution dedicated to the promotion of regional cooperation and integration similar to Southeast Asia's ASEAN, South Asia's SAARC, or the European Union. The Commonwealth of Independent States (CIS) which was conceived in December 1991 amid the disintegration of the Soviet Union as a way of maintaining economic ties between the (non-

http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS/0,,contentMDK:22759429~pagePK:64165 401~piPK:64165026~theSitePK:476883,00.html#Remittances (accessed 16 September 2015).

^{1.} ESCAP database, measured as intraregional imports as % of GDP, and weighted by GDP.

^{2.} For more information, see:

^{3.} See for example, Nangia (2016 forthcoming) for an indepth discussion

Baltic) Soviet successor states, became entangled in strategic and political decisions, thus complicating inter-dependence and thwarting any potential cooperation that could have promoted increased market exchanges.

In an important policy overhaul, in 2009 the Russian Federation shifted its focus from the CIS to bilateral or plurilateral relations with like-minded countries from the former Soviet Union. The customs union that was formed between Belarus, Kazakhstan and the Russian Federation was important because implementation was rapid, and further deepening and widening were credibly promised. Consequently, by January 2015, the EaEU was set up.⁴ The EaEU is the first subregional institutional cooperation mechanism that provides concrete economic benefits, especially for much-needed labour migration from the poorer countries. Notably, the EaEU Agreements on labour migration have reduced the number of documents required by migrant workers, increased the timeframe for registration and permissible period of uninterrupted stay and granted social rights to migrant families, especially in education. Kyrgyzstan and Armenia, the fourth and fifth largest sources of foreign labour in the Russian Federation (Schenk, 2015) are major beneficiaries, while remittance-dependent Tajikistan could also be a major beneficiary if it joins in future.

Additionally, current provisions of the EaEU promote a model of diversification based on the processing of local resources in which the industry hopes to thrive in the much larger Russian Federation market through favourable entry. However, here the benefits are less clear as the model of diversification and national development being promoted is still largely based on import-substituting industrialization, reliant on protectionist measures for gaining competitiveness⁵. ESCAP research estimates that the NCA subregion accounts for the highest non-tariff trade costs, reaching a tariff equivalent of 351%, for the subregion's trade with ASEAN, and even for intra-NCA trade the tariff equivalent is 121% as compared to 43% for intra-EU trade for example⁶. Not unlike other RTAs, this suggests that the EaEU has yet to curb protectionism.

Furthermore, the EaEU's impact on cooperation and integration in the subregion is double edged. On the one hand it creates a more deeply integrated area among members, but if some Central Asian countries continue to remain outside the deepening EaEU, it can exacerbate the fault lines running across Central Asia and hamper much-needed long-term economic integration at both the subregional level and the wider Asia-Pacific space. For example, the Russian Federation introduced new regulations for labour migrants ⁷ that gave citizens from EaEU countries preferential access to its massive labour market. Thus, Kyrgyz workers have an advantage over migrants from Uzbekistan for example, while for countries such as Tajikistan, the new regulations could provide an incentive to join.

In this context, whether the EaEU will reduce its common external tariff and non-tariff barriers to mitigate discrimination against non-members is crucial to assess whether the subregion will develop the same principles of open regionalism that evolved over time in ASEAN and APEC. The contrasting experiences of the Thailand and Malaysia in the ASEAN car industry are a case in point. The Thai car industry, which by the early millennium had become the largest

^{4.} The analysis draws on Pomfret (2014) and Pomfret (2016), forthcoming.

^{5.} For example, cars produced in Kazakhstan enter the Russian Federation at favourable tariffs while border arrangements have been designed to favour internal EAEU trade over trade with non-members. Similarly, average border-crossing time for trucks leaving Kazakhstan for Russia fell from 7.7 hours in 2011 to 2.9 hours in 2012 while for trucks entering Kazakhstan from outside the customs union the time increased from 8.6 to 21.5 hours, with "waiting in queue" accounting for the biggest part (CAREC, 2012, 38-9) of the delays experienced.

^{6.} Nangia (2016, forthcoming)

^{7.} Migrants now have to pass tests on Russian language, history and legislation basics, as well as undergo a medical examination and buy health insurance. Local governments also increased their fee for work permits, e.g. in Moscow the fee went up from 1,200 rubles to 4,000 rubles per month.

assembler of cars in Asia, employing some 550,000 people and producing 2.85 million vehicles by 2013, evolved around participation in global supply chains. Meanwhile, its Malaysian counterpart, the Malaysian Proton, which embarked as a national, import-substituting car industry, has stagnated, with domestic buyers paying up to 50 percent more for the same cars sold on export markets amid global competition and national automotive production operating at less than half of its capacity throughout the early 2000s, (Baldwin, 2011). By 2005 Malaysia had little choice but to withdraw cars from its ASEAN Free Trade "Exclusion List", in a highly symbolic retreat from import substitution in favour of participation in regional and global supply chains for the industry.

Of late, there are encouraging signs that the EaEU is expanding outwards. In 2015, the EaEU signed a free trade agreement with Viet Nam and in 2016, several other countries (e.g. Egypt, Islamic Republic of Iran, Israel, Pakistan, Serbia and Thailand), were reported to be interested in a similar arrangement. Kazakhstan's entry into the WTO in July last year amid a slew of national efforts to privatize state companies also bodes well for the pursuit of an open preferential regime that is WTO compliant and therefore based on open regionalism principles. With the exception of Belarus, all ESCAP's EaEU members are now also WTO members.

The persistence of non-tariff barriers

The persistence of non-tariff barriers in the NCA continues to challenge the subregion's ability to become a competitive player in regional markets. Reduced trade costs are especially important for small and medium-sized businesses to participate in global value chains (GVC), and for countries to enjoy a more broad-based and inclusive growth process, as illustrated by examples from Kyrgyzstan.

Box 1: Ease of Trading Across Borders

Kazakhstan and Kyrgyzstan introduced joint customs controls at the Akjol-Kordai border, but it was soon discontinued and the countries reverted to independent border control points (BCPs). Similarly, the CAREC Corridor Monitoring Reports show that between 2011 and 2012 border crossing delays had become longer, especially along corridors with the highest volumes. However, the Chongquing (Southwest China)-Duisburg (Germany) train has special wagons to facilitate gauge change. It also has simplified border formalities as well as crossings between the Russian Federation and Kazakhstan, which were shortened since the establishment of the EaEU. This provides evidence that trade barriers can be dismantled, when the political will to do so is there.

The most recent ESCAP-led Global Survey on Trade Facilitation and Paperless Trade Implementation in 2015 ranks CCA countries considerably less integrated than East and Southeast Asian countries, aligning the subregion with South and Southwest Asia based on 38 measures of progress in trade facilitation. Within Central Asia, Uzbekistan ranks below Kazakhstan and Kyrgyzstan, while interestingly Tajikistan ranks highest among the four countries (Figures 1 and 2). This may be due to the fact to that physical disruptions, amongst the highest in the world in parts of CCA, are more of an obstacle than the absence of a paperless trade system⁸. These constraints are not captured by the ESCAP survey and could thus account for the relatively high positive results obtained. Further ground testing with traders is needed to add depth to the results, particularly to identify the areas in which NCA lags behind the most.

7

^{8.} See for example the CAREC Corridor Performance Measurement and Monitoring Reports (CCPMMR) which empirically record actual travel and border crossing times, as reported in Pomfret (2016, forthcoming).

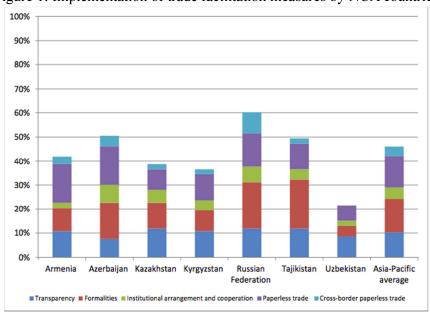


Figure 1: Implementation of trade facilitation measures by NCA countries

Drawing on the benefits that ASEAN's landlocked countries (LLDCs) have gained from their central geographic positions, NCA has yet to capitalize on its potential as a transit route for goods moving between East Asia and the European Union.

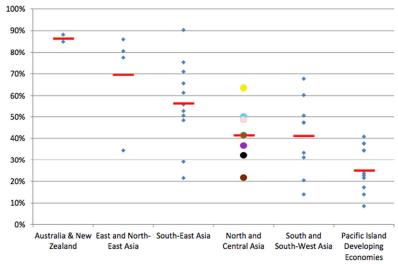


Figure 2: Implementation of trade facilitation measures by NCA countries

Notes: Blue dots show implementation of individual economies (%). Red lines show implementation of the subregional grouping (%) Coloured dots shows Trade Facilitation of

Source: ESCAP, UNRCs TF Survey 2015

NCA countries' economies (%)

An additional and less measurable impediment is the CCA 'reluctance to reform' mindset that blocks innovative reforms. CCA countries inherited a Soviet system that emphasized revenue

collection and full inspection, rather than risk assessment methods that monitor selective goods while facilitating legitimate trade. Georgia alone has introduced major customs reform centered on modern systems aimed at streamlining procedures, creating a single electronic window,

upgrading infrastructure and IT equipment at Border Control Points (BCPs). Others have been more reluctant to follow Georgia's innovative path.

The recent increase in cross-border trade, notably for Azerbaijan, Armenia and the Central Asian countries, provides the first systematic evidence of a change in mind set, according to 2014-2015 data from the World Bank (Table 1). Until recently, the four Central Asian countries were among the world's seven worst countries for the "trading across borders" subcomponent of the index. The Caucasus countries and the Russian Federation ranked higher, but only Georgia was above the median. In 2015, the rankings substantially improved, especially for the "trading across borders" sub index. Although half remained below the median, the progress shows there is great scope to improve in border crossing services, provided there is sufficient political will.

Table 1: Ease of Doing Business (DB) and Logistics Performance Index (LPI)

	DB	DB Trading	LPI	Ì	
	Overall	Across			
	Ranking	Borders			
	2014	2015	2014	2015	2014
Armenia	45	35	110	29	92
Azerbaijan	80	63	166	40	125
Georgia	15	24	33	78	116
Kazakhstan	77	41	185	122	88
Kyrgyz Rep.	102	67	183	83	149
Russian Fed.	62	51	155	170	90
Tajikistan	143	166	188	132	114
Turkmenistan	Na	Na	Na	Na	140
Uzbekistan	146	141	189	159	129
Source: World	Bank Doin	ng Business	http://www.doing	business.org/rankings	and LPI

Source: World Bank Doing Busin http://lpi.worldbank.org/international/global/2014

Notes: the LPI covered 160 countries in 2014; the *Doing Business* rankings cover 189 countries - Turkmenistan is not ranked in *Doing Business*.

The DB columns refer to the benchmark dates, not the date in the publication's title, e.g. *Doing Business 2016*, published in 2015, contains the June 2015 data and the June 2014 data are in *Doing Business 2015*. Online data are sometimes revised.

Low productivity: a model in transition

In Asia-Pacific, today's need for integration is typically driven by the demands of global supply chains and ICT-enabled supply chain management, which serve to tighten linkages between goods, services and FDI. Amid intense competition, services and investments (through the establishment of commercial presence to supply the service) are central to developing more complex products to export, as they allow for the coordination of information, data and knowhow, as well as the development of technology required to increase productivity, augment capacity and penetrate new markets. Such processes inevitably have proven to be pluralistic, fluid and uncertain – raising the need for a "software" of RECI, But such reforms have so far gained little traction in the subregion, as remnants of central planning approaches which deem services as unproductive in comparison to heavy industry outputs, persist.

Even though in NCA there is a direct link between green field FDIs, ventures by multinational corporations into emerging markets, and service sectors of electricity, gas, water, construction, transport, communications, the focus has been on attracting natural resource-seeking investments rather than other types of investments including efficiency-seeking FDI. As a consequence, services that have developed take the form of accessory activities to commodity-related ventures rather than core foundations of a globally competitive economy. For example,

investments in cross border pipelines drove the development of construction services in several energy exporting countries. Policies have subsidized private investment in arbitrarily chosen sectors, often prestige buildings that are not put to the test of market driven competition, effective demand, profitability, and innovation. Consequently, investments in education, health and even financial services have lagged, stymying the opportunity to capitalize on the subregion's second most abundant resource: human capital. Skilled labor, a productive and healthy workforce and the nurturing of entrepreneurial talent, especially among youths without access to financial backing, are crucial to attract FDI to the NCA.

Box 2: Kyrgyz Value Chains

After dissolution of the Soviet Union in December 1991, the Kyrgyz Republic adopted the most open economic system in Central Asia, and in 1998 became the first Soviet successor state to join the WTO. One consequence was that it became the entrepôt through which consumers goods entered Central Asia, and during the 2000s the country's bazaars became major trading hubs. In 2008 the Dordoi bazaar in Bishkek employed 55,000 people, had 40,300 sales outlets and annual sales of \$2,842 million, of which \$2,131 million are estimated to have been foreign sales (customers in Uzbekistan, Kazakhstan and Russia).

The open Kyrgyz economy has also had some success in agriculture, importing know-how and inputs as well as benefitting from foreign intermediaries with knowledge of export markets. With the introduction of new bean varietals, primarily from Turkey, the land devoted to bean production in the Talas province increased from 5,000 hectares in 1999 to 45,000 hectares in 2012, as small-scale farmers became competitive producers supplying export markets in Turkey, Bulgaria and Russia (Tilekeyev, 2013). Many small and medium enterprises offering intermediary services also sprung up. They imported cleaning equipment, and grade and pack the beans in standard 25kg and 50kg polypropylene bags, while plans are underway to provide higher value-added packaging and marketing services for the EU market.

Tilekeyev uses household survey data from May-June 2011 to show that households specializing in beans were significantly better off than non-bean-producers, and although still a minor player in the global market the Kyrgyz Republic was one of the top twenty bean exporters (Hegay, 2013). The basic lesson is that with an enabling policy environment supported by infrastructure connectivity, new products and markets can develop, including niches that previously did not exist and whose existence was not predicted.

III. Infrastructure Connectivity

Leaders of the NCA countries have prioritized the modernization of infrastructure for transport, power generation and communication as the foremost item in their regional economic cooperation and integration agenda. Historically, infrastructure connectivity of NCA countries has been with the north. Connections with the Russian Federation have been well established, with road, rail and electric and energy grids linked with Russian systems. More recently, the east-west corridors have been developed rapidly supported by Chinese investments. The gas pipeline from Turkmenistan through Uzbekistan and Kazakhstan to China completed in 2009 is a major investment that provided both the strongest demonstration of China's potential role in Central Asia and the first meaningful collaboration of the three Central Asian countries in a mutually beneficial project. Specifically, it showed the ability of Turkmenistan, Uzbekistan and Kazakhstan to reach agreement on a set of complex issues such as the pipeline route, transit rates, and options for Kazakhstan and Uzbekistan to export their own gas through the pipeline. Cooperation on the pipeline continues amongst all parties. Annual capacity is being expanded, and the pipeline will be extended to link to the Kyrgyz system and further south to the Islamic Republic of Iran.

Connectivity southwards represents the last geographic frontier for the full spatial integration of the NCA subregion. The South Asian space is only sketchily mapped, and while connectivity to South-west Asia continues to be difficult, not least due to security considerations, renewed signs of cooperation amongst Central Asian countries, the Islamic Republic of Iran's re-entry in the global economy and gradual stabilization in Afghanistan have improved the prospect for South-western and Southern integration.

Transport: multi-directional integration

The time is ripe for the NCA region to actively pursue the RECI agenda along three principal axes of infrastructure connectivity:

Eurasian Rail Link

Chinese investments in high-speed and ultra-high speed railway infrastructure are evolving as the connectivity game-changer in Asia-Pacific. Given the stakes involved, there is still considerable uncertainty regarding the route that the long distance backbone line will take. Rail connections established since 2010 have almost all gone in a northerly direction via Urumqi, Astana and Minsk to Europe. This includes the important Chonqing-Duisburg route, which became operational in 2011-12 and is used westwards by electronics firms in China supplying EU markets (e.g. Acer, HP, Foxconn) and eastwards by automobile firms shipping parts to their Chinese assembly operations (e.g. Volkswagen, BMW, Audi) (Figure 1).

For time sensitive items traded along the global supply chain, this overland journey of 16 days, as compared to 36 days over maritime routes, has proved commercially viable. The possibility that Shanghai and Berlin could be linked in two days via Astana are not implausible given the speed with which China has constructed its domestic high-speed rail network⁹. In 2014, China invested in further improvements and completed the 1,776 kilometre Lanzhou-Urumqi

^{9.} High-speed rail rail links are imminent in other countries. In 2015 a China-led consortium won a contract to build a 77 kilometer high-speed line from Moscow to Kazan which will cut jour time from 12 to 3.5 hours, and could be extended to Astana and Urumqi. The Islamic Republic of Iran has signed a contract with Italy for a high-speed rail line from Tehran to Isfahan. Kazakhstan plans to provide high-speed trains to Almaty and Urumqi for Expo2017. As with many projects, it is unclear which high-seed lines will actually become operational, but the number of projects, and absence of major geographical obstacles, suggest that a high-speed network is likely.

segment, which now takes 10 hours. By extending the line by 460 kilometres, Alashankou on the Kazakhstan border could be reached in less than three hours.



Figure 1: Chongqing-Duisburg Time Comparisons, 2011-12

China is also developing a southern rail link. China has lent \$450 million to Uzbekistan for railway construction, the largest Chinese loan for this sector in Central Asia. China's Silk Road Economic Belt envisages an alternative Southern main line through Tashkent, Tehran and Istanbul (Figure 2), with Moscow featuring as a circuitous spur (Figure 3).



Figure 3: The New Silk Road Economic Belt

NEW SILK ROAD
ECONOMIC BELT

VENICE
ITALY

NAIROBI
KENYA

KUALA-LUMPUR
MALAYSIA

Source: CCTV - reproduced in Wong (2015).

These two routes have important differences, as the former includes Russia as a transit country to the EU, while the latter transits Turkey to Europe and is linked to maritime routes of the Middle East and North Africa. Given the large fixed costs of upgrading rail systems, the two routes might be mutually exclusive as mainlines between China and Europe, And if a single high-speed rail line is to be constructed, a key issue for the two largest Central Asian countries is whether it passes through the capital of Kazakhstan, Astana, or the capital of Uzbekistan, Tashkent.

Trans-Caspian Routes

The second major axis of integration involves CAREC Corridor 2 across the Caspian Sea¹⁰. Since 2010, Azerbaijan has been investing an estimated \$870 million on the construction of a major new seaport, logistics centre and associated free economic zone at Alyat on the Caspian Sea, that has increased its attractiveness. In turn, Kazakhstan has promoted a rail/ferry trans-Caspian route via its port of Aktau, and the first container from China arrived in Alyat in August 2015, having travelled over 4,000 kilometers in six days. It is expected that Alyat will handle 300-400 thousand containers per year by 2020. This route forms part of CAREC Corridor 2. The corridor is being extended westwards as Azerbaijan provided Georgia with a \$700 million loan to complete the missing links in an Azerbaijan-Georgia-Turkey route. Another version of this Corridor would pass South of the Caspian Sea through the Islamic Republic of Iran to Turkey and the Middle East¹². This blank on the CAREC map would be filled if the Islamic Republic of Iran were to become a member. Regardless of CAREC status, the Islamic Republic of Iran has ambitious rail construction plans as it prepares to reintegrate into the global economy.

10. This is not a new idea. The 1990s EU-promoted TRACECA route from CCA to Europe crossing the Caspian Sea saw USD 800 million of investments in ports/railways, but only modest benefits, mainly due to border obstacles between Azerbaijan, Turkmenistan and Kazakhstan.

-

^{11.} Valiyev (2015)

^{12.} The vision of a Beijing-London rail link via Istanbul was raised by completion of the first rail tunnel under the Bosphorus in 2013. In October 2015, Turkey's Prime Minister announced a \$3.5 billion project for a three level sub-sea tunnel under the Bosphorus which will connect Europe and Asia, with a second railway and two highways.

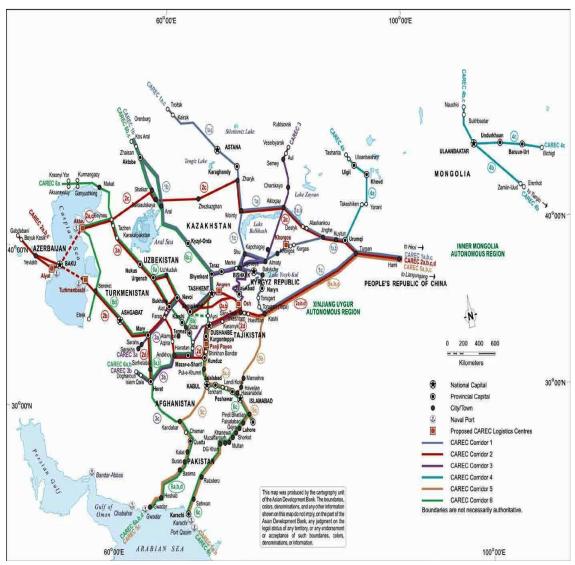
Connectivity to the South and South-west Asia

Connectivity southwards represents the third axis of integration. This presents a rare opportunity whose timing has matured for several reasons. One is the political will amongst the countries directly concerned. In recent reciprocal visits by the Heads of State of Pakistan and Tajikistan, the Prime Minister of Pakistan said that regional connectivity would transform the economic outlook for the entire region, and added that connectivity projects with Tajikistan will prove to be the game changer for the sub-region¹³. The Prime Minister of Pakistan also visited Kazakhstan, Kyrgyzstan and Turkmenistan and all visits featured south-bound connectivity.

China's announcement in April 2015 to invest \$46 billion to strengthen the China-Pakistan Economic Corridor will have important implications for the development of the southern corridor. The Chinese investment will strengthen the South-Central Asia connectivity by upgrading the Karakorum Highway. This is in line with CAREC's 2020 Transport and Trade Facilitation Strategy that recognizes the Karakoram Highway as an alternative route for Corridor 5 (See segment 5b in figure 4 below).

^{13.} Pakistan Today, 13 November 2015 available at thhp://www.pakistantoday.com.pk

Figure 4: CAREC Corridors



Plans are also underway to develop rail links between the main cities along the north and south of Afghanistan, linking with Pakistan and the Islamic Republic of Iran. Here, even though the security situation in Afghanistan poses difficulties as trucks face lengthy delays due to convoy requirements on segments of the route in both Afghanistan and Pakistan, it should be noted that the main bottlenecks are the Border Control Points (BCPs) between Pakistan and Afghanistan. Trucks spend more time queuing up at the border than on the roads; for example, in 2014 trucks took an average of 34 hours to pass through the Peshawar BCP, and 39.5 hours in Torkham on the Afghan side. Crossing times were even longer at the Chaman (Pakistan)-Spin Buldak (Afghanistan) BCPs, 36 and 60 hours respectively i.e. four days and nights to cross the border. While improvements in the overall security situation would help shorten travel times, especially on the Kandahar route, improvements in physical infrastructure and customs procedures at BCPs would help even more. For example, the BCPs could be better designed to separate passenger traffic from goods. Even difficulties related to sharing of freight information because Afghanistan uses ASYCUDA World, while Pakistan uses the proprietary Web-based One Customs System, could be resolved relatively easily with the necessary political will.

In December 2014, the Presidents of Kazakhstan, Turkmenistan and the Islamic Republic of Iran, formally hammered the last spike in a new railway along the eastern coast of the Caspian Sea (Figure 5). This route is important because it offers a North-South corridor between Russia

and India through Iran's extensive railway network and the Chabbhar Port, the Islamic Republic of Iran's only deep-sea port¹⁴ (Figure 6). It also reflects an increased engagement of Turkmenistan and the Islamic Republic of Iran in international trade, and Kazakhstan's desire for links to Southwest Asia and the Middle East as an alternative to the trans-Caspian Sea crossing or transiting the Russian Federation to Black Sea ports. Rail connections between China and Southwest Asia could also be improved, by directly connecting into Kazakhstan's rail network. The first train along this route, travelled with 32 containers of goods in early 2016, and arrived in Teheran after a 14-day journey from Zheijang Province on China's east coast, via Urumqi, Kazakhstan and Turkmenistan. The transit time compared favourably to the 45 days needed to ship goods by sea from Shanghai to the Bandar-e Abbas port, in line with the Islamic Republic of Iran's desire to be a key link in China-EU rail connectivity (Figures 2 and 3).



Figure 5: The Kazakhstan-Turkmenistan-Iran Railway

the goal of accessing Afghanistan, and potentially other long-distance rail trade, without transiting through Pakistan. In a memorandum of understanding signed in April 2015, India committed to spending \$1 billion on port development, and the Islamic Republic of Iran is also seeking China's participation in the port's development.

^{14.} A master plan for port development was drawn up in the 1970s but shelved after the 1979 revolution. In the 1990s India contributed to some construction work, and since the early 2000s India has been negotiating more substantial involvement, with

Transport corridor for Indian goods

KAZAKHSTAN

Arol
Seo
Usan
Uzbekistan

KYRGYZSHAN

IRAN

AFGHANISTAN

AFGHANISTAN

IRAN

Source: Uysal (2014)

Figure 6: Chabahar Port and a potential link for trade with India

The significance of these new links to South and Southwest Asia is that what was previously a transport system centred on one or two major corridors subject to chokepoints is now becoming a system of networked corridors where end-users can choose alternative routes as needed. These new routes promise a network of connected transport routes from Central Asia through South Asia to the ports on the Indian Ocean.

Although the journey from Central Asia to South Asia eastwards through Kashgar (Xinjian Province, China) and then southwards along the Karakorum Highway (segment 5b of the CAREC corridor) will always be more geographically challenging than the trans-Afghan routes from Central Asia to South Asia, investment in this route opens up a complementary road that can serve as an alternative in case conditions deteriorate in Afghanistan. Moreover, the availability of options permits traders to avoid the uncertainty of hold-ups at any border checkpoint. Having alternative routes also raises the opportunity costs for the country imposing the border point blockade. Similarly, although the Kazakhstan-Azerbaijan Trans-Caspian sea link will likely face serious challenges from Southern and South-western initiatives underway, the expansion of options is in itself trade-creating. Similarly, the Kazakhstan-Turkmenistan-Iran railway could stimulate increased trade not only among those three countries, but also between Russia and China and Southwest Asia.

Energy: Central Asian - South Asian integration

The ambitious connectivity plans southwards also extend to the energy sector. The export of electricity from Kyrgyzstan and Tajikistan to energy deficient South Asia through its flagship project launched on 11 May 2015 in Dushanbe, the CASA-1000 high voltage electricity line running over 1,200 km is intended as a first step in the development of a wider Central Asian-South Asian regional electricity market (CASAREM). The TAPI pipeline, which has been under consideration since 1994, was revived and the much awaited ground breaking ceremony for the Turkmen segment of the pipeline took place on 13 December 2015. Construction for the East-West national pipeline is underway, and in future this pipeline has potential to link up to various cross-border pipeline projects, westwards through trans-Caspian lines (Turkmenbashi to Baku) for gas exports to Europe, and eastwards to China.

Both CASA-1000 and TAPI are dependent on the security situation in Afghanistan. Likewise, there is some concern that if commodity prices remain at their historically low levels, over the long term, both projects may become financially less viable, given the high investments needed for generation, transmission and distribution infrastructure. Notwithstanding these concerns, both projects can provide route diversification while CASAREM can dilute the difficulties that the Unified Power System of Central Asia continues to experience. Given the long planning horizons involved, these initiatives should be viewed as complementary, offering options and innovative solutions, presenting triple-win outcomes between energy-deficient, energy surplus countries and renewable energy.

With the adoption of the 2030 Agenda, the profile of the NCA subregion as one of the world's largest repositories of renewable energies (wind, solar, hydropower) has been raised. As the most effective mode of energy trade for renewables is electricity (in contrast to traditional maritime or rail transport for trade in coal and oil) and as technological innovation has increased the transmission capacity over longer distances through ultra-high voltage grids, opportunities for trade in green energy are multiplying. Towards this end, ESCAP's Asian energy highway (AEH) initiative through the development of an integrated regional grid aims to increase the share of renewables in the energy mix, thus reducing energy shortages especially in South and South-west Asia, while lowering carbon emissions.

ICT: Central Asia to the World

While ICT provides ever-increasing knowledge and development-enhancing applications through broadband internet, the problem for most NCA countries is that the deployment of infrastructure, especially cross-border connections, has lagged. Consequently, although optic fibre cables have been deployed domestically reaching most of the major population centres in a meshed grid network, up to 90% of international traffic is routed onto submarine cables with the result that connectivity prices reflect the margins that telecom carriers in countries with sea-access are able to impose on landlocked neighbours, over and above the price for capacity sold through the submarine cable. Prices for international data transit are therefore very high: for example, twice-landlocked Uzbekistan faced a hefty US\$347 per Mbps per month for international connectivity in 2012, and most other Central Asian countries faced prices of more than US\$ 100 per Mbps for international capacity. Azerbaijan and Kazakhstan constitute exceptions in that they enjoy considerably lower transit prices (\$20 and \$15 respectively per Mbps).

Energy-exporting Azerbaijan and Kazakhstan stand out for the fact that they made significant infrastructure investments that multiplied their cross-border points of physical connectivity to international networks, so much so that they are also emerging as transit countries for through traffic of third countries. In the process, they import large international bandwidth capacity and trigger economies of scale that allow them to command much lower prices, than most other LLDCs. Azerbaijan in particular through its recent projects such as the Europe Persia Express Gateway and planned ones such as the consortium of private sector and government entities aimed at deploying a Trans-Eurasian Information Superhighway (TASIM) from Frankfurt to Hong Kong, China is positioning itself as a transit hub for the region.

Taking into consideration the situation of other countries, ESCAP studies (2014) identified missing cross-border links and ranked them into high, medium and low priority investment needs. While such investments in bilateral solutions can improve the situation in terms of competition, pricing and network robustness, the benefits would be even higher if they were integrated into a regionally cohesive approach for which ESCAP has set up a Working Group

on the Asia-Pacific Information Superhighway (WG-APIS), to devise principles and norms for seamless connectivity across Asia-Pacific.

The digital revolution has accelerated the inter-linkages and interdependencies across all infrastructures. Of interest is the World Bank's Digital CASA. Although still at an early stage, it builds on the principles and objectives of ESCAP's APIS, namely that through meshed configurations of intercountry terrestrial infrastructure connectivity, that share common passive infrastructures, opportunities in international transit digital traffic emerge for the landlocked subregion. A path-breaking aspect of the project which involves Tajikistan, Kyrgyzstan, Afghanistan and Pakistan is that it plans to leverage on the optical ground wire (OPGW), embedded in power transmission of CASA-1000, to provide additional telecom capacity, at the same time that electricity is being traded. Optical fibre ground wire can thus be used to perform the shared task of grounding and communication, at next to no additional cost while providing a diversified revenue-generating source. Examples abound of where such synergies can be reaped.

IV. Financial cooperation

Financial sector reforms are one of the most important elements for the full transition to market economies. The development of the banking and non-banking sectors enhances the intermediation function between savings and long-term investments. This is crucial for mobilizing domestic and foreign financing for private sector-led growth and economic diversification. The experience from the rest of Asia-Pacific shows that the level of financial sector development influences the depth and breadth of trade, and in turn, trade openness influences financial sector development.

Yet, financial exclusion remains substantial. The subregion's financial sectors are poorly integrated into global and regional financial markets, and overall, this is the sector that has most lagged behind in terms of integration. There are many reasons for this, some from influences beyond the financial sector, but importantly for inter-country cooperation to be credible, it requires a solid foundation of established national financial institutions as well as an implementable governance framework that builds trust and ensures mutual benefits.

As market institutions become more established with the due regulatory frameworks in place, the time appears ripe for a deepening of liberalization in the financial sector to take hold in NCA. To be sure, such reforms are complex because they involve a mix of liberalization through deregulation (the dismantling of barriers to market entry and the promotion of competition) and re-regulation (the establishment of a transparent, predictable and enforceable legal environment, with strengthened and independent regulatory agencies). For formerly centrally planned economies, the policy challenge is particularly complex as there are more regulatory barriers to dismantle and no benchmarks to guide effective regulation. In other words, the NCA countries are faced with the need to enhance competitiveness by increasing the contestability of markets, i.e. allowing entry of new domestic and global foreign service providers, while at the same time, implementing effective regulatory supervision of both domestic and foreign financial operators. The risks are further heightened by the asymmetric nature of information in economic systems in transition.

Membership to the WTO is important for further integration, precisely because the common thread of WTO rules in the services sector is to level the playing field between foreign and domestic service providers. This is an important step in creating a competitive within-country financial services supply. It also instils confidence in potential foreign investors and trade partners that liberalization policy stances will be followed through, as WTO commitments are legally binding.

In this regard, both Armenia and Georgia, early WTO entrants, have relatively open financial sectors and transparent regulatory frameworks. In Kazakhstan, the latest entrant, financial services is one of the three top sectors where Kazakhstan inscribed full liberalization commitments, although around half of the subsectors in financial sector have non-binding commitments. The Russian Federation and Tajikistan (the other two recent entrants) made extensive use of partial commitments in the financial services sector

A related question, given the increased importance of the Eurasian Economic Union (EaEU) as the only integrating intergovernmental institutional structure, set up so far, in NCA, is to what extent it is promoting financial cooperation. The stated goal of the Union is to create a common financial market with a view to enhance allocation of capital, diversify risks, increase competition and promote capital movement. Although the EaEU's two Consultative Committees for Financial Markets and Tax policy and Tax Administration, respectively, have engaged central banks, tax authorities and private stakeholders on a wide range of issues, that range from auditing, insurance, payment systems, and tax policy, including electronic

information exchange between tax authorities on certain types of income and assets, it appears that especially the poorer countries of the EaEU, could benefit from accelerated progress. By its very nature, a customs union is characterized by deep trade and investment integration, in which financial cooperation is an essential pillar. Likewise combatting cross-border tax evasion through more than exchange of information is crucial.

A deeper process of financial cooperation is a long term effort, that requires high levels of political economy trust and the involvement of ESCAP, as a UN commission with a deep and extensive institutional experience dedicated to analytical and normative work for development, could assist in harvesting from the Asia-Pacific region the best practices emerging from wider regional efforts. In this regard, the ESCAP secretariat and Eurasian Development Bank have launched a joint study on promoting an integrated investment area.

V. Shared vulnerabilities

Disasters and climate change

The NCA subregion's shared vulnerabilities emanate from the transboundary nature of disaster and environmental risks. Furthermore, the inherent difficulties in resolving these issues on a mutually cooperative basis, has increased the stakes in strengthening joint efforts that effectively mitigate ex-ante risks.

Not unlike other subregions of Asia-Pacific, the occurrence and intensity of disasters in NCA is on the increase. Notably, the IPCC (2007), Stern Review (Stern, 2006) and WBGU (2007) reports all refer to this semi-arid region as one of the most vulnerable areas to climate change globally. Some disasters are acute, difficult to predict, and typically entail large losses in human life and economic costs, notably earthquakes. Most of the other disasters experienced in the subregion, can be linked to extreme-weather conditions and climate change effects. They can also be acute, but they are more predictable (e.g. mudslides, glacial lake outburst floods). Other disasters evolve slowly, but nevertheless can also have very high costs if timely mitigating actions are not taken, notably droughts. Almost without exception, disasters are transboundary in origin and impacts.

Mitigating action to reduce risk thus lends itself well to measures taken on a subregional as well as regional and international cooperative basis. For example, in 2000 a severe drought hit the Caucasus, but Tajikistan, Turkmenistan and Uzbekistan were not spared, while effects spread as far as Iran, Afghanistan and western Pakistan. Almost 60 million people were affected, and national economies suffered from sizable losses. In 2005, the two main rivers of Central Asia, Amu Daria and Syr Daria, and their tributaries flooded, damaging infrastructure, destroying settlements and farmlands. Likewise, the areas comprising a) Georgia, Armenia and Azerbaijan, b) Kyrgyzstan, Tajikistan and South-eastern Kazakhstan, and c) South/South-West Turkmenistan are highly exposed to trans-boundary seismic risk, as was the case in 1988 in Armenia or in 2008 in Kyrgyzstan.

The Sendai Framework for Disaster Risk Reduction 2015-2030 has recommended the creation of regional programs to address shared vulnerabilities. Indeed, Asia-Pacific as the most disaster-affected region of the world, has a number of initiatives of note. ASEAN countries founded the Coordinating Centre for Humanitarian Assistance on Disaster Management with the main goal to assist people and areas hit by natural disasters; SAARC governments established a Food Bank in order to address sudden shortages of food among their populations; Afghanistan, Pakistan India, Nepal, Bhutan, China, Bangladesh and Myanmar created the Regional Flood Information System with the aim of reducing flood vulnerability through improved flood forecast and management in the Indus, Ganges, Brahmaputra, and Meghna basins. Kazakhstan and Kyrgyzstan signed an agreement on the establishment of a Center for Emergency and Disaster Risk Reduction that entered into force in 2015. ESCAP has provided technical assistance aimed at developing a programme that would enable the Center to become fully operational through the promotion of policies that are beneficial for all countries of North and Central Asia.

An institutional framework for addressing shared vulnerabilities

In NCA, disaster risk reduction initiatives necessarily involve coordination between the water, energy, and food/land sectors. This is challenging because policy process at the national level generally follow a sectoral approach that does not take into account the interconnections and interdependence among the three sectors. This complexity increases substantially across the

national boundaries. At all times, there is a tension between the three interfaces as a balance between the competing needs both sectorally and intercountry needs to be sought.

ESCAP has been at the forefront of addressing shared vulnerabilities as a regional public good. In particular, ESCAP has promoted regional cooperation as a modality for strengthening early warning systems. Collective early warning systems can help mitigate the worst impacts of disasters and are more (cost-) effective when action is coordinated among countries. Furthermore, trans-boundary cooperation can identify inter-sectoral synergies and determine policy measures and actions that could alleviate conflicts related to the multiple use of, and needs for common resources.

There have been several initiatives across the whole of ESCAP region, notably the Regional Integrated Multi-Hazard Early Warning System for Africa and Asia (RIMES) in which Armenia, the Russian Federation and Uzbekistan participate in the system's work as collaborating countries, as well as ESCAP's regional mechanism for drought monitoring. Kyrgyzstan recently expressed interest to become the focal point for the Regional Drought Mechanism for the Central Asian subregion.

In depth study and inter-country coordination efforts are needed to promote efficient resource use and policy coherence that minimizes trade-offs and maximizes synergies. Although the concept of a water-energy-food nexus is gaining momentum in other regions, more efforts will be needed to understand the linkages and promoted an integrated approach.

On a subregional scale, interstate bodies promoting cooperation between countries in several sectors already exist, notably, the Inter State Commission for Water Coordination (ICWC), including the Basin Water Association Syrdarya (BWO), the Interstate Council for the Aral Sea (ICAS), and the International Fund for Saving the Aral Sea (IFAS). Nevertheless, these entities have limited powers, and, without the required political will to cooperate, they are unable to formulate cohesive planning for a sustainable basin resources use. In moving forward on RECI, building disaster resilience through regional cooperation is crucial for implementation of the SDGs as is taken up below.

VI. A RECI agenda for NCA

NCA countries continue to sit at the historical crossroads of the flow of goods between Europe, South Asia, West Asia and East Asia, having hosted for centuries the most important trade routes traversing the Asian continent. With China's determination to revive the ancient Silk Road and reinstate the vast Eurasian steppe as a crucial linking hub for East and West in the 21st century, many of the laggard post-Soviet cities are being offered the chance to once again become trade hubs. For example, Khorgos, on the Kazakh-Chinese border, has attracted billions of dollars through investments in the Kazakhstan Railways (KTZ)-backed dry port that now has a cargo-handling capacity of 200,000 containers. Similarly, the economic and socio-political dividends that can be reaped by reviving the 2,000-year old trade exchanges between China and Central Asia will extend beyond bilateral trade relations that exploit raw materials and source markets for Chinese exports. The SREB offers to create a "belt of economic prosperity" that can open up dormant economic relations among countries previously barred by inwards-oriented economic policies.

a. Role of ESCAP

Within the remarkable global leadership shown in setting an ambitious and visionary 2030 Agenda for Sustainable Development, the ESCAP agenda for RECI is built on the premise of whether political leadership will embrace forces of transformation needed to align policies and institutions with sustainable development outcomes. Crucially in NCA it means that investments in physical infrastructure will lead to lasting development gains if they are accompanied by an architecture that builds inter-country cooperation and opportunities for private sector actors as well. With most NCA countries already committed to modernization and participation in global markets, cross-border collaboration facilitated by the unprecedently large investments in Eurasian connectivity, driven by China which this year Chairs the G20, offers what would appear to be easy gains to fuel economic growth. The subregion's changing political dynamics, with new integration frontiers opening up, notably energy-rich Islamic Republic of Iran, combined with ESCAP's overarching framework of norms, can help build the soft infrastructure in support of CAREC corridors linking Central Asia to Southwestern and South Asian economies in an innovative, invigorated, interconnected and inclusive way.

Although the pathway to integration will not be easy, requiring the political commitment to remove entrenched barriers such as bottlenecks in cross-border trade, even among EaEU members, and solving amicably territorial claims and disputes, ESCAP offers a vital platform, through interalia, its Commission, the Special Programme for Economies of Central Asia (SPECA) and the Asia-Pacific Forum on Sustainable Development, where governments can work together to simplify processes, build the industrial capacity that responds to the growing prosperity and demand of Asia-Pacific trade partners and competes on an intra-regional scale. As trade will become a crucial component of growth for NCA, particularly for key commodities, such as gas and oil, working together to create an environment conducive for value-added regional value chains will be a main pathway towards diversification for inclusive and sustainable growth.

b. Recommendations

Drawing from the analysis above, five recommendations and policy actions for NCA are proposed

1. Consolidate on the Eurasian Economic Union by broadening membership in support of RECI

While key NCA countries have been involved in building the EaEU, with only 5 participating economies that account for 1.9% of global GDP, as compared to the 21 members that account for 58% of global GDP, of the Free Trade Area of Asia-Pacific (FTAAP), for example, there is much to be gained from expansion of membership. The Russian Federation is a member of both initiatives, and recent developments that broaden agreements with Viet Nam and Singapore bode well for EaEU to evolve into a platform of wider outward oriented liberalization commitments in support of WTO principles and the new wave of mega trade initiatives that Asia-Pacific is involved in.

2. Promote plurilateral model agreements on intermodal transport and cross-border trade facilitation

ESCAP can help build the soft infrastructure in support of CAREC corridors 5 and 6 linking Central Asia to the large economies of Southwest and South Asia, as well as corridors 1 and 2. Using the multidisciplinary structure and regional coverage of ESCAP's membership, ESCAP can provide its members and associate members with an overarching framework of norms to which national policy-making and interconnectivity can be anchored.

As a start, the focus could be on subsets of like-minded countries that are business-oriented and interested in deeper integration as ASEAN has done with the establishment of single windows, integrated border crossings, mutual recognition agreements and other measures. Such goals may be best addressed through the flexibility that plurilateral approaches offer. Two subsets of countries are proposed: Pakistan-Afghanistan-Tajikistan and Kazakhstan-Azerbaijan-Georgia-Turkey. This can be extended to other country groupings in future, so that the plurilateral approach serves as a building block for an integrated and regionally cohesive approach. Interested countries may opt-into the subset at any time, while a country that becomes more concerned about policy sovereignty and/or autonomy, may opt-out at the cost of remaining outside the international value chains. For those who chose to opt-in, the existence of multiple route configurations would help to ensure that non-participants do not disrupt the entire chain.

3. Promote cross-sectoral infrastructure synergies

With the revamping of transport routes, ICT analysts have suggested that simultaneously installing upgraded fiber ICT infrastructure will spur industry demands, production, innovation and cross-border relations. Evolving technologies offer the prospect of developing open and expanding internet ecosystems, capable of overcoming the tyranny of distance and isolation faced by many of the landlocked North and Central Asian communities forced overseas for work out of lack of employment opportunities. Telecommunications infrastructure in the subregion is currently limited, also slowing the expansion of trade for the three largest markets of Azerbaijan, Kazakhstan and Russia across the subregion. Digital connectivity is also a way to boost resilience in increasingly volatile climates, with the rapid spread of information spurring both recovery and preparedness, instrumental for the 2030 SDGs.

ESCAP was among the first international organizations to encourage countries to design policies that encourage deployment of ICT infrastructure along passive infrastructures such as power grids and railways, to integrate peripheral areas into larger networks and production chains. Dry Ports are key to ensure landlocked countries are not excluded the economic gains of coastal access, and create more equitable distribution of the gains from trade, while reducing the negative environmental impact of transport in congested urban areas. When combined with ICT connectivity, dry ports can become internet hub cities that diversify revenue generation in an efficient and commercially viable way. For example dry ports that have been constructed over the past decade in Lao PDR and Myanmar are forecast by 2025 to bring in economic returns of 16.79 percent and 19.15 percent, respectively.

4. Strengthen financial cooperation through the EaEU

Financial cooperation needs to accelerate beyond information sharing. This is important for NCA as financial stability will be reinforced by the diversification of its financial systems and asset portfolios which henceforth will need to cater to the emerging dictates of a more inclusive and sustainable development trajectory. The EaEU, for one, with its like-minded members provides an ideal platform to deepen financial cooperation anchored to international norms and regional regimes. Furthemore, its small membership offers some leeway to maintain some operational elements that would encompass a more decentralized and flexible approach when comfort levels of deeper integration diverge.

5. Strengthen monitoring and early warning for transboundary disasters through enhanced cooperation

To reduce shared vulnerabilities, there is a need to address the significant gaps that exist for cross-border hazards in the subregion. Enhanced cooperation based on a strengthened science-policy interface supported by right data, technical coordination mechanisms and capacity-building is crucial. In this regard, ESCAP's drought monitoring mechanism as well as the capacity development activities provided by ESCAP's dedicated Regional Institutes (CAPSA, CISAM, APDIM) can provide multi-hazard early warning systems that will reduce the trade-offs inherent to the water-energy-food nexus and climate change impacts of this semi-arid area.

References

ADB (2006): Central Asia: Increasing Gains from Trade through Regional Cooperation in Trade Policy, Transport and Customs Transit (Asian Development Bank: Manila).

ADB and ESCAP (2009; updated 2013): *Designing and Implementing Trade Facilitation in Asian and the Pacific* (ADB and ESCAP: Manila and Bangkok)

ADBI (2014): Connecting Central Asia with Economic Centers (Asian Development Bank Institute: Tokyo).

Atkinson, Derek (2015): Energy Connectivity in Asia and the Pacific (ESCAP).

Baldwin, Richard (2011): Trade and Industrialisation after Globalisation's 2nd Unbundling: How building and joining a supply chain are different and why it matters, *NBER Working Paper No. 17,716*, National Bureau of Economic Research, Cambridge MA.

CAREC (2012): Corridor Performance Measurement and Monitoring Annual Report 2012 – at http://www.carecprogram.org/uploads/docs/CAREC-CPMM-Reports/1-CAREC-CPMM-Annual-Report-2012.pdf

ESCAP (2014): Bridging Transport, ICT and Energy Infrastructure Gaps for Seamless Regional Connectivity (Bangkok).

ESCAP (2014): Economic and Social Survey for Asia and the Pacific (Bangkok).

ESCAP (2015): Trade Facilitation and Paperless Trade Implementation Survey 2015: Asia and the Pacific Report.

IMF (2015): *Making Public Investment more Efficient* (International Monetary Fund: Washington DC).

Kaminski, Bartlomiej, and Saumya Mitra (2012): *Borderless Bazaars and Regional Integration in Central Asia: Emerging patterns of trade and cross-border cooperation* (World Bank: Washington DC).

Laruelle, Marlene, and Sebastien Peyrouse (2012): Regional Organisations in Central Asia: Patterns of Interaction, Dilemmas of Efficiency, *University of Central Asia Institute of Public Policy and Administration Working Paper No.10*.

Linn, Johannes (2004): *Economic (Dis)Integration Matters: The Soviet Collapse Revisited*, unpublished paper (Brookings Institution, Washington DC).

Minasyan, Sergey (2015): Armenia keeps on Balancing: Between the European Union and the Eurasian Economic Union, *PONARS Eurasia Policy Memo No.377* (The George Washington University, Washington DC).

Mogilevskii, Roman (2012a): Trends and Patterns in Foreign Trade of Central Asian Countries, *University of Central Asia Institute of Public Policy and Administration, Working Paper No.1*.

Mogilevskii, Roman (2012b): Re-export Activities in Kyrgyzstan: Issues and Prospects, *University of Central Asia Institute of Public Policy and Administration, Working Paper No.9.*

Ordabayev, Aset (2015): *The Geopolitics of Transport Corridors in Central Asia*, Working Paper of the Institute of World Economics and Politics, Astana-Almaty.

Peyrouse, Sebastien (2015): The New Silk Road Initiative: Are its underpinnings sound? *PONARS Eurasia Policy Memo No.384* (The George Washington University, Washington DC).

Plummer, Michael (2014): "The Emerging "Post-Doha" Agenda and the New Regionalism in the Asia-Pacific" in Masahiro Kawai, Peter J. Morgan and Pradumna B. Rana, eds. *New Global Architecture: The Asian Perspective* (Edward Elgar: Cheltenham UK), 172-96.

Pomfret, Richard (1999): *Central Asia Turns South? Trade Relations in Transition* (The Royal Institute of International Affairs, London, and The Brookings Institution, Washington DC).

Pomfret, Richard (2006): *The Central Asian Economies since Independence* (Princeton University Press, Princeton NJ, 2006).

Pomfret, Richard (2009): Regional Integration in Central Asia, *Economic Change and Restructuring* 42(1-2), 47-68.

Pomfret, Richard (2014): "The Economics of the Customs Union and Eurasian Union" in S. Fred Starr and Svante Cornell (eds.) *Putin's Grand Strategy: The Eurasian Union and Its Discontents* (Central Asia-Caucasus Institute & Silk Road Studies Program: Washington DC), 49-58.

Pomfret, Richard, and Patricia Sourdin (2014) "Global Value-Chains and Connectivity in Developing Asia – with application to the Central and West Asian region," *ADB Working Paper Series on Regional Economic Integration No.142*, Asian Development Bank, Manila.

Ritzinger, Louis (2015): The China-Pakistan Economic Corridor, *National Bureau of Asian Research*, *NBR Commentary*, 5 August.

Schenk, Caress (2015): Labor Migration in the Eurasian Union: Will freedom of movement trump domestic controls? *PONARS Eurasia Policy Memo No.378* (The George Washington University, Washington DC).

Sourdin, Patricia, and Richard Pomfret (2012): *Trade Facilitation: Defining, measuring, explaining and reducing the cost of international trade* (Edward Elgar: Cheltenham UK).

UNDP (2005): Central Asia Human Development Report: Bringing Down Barriers: Regional

cooperation for human development and human security (United Nations Development Programme: Bratislava).

Valiyev, Anar (2015) "Can Azerbaijan revive the Silk Road?" *PONARS Eurasia Policy Memo No.382*, (The George Washington University, Washington DC).

Wong, Catherine Tsoi-lai (2015) "Xi'an readies for Key Role in 'One Belt, One Road' Initiative", *Global Times* 21 April. Available: http://www.globaltimes.cn/content/917943.shtml

Xu, Hingtian (2014) "Revisit the Silk Road; Railway speed-up and export, unpublished paper presented at the World Bank Annual Bank Conference on Development Economics," Available: http://siteresources.worldbank.org/EXTABCDE/Resources/7455676-1401388901525/9576629-1401389040426/Hangtian_Xu.pdf