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Achieving the Sustainable Development Goals in North and Central Asia

Session II: Review of Implementation of the Sustainable Development Goals at National Level

Session IV: Environmental Sustainability and Resource-Use Efficiencies

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Achieving the Sustainable Development Goals in North and Central Asia

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Executive Summary

For economies in transition, given the determinant role that state expenditures play in shaping the economy, understanding the immediate, medium and long-term challenges the subregion faces is important for the successful implementation of the SDGs. This is especially true in the event of sudden shocks to key fiscal drivers such as growth, interest rates and revenue earnings.

The MDG implementation period coincided with a resource boom; GDP growth was rapid, and overall, North and Central Asian (NCA) countries' performance in implementing the Millennium Development Goals (MDG) was positive. The share of the population in NCA living under the poverty threshold fell by almost 88%[1]. The under-five mortality rate dropped from 49.0 in 1990 to 22.6 deaths per 1,000 live births in 2013, however, large differences remain between countries, ranging from 10.1 in the Russian Federation to 55.2 deaths per 1,000 live births in Turkmenistan[2].

The launch of the SDGs coincides with steep declines in commodity prices (notably oil by around 70% since June 2014 and January 2016) and marked economic slowdown, in addition to rising job insecurities and inequalities, not seen in decades. Economies of the subregion are still dependent on a small number of primary products with capital-intensive technology, the main benefits of which tend to accrue to the state, or resource-owners.

Success in the implementation of the 2030 Sustainable Development Agenda and SDGs will depend on whether this new agenda will trigger new momentum for economic reform and change the transition path of countries. Such a transition will require investment in public goods, notably in education and health, which are the social sectors most needed for building sustainably over the long-term more inclusive and equitable societies. At the same time, strengthening the motivation for wealth creation through the efficient use of capital and labour productivity, the economy would remain connected to its comparative advantage. In economies which export primary sector goods, it encourages industrialization even at relatively low per capita income.

Emerging priorities for the implementation of the 2030 Sustainable Development Agenda include:

- **Rebalancing and reviving economic growth:** With the volatility and recent sharp declines in crude oil and commodity prices, the key for NCA in achieving the SDGs will be to reduce their reliance on exports in primary commodities (and remittances for some countries) in favour of more diversified and globally competitive exports of higher value-added products. However, this will require deep reforms in public investments and subsidies, governance, innovation and human capital development.

- **Enhancing infrastructure connectivity for trade and investment competitiveness:** With seven of the nine NCAs landlocked, modernization of infrastructure related to transport, power generation and communication will be essential for economic competitiveness, sustainability and inclusiveness. There are signs of progress, including the Turkmenistan-Afghanistan-Pakistan-India (TAPI) gas pipeline launched in 2015. Technological advances

[1] MDGs 2015 data, poverty $1.25 (1993-2012), aggregate calculated by UN ESCAP
[2] MDGs 2015 data, aggregates calculated by UN ESCAP

have also increased the viability of large multi-country power grids, along with a higher share of renewables in the energy mix.

- **Investing in people:** Human capital is the second most abundant resource in the subregion. Although extreme poverty was nearly eradicated, inequality and social exclusion have increased.[3] In general, education targets were met but the quality of education is unsatisfactory in many countries. In the health sector, improvements in child, infant and maternal mortality, as well as access to water and sanitation, were slow particularly in the low-income countries of NCA and Afghanistan. The gains from MDGs were distributed inequitably. Investments in social infrastructure, especially education and health, will need to accompany investments in hard infrastructure for the SDGs to be successfully implemented. With a growing workforce, gainful employment and the narrowing of deep gender pay gaps will be at the heart of immediate poverty reduction and social inclusion, needs. At the same time, putting in place plans for population ageing will be crucial for the long-term sustainability of a more equitable society, as by 2050 NCA is projected to be the second highest subregion of Asia-Pacific with persons above 60 years of age. Experiences, lessons learnt and best practices emanating from East and North-east Asia, the subregion with the highest share will be instructive.

- **Addressing shared environmental vulnerabilities:** NCA is highly vulnerable to climate change. Growing demands for water, energy and food, coupled with the increasing frequency and intensity of weather events and climate-related disasters, exacerbate the existing vulnerabilities: land degradation together with advancing desertification and declining crop yields. Twin challenges remain for the subregion's energy security, which include addressing the low capacity of electricity generation and its highly inefficient use. Relatedly, the management of water resource across countries is fraught with difficulties.[4] The launch on 12 May 2015, of the CASA-1000 project in Dushanbe, Tajikistan is an important contribution to addressing these challenges. While NCA greenhouse gas (GHG) emissions are low overall, Kazakhstan and Turkmenistan are among the highest GHG contributors per capita in the world. Opportunities therefore exist for GHG reductions, such as modernizing energy infrastructure (transmission and distribution networks) and phasing-out inefficient subsidies.

- **Facilitating institutional arrangements for the implementation of SDGs:** Armenia, Azerbaijan, Kyrgyzstan, and Tajikistan, among others, have evolved strategies linking development plans to the SDGs. Furthermore, Georgia is one of five Asia-Pacific countries that have committed to voluntary national reviews. Addressing the functioning and effectiveness of national and subnational institutions in sectors such as public administration, public finance and the judicial branch is high on the institution building agendas of most countries. At the subnational level, NCA countries also give great importance to promoting economic development, education and public services, as well as improving the living conditions in all their regions, especially rural areas. Kazakhstan has initiated a national

[3] See paper prepared under Session V: Rebalancing Development for Equality, Inclusion and Social Justice.
[4] See for example, note by the secretariat "Fostering sustainable development in Asia and the Pacific" presented at the Asia-Pacific Forum on Sustainable Development, in Pattaya, Thailand, May 19-21, 2014 available at http://www.un.org/ga/search/view_doc.asp?symbol=E/ESCAP/FSD/1&Lang=E

dialogue that will build on ongoing initiatives, notably Expo2017. This will be the first time that the global Expo event is hosted in NCA, and with the theme of "future energy", a major institutional and policy impetus will be given to promoting innovative and practical energy solutions throughout the subregion. Kazakhstan's Green Bridge Partnership Programme is also expected to benefit from accelerated implementation after Expo2017.

Achievement of the SDGs in NCA will depend on the extent to which lasting momentum is triggered that will accelerate graduation from the "in transition" phase of the subregion. **Priority areas for bridging the capacity gap** to promote such a graduation include:

- **Improving governance to enhance policy planning and implementation**, in order to fill unaddressed inefficiencies. While governance has improved, there are still gaps and inefficiencies that need to be addressed, notably in areas such as financial and environmental regulation, as well as the integration of SDGs into national policy-making and fiscal frameworks. National institutional frameworks for sustainable development should also support capacity-building for follow up and review on the 2030 Agenda, including through the strengthened engagement of civil society. Kazakhstan provides examples of modalities for civil society engagement which may suit the particular circumstances of other countries in the subregion.

- **Strengthening policy formulation on trans-border issues** to address among others, infrastructure connectivity, trade facilitation, market integration, and disaster risk reduction. In addition to skill development, this will also require setting up appropriate national institutional coordination mechanisms or making better use of existing ones such as SPECA, that are able to promote policy coherence and consistency across neighbouring countries.

- **Enhancing data and statistical capacities** for implementation of the 2030 Agenda should receive priority attention, as the strategic implementation of the 2030 Agenda is contingent on the availability of timely and reliable data, as well as the development of internationally comparable indicators where they are missing. Furthermore, consistent and transparent use of data could provide insights, for example regarding where progress is lacking, that would bring direct implementation benefits. Data paucities are quite substantial in NCA, not only in macroeconomics and trade, but across all policy domains. In this regard, to help determine where the subregion stands in terms of SDG indicator readiness, ESCAP has mapped data availability by tiers I, II and III in SPECA countries.[5]

Besides offering a holistic institutional framework for capacity-building, **ESCAP** is mandated and well placed to give new momentum to subregional cooperation and integration in North and Central Asia in the following:

- **Regional connectivity**[6] to promote the smooth flow of goods, services and people; build up regional trading and investment corridors, create wide renewable energy networks, and

[5] For an in-depth discussion see the paper prepared under session 3 titled "SDG indicator readiness in SPECA countries"
[6] For an in-depth discussion see the paper prepared under session 1 titled "North and Central Asia as a Transit Hub: Potential, Challenges and Way Forward"

build mutually beneficial, regional economic integration and cooperation with Russia, China and Japan.

- **Equity and social justice** by strengthening the social dimension[7] of the 2030 Agenda and ensuring its effective integration into the economic and environmental dimensions[8]. Political commitment needs to be fostered to strengthen the principle of universality and related legislation in a rights-based foundation. Increased and more effective participation of women in parliamentary decision-making, as well as enhanced fiscal budgetary outlays in education, health and social protection, especially in pension systems for the elderly are critical for economies in transition of the subregion. Furthermore, increased opportunities for regular migration and formal work, as well as protection of migrants abroad based on existing international norms such as ILO Conventions 97 and 143, can also strengthen social justice goals. By investing in an already resourceful human resources base, this sequencing of priorities in NCA could accelerate the realization of SDGs progressively – not only would poverty and social inclusion be addressed, but economic growth through diversification and employment-generation would be more resilient, while environmental protection would be more sustainable.

- **Food, water and energy security** by strengthening subregional and regional cooperation within the framework of SDG implementation. The nexus is strong in NCA, due to growing demands for water, food and energy, coupled with environmental degradation exacerbated by the increased intensity of extreme weather events and climate-related disasters. Addressing these interlinkages with the indivisibility of SDGs provides the subregion with the means to improve outcomes, and muster the political will to further enlarge the scope of cooperation and cross-sectoral coordination, particularly in the Syr Darya Basin. Furthermore, subregional climate change adaptation and disaster risk reduction measures can be particularly cost-effective policies when actions are taken on a cooperative subregional basis. For example, the 2015-2030 Sendai Framework for Disaster Risk Reduction promotes interstate DRR cooperation, in addition to encouraging the creation of regional programs and collaborative centers.

  Agreeing on a long-term agenda for regional economic cooperation and integration for SDG implementation at the political, policy and capacity-building levels, form major building blocks of this holistic and integrated subregional policy agenda. In this regard, SPECA offers a multistakeholder coordinated and coherent means of implementing SDGs. While undoubtedly, governments must take full ownership and lead the process, efforts by national authorities alone, will not be sufficient to guarantee the achievement of the SDGs.By bringing countries around a common purpose of integration, interconnectivity and institution-building, SPECA can serve as a mechanism that helps ground its countries' national efforts in ESCAP's and ECE's wider regional strategies for the attainment of the sustainable development goals of the 2030 agenda. Towards this end, the UN Secretary-General Ban Ki-moon, in September 2016, underlined [9] that "World leaders recognized like

[7] For an in-depth discussion see the paper prepared under session 5 titled "Rebalancing development for Equality, Inclusion and Social Justice"

[8] Also see note by the secretariat "Fostering sustainable development in Asia and the Pacific" presented at the Asia-Pacific Forum on Sustainable Development, Pattaya, Thailand, 19-21 May 2014, available at http://www.un.org /ga/search/view_doc.asp?symbol=E/ESCAP/FSD/1&Lang=E

[9] Opening of High-level side event on "Regionalism and the 2030 Agenda for Sustainable Development" organized on the margins of the General Debate of the 71st General Assembly

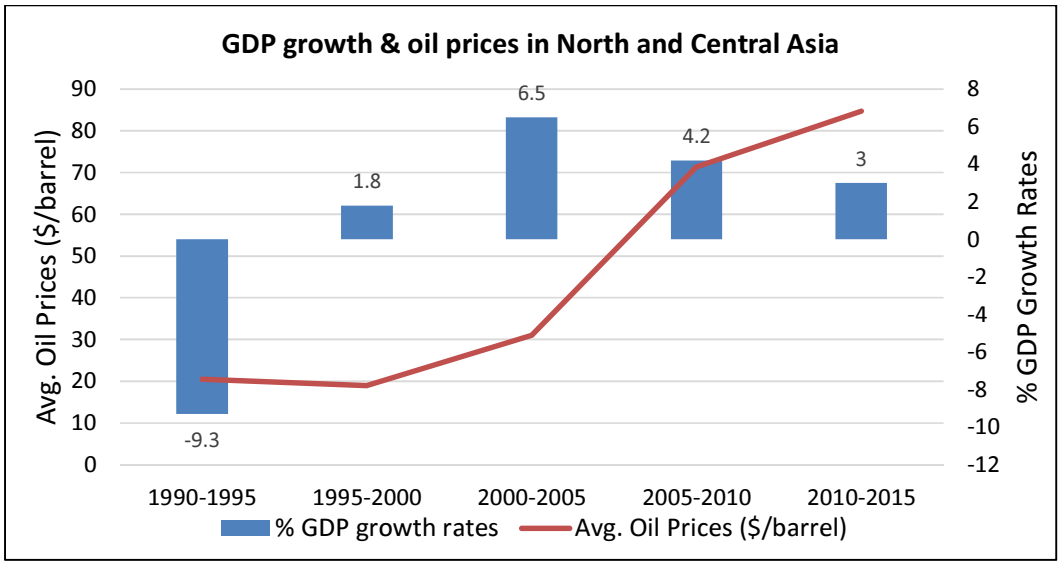
never before the role of regional cooperation in implementing and assessing progress towards 2030 Agenda. … The UN Regional Commissions are central to our work. Every day, they promote regional cooperation and integration and extend their expertise for socio-economic development."

1. Introduction

The aim of this report, prepared by ESCAP's subregional office for North and Central Asia (SONCA), is to examine the immediate, medium and long-term challenges faced by the North and Central Asia subregion in achieving the SDGs, particularly in the event of sudden shocks to key fiscal drivers such as growth, interest rates and state revenues. In identifying the subregional priorities of the 2030 Sustainable Development (SD) Agenda, the report pays particular attention to fiscal expenditures due to their significance in determining the composition of aggregate demand and supply. For economies in transition, the allocative function of government still plays a determinant role in the direction of SDG implementation. During favorable economic conditions, governments will be more incentivized to align their spending priorities to the realization of the 2030 SD Agenda. Reviving economic growth in NCA is the key policy imperative for a rebalancing of the development agenda. In turn, more effectively integrating goals of social equity and environmental sustainability in institutional policy making processes will enhance the resilience and sustainability of economic growth and fiscal revenues in a virtuous circle. Consequently, providing better knowledge of medium-term trends and the long-term prospects -- which is often lacking -- and better understanding of the impact of policies and feedback loops between economic growth, social inclusion and environmental sustainability, may enable the NCA subregion to be better prepared for the implementation of the Sustainable Development Goals (SDGs).

Understanding the challenges is especially important in North and Central Asia since commodity prices and economic growth closely track each other (figure 1), and the launch of the SDGs coincided with steep declines in commodity prices, (oil prices declined around 70% from a high of 111.71 USD in June 2014 to a low of 32.13 USD per barrel in January 2016). The marked economic slowdown, as well as rising job insecurities, inequalities and social tensions experienced, underlined interalia, the heavy dependence of the subregion on a small number of primary products that involve capital-intensive technology such that the main benefits accrue to the state, or resource-owners. Over the last 25 years, natural resource rents accounted for around 30% of GDP and the pattern is set to continue in the absence of reforms to promote economic diversification and resilience.

Figure 1: GDP growth and oil prices in NCA



Sources: UN ESCAP & Federal Reserve Economic Data

In addition, the substantive economic growth and poverty reduction since the mid-1990s has not necessarily been translated into progress for improving the quality of institutional, economic, social and environmental policy-making.

Section 2 assesses the outlook for sustainable development in the region based on progress of the MDGs. Drawing from the findings of Section 2, and within the context of current policy-making, Section 3 considers the subregional priorities of the 2030. The final sections of the paper assess implementation challenges and provide recommendations for institutional, capacity-building and policy reforms.

2. Status of sustainable development: main development challenges[1,2]

During the MDG implementation period, the greater part of which coincided with a resource boom, GDP growth was rapid. Notwithstanding shortcomings in some social and environmental MDG indicators, North and Central Asian countries' overall performance in MDG implementation was positive, especially in comparison with some developing countries in Asia and the Pacific. This prepared a solid base for further progress.

Having said this, a notable feature of MDG implementation was that results were not equitable and consistent across countries of the subregion. While many countries experienced rapid economic growth, not all did, and there were indeed pockets of poverty and depravation among communities and families that are masked by statistical averages and aggregation. To ensure that more attention is paid to the newer focus areas of social inclusiveness and justice, environmental sustainability, and governance, it is essential to take stock of the MDG shortcomings and gaps.

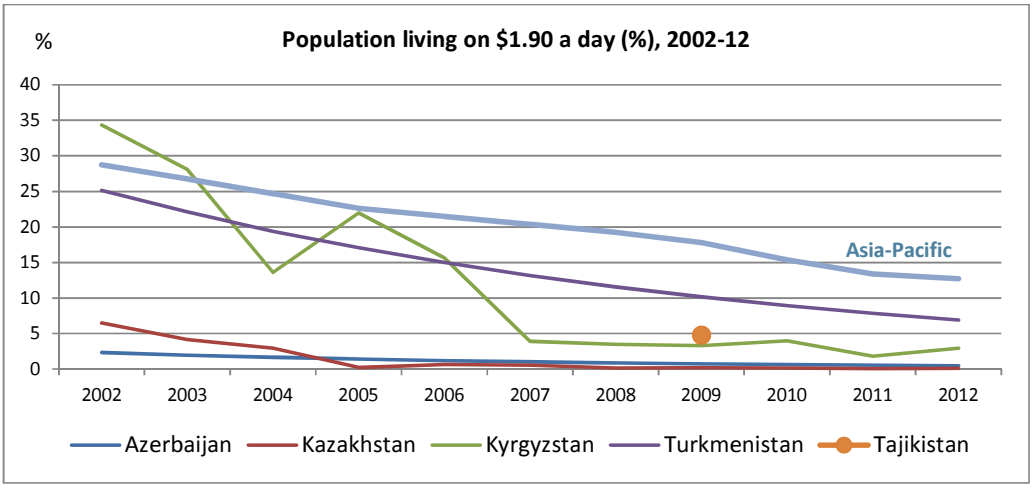
Economic Agenda[10]

Poverty rates declined substantially over the MDG implementation period, and these declines can be attributed mainly to economic growth in terms of income and consumption.

The share of the population in NCA living under the UN's $1.25 per day poverty threshold[11] was about 6.5% in 1993. By the end of 2012, this figure had fallen to 0.8% of the population, meaning a reduction by almost 88% of the initial value. At PPP$1.90/day, as shown in Figure 2, the population living in poverty has fallen to under 7% in all countries (where data are available), which is well below the Asia-Pacific aggregate of 12.7%.[12] Furthermore, on the labour front, North and Central Asia performed relatively well, with a rise in the employment-to-population ratio from 58% to a predicted 60% by the end of 2015, along with a reduction in the share of workers living in extreme poverty from 5% to 1%.

[10] Data presented in this section of the report draws from the United Nations' 2015 Millennium Development Goals Report and the joint ESCAP, UNDP and ADP report titled "Making It Happen: Technology, Finance and Statistics for Sustainable Development in Asia and the Pacific".
[11] The UN poverty threshold defined as populations living on less than $1.25 a day in 2005 PPP.
[12] Recent data are not available for Afghanistan and Uzbekistan; limited data is available for Tajikistan.

Figure 2: Population in SPECA region living on $1.90 per day

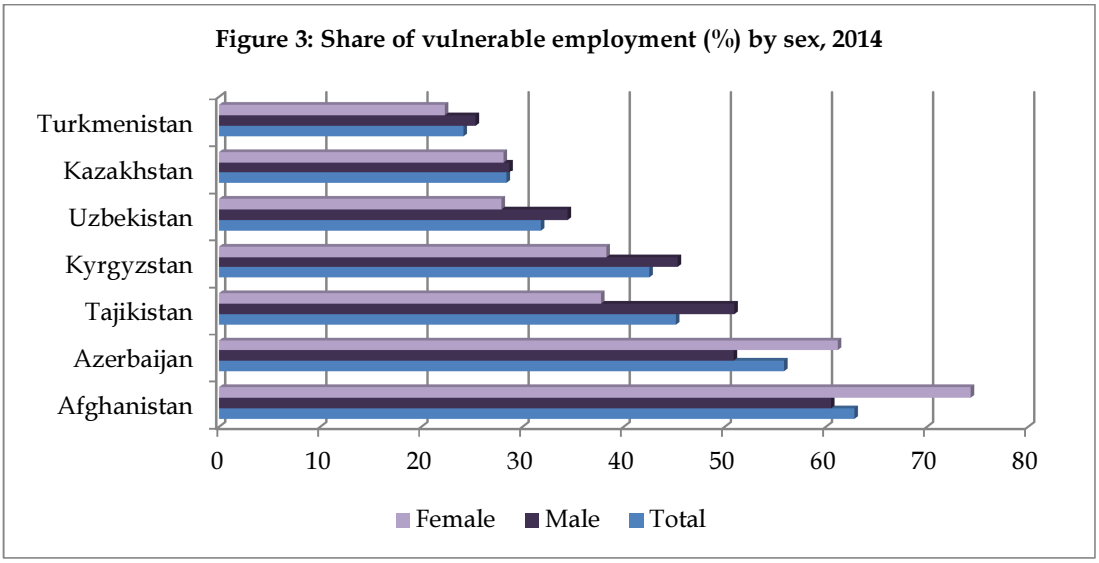


Source: ESCAP (2016) Statistical Yearbook for Asia and the Pacific

However, because of the higher level of development and average cost of living in several SPECA countries, the $1.90/day measure may not be very relevant for comparing poverty levels. Therefore, the World Bank introduced the regional income poverty thresholds for European and Central Asian countries at PPP$2.15/day for extreme poverty and PPP$4.30/day as the per-capita income level needed to satisfy basic human needs such as education, healthcare and access to information. These measures suggest that income poverty remains a serious issue for lower middle-income SPECA countries,[13] especially in rural and high altitude areas.[14]

A central factor driving this trend is the high levels of "working poverty".[15] As shown in Figure 3, more than one-third of the working force in five of the seven SPECA countries are classified as having a vulnerable job, with low wages and minimal or no legal and social protection. Older persons are particularly susceptible to working poverty. Pensions are critical for older persons, for example, in Kyrgyzstan, pensions contribute to 26% of total household consumption of the poorest. Consequently, all SPECA countries have programmes that cover between 80-95% of the elderly population (with the exception of Kyrgyzstan where 100% of older people receive pensions, and Afghanistan where only 10% receive a pension). However, the overall adequacy of benefits is insufficient. Older persons thus continue to live on or below the subsistence minimum – with the elderly that have no income earning children to support them the worst affected. In such circumstances, the elderly are particularly susceptible to working poverty and vulnerable employment, or depravation.

[13] UNDP (2014), Poverty, Inequality, and Vulnerability in the Transition and Developing Economies of Europe and Central Asia.
[14] Gassmann, F. (2011), Background Paper on Social Protection in Central Asia. Prepared for UNICEF Regional Office for CEECIS
[15] Baschieri, A., and J. Falkingham (2007), Child Poverty in Tajikistan, DFID/UNICEF, Dushanbe.



Source: ILO

Furthermore, for countries where sufficient data is available, although the Gini indexes indicate that income inequality in SPECA countries have improved since the 1990s, and in fact, Kazakhstan and Kyrgyzstan rank among the countries with the most equal income distribution among ESCAP countries, the indexes remain at relatively consistent levels up to 2013, and as there is no data yet for the most recent years, the impacts of the crisis on income inequality remain to be measured across countries.

Table 1: Gini[16] indexes in SPECA countries

	1990s	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Afghanistan								27.8							
Azerbaijan	35.0	36.5	17.4	18.8	16.2	16.6			31.8						
Kazakhstan	32.7	35.4	34.1	33.0	31.4	29.7	30.0	28.5	29.1	28.8	28.6	27.4	27.5	26.3	
Kyrgyzstan	53.7	30.2	30.3	28.7	34.8	32.6	37.4	33.9	31.5	29.9	30.1	27.8	27.4	28.8	26.8
Tajikistan	29.5			32.7	33.6			32.2		30.8			30.5	30.4	30.8
Turkmenistan	35.4														
Uzbekistan	45.3		33.0	35.3											

Notes:
For the 1990s period: data for Kazakhstan, Kyrgyzstan and Turkmenistan is for 1993, for Uzbekistan 1998, for Tajikistan 1999. For Afghanistan data is not available.

For the 2000s period: data for Gini coefficients are available for Kazakhstan and Kyrgyzstan for the most recent years, up to 2015 from the National statistic agencies; however the methodology of estimation was based on consumption not income.

Source: Data exported from World Bank Research Group website on Gini Indexes

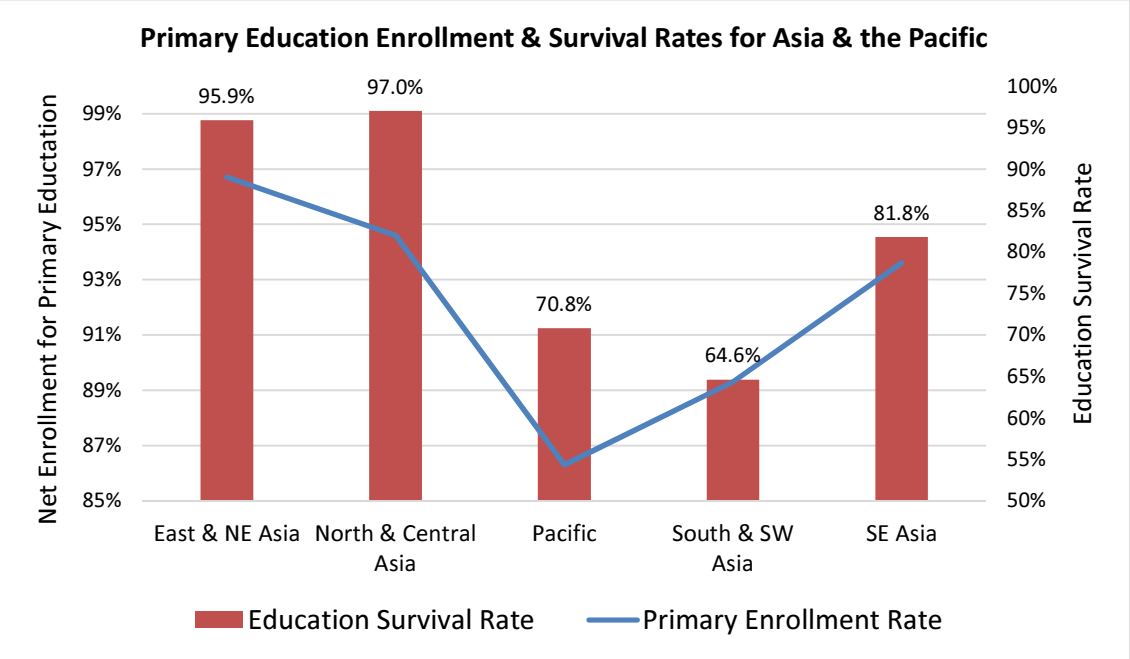
[16] Gini index is measure of inequality in outcome (income or consumption). It ranges from 0 (perfect equality) to 100 (perfect inequality).

Social Agenda

Between 2000 and 2015, the picture that emerges on social indicators is overall positive, but highly varied across countries and indicators, with statistical averages and aggregation masking deeper social inequities.

The enrollment rate in primary education remained steady at 95%, a figure consistent with the performance of other subregions in Asia and the Pacific, although slightly lower than East and North-East Asia. North and Central Asia, however, performed well with respect to the education survival rate, at around 97% from 2000 to 2015, which is not only the highest rate among ESCAP's subregions, it is also significantly higher (with the exception of East and North-east Asia).

Figure 4: Contrasting enrollment and survival rates for primary education



Source: UN ESCAP database

Gender parity has been reached both in primary and secondary education. Considerable progress was also made in tertiary education, apart from Tajikistan, Turkmenistan and Uzbekistan. Moreover, North and Central Asia is the Asia-Pacific sub-region which has achieved the highest share of women employed in the non-agricultural sector (45% of the total, from 43% in 1990) in 2015.

The under-five mortality rate dropped from 49 deaths per 1,000 live births in 1990 to 22.6 in 2013.[17] Even though the reduction was considerable, similarly to other sub-regions, the target of a reduction of two thirds of the initial value was not achieved. However, there are huge differences between countries. Whereas in 2013 in Armenia, Georgia, Kazakhstan, Kyrgyzstan, and the Russian Federation the under-five mortality rate measured in deaths per 1,000 live births fluctuates between 10.1

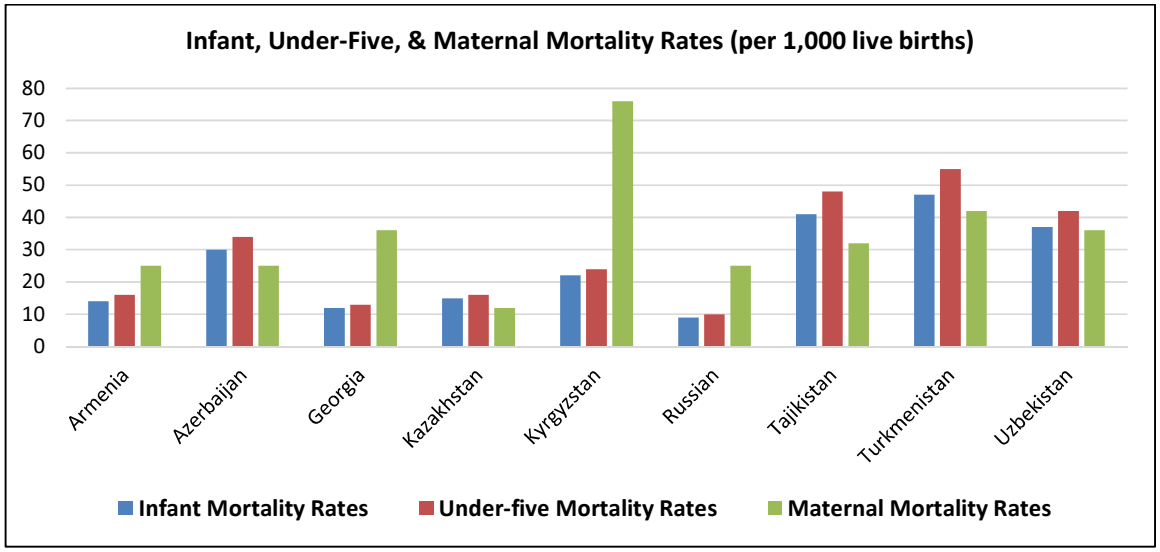
[17] MDGs 2015 data

(Russian Federation) and 24.2 (Kyrgyzstan), while the value of this rate sharply increases in Azerbaijan (34.2), Uzbekistan (42.5), Turkmenistan (55.2) and Tajikistan (47.7).[18] The same pattern can be observed concerning the infant mortality rate.

North and Central Asia actually halved the amount of undernourished people, shifting from 14% of the total population in 1990 to an expected 7% by the end of 2015, which was the lowest subregional value in Asia and the Pacific. Nonetheless, in this sector as well, there are huge national differences. For instance, the proportion of underweight children under five years of age, while slightly decreasing in the majority of NCA countries, remained steady in Kazakhstan (3.8% in 1999, 3.7% in 2010), rose from 2.7 (1999) to 3.4% (2012) in Kyrgyzstan, and almost doubled in Armenia between 1998 and 2010 (from 2.7 to 5.3%). These data camouflage further qualitative differences. Notably, stunting of children below 5 years of age is high (between 15 and 30%) while in Afghanistan four out of 10 children are stunted. The Global Hunger Index (IFRPI) also reports the situation in Tajikistan to be serious, with an overall alarming performance in indicators related to child wasting, stunting and mortality.[19]

Along with the other sub-regions in Asia and the Pacific, North and Central Asia made important progress in reducing maternal mortality. Indeed, the maternal mortality ratio, measured in deaths per 100,000 live births decreased from 72 in 1990 to a projected 31 in 2015, representing a total reduction of 57% (based on unrounded numbers).[20] Nevertheless, as in the other parts of Asia and the Pacific, the target of a reduction by three quarters was not fulfilled. Finally, despite a slight reduction in the percentage between 1990 and 2014, close to all births are attended by skilled health personnel, which is quite different to other sub-regions. Apart from Azerbaijan and Tajikistan, the subregion has reached universal antenatal care. Simultaneously, the use of contraceptives in the region has increased, as the adolescent birth rate has decreased.

Figure 5: Infant (2013), under-five (2013), and maternal (2015) mortality rates in NCA



Source: UN ESCAP database

[18] Ibid.
[19] www.ifpri.org/ghi/2015
[20] MDGs 2015 data, aggregate calculated by ESCAP

New HIV/AIDS cases were halted by 2015 and the spread has begun to reverse, on average. This was a major achievement considering that in the majority of Asia and the Pacific countries between 1990 and 2013, the HIV prevalence rate doubled, even tripling in Georgia and Tajikistan - even though in absolute terms less people are affected by HIV in North and Central Asia compared to other parts of Asia and the Pacific.

A similar trend is seen for the incidence of malaria and some other major diseases, although for tuberculosis, the incidence and prevalence rates between 1990 and 2012 differed according to national context. It increased in Armenia, Kazakhstan, Kyrgyzstan, Russian Federation and Tajikistan, while sizable progress was achieved in Azerbaijan, Georgia, Turkmenistan and Uzbekistan. Life expectancy has also not markedly increased, with one key reason for this being the lack of affordable quality health-care services. For instance, in Afghanistan and Azerbaijan, private households bear more than two thirds of total health expenditure, while increases in old-age dependency ratios will put increased pressures on the public health systems.

Environmental Agenda

Since the dissolution of the Soviet Union, most SPECA countries have grown economically through the extraction and export of non-renewable, primary resources. Despite being profitable, these economic activities have generated high levels of waste and pollution. Combined with Soviet-era environmental degradation, as well as underinvestments in modern infrastructure, the primary resources industries have put significant negative pressures on the local environments.

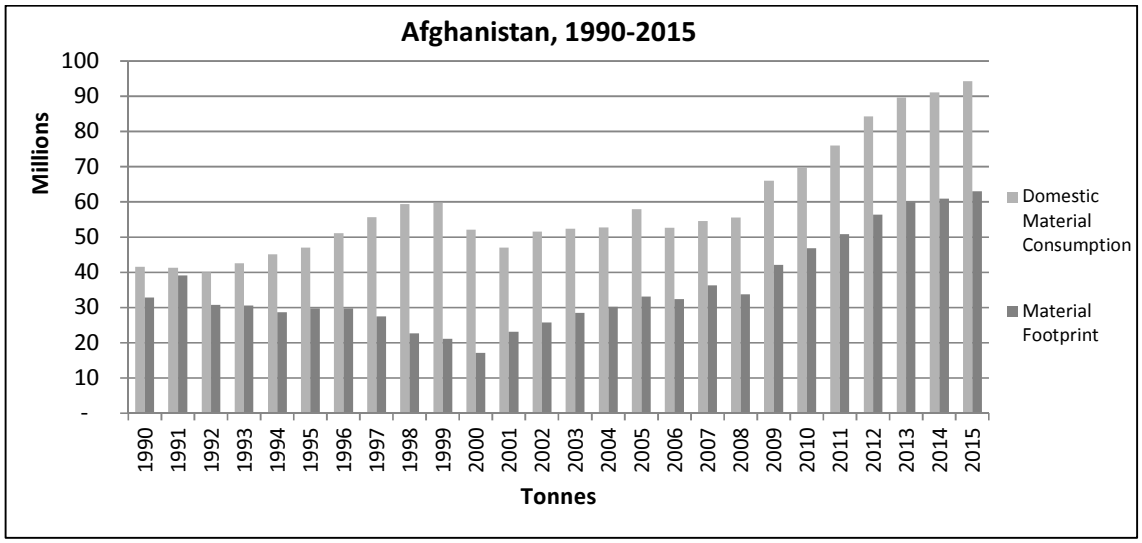
The pattern of greenhouse gas (GHG) emissions has been similar in the majority of the countries: after a sharp decrease experienced in the 90s, largely due to technical adjustments after the Soviet Union breakup, GHG emissions started increasing from the beginning of the new century. Nevertheless, compared to 1990 levels, in 2012 almost all the countries, apart from Turkmenistan, had lower levels of GHG emissions, GHG emissions per capita, and GHG emissions per 1$ GDP (2005 PPP). However, considering the ageing infrastructure and high inefficiency of resource use, stronger efforts could have been undertaken to further reduce GHG emissions and make their development paradigm more sustainable.

The use of primary resources—from extraction to consumption, production, and ultimately disposal—creates significant environmental impacts. Therefore, understanding the pattern and rate of resource use is crucial for the sustainability of consumption and production. Material use - as measured by the indicator domestic material consumption (DMC)[21] - in the majority of NCA countries showed steady increases since 1990 but many peaked in 2007/2008 (Azerbaijan, Kyrgyzstan, Turkmenistan) around the time of the global financial crisis, while others show stagnation or slight increases (Kazakhstan, Tajikistan, and Uzbekistan) since 2008. Since data are available only up until 2010, we know less about the resource use trends in NCA countries in recent years. The only country for which DMC data are available through 2015 is Afghanistan, as a SPECA

[21] The domestic material consumption measures the overall amount of materials (in tonnes) used in an economy, including biomass, fossil fuels, metal ores, and non-metallic minerals.

member country.[22] Resource use in Afghanistan shows sharp increases from 2010 to 2015, replicating a similar trend witnessed from 1993 to 1999. The data also show a wide divergence between Afghanistan's domestic resource use (as measured by DMC) and the material footprint of its consumption.[23] While both are increasing, its much higher domestic resource use compared to its material footprint means that some of its material use is a by-product of its exports (i.e. not consumed within its borders) and may not have necessarily resulted in higher material standards for its population.

Figure 6: Domestic material consumption & material footprint in Afghanistan



Source: UNEP Live

The NCA sub-region also has one of the highest proportions of renewable water resources withdrawal (at around 50%, second only to Western Asia, at 54%). This puts the hydrological system in what is already a semi-arid subregion, under constant pressure. Nevertheless, it rose from 10.3% of surface area in 2000 to 10.9% in 2014.

Between 1990 and 2015, the share of population with access to safe drinking water increased in Armenia and Georgia (reaching 100%), the Russian Federation (97%), Kyrgyzstan (90%), Azerbaijan (where it accounts only for 87% of the population), Tajikistan (74%), and Turkmenistan (with a low value of 60%). On the contrary, this value decreased in Kazakhstan (from 94% to 93%) and Uzbekistan (from 90% to 87%).[24] Overall, the subregion has the smallest share of population with access to safe drinking water, however it has the highest proportion of population with access to basic sanitation, thus achieving the 2015 target. Nevertheless, also in this case tendencies vary according to national contexts. For instance, between 1990 and 2015 the percentage of population with access to basic sanitation decreased in Georgia and the Russian Federation, whereas it increased in all the other countries, with remarkable increases in Azerbaijan (from 63% to 89%) and

[22] UNEP Live. http://uneplive.unep.org/

[23] Being a consumption-based indicator, the material footprint of consumption measures the total consumption of resources by a country, including resources that are imported.

[24] MDGs 2015 data.

Uzbekistan (from 84% to 100%).[25] Additionally, the sub-region also has the smallest protected terrestrial areas in Asia and the Pacific. However, it rose from 2.7% in 1990 to 4.6% in 2014.

3. Sub-regional policy implementation and priorities of the 2030 SD Agenda

The objective of section two was to take stock of where SPECA countries stand in terms of MDG implemention. Overall, the results were positive which set a firm basis for further progress. However, as was pointed out, results were also inequitably shared, with high variations among countries, as well as qualitative gaps in MDG implementation. The objective in section three is to identify policy priorities that not only tackle MDG unfinished business, but also reorient policy making within the frameworks of the more comprehensive 2030 SD Agenda and the subregion's current policy implementation context.

Today, the subregion is vastly different from the year in which the MDGs were launched. Peoples' expectations of more inclusive growth and sustainable development have increased, as has their readiness to voice such expectations. Civil society organizations, while still nascent, are on the rise, as is the use of social media platforms as opinion shapers. This provides an opportunity for leadership that will bring together economic growth, social inclusion, greater equality, environmental rehabilitation and quality of life for present and future generations. The importance of these issues has been recognized in various fora, notably the Declaration adopted at the 10th Session of the Governing Council of the ECE/ESCAP Special Programme for Economic Cooperation in Central Asia (SPECA), held in Tajikistan on November 10, 2015.

Rebalancing and reviving economic growth

Reviving economic growth is perhaps the most crucial SDG enabling factor on the short term. A related key economic question facing NCA over the medium term is whether it will be able to move away from heavy export concentration in primary commodities towards more diversified exports of value-added goods and services, with the increasing participation of vibrant small and medium-sized enterprises? This is important for SDG implementation because while revenues generated by commodity exports will continue over the medium term to play a decisive role in the SDG implementation capacity of governments, reforms to promote new sources of economic growth assume added urgency for enhanced resilience. Innovation, entrepreneurship development, and job-creating industrialization (SDGs 8 and 9) all improve equality, and enhanced equality tends to improve efficiency, leading to and reinforcing sustainable long-run growth. Furthermore, manufacturing through its specific learning-by-doing features, as well as spillover effects, is perhaps the most important dynamic source of technological progress, trading opportunities and SDGs implementation. Importantly, export participation is useful in providing a basis for the NCA sub-region to identify and develop new activities and goods. By putting into operation a process of "self-discovery"entrepreneurs can find for themselves profitable opportunities, and innovative into niches that previously did not exist and whose existence was not necessarily predicted, though they may be produced in other parts of the world.

[25] Ibid.

Long-term macroeconomic aggregates (table 3) show that economic performance in NCA is quite persistently linked to natural resource endowments, even if initial levels of economic development and the effectiveness of policy implementation also play a role. Consequently, annual GDP growth over the period of 1990-2008 ranges from 12.45% in resource-rich Azerbaijan to 2.57% in resource-deficient Georgia. The pattern is similar in the second time span between 2008-14. Resource-rich Turkmenistan has the highest rate of economic growth (while resource-deficient Armenia experiences negative growth of -0.83%. Furthermore, value-added in the industrial sector is higher in resource-rich countries.

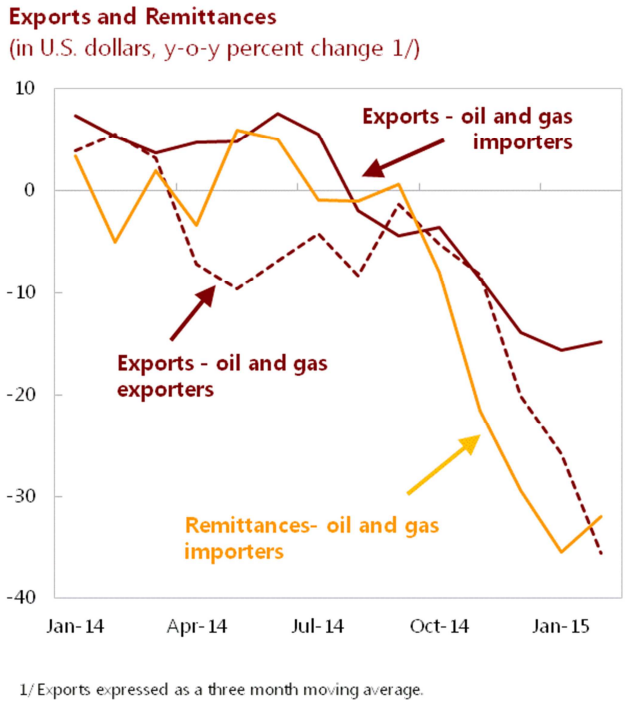
Table 3. Selected Long-term Macroeconomic Aggregates

	Avg. Annual GDP Growth % (USD 2005)		Avg. % Added Value: Agriculture		Avg. % Added Value: Industry	
	1990-2008	2008-2014	1990-2008	2008-2014	1990-2008	2008-2014
Armenia	6.58	-0.83	28.7	20.3	38.9	34.3
Azerbaijan	12.45	7.40	19.3	5.8	45.7	62.9
Georgia	2.57	1.43	29.6	8.9	23.4	22.9
Kazakhstan	4.42	3.37	12.1	5.1	33.9	39.3
Kyrgyzstan	2.78	5.40	37.0	19.3	26.9	26.4
Russia	3.42	-0.07	7.1	4.2	39.8	35.9
Tajikistan	2.32	5.87	25.7	24.0	39.9	26.3
Turkmenistan	6.27	10.80	21.4	13.9	47.4	49.9
Uzbekistan	5.25	8.53	31.3	19.9	29.5	33.0

Source: Calculated data based on ESCAP Statistics Division database.

With the fast, considerable decline in the world crude oil price and the sharp depreciation of the Russian ruble, NCA countries are now faced with the challenge of implementing SDGs in a volatile economic environment with potential long term shock effects. Even commodity importers are affected (figure 7) due to their reliance on remittances from workers employed in commodity exporting countries such as the Russian Federation and Kazakhstan, where export revenues and foreign direct investments have fallen sharply in dollar terms.

Figure 7: Recent and potentially medium-term shocks effects



1/ Exports expressed as a three month moving average.

Source: Boris Petkov, Caucasus and Central Asia (CCA): Responding to New Challenges, Paper Prepared for the Astana Forum, 21 May, 2015,

Furthermore, the devaluation of China's yuan and interest rate increases in late 2015 by the Federal Reserve System (for the first time in more than a decade and exactly 7 years since the FED cut its federal funds rate nearly to zero) exacerbated things by strengthening the dollar and pushing commodity prices further downwards.

The underperformance in growth of the non-resource sector relative to the resource sector, and to the rest of the world, is due to the unfinished economic reform agenda. While aggregate investments are comparatively high – compared to other developing economies with the notable exception of MENA economies – there is considerable room for improving the efficiency of these public investments. A 2014 IMF Special Report on Caucasus and Central Asia (CCA) and Middle East and North African Oil Exporters demonstrated a significant gap in the allocative efficiency of public investments compared to the best performing countries in the global sample. Closing the gap could lead to about a 20% additional improvement in infrastructure for the same capital. Key recommendations included enhancing transparency and developing stronger frameworks, both institutional and budgetary[3] so that competition, effective demand, profitability, innovation and effectiveness become key drivers of growth in total factor productivity (TFP).

Enhanced infrastructure connectivity and energy

Affordable, reliable and renewable energy is key to sustainable development and the transition to a modern society. Energy, which is a means to an end, remains crucial for social and economic welfare, ending poverty, ensuring healthy lives, and raising standards of living. With seven of the nine member States landlocked, the essential albeit insufficient contributor to reviving economic growth,

sustainability and inclusiveness in the subregion is the modernization of infrastructure related to transport, power generation and communication.

Rich in fossil fuels and hydropower, the subregion possesses sufficient resources to meet its domestic energy needs. However, the countries face a number of systemic issues in the energy sector, including (but not limited to) a high degree of aged energy infrastructure; a shortage of financial resources to ensure its functioning and development; a lack of effective mechanisms for implementing sustainable energy development policies synergized with existing regulatory frameworks; delay in scaling up energy efficiency and renewable energy development; and the insulated state of electric power grids. These factors limit the comprehensive realization of the energy potential. The current progress is outlined in Table 3 below.

Table 3: Progress of NCA member States toward achievement of SDG targets

	Renewables share of TPES *%*		**Final energy intensity** *kg of oil equivalent per 1,000 dollars GDP (2005 PPP)*	
	1990	2013	1990	2013
Armenia	1.9	6.7	622	98
Azerbaijan	0.7	1.8	491	94
Georgia	9.0	31.0	305	137
Kazakhstan	1.0	0.9	515	207
Kyrgyzstan	11.5	28.6	623	304
Russian Federation	3.0	2.6	334	212
Tajikistan	26.7	59.8	294	133
Turkmenistan	0.3	0.0	557	355
Uzbekistan	1.2	2.3	851	385

Source: ESCAP Asia Pacific Energy Portal

Recognizing achievements related to universal (100%) access to energy services in all NCA member States, as well as a nearly two-fold average decline in final energy intensity, significant variations in the percentage of renewables in total primary energy production within the 1990-2013 period should be stressed. Their share in primary energy mix averaged 15% in 2013 in large part due hydropower resource development in Tajikistan (59.8% by 2013), Kyrgyzstan (28.6%) and Georgia (31.0%). Turkmenistan has no renewables in its energy mix, and in other NCA countries renewables vary from 0.9 to 6.7%. However, the share of renewables in NCA has more than doubled since 1990 broadly due to low base effect, keeping the annual growth pace of 10.5%, with Armenia and Georgia showing the most significant results (3.5 and 3.4 times growth, respectively).

The adoption of Goal 7, with a holistic dissemination of its provisions – access to energy sources, energy efficiency and renewable energy – and their implementation within the NCA countries' legal framework may result in the attainment of sustainable energy development objectives in the subregion. The overall target can be achieved through sustainable management of natural resources, ensuring innovative production and consumption patterns, sustainable industrialization that further fosters building resilient energy infrastructure, and coordinated planning of the overall energy system development. However, it requires technological foresight, adequate economic incentives, strategic energy policy planning at national and subregional levels, as well as a tracking framework and procedures, that allows evaluation of the impact of implemented policies.

Under the Soviet Union, North and Central Asia was strongly integrated through the Unified Energy System (UES), taking advantage of the highly diversified energy mix and time-shift of peak loads. Following the breakup of the Soviet Union, this system became weaker and less effective: Turkmenistan decided to stop its parallel efforts with the UES in 2003, Tajikistan was disconnected from the UES connection with Uzbekistan in 2009, while all countries preferred to decrease their regional involvement in favor of national interests thus hindering the realization of synergies that can be achieved through subregional connectivity. Likewise, uncoordinated energy subsidies across the subregion have distorted regional markets, reoriented efficiency-seeking investments and crowded out alternative energy sources. Furthermore, regulatory and legislative regimes skew the risk-reward investment equation of regional projects.

The resolution of energy connectivity issues ensures the contribution of one of the key targets to be reached within the subregion. First and foremost, it can enhance national energy security through the diversification and balancing of energy flows. In addition, since the adoption of Goal 7 on energy has raised the profile of the subregion as one of the world's largest repositories of renewable energies, building up interstate electricity interconnectors with implementation of advanced energy trade mechanisms, can futher boost the development of renewable energy. Aimed either to support large grids (that are more suitable in managing the problem of intermittency of renewable sources such as sun and wind, especially given time zones differences) or supply electricity generated at small scale renewable plants to remote areas where people suffer electricity shortages and are, as a result, obliged to resort to firewood for their heating and cooking necessities with negative environmental and health consequences. In addition, the establishment of common electricity market with free power transfer zone will facilitate trade of electricity surpluses beyond the borders of the subregion.

The governance of cross-border energy connectivity remains contingent on voluntary, unanimous and continued consent by member States. Not surprisingly, it is primarily through bilateral agreements that energy is traded in the subregion. Nevertheless, more recently the launch of trilateral or quadrilateral projects such as the Turkmenistan-Afghanistan-Pakistan-India (TAPI) and CASA-1000 could be harbingers of more subregional cooperation in the future.

Improvements in the investment environment, especially for large-scale projects, will come about as countries reach common understanding built around sustainability principles. Mutual trust will then be fostered as countries harmonize political and legal frameworks related to interstate energy trade, giving new priority to the implementation of measures on energy efficiency – a compelling issue for all NCA countries.

In this regard, ESCAP's cooperative initiatives that encompass all Asia-Pacific countries can enlarge the opportunities for regional power trading while also enhancing the share of renewables in the energy mix. Through technological advances such as high voltage lines, power losses inherent to long-distance transmission have been significantly reduced, increasing the viability of large multi-country power grids. Consequently, over the SDG implementation period ESCAP will be prioritizing its support to the NCA subregion for the implementation of Goal 7.

Furthermore, Goal 7 is inextricably linked to the attainment of all other goals, especially Goals 9 and 13, as well as climate objectives. In the context of NCA's transition economies, improvements in

infrastructure connectivity need to be supported by a policy environment that promotes the private sector and the development of new entrants, products and markets for a more equitable income distribution.

In this regard, urban centers, as intense users of energy play a vital role in sustainable development (SDG 11). For example, the Mayor of Almaty's proposal to convert the city into a subregional hub (See box) through smart infrastructure can provide a model of urban development in support of sustainable development. An important spin-off benefit could include improved public education and health services.

Box 1: Almaty-2020 Development Plan

Today, Almaty, as the largest economic centre of Kazakhstan, is positioning itself as an emerging Eurasian business and cultural hub through the development of key services sectors. The Almaty-2020 Development Plan is embedded in the President's Kazakhstan 2050 Strategy and 100 concrete steps, which foresee Kazakhstan becoming one of the 30 most competitive countries in the world.

Importantly, the Plan involves developing Almaty into an international energy-efficient transport and logistics hub by way of construction of a world-class airport, new road junctions, the development of accompanying logistics services and an innovation cluster – "The Park of Innovative Technologies". Efforts will focus on IT, education and the healthcare sectors, focused on building production capacity in innovative services. Furthermore, Almaty's integration into the international space will continue to spread further as the city plans to evolve into a Central Asian hub for the UN and international organizations.

A key pillar of the Plan is the modernization and the development of fuel and energy infrastructure due to growing needs for heat and power, as well as large energy losses due to outdated and ageing infrastructure. Notably, the President has tasked the people of Kazakhstan to achieve a reduction in energy intensity by at least 25% of current levels by 2020. Almaty's planned energy-saving measures will focus on this indicator and a reduction in pollution levels.

As a major Central Asian metropolis, Almaty has embarked on an ambitious plan that positions itself to become a hub of Eurasian business, innovation, and culture. The importance afforded to the development of state-of-the-art technology will have direct consequences for the balanced integration of the three pillars of sustainability and Almaty may be on the path of becoming a model city of sustainable development.

Investing in people

Human capital is the second most abundant resource of the subregion and the workforce is still growing, with a median age of around 33 years, nearly 10 years younger than the median age for developed countries. Thus, there is an immediate need for the subregion to focus on the social development linkages and beneficial spillovers inherent in the attainment of SDGs, with investments in social infrastructure education and health serving as a corollary to investments in hard infrastructure such as renewable energy grids, over the medium to long-term.

As discussed in section 2, on social indicators, the subregion performs quantitatively well on average. For example, school survival rates are the highest among the subregions, at 97%. However,

important qualitative issues need to be addressed both within and across countries, such as improved learning outcomes and better matches between demanded labour market skills and those of jobseekers, especially for young labour market entrants, in addition to enhanced working conditions for women. Gainful employment as discussed above is at the heart of poverty reduction and social inclusion, therefore along with the need to create conditions for supporting job creation capacity, especially among small and medium-sized enterprises, such policies should be underpinned by strategies that align economic, employment, environmental and social policies.

NCA is home to several remittance-dependent economies, notably Tajikistan and Kyrgyzstan, the two countries in the subregion with the highest share of remittances as a percentage of national GDP[4]. While the economic benefits of remittances as enablers of domestic growth and meaningful employment are clear, there are significant negatives consequences of the large outflow of migrant labourers. With one or even both of their parents abroad, children may be neglected without sufficient care, nutrition and education. The fluctuation of remittance income, especially given the current economic downturn, can have large, destabilizing impacts on the local economies.[26] Furthermore, migrant labourers come disproportionally from the poorer rural areas, thus affecting the development of these areas.[27] In addition to the development of domestic economies, a number of SDGs can help address challenges faced by migrant labourers, their families, and to a larger extent, the greater society. These include:

- **SDG 2, target 3** (By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment) to ensure that rural workers have wider and better quality employment opportunities.

- **SDG 8, target 7** (Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment) to promote better protection for migrant workers.

- **SDG 8, target 10** (Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all) to ensure that the transfer of remittances, which are critical to families back home, is safe, affordable and efficient.

Relatedly, despite generally high education levels, the attainment of gender equality remains an ongoing problem. In fact, the deepest gender gaps can be found in the sector of labour practices[28]. For instance, in 2013, the gender pay gap is large in countries such as Azerbaijan (53.2%) and Tajikistan (50.9%), whereas women in top business management positions are rare.

[26] World Bank (2015). World Development Indicators.
[27] OSCE (2016). Labour Migration from Central Asia to Russia: Economic and Social Impact on the Societies of Kyrgyzstan, Tajikistan and Uzbekistan.
[28] Cited in Khitarishvili T., 2015, p.27 (see attachment).

Table 3. Different measures of gender gap in earnings.

	Gender Pay Gap (UNECE, 2012)	Earned Income Gap (WEF,2014)	Wage Equality for Similar Work, F/M ratio (WEF, 2014)
Armenia	35.6 (6)	41 (4)	.66
Azerbaijan	53.2[1] (9)	56 (8)	.74
Georgia	39.8 (7)	55 (7)	.72
Belarus	25.5 (3)	37 (3)	
Moldova	25.6[2] (4)	23 (1)	.70
Ukraine	22.2[3] (2)	35 (2)	.69
Kazakhstan	6.8 (1)	42 (5)	.71
Kyrgyz Republic	26.7[1] (5)	46 (6)	.72
Tajikistan	50.9[2] (8)	37 (3)	.71

Notes: [1] 2013; [2] 2011; [3] 2010; no data available for Turkmenistan and Uzbekistan.

Source: UNECE 2012, http://w3.unece.org/PXWeb/en/DataMap?IndicatorCode=21

Having said this, it is also crucial to plan for the longer-term challenge of population ageing. As populations age over the next 15 years, the attainment of a more equitable society will put significant pressures on fiscal budgets. By 2050, in NCA, 24.5% of its population will be over 60, up from 16.3% in 2016. It will be the second highest proportion in Asia-Pacific after East and North-east Asia at 36.8%. Not only will maintaining the high pension coverage rates discussed in section 2 mean large numbers of new entrants receiving benefits, (and declining contributors from among the working population), there will also be a need to significantly increase the real value of benefits. Together with investment increases needed in the education and health sectors, a more inclusive society will require a reorientation of the development paradigm geared towards new sources of private-sector led growth. The experiences, lessons and best practices emerging from ageing societies such as Japan, Republic of Korea and China will be instructive. At the same time, putting in place early on, plans for productive ageing and population ageing will be crucial for the long-term sustainability of a more equitable society.

Addressing shared environmental vulnerabilities

As a semi-arid subregion, NCA is one of the most vulnerable to climate change. Growing demands for water, energy and food, in addition to climate change induced disasters which are increasing in frequency and intensity, exacerbate the already vulnerable human ecology. In all countries, land suffers from a high degree of degradation, and with increasing temperatures and advancing desertification, crop yields are expected to decelerate further. This will affect food production in the NCA subregion and could mean that impoverishment will rise again as malnutrition, especially among rural communities, becomes endemic. At the same time, climate change will threaten water (and thus, hydropower), a resource fundamental for agriculture and for the political stability of the region itself. In the long-term, river runoff is expected to decrease throughout the entire region albeit to different extents, despite rivers receiving their water supply from melting snowfalls and glaciers.

Box 2: Drought and Kazakhstan's policy strategy

Over the last six years the country has had two severe droughts, as reported by the Kazakhstan Ministry of Agriculture and Union of Farmers. In 2010, the drought was caused by a shortage of soil moisture due to low precipitation and snow cover. In 2012, in addition to a shortage of low precipitation and snow cover, a severe atmospheric drought was caused by hot weather in early spring, having a significant negative effect on wheat production. In total, the loss of wheat crops was measured at 1.5 million hectares (ha), with a loss of potential annual wheat crops at 800kg/ha, in the regions of Aktube, Northern Kazakhstan, Ural, Western and Southern Kostanay and Pavlodar. The droughts also substantially affected the global price of wheat, raising prices for wheat-importing countries. Thus, if these trends in regional climate change continue to occur, food security may become an issue with transboundary effects on a global scale.

To better analyze and assess the negative effects of climate change on agriculture, the government of Kazakhstan has integrated environmental policies and strategies into its national plan. The main priorities are as follows:

1. Increasing the efficiency and management of resource-use;
2. Modernizing extant and developing new infrastructure ;
3. Improving the population's well-being and environmental quality through cost-effective ways to mitigate environmental pressures;
4. Improving national security, including water security.

Kazakhstan's strategy for transitioning to a 'green economy' will be prioritized along the following lines:

2013-2020: resource-use optimization and creation of 'green' infrastructure.

2020-2030: building o**n** 'green' infrastructure, widespread adoption of renewable energy technologies, as well as the development of energy-efficient "smart" infrastructure, and efficiencies in water usage.

2030-2050: Transitioning to the 'third industrial revolution', in which the use of natural resources will be subjected to criteria related to their renewability and sustainability.

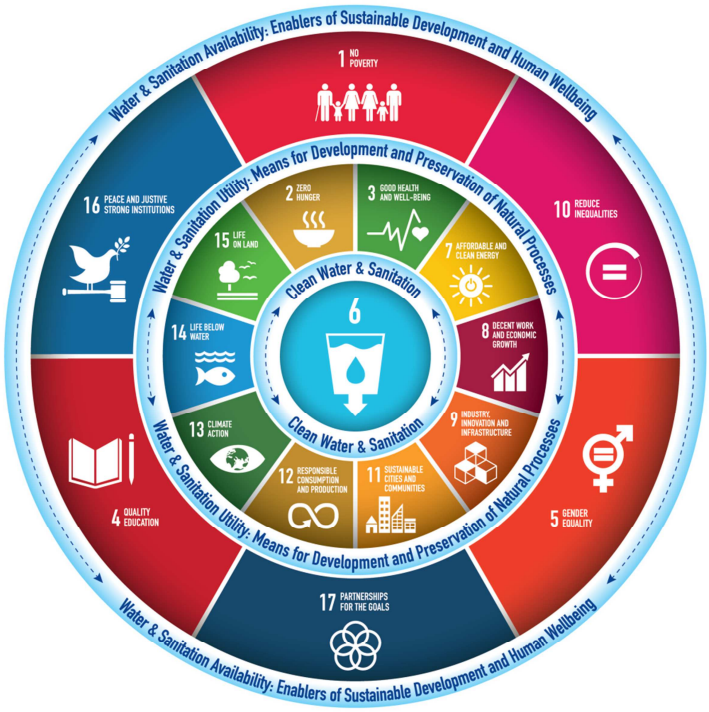
Tackling climate change also requires mitigation strategies. NCA stands as the third highest subregion for per capita Green House Gas (GHG) emissions, even without Russia (If using the indicator, GHG emissions in million tons of CO2, then NCA without Russia contributes 2.8% to the total ESCAP's emission). Most notably, NCA countries such as Kazakhstan, Turkmenistan, Uzbekistan and Azerbaijan are among the highest GHG contributors per capita in the world. Considering this situation and the risks represented by climate change, but taking into account also the principle of "common but differentiated responsibilities", NCA countries are expected to participate in the reduction of global GHG emissions, as a means of good policy: enhancing energy efficiency, reducing air pollution and improving quality of life for all.

Furthermore, as the largest contributors to the release of GHG in the atmosphere, in Kazakhstan, Turkmenistan, Azerbaijan, and Armenia there is a need for governments to modernize their energy infrastructure, as well as phase-out subsidies with no sizable relevancy for the welfare of citizens, as pointed out in section 2. New pricing mechanisms that better reflect the negative environmental externalities and promote the development and use of renewable energies need to be phased-in. There is already a host of best practices that could be implemented, for example, the establishment

of favourable feed-in tariffs for a given period of time which are adjusted to the rate of inflation, prioritization by transmission companies to purchase electricity produced by renewable sources, tax rebates on imported equipment for the production of renewable energy, capital facility tax, and so on. The majority of NCA countries, such as Kazakhstan, Tajikistan and Kyrgyzstan, have already launched important declarations and issued strategies concerning the promotion of renewables and one of the most important contributors to this paradigm shift is an enabling investment environment that mobilizes domestic resources and attracts international investments.

Box 3: Integrated implementation of the SDGs – SDG6 at the Core

The importance of an integrated approach to implementation of the SDGs was highlighted at the High-Level Symposium on SDG 6, hosted by the Government of Tajikistan from August 9-11, 2016 in Dushanbe. ESCAP presented an analytical framework for integration of the water and sanitation SDGs and targets using a systems thinking approach.



The approach views the 17 SDGs and the 169 targets as one indivisible whole system and provides an analytical approach that develops and analyzes the systems' inter-relationships. The objective is to design holistic implementation strategies based on leverage points that point to the most effective interventions. A number of pilot applications of the analytical framework and related modelling are in progress, involving Sri Lanka, Fiji and Tajikistan. In Tajikistan, the Interstate Commission on Water Cooperation in Central Asia in close cooperation with ESCAP is managing the pilot. It is expected that the methodology, lessons learned and recommendations will be shared with the rest of the ICWC member states in Central Asia for an integrated subregional application and modeling in a follow-up phase.

4. Addressing institutional arrangements for implementation: progress and priority setting

The adoption of the 2030 Agenda for Sustainable Development creates new opportunities for the NCA sub-region and institutional setups to support these aspirations become important. In this regard, it is essential to properly situate the SDGs within the contextual reality of the subregion. In essence, institutions (whether formal or informal) define how power is managed and used, how governments and societies arrive at decisions, how they implement those decisions, as well as measure and account for the results. They thus have a key intermediation role. In this section, after an initial review of progress achieved at this early stage of implementation, priorities and principles are suggested to guide national and subregional institutional arrangements, while recognizing that at all stages, the national decision-making processes of each country will determine outcomes.

In most countries of the NCA subregion, institutional arrangements for implementation of SDGs are still in the process of being set up. As shown in table 5 below, in partnership with UNDP and other relevant UN agencies, Armenia, Azerbaijan and Tajikistan, Turkmenistan among others, have evolved strategy/vision papers, that link development plans and the SDGs. Furthermore, Georgia is one of five Asia-Pacific members that have committed to voluntary national reviews, while Kazakhstan has initiated a national stakeholders dialogue and a mapping of SDGs, as well as related national legislative provisions that will support implementation.

From this early information, it appears that the common element running across the subregion is economic diversification and enhanced implementation of the social and environmental pillars. Governments of countries relying on energy exports will continue promoting development in the oil and gas sector, while at the same time boosting a more diversified industrialization process. Net importers of energy resources prioritize energy security through improved energy connectivity, more efficient infrastructure and a larger share of renewable energy in their national portfolio, while emphasis is given to the innovation of the economy through strengthening science and technology and the tertiary sector. Finally, a common trait in all of the development strategies is the need to improve the business and investment climates.

With the social dimension, the aim is to improve and modernise the quality of health care systems, while the need to strengthen inclusive social security services to reduce poverty and inequalities within the society, including gender inequality, is also given emphasis. Furthermore, following the same path traced by the MDGs, the countries aim to keep improving their educational system, from pre-school to higher education, as well as strengthening the right to education for girls, the youth living in rural areas and other disadvantaged populations.

In the environmental sector, the priorities are similar. The rationalization of land and water management is a priority for all the countries given the importance of these resources in their economies and the exposure of the same resources to external disruptions and inefficient management. Another common element is the effort to improve disaster risk reduction policies, since a large share of NCA countries' territory and population continue to be affected.

There is also a clear recognition of the need to reduce corruption and improve the functioning of national institutions with public administration, public finance and judicial branches featuring prominently. This is important as the subregion, albeit with wide variations, still faces a number of

institutional challenges, which include embedded monopolies; deficiencies in implementation of adopted legislation; lack of a meritocratic approach in both formal and informal institutional structures, and missing market mechansims. Work on these issues is underway in most countries, as for example, Azerbaijan held its fifth subcommittee meeting with the EU on October 12-13 to discuss institutional issues, such as constitutional and electoral reform with the aim to bolster human rights protections, freedom of speech, and the healthy functioning of civil society. At the subnational level, NCA countries emphasize the need to give particular attention to an even spatial development in all their regions, especially rural areas for poverty reduction and enhanced social inclusion.

[1] United Nations (2015), The Millennium Development Goals Report.
[2] ESCAP, ADB, UNDP (2015), Making it happen – Technology, finance and statistics for sustainable development in Asia and the Pacific
[3] IMF (2014). Making the Most of Public Investment in MENA and CCA Oil-Exporting Countries.
[4] World Bank (2015). World Development Indicators.

Table 5: Linkages between the SDGs and national development plans

	Armenia	Azerbaijan	Tajikistan	Kazakhstan	Georgia	Afghanistan
Source	*Armenia Development Strategy for 2014-2025*	*Azerbaijan 2020: Look into the Future*	*National Development Strategy of Tajikistan for 2030*	*Kazakhstan Strategy 2050*	*Social-Economic Development Strategy of Georgia (Georgia 2020)*	*Statement by the Ministry of the Economy of Afghanistan at 72nd UN-ESCAP Session*
Economic	➢ modernize the agricultural sector ➢ develop national industries ➢ promote tourism ➢ develop the IT and technology sectors ➢ strengthen support for SMEs ➢ develop transport, water and energy infrastructure ➢ improve business environment	➢ promote sustainability and export capacity in the agricultural sector ➢ diversify the economy through the development of non-oil industries ➢ promote tourism, transport and ICT sectors ➢ promote science, technology and innovation ➢ improve business and investment environment ➢ improve economic regulation ➢ specialize regional economies within the country	➢ develop industrial-innovative clusters ➢ develop transport and ICT sectors ➢ improve the financial sector ➢ create independent regulators for energy and telecommunication ➢ liberalize service and financial sectors ➢ improve business and investment environment	➢ promote innovation and technology in industrialization ➢ double the share of non-energy exports by 2025, triple by 2040 ➢ introduce advanced agro technology for crops and efficient water usage ➢ reform the tax code with benefits to innovative companies ➢ privatize non-strategic enterprises and create favorable climate for investments ➢ stimulate the private sector and develop public-private partnerships	➢ increase competitiveness of private sector ➢ improve business and investment environment ➢ increase innovation and technology sectors ➢ develop transit access and infrastructure ➢ promote mobilization of investment resources ➢ develop financial intermediation	➢ focus on economic transformation towards self-reliance ➢ address fiscal deficit and negative BoP with macroeconomic stability ➢ strengthen political and social capital with cross-sectoral regional partnerships ➢ foster confidence building measures with regional initiatives and cooperation ➢ promote active participation in mega projects, such as TAPI and CASA 1000 ➢ develop private-public partnership for greater employment generation
Social	➢ improve accessibility, quality and efficiency of the healthcare system ➢ improve drug safety ➢ increase quality and access to education ➢ improve protection of vulnerable groups, including women and the disabled	➢ improve accessibility, quality and efficiency of the healthcare system ➢ promote active lifestyle ➢ increase education quality/access ➢ improve care and protection of vulnerable groups including women and the disabled ➢ promote political representation and participation by women and youth ➢ ongoing dialogue with EU on human rights issues and freedom of speech	➢ improve accessibility, quality and efficiency of the healthcare system ➢ promote active lifestyle ➢ increase quality and access to education ➢ improve care and protection of vulnerable groups including women and the disabled	➢ prevent poverty growth ➢ target vulnerable social groups ➢ develop education and health sectors to provide for all ➢ boost employment for disadvantaged or vulnerable citizens ➢ protect women's rights and fight domestic violence ➢ develop engineering and technical education programs ➢ stimulate R&D with educational grants	➢ develop the workforce for future labor market needs ➢ improve social assistance system ➢ ensure accessible and quality healthcare ➢ develop the quality and accessibility of education system at all levels	
Environmental	➢ promote environmental protection in legal, business and administrative sectors ➢ improve land and water management ➢ improve ecological conditions in human settlements	➢ protect biodiversity, water sources and green areas ➢ reduce pollution, especially in the energy sector ➢ improve land and waste management ➢ enhance disaster risk management	➢ develop "environmentally clean" production and innovation industries ➢ increase the appeal of ecological business ➢ enhance disaster risk management	➢ develop production of alternative energy sources such as solar and wind power ➢ develop national strategy which ascertains that renewable energy sources account for at least half of the country's energy consumption by 2050	➢ introduce green, modern technologies ➢ encourage FDI towards resource-saving technologies ➢ introduce modern systems for solid waste management and new sanitary landfills at EU standards ➢ ensure effective environmental	

					management and assessment	
Institutional	➢ reform public administration and finance management ➢ improve legal and judicial systems ➢ reduce corruption	➢ improve transparency and accountability in law enforcement ➢ strengthen the public sector through e-governance, reforms, and human resource development ➢ ensure compliance of state programs and strategies covering SDGs through the National Coordinating Council on SD ➢ Ongoing dialogue with EU on constitutional and electoral reform	➢ improve public administration and civil service ➢ improve the public finance administration ➢ reduce corruption	➢ decentralize government to strengthen local representation and focus on local needs ➢ improve selection methods and training for public sector employees ➢ implement new 'Public Service Law' to fight corruption and increase transparency ➢ Reform the criminal system	➢ establish a mandatory pension savings scheme to facilitate the growth of national savings ➢ increase financial transparency and reform the disclosure process ➢ promote the independence of the National Bank of Georgia ➢ improve the mechanisms of public policy management	➢ localize SDGs and align them with national policy ➢ align the Afghanistan National Development Framework (ANDF) with SDGs and prioritize strategic sectors ➢greater monitoring, reporting and advocacy of the SDGs ➢ integrate SDGs into 2017-2021 Presidential Strategy and medium-term plans ➢strengthen line ministries to incorporate the SDGs

In moving forward, national institutions will need to be strengthened in line with the following priorities:

One, the disaggregation and nationalization of data, targets, indicators and practice is crucial for better understanding the progress in implementation and strengthening its effectiveness. Localization can improve the consistency and harmonization of national and sub-national development planning, and further decentralization could help reform both central and local government institutions. Local civil society organizations have continued to expand, with several becoming very active[29]. However, expanding multi-stakeholder participation can be both an accelerator and a challenge to governments as civil society organizations take many forms in the subregion, some of which are coming under increased scrutiny in terms of terrorism and extremism. Notwithstanding these concerns, there are many that could work in close collaboration with agencies from the UN country teams (UNCTs), and serve as supportive implementers to governments and there is a need to intensify this process by co-opting more civil society organizations, through public-private-people-planet partnerships (5Ps), adapted to the particular contexts of SPECA countries. Such partnerships present a promising way forward, especially if focused particularly on geographic areas, where pockets of the populations are at the highest risk of marginalization and social exclusion. Relatedly, there is a need to strengthen the evidence base for more informed policymaking, for which institutions that produce, analyze and disseminate reliable data and conduct research and policy analysis, need to be empowered as part of the multistakeholder ownership of SDGs.

Second, as SDGs need to be pursued alongside the promotion and nurturing of human rights-based policy approaches focused on the principles of participation, accountability, non-discrimination, empowerment, sustainability, and respect for the rule of law, the willing engagement of governments once again assumes importance. MDG experience shows that Government commitment had a significant positive influence in driving the national development strategies and plans on MDG delivery. As a starting point there is a need to anchor these principles into the national legislative process. In this regard, countries of the subregion, perform relatively well, for example, with the exception of Uzbekistan, all have ratified the *Aarhus Convention*[30] *on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters* which entered into force on October 30, 2001. No other subregion has achieved this. A key problem therefore, and not unlike other subregions, is the implementation gap, which in some countries is more acute and in need of remedial insititional and human capacity-building than in others. A related legislative concern for SPECA countries is that even though the proportion of seats held by women in national parliaments rose from 7% in 2000 to 17% in 2015, the subregion records the poorest performance of women's political empowerment in Asia-Pacific, although Kazakhstan performs slightly better than others. According to the latest Inter-Parliamnetary Union, Afghanistan records the largest share of women in parliament at 27.7%, while Kyrgyzstan has the highest share of women in ministries at 15%, with both figures well below gender parity.

[29] See ESCAP State of the Environment in Asia and the Pacific 2005 report - Chapter for Central Asia available at: http://www.unescap.org/sites/default/files/Part4_06.pdf

[30] The Convention links environmental and human rights, while broadly providing access to environmental information (including public disclosure), public participation and access to justice.

Third, as economic growth remains anemic for the foreseeable future, institutional capital needs to be dedicated to enhanced social protection systems for social cohesion and stability. Some countries have already started down this path, notably Kazakhstan. In a number of other countries, the empowerment of institutions dedicated to this goal can help foster political commitment around the principles of universality and anchor related legislation in a rights-based foundation. To be sure, the immediate challenge of large declines in fiscal revenues will require a mix of fiscal policy reforms and labour market programmes that address high levels of working poverty. Furthermore, broad multi-stakeholder involvement in the design of expanded social protection systems will be needed to ensure that social protection systems in the context of future ageing societies will be sustainable in the long term as pointed out in previous sections.

Fourth, over the short- and medium term, there will be a need for international organizations to gain a firm understanding of the evolving institutional dynamics at work, both formal and informal. More specifically, there is a need to better identify the driving factors of SDG implementation – those factors that shape the political process, and the incentives that would motivate reforms in public finance management with potential for sustainable development. Hence, in identifying an appropriate technical solution, it is vital to comprehend how its implementation could be made feasible under the given circumstances. With this deeper understanding, the implementation experience of international organizations in the subregion will be more productive.

Fifth, there is a need to strengthen national institutions that support policy formulation on trans-border issues such as infrastructure connectivity in roads, electricity, ICT, and disaster risk reduction, as well as the management of transboundary water resources. An existing subregional cooperation mechanism, such as SPECA, supported by good information and analytical evidence, generated by the research programmes of ESCAP and ECE working in close partnership with UNCTs, and other partners such as CAREC, the Islamic Development Bank, and the Aga Khan Foundation, could play a useful role in promoting experience exchanges, policy coherence and consistency across neighbouring countries.

5. Capability gap assessment of subregion in its implementation of the 2030 Agenda for Sustainable Development

Achievement of the SDGs in NCA will depend on the extent to which lasting momentum is triggered that will accelerate graduation from the "in transition" phase of the subregion.

The process of assessing capacity gaps and delivery modalities of capacity building activities has begun in earnest both at the individual country level as well as the UN system level. UNDP and the UN regional commissions signed a partnership agreement, UN Country Teams (UNCTs) have integrated SDGs in UN Development Assistance Frameworks (UNDAFs), while Member States of ESCAP, are working on a roadmap that will promote regional cooperation in the implementation of the SDGs, structured along evolving priority action areas and in a phased approach. ECE has launched a scoping study, for which results are expected to be available at the forthcoming SPECA Economic Forum and Governing Council in November 2016. Likewise as shown above, a number of

countries in the subregion have articulated as part of their development plans their vision, which include evolving priorities for implementation of the SDGs.

Drawing from the above discussion, priority areas for bridging the capacity gap include the following:

Improving governance to enhance policy planning and implementation. While governance has improved, there are still gaps and inefficiencies that need to be addressed, notably in areas such as promoting human rights-based policy approaches focused on the principles of accountability, non-discrimination, empowerment of women and other vulnerable groups, environmental sustainability and integrity, and respect for the rule of law. This hinges on knowledge and know-how available from top-level policy decision makers to ground level public administrators and civil servants. Capacity development is not, of course, limited to public sector. Strengthening capacities of the private sector and citizens are also vital. For example, to increase the share of renewable energy the private sector may need government support to attract investment and know-how to build and operate renewable energy plans, while capacity-building for a strengthened engagement of civil society could improve localization and outreach, which in turn would strengthen the national follow up and review process.

Enhancing data and statistical capacities. This is a key priority as the strategic implementation of the 2030 Agenda is contingent on the availability of timely and reliable data, as well as the development of internationally comparable indicators where they are missing. Furthermore, localization can improve the consistency and harmonization of national and sub-national development planning, and provide insights where progress is lacking, that would bring direct implementation benefits. As ESCAP's mapping of SDG indicator readiness indicates, data paucity for tiers II and III SDG indicators remain substantial in SPECA countries.[31] ESCAP's Statistical Database, shows some examples of specialized statistics that are yet to be produced. They relate to indicators on gender-based violence, informal employment and slums, amongst others. In other cases, where data are available, it is essential to ensure the quality of the statistics provided against a quality assurance framework.[32] Trade data is particularly problematic, as most official data omit trade through unofficial channels, which can be very large (Mogilevskii and ADBI).

6. ESCAP Responses and Recommendations

In the area of statistics ESCAP provides a forum for member States in the region to address shared challenges in statistics development. In a nutshell, the target of the region is to develop well-resourced and well-functioning statistical systems that produce and disseminate a basic range of official statistics required for policymaking, including for SDG monitoring, in line with internationally agreed standards, including the Fundamental Principles of Official Statistics.[33] ESCAP, beyond

[31] For an in-depth discussion see the paper prepared under session 3 titled "SDG indicator readiness in SPECA countries"
[32] For an example of a statistical quality assurance framework, see that of the European Statistical System at http://ec.europa.eu/eurostat/documents/64157/4392716/ESS-QAF-V1-2final.pdf/bbf5970c-1adf-46c8-afc3-58ce177a0646
[33] For further information on the Fundamental Principles of Official Statistics please see http://unstats.un.org/unsd/dnss/gp/FP-Rev2013-E.pdf

providing an intergovernmental forum, contributes to the development and the implementation of regional programmes that focus on domain-specific as well as institutional capacity building.[34]

The difference between the SDGs and the Millennium Development Goals is that the former covers statistics development under targets 17.18 and 17.19 as a means of implementation. Hence, beyond building capacity for the given set of SDG indicators, building national statistical capacity is a part of the core development agenda.[35] Since the adoption of the 2030 Agenda, the ESCAP Committee on Statistics has worked on ensuring that existing initiatives are well aligned with and responsive to the requirements of SDG monitoring. The region's efforts have culminated in a draft collective vision and framework for action by the Asia-Pacific statistical community for advancing official statistics for the 2030 Agenda for Sustainable Development, which will be tabled for approval at the fifth session of the Committee on Statistics to be held in December 2016.

Besides offering a holistic institutional framework for capacity-building, **ESCAP** is mandated and well placed to give new momentum to subregional cooperation and integration in North and Central Asia in the following:

- **Regional connectivity**[36] to promote the smooth flow of goods, services and people; build up regional trading and investment corridors, create wide renewable energy networks, and build mutually beneficial, regional economic integration and cooperation with Russia, China and Japan.

- **Equity and social justice** by strengthening the social dimension[37] of the 2030 Agenda and ensuring its effective integration into the economic and environmental dimensions[38].

- The **food, water and energy nexus** by addressing these interlinkages with the indivisibility of SDGs that provides the subregion with the means to improve outcomes, and muster the political will to further enlarge the scope of cooperation and cross-sectoral coordination, particularly in the Syr Darya Basin. Furthermore, subregional climate change adaptation and disaster risk reduction (DRR) measures can be particularly cost-effective policies when actions are taken on a cooperative subregional basis.

  In conclusion, agreeing on a long-term agenda for regional economic cooperation and integration for SDG implementation at the political, policy and capacity-building levels, form major building blocks of this holistic and integrated subregional policy agenda. In this regard,

[34] ESCAP provides analysis, technical assistance and training in areas of agricultural, disaster-related, economic, environment and gender statistics. ESCAP's work also supports institutional capacity building through standards-based modernization activities, e.g. SDMX and the implementation of Fundamental Principles of Official Statistics through support to statistical planning and associated reviews.

[35] http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E

[36] For an in-depth discussion see the paper prepared under session 1 titled "North and Central Asia as a Transit Hub: Potential, Challenges and Way Forward"

[37] For an in-depth discussion see the paper prepared under session 5 titled "Rebalancing development for Equality, Inclusion and Social Justice"

[38] Also see note by the secretariat "Fostering sustainable development in Asia and the Pacific" presented at the Asia-Pacific Forum on Sustainable Development, Pattaya, Thailand, 19-21 May 2014

SPECA offers a multistakeholder coordinated and coherent means of implementing SDGs. While undoubtedly, governments must take full ownership and lead the process, efforts by national authorities alone, will not be sufficient to guarantee the achievement of the SDGs. By bringing countries around a common purpose of integration, interconnectivity and institution-building, SPECA can serve as a mechanism that helps ground its countries' national efforts in ESCAP's and ECE's wider regional strategies for the attainment of the sustainable development goals of the 2030 agenda. Towards this end, the UN Secretary-General Ban Ki-moon, in September 2016, underlined [39] that "World leaders recognized like never before the role of regional cooperation in implementing and assessing progress towards 2030 Agenda. … The UN Regional Commissions are central to our work. Every day, they promote regional cooperation and integration and extend their expertise for socio-economic development."

[39] Opening of High-level side event on "Regionalism and the 2030 Agenda for Sustainable Development" organized on the margins of the General Debate of the 71st General Assembly

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