UNITED NATIONS
KAZAKHSTAN

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COMMON COUNTRY ANALYSIS

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November 2024

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SDG Trends in Kazakhstan

SDG achieved	1 NO POVERTY
Challenges remain	4 QUALITY EDUCATION; 10 REDUCED INEQUALITIES
Significant challenges remain	5 GENDER EQUALITY; 6 CLEAN WATER AND SANITATION; 8 DECENT WORK AND ECONOMIC GROWTH; 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE; 11 SUSTAINABLE CITIES AND COMMUNITIES; 12 RESPONSIBLE CONSUMPTION AND PRODUCTION; 17 PARTNERSHIPS FOR THE GOALS
Major challenges remain	2 ZERO HUNGER; 3 GOOD HEALTH AND WELL-BEING; 7 AFFORDABLE AND CLEAN ENERGY; 13 CLIMATE ACTION; 15 LIFE ON LAND; 16 PEACE, JUSTICE AND STRONG INSTITUTIONS
Insufficient data	14 LIFE BELOW WATER

Gender Inequality and Women Empowerment

29%

of all business owners are women

19.4%

of seats in the Mazhilis are held by women (previous election — 26.9%)

25.2%

gender pay gap

Education & Health

36%

of students achieved Level 2 or higher in PISA reading (OECD average (74%)

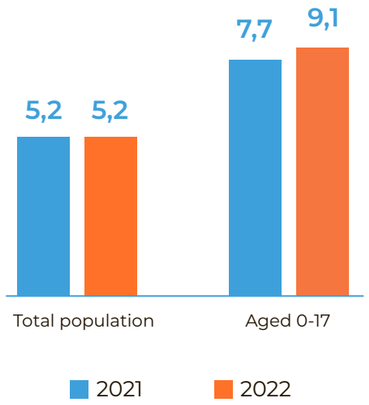
65%

of children aged 2-5 attend preschool

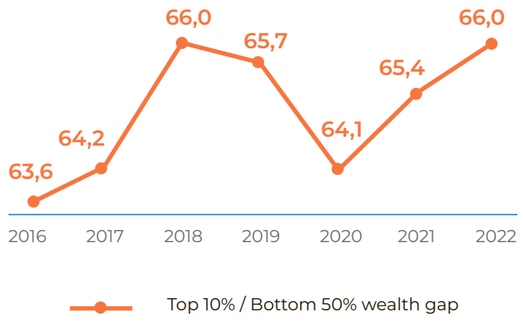
451

Deaths from NDCs per 100,000 population (WHO European Region – 359)

Children face higher poverty rates than the national average



The wealthiest 10% own 66 times more wealth than the poorest half



LEAVE NO ONE BEHIND

61 dependents (children and seniors) for every 100 persons of working age (globally – 55)

25% of persons with disabilities who can work are employed

12,651 children without parental care live in institutions

148th place among 183 countries for youth political and civic participation

1 woman dies every three days due to domestic violence

273 Refugees reside in Kazakhstan

480 asylum-seekers reside in Kazakhstan

26% of surveyed migrants reported having no access to health services

32,659 people living with HIV, including 3,862 new cases in 2023

88% of people living with HIV receive antiretroviral treatment

Environment

18th

highest in the world for greenhouse gas emissions per capita

40th

most polluted country in the world based on PM2.5

50%

water loss in some irrigation systems

Top 5 SDG-related risks requiring high commitment and capacity

- Equality and Non-Discrimination
- Environment and Climate Change
- Quality of Democracy
- Justice and Rule of Law
- Quality of Infrastructure

Key entry points to accelerate the achievement of SDGs

- Inclusive economic diversification
- Agri-food systems
- Clean energy access and affordability
- Climate change, biodiversity loss and pollution
- Human rights, justice and social cohesion
- Digital transformation
- Quality education

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LIST OF ABBREVIATIONS AND ACRONYMS

AI	Artificial intelligence
ART	Antiretroviral treatment
BNS ASPR	Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan
CCA	Common Country Analysis
CF	Cooperation Framework
CPC	Caspian Pipeline Consortium
CPS	Child protection system
CRPD	UN Convention on the Rights of Persons with Disabilities
CSO	Civil society organisation
DRR	Disaster Risk Reduction
ESD	Education for sustainable development
EU	European Union
FAO	Food and Agriculture Organization
FDI	Foreign direct investment
GBV	Gender-based violence
GCM	Global Compact for Safe, Orderly and Regular Migration
GDP	Gross domestic product
GEF	Global Environment Facility
GHG	Greenhouse gas
HIV	Human immunodeficiency virus
ICF	International Classification of Functioning, Disability and Health frame-work
ICT	Information and Communication Technology
IT	Information Technology
ITU	International Telecommunication Union
KZT	Kazakhstani Tenge
LNOB	Leave no one behind
Mbps	Megabits per second
MDRA	Multidimensional risk analysis
NCD	Non-communicable diseases
NDC	Nationally Determined Contribution
NHRI	National Human Rights Institution
OECD	Organisation for Economic Co-operation and Development
OSCE	Organization for Security and Cooperation in Europe
PISA	Programme for International Student Assessment
RE	Renewable energy
SDGs	Sustainable Development Goals
SME	Small and medium-sized enterprise
SPECA	United Nations Special Programme for the Economies of Central Asia
STEM	Science, technology, engineering and mathematics
TSA	Targeted social assistance
TVET	Technical and vocational education and training
UES CA	United Power System of Central Asia
UN	United Nations
UNCT	United Nations Country Team
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UN ESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UPR	United Nations Universal Periodic Review
USD	United States Dollar
USSR	Union of Soviet Socialist Republics
WHO	World Health Organization

EXECUTIVE SUMMARY

The Republic of Kazakhstan is the largest landlocked country in the world, with a population of 20.1 million people. Since gaining independence in 1991, Kazakhstan has made significant progress in economic and social development, graduating into an upper-middle-income country. The share of the population with incomes below the subsistence level has decreased from 46.7 per cent in 2001 to 5.2 per cent in 2023. Kazakhstan ranks 67th on the Human Development Index, placing it among countries with very high human development.

The country has demonstrated a strong commitment to Agenda 2030 for Sustainable Development by integrating the Sustainable Development Goals (SDGs) into its national development strategies and achieving significant progress, particularly in poverty reduction. However, major challenges persist in areas such as affordable and clean energy and climate action. The country ranks among the top emitters of greenhouse gas emissions per capita and is highly vulnerable to the impacts of climate change. In this regard, Kazakhstan has committed to reducing its emissions by adopting the Strategy on Achieving Carbon Neutrality by 2060.

The events of January 2022 prompted political and economic reforms that were initiated by President Kassym-Jomart Tokayev who announced a political agenda aimed at building a 'new Kazakhstan'. These changes include, inter alia, reducing presidential powers and strengthening the role of Parliament; introducing a mixed proportional-majoritarian electoral system for Mazhilis; simplifying the registration of political parties; and limiting the privileged position of the former President and his inner circle.

The economy of Kazakhstan is heavily reliant on the oil and gas sector, posing challenges for inclusive, sustainable, and resilient economic development. Over the past decade, the country has experienced an economic slowdown — characterized by low economic complexity, stagnant productivity growth, decreasing investments in fixed assets, and increasing imbalances in public finance — resulting in an average economic growth of only 2.9 per cent. By jointly addressing cross-border issues with neighbouring countries, including transport connectivity, water management, Kazakhstan can enhance its achievement of the SDGs.

In 2024, Kazakhstan will finalise its term as a member of the UN Human Rights Council. During, its membership, Kazakhstan has implemented multiple measures in the areas of human rights and the rule of law. These measures include the abolition of the death penalty for all crimes; the decriminalization of defamation; the elimination of prohibitions on certain jobs for women; and the adoption of Constitutional laws concerning the Commissioner for Human Rights and the re-establishment of the Constitutional Court.

The multidimensional risk survey — conducted by the United Nations (UN) among experts in Kazakhstan — highlights the diverse challenges the country faces with «Environment and Climate Change,» «Food Security, Agriculture, and Land,» and «Justice and Rule of Law» identified as the most significant risks in terms of the likelihood of negative developments and impact. The analysis also revealed that «Justice and Rule of Law», «Democratic Space» and «Equality and Non-Discrimination» risks are high but have a low commitment by the Government to improve in a short-term perspective.

Given that the SDGs are deeply interconnected, an integrated policy approach is essential to their achievement. This Common Country Analysis identifies the following seven strategic entry points, or key transitions, that have catalytic effects across the SDGs: (i) inclusive economic diversification; (ii) agri-food systems; (iii) clean energy access and affordability; (iv) advancing human rights, justice, and social cohesion; (v) digital transformation; (vi) quality education; and (vii) climate change, biodiversity loss, and pollution.

INTRODUCTION AND METHODOLOGY OF CCA DESIGN

The United Nations Common Country Analysis (CCA) for the Republic of Kazakhstan is a forward-looking, evidence-based and integrated joint analysis of the context for sustainable development in the country. The CCA is based on the contribution and expertise of 110 UN colleagues from 27 UN agencies, funds and programmes under the leadership of the Resident Coordinator Office in the Republic of Kazakhstan. To facilitate this process, a task force was established to ensure coordinated efforts with the United Nations Country Team (UNCT).

The CCA is aligned with Kazakhstan's national priorities as outlined in the Kazakhstan 2050 Strategy, the Strategy for Achieving Carbon Neutrality by 2060, the National Development Plan until 2029, and other sectoral strategies. It also builds on the findings of the second Voluntary National Review for Kazakhstan on the implementation of the 2030 Agenda. In addition, the principles of human rights, gender equality, leaving no one behind, sustainability, accountability and resilience were mainstreamed throughout the document to emphasize often overlooked but crucial aspects of development through utilizing the concluding observations of the UN Treaty Bodies and the Universal Periodic Reviews. Therefore, the CCA serves as the analytical foundation for the design of the next UN Cooperation Framework (CF) 2026-2030. At the same time, the analysis can immediately inform decision-making by the government and other stakeholders.

The CCA is primarily an anticipatory document with projections extending to 2030. It includes the results of a foresight exercise conducted by the UNCT on 23-25 April 2024, using a driver-based scenarios approach with the key question: «How will sustainable development evolve in Kazakhstan from 2024 to 2030?». The foresight exercise aimed to methodically analyse key drivers, factors and actors to identify four possible scenarios for Kazakhstan by 2030. This exercise helped the UNCT identify future entry points to keep the CF relevant and responsive to emerging challenges.

The UN in Kazakhstan also carried out a multidimensional risk assessment survey in July 2024 to ensure forward-looking and comprehensive understanding of risks that may challenge the achievement of the SDGs. The survey consisted of 46 questions, including 14 exploratory open-ended questions, and was available in both English and Russian. The sixty-three experts who completed the survey were selected based on their publications, presentations, memberships, and roles in organizations that address developmental issues in Kazakhstan. The sampling methodology allowed for gender, geographic, stakeholder and thematic diversity of respondents.

Furthermore, this CCA is based on an inclusive and participatory process, ensuring stakeholder engagement to make the document outward-focused rather than UN-centric. The report is based on consultations with the Government, findings from the «Sustainable Development of Kazakhstan until 2030» session with 40 representatives (29 women and 11 men) from civil society and the private sector on 19 April 2024, and the «Reinvigorating Partnership on SDGs with Civil Society» session on 5 December 2023. Given that youth make up almost one-third of the country's population, a focus group discussion was held on 9 July 2024, with 23 members (15 women and 8 men) of the UN Youth Advisory Board aged 16-34 coming from 10 regions of Kazakhstan. The session identified the challenges faced by youth, determined which groups are most disadvantaged, and used a «Tree of Vision» exercise to visualize Kazakhstan's future.

The analysis is data-driven and builds an evidence base sensitive to dynamic changes. It employs a comprehensive range of quantitative and qualitative data derived from an extensive desk review, as well as primary data collection. Secondary data and existing literature were used to corroborate and augment evidence from the primary data. It is important to note that in many cases, however, people who are left behind in development are not captured in official data due to the lack of disaggregated

data, thus rendering them invisible in the design of policies and their assessment.

To address the issue, the UN in Kazakhstan conducted focus group discussions, engaging vulnerable groups identified by the UNCT. These groups included: (i) refugees; (ii) asylum-seekers; (iii) migrants; (iv) GBV (gender-based violence) and domestic violence survivors; (v) people living with HIV (human immunodeficiency virus); and (vi) persons with disabilities. The primary goal was to identify challenges and vulnerabilities faced by each group along with the underlying root causes. Overall, 45 participants participated in the focus group exercises in Astana and Almaty. Furthermore, Kazakhstan is currently conducting the Multi-Indicator Cluster Survey (MICS) across all regions, providing valuable insights into vulnerable groups. MICS remains a key data source for measuring SDGs under the 2030 Agenda. Therefore, the current CCA will be updated next year to reflect the MICS results.

The document integrates systems thinking, linking the analysis of issues for each SDG and across SDGs. It captures the interconnections, resources, information, institutions, and capacities needed to address pathways to achieve the Agenda 2030. The analysis extends beyond national borders, factoring regional and transboundary issues that impact a country's SDG trajectory. Consequently, the United Nations Special Programme for the Economies of Central Asia (SPECA) Common Chapter focuses on critical subregional issues, including trade and investment, transport connectivity, energy connectivity and transboundary water management.

To enhance the focus on environmental and climate change issues, the section was developed with substantial support from the UN Partnership for Action on Green Economy. The CCA also draws on the RiX (Risk Information Exchange) Spotlight[1] for Kazakhstan developed by the UN Office for Disaster Risk Reduction and insights from the «Just Transitions from Mining and Fossil Fuels to a Green Economy in Kazakhstan» workshop, conducted by the Issue-Based Coalition on Environment and Climate Change for Europe and Central Asia on 16 April 2024.

The CCA begins with an overview of Kazakhstan's development context in Chapter 1. This is followed by multidimensional risk and foresight analyses in Chapters 2 and 3. The subsequent chapter focuses on determinants of inequality and analysis of eight vulnerable groups. Financial landscape analysis is presented in Chapter 5, while Chapter 6 contains a stakeholder/partnership analysis in the context of Kazakhstan. Critical subregional and transboundary issues are addressed in Chapter 7. The concluding section, Chapter 8, highlights seven top priority issues that need to be addressed to advance the 2030 Agenda and accelerate the achievement of the SDGs.

[1] The Risk Information Exchange (RiX) is UNDRR's living repository of open-source global, regional, and national risk information to improve risk knowledge, risk literacy, and risk analysis. The RiX Spotlight CCA for Kazakhstan can be found here: http://www.undrr.org/quick/86323

1. KAZAKHSTAN'S DEVELOPMENT CONTEXT

1.1. National vision on sustainable development

The COVID-19 pandemic and geopolitical challenges have slowed down the process of achieving the SDGs in Kazakhstan. According to the Sustainable Development Report 2024[2], Kazakhstan ranked 66th out of 167 countries in the SDG Index, scoring 71.11, which is below the pre-pandemic level (71.33 in 2019). Kazakhstan has successfully achieved SDG 1 (No Poverty). However, according to the current methodology, achieving SDG 1 is measured solely by the poverty headcount ratio at USD 2.15 and USD 3.65 per day.

This approach does not take into account other methodologies for measuring poverty, including child poverty.

As noted in Chapter 1.5, 'Poverty and Inequality,' poverty remains a key challenge for the country. While significant challenges remain for several goals, including SDG 5 (Gender Equality) and SDG 6 (Clean Water and Sanitation). Major challenges are noted for SDG 2 (Zero Hunger), SDG 3 (Good Health and Well-Being), and SDG 13 (Climate Action), among others (Figure 1). It is worth mentioning that the SDG Index was computed based on international data from 2012 to 2024, with occasional use of data for 2023-2024. Therefore, the overall score might not fully reflect recent activities towards achieving the SDGs.

Figure 1. SDG Trends in Kazakhstan

SDG achieved	1 NO POVERTY
Challenges remain	4 QUALITY EDUCATION; 10 REDUCED INEQUALITIES
Significant challenges remain	5 GENDER EQUALITY; 6 CLEAN WATER AND SANITATION; 8 DECENT WORK AND ECONOMIC GROWTH; 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE; 11 SUSTAINABLE CITIES AND COMMUNITIES; 12 RESPONSIBLE CONSUMPTION AND PRODUCTION; 17 PARTNERSHIPS FOR THE GOALS
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Insufficient data	14 LIFE BELOW WATER

Source: Sustainable Development Report 2024

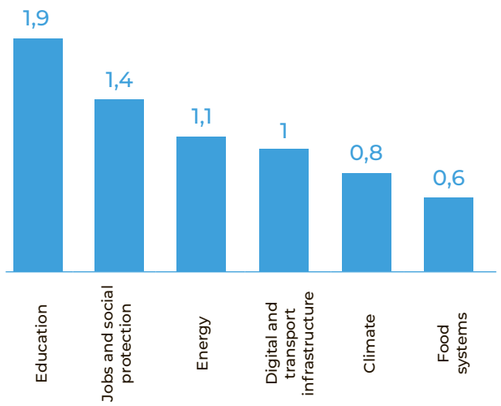
[2] Sachs, J.D., Lafortune, G., Fuller, G. (2024) The SDGs and the UN Summit of the Future. Sustainable Development Report 2024. Paris: SDSN, Dublin: Dublin University Press. doi:10.25546/108572

To ensure Kazakhstan achieves the SDGs by 2030, the state planning system should be linked closely to budgetary processes through SDG principles. Budget tagging analysis in Kazakhstan revealed that the State budget is 80 per cent consistent with SDGs. Further work will focus on improving the quality of budget allocation and distribution and better monitoring of expenses. In particular, analysing and aligning the budget through the lens of the SDGs, including from a gender perspective with gender-responsive budgeting, is as an effective approach to determine the extent to which funding levels are influencing progress on relevant SDG indicators.

This approach allows for better monitoring of indicators, tracking of cause-and-effect relationships, and early identification of the possible risks of not achieving targets in the short and long term. Furthermore, achieving the SDGs requires substantial investment from both public and private sectors to make these goals a reality. According to calculations by the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), Kazakhstan's additional SDG spending needs across six transition pathways are estimated to average nearly 7 per cent of Gross domestic product (GDP) per year until 2030[3]. The largest component is education, accounting for 1.9 per cent of GDP, followed by jobs and social protection, and affordable and clean energy (Figure 2).

Kazakhstan has developed an institutional framework for the implementation of the SDGs (see Annex 1). The Coordination Council for SDGs, chaired by the Prime Minister of Kazakhstan, was established in 2018. The Ministry of National Economy of the Republic of Kazakhstan is the coordinating body of the Council, with the Economic Research Institute as the Secretariat providing expert support. The five «Ps» inter-ministerial working groups and an SDGs Monitoring Committee were established to support the Council's activities. The Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan (BNS ASPR) is tasked with developing methodologies and collecting statistical data for the SDGs. Additionally, in 2023 the Parliamentary Commission, headed by the Chairman of the Senate, was established to monitor the implementation of SDGs and national targets. It also focuses on the integration and mainstreaming of sustainable development principles in budgeting, norm-setting, and regional development.

Figure 2 Kazakhstan's additional spending needs per year,% of GDP

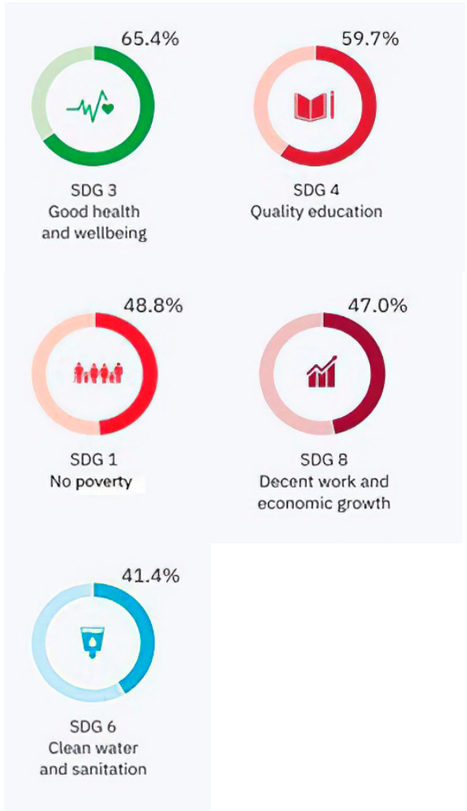


Source: ESCAP (2019)

Note: «Jobs and social protection» is based on spending needs for Goals 1, 3, 5, 8 and 10; «Education» on Goal 4, «Food systems» on Goals 2, 14 and 15; «Digital and transport infrastructure» on Goal 9; «Energy» on Goal 7; and «Climate» on Goals 6, 11, 12 and 13.

During the preparation of the second Voluntary National Review in 2022, consultations were held in all regions of Kazakhstan with more than 2,500 representatives of government agencies, civil society, business, media, youth, and women's organizations. Figure 3 shows the top five priority SDGs for Kazakhstan. Interestingly, after three years, citizens of Kazakhstan prioritized almost the same SDGs as in the first Voluntary National Review in 2019, apart from SDG 1 (No Poverty). Three years later, the eradication of poverty has become still more relevant for residents of Kazakhstan than the sustainability of cities and communities. It is worth noting that the Government intends to assess a progress on SDGs by undertaking VNR in 2025 to present at HLPF 2025 which will deeply review SDG 3, SDG 5, SDG 8, SDG 14, and SDG 17.

Figure 3 The top 5 priority SDGs of Kazakhstan according to online voting



Source: Voluntary National Review 2022, Kazakhstan

In January 2024, during the 7th SDG Coordination Council, chaired by the Prime Minister, the Government of Kazakhstan initiated a review of 262 national SDG indicators, including 87 priority indicators, adopted in 2021. Currently, the new national SDG indicators are expected to be approved by the Government. To support evidence-based policy prioritization, the Government will also develop target values for these indicators until 2030. This process will be followed by the integration of the national SDG indicators into strategic planning documents at state and local levels.

Currently, integration of SDGs at local levels is below 30 per cent, while it reaches up to 80 per cent in national strategic plans. It is crucial to identify priority SDG targets for each region and support them with specific measures and financing. Kazakhstan is implementing SDG localization activities in the newly established regions — Abay, Ulytau and Zhetysu — and Kyzylorda as pilot regions. As part of this initiative, a comprehensive SDG localization methodology for local government was developed with the support of United Nations Development Programme (UNDP) and is in the process of being adopted by the Government. According to the SDG Coordination Council resolution, the localization process should be launched in the rest of the regions during the 2024-2025 period. Subnational reviews of SDG implementation are equally important. In this regard, in 2023 Almaty was the first city in Kazakhstan to present its voluntary local review.

There have been a few studies that explore how to accelerate SDG attainment in Kazakhstan. In the report entitled Kazakhstan's SDG Progress and Transformative Pathways, ESCAP highlighted five policy priorities for Kazakhstan: education, economic diversification, climate change and energy, digital transformation, and financing sustainable development. At the same time, UNDP, together with the Economic Research Institute, developed the Central Asia SDG Platform, which includes findings of the SDG interlinkages exercise. SDG interlinkages show how actions directed towards one SDG can influence the others. Based on the findings, the following SDG targets are prioritized to accelerate the SDGs in Kazakhstan: (i) 2.4 Sustainable food production systems; (ii) 4.4 Skills for employment; (iii) 7.2 Renewable energy; and 10.4 Policies for greater equality.

[3] ESCAP (2023) Kazakhstan's SDG progress and transformative pathways. Internal document.

1.2. Human rights

Kazakhstan is a member of the UN Human Rights Council for the 2022–2024 term. In commemoration of the 75th anniversary of the Universal Declaration of Human Rights, the country ratified the "Optional Protocol to the Convention on the Rights of the Child on a communications procedure"; fostered implementation of the "listening state" concept, with particular attention to the rights of women, children, youth, persons with disabilities and other vulnerable groups; promoted digitalization and reduced disadvantage due to lack of access to modern technologies; increased participation of civil society in the protection of human rights and freedoms in accordance with the SDGs, including by developing public oversight mechanisms in various areas of government to protect and respect human rights and legitimate interests; and ensured the integration of human rights and SDG indicators into national action plans.

Kazakhstan is a party to almost all core international human rights instruments except the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families. With the ratification of the Optional Protocol to the Convention on the Rights of the Child on a communications procedure and the Optional Protocol to the Convention on the Rights of Persons with Disabilities, six UN human rights treaty bodies may consider communications from individuals under the jurisdiction of Kazakhstan (Committee against Torture, Committee on the Elimination of Racial Discrimination, Committee on the Elimination of Discrimination against Women, Human Rights Committee, Committee on the Rights of Persons with Disabilities and Committee on the Rights of the Child). Kazakhstan has strengthened its engagement with the UN Treaty Bodies. However, the State has shown reluctance in implementing the views of the Treaty Bodies, particularly on individual communications.

Kazakhstan has ratified 25 International Labour Organization (ILO) Conventions, including Workers' Representatives (C135), Labour Inspection (C081), and the Worst Forms of Child Labour (C182). However, advocacy continues for the ratification of ILO Convention No. 190 on Violence and Harassment, as it is recognised as a significant commitment by the State to ending workplace violence and harassment.

International treaties ratified by Kazakhstan have supremacy over national laws and each acting international treaty of Kazakhstan is subject to mandatory implementation in good faith. Since March 2017, the Constitution no longer provides for direct application of international treaties ratified by Kazakhstan. The legislation of Kazakhstan determines the procedure and conditions for their application in the country's territory.

During its last (third review) in 2019, Kazakhstan has received 245 recommendations from peer states in the UN Universal Periodic Review (UPR), of which 214 were supported by the State. Key supported recommendations include *inter alia* the full alignment of the Ombudsperson institution into full compliance with the Paris Principles; ensuring an enabling environment for civil society activities, activist groups and human rights defenders of lesbian, gay, bisexual, transgender and intersex persons; increasing efforts to promote a zero-tolerance approach to torture and ill-treatment in particular by conducting timely, transparent and comprehensive investigations into and prosecutions of reported incidents of torture; ensuring the exercise of freedom of expression and opinion by revising the criminal law used against independent media and the law on incitement to hatred used to restrict freedom of expression; deepening measures aimed at combating violence against women, in particular by criminalizing all forms of gender-based violence in order to protect all survivors, punish the perpetrators and avoid impunity; and adopting a comprehensive anti-discrimination legislation. Although there has been progress in addressing some of the supported recommendations, it is observed that many recommendations have not been fully implemented, particularly in the areas of freedom of expression and opinion, freedom of assembly and association, equality and discrimination.

The plan of action on human rights and the rule of law of 8 December 2023 foresees the establishment of a standing taskforce on the issues of anti-discrimination legislation and implementation of the International Convention on the Elimination of all Forms of Discrimination and/or of a structural unit in the National Centre for Human Rights. The task force has convened twice thus far. CSOs voiced over the lack of consideration of sexual orientation and gender identity as grounds for discrimination during the working group discussions in accordance with the latest CEDAW concluding observations and the latest UPR recommendations.

Since 2012, the Kazakhstan's National Human Rights Institution (NHRI) has been accredited with B status from the Sub-Committee for Accreditation of the Global Alliance of NHRIs. Since the accreditation, Kazakhstan has addressed some of its recommendations such as the consolidation of its power at constitutional level by the constitutional law on the Commissioner for Human Rights in the Republic of Kazakhstan dated 5 November 2022. The Sub-Committee also recommended that the NHRI ensure a clear, transparent, and participatory staff selection process, allowing for the equal participation of diverse segments of society. Additionally, the NHRI has received recommendations to develop policies and procedures to guarantee broad and pluralistic staff representation.

In 2021 the NHRI, which had functioned only in the capital since its establishment in 2002, expanded to all regions and cities of the country. At the same time, the Ombudsperson for Human Rights continues to be appointed indirectly by the President because the Senate, the upper Chamber of the Parliament of Kazakhstan, elects the Ombudsperson upon nomination by the President with no alternative nominations. Similarly, the Ombudsperson can be dismissed from duty by the Senate upon a motion by the President. This may undermine institutional independence and is therefore recognized as a key reason for not being fully aligned with the Paris Principles, while it remains to be one of the key UPR recommendations to be addressed during its next review scheduled for January/February 2025.

In 2016, a presidential decree created the Ombudsperson for the Rights of Children. This person is appointed by the President and acts on a pro bono basis. At the subnational level, mayors/governors (*akims*) appoint such ombudspersons also acting pro bono. In 2023, the President established a post for an ombudsperson for the rights of socially vulnerable groups of people. The mandate includes people with disabilities. The person currently acting in this capacity also holds the position of Member of Parliament. Both Ombudspersons act on a pro bono basis and lacks essential human and financial resources, which has hindered the full operationalization and independency of their respective mandates.

Current legislation on freedom of assembly, particularly the Law "On the Procedure of Organizing and Holding Peaceful Assemblies" restricts to fully exercise of freedom of assembly. Articles 10 and 12 of the Law requires organizers providing notification (five working days in advance of any assemblies and rallies, and ten working days in advance of any marches and demonstrations) or seeking authorisation of an assembly to provide an extensive list of information, including "the purpose", "form", "anticipated number of participants", "the sources of financing of the peaceful assembly". There is evidence that state authorities sometimes reject the request of human rights defenders for organizing peace assemblies arbitrarily and on ad hoc basis.

The new Mass Media Law introduced restrictive mechanisms, such as preventive visits by local authorities to control media products before the release, and broad grounds for suspending journalistic activities. The law also classifies online/social media outlets as part of mass media, requiring them to register and maintain a physical presence in Kazakhstan. In addition, the Ministry of Foreign Affairs is mandated to

grant or reject accreditation to foreign media through a procedure it defines. The law also broadens the grounds for suspending and terminating journalistic activities beyond international human rights standards. Civil society organizations have raised concerns over the restrictive nature of the new law and continue to advocate for aligning the legislation with international standards.

Another legislation relating to the exercise of freedom of expression and opinion has been adopted by the Parliament on 10 May 2023, i. e. the Law on Online Platforms and Online Advertising. In this law, in an effort to safeguard society from online disinformation, legislators have imposed administrative fines for 'posting and disseminating false information'. However, these vague terms have sparked concerns among civil society organizations about the protection of free speech on social media, as they provide the authorities with another means to prosecute dissenting voices. Noteworthy, one of the key recommendations made during the third cycle of the UN UPR in 2019 calls the Government of Kazakhstan to «repeal and revise the legal provisions that restrict freedom of expression and refrain from using criminal provisions as tools to supress the expression of dissenting opinions, including on the internet and social media» in line with the International Covenant on Civil and Political Rights. Civil society organizations have expressed concern over fines imposed on certain journalists for alleged defamation and dissemination of false information, viewing these actions as attempts to restrict freedom of expression and opinion.

In addition, grounded in vaguely defined offences of «extremism», such bans violate the rights to freedom of expression, assembly and association. Furthermore, individuals convicted under criminal articles and labelled terrorist or extremist are automatically subjected to inclusion in the list of organizations and persons connected with the financing of terrorism and extremism. This can create hardship for family members and dependents given the impact of inclusion on the list entails, including asset and bank account freezing and the prohibition against engagement in commercial and notarial acts.

Despite easing registration criteria for political parties with dissenting views, in practice the registration of a political party with dissenting views remains hardly possible. Amended election legislation now contains a mandatory registration requirement for non-commercial organizations to obtain accreditation from the Central Elections Commission if election observation is reflected in their founding charters. In the past, any public organization could monitor elections. Non-commercial non-governmental organizations are subject to additional reporting requirements under tax legislation regarding foreign funding received for certain purposes. In September 2023, the Government published a list of organizations and individuals that received foreign funding.

On 15 April 2024, the President signed the package of amendments related to ensuring the safety of women and the protection of children. The law recriminalized assault and the infliction of light bodily harm committed against «an individual in helpless condition or financially or otherwise dependent on the perpetrator», which is relevant to domestic violence. The law, however, has not explicitly made domestic violence a stand-alone offense in the criminal code or elsewhere, as the Convention on the Elimination of All Forms of Discrimination against Women recommended. This law has also fallen short of criminalization all aspects of gender-based violence and domestic violence in line with one of the key UPR recommendations urging the State to criminalize all aspects of gender-based violence.

Under the law, the duty to collect evidence in cases of domestic abuse lies with the police. The police must register and investigate all cases of domestic violence, even in the absence of a survivor's complaint, including in response to reports of domestic violence in the media or on social media. The law also eliminates the option of seeking «reconciliation» between parties in cases of repeated «battery» and «light bodily harm».

In addition, Article 120 of the Criminal Code defines sexual offenses as penetrative vaginal intercourse involving violence, threats, or exploitation of a woman's helplessness, focusing on violence rather than the absence of consent. Article 122 also stipulates that sexual offenses apply only if the survivor is under 16, with no defence based on consent or mistaken belief about the victim's age. This definition excludes survivors over 16 and male survivors, leaving them without adequate legal protection. However, the Government of Kazakhstan has expressed its interested in ratifying the Istanbul Convention and aligning its national legislation with it.

Discrimination and stigma against people living with HIV persist in the legislation and in the society. Article 118 of the Criminal Code criminalizes intentional HIV transmission and exposure, thus discouraging people from accessing to preventive measures and seeking test. There has been ongoing advocacy calls for its decriminalization in an attempt to eliminate ongoing stigma and discrimination in the society particularly towards the most vulnerable communities most affected by this legislation, such as LGBTIQ+ groups and people living with HIV. Civil society activists report that people living with HIV in remote areas face increased challenges in accessing healthcare services, as many now fear seeking treatment in public settings.

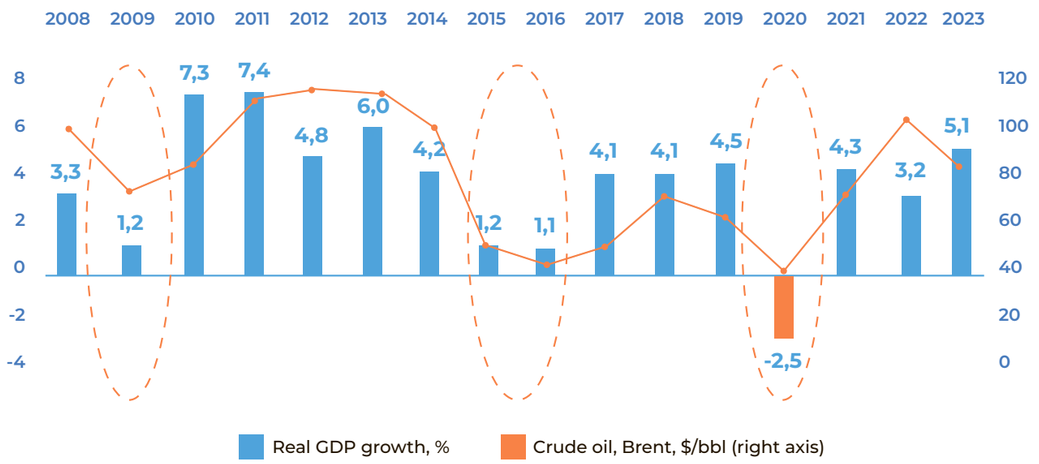
The full range of medical and psychosocial services is provided free of charge under the Guaranteed Volume of Free Medical Care. However, specialized social services provided by the institutions under the Ministry of Social Protection remain inaccessible to people living with HIV, as AIDS is classified as a contraindication for receiving such services across all age groups, including women living with HIV who are affected by violence. Exclusion of women, older persons and persons with disabilities living with HIV from crisis centers for survivors of domestic violence has persisted. In 2019, Kazakhstan received recommendations from the CEDAW Committee to address this rights violation.

1.3. Economic transformation analysis

Kazakhstan's economy is highly dependent on the production of mineral resources. Between 2000 and 2013 Kazakhstan experienced remarkable economic growth at an average of 8 per cent because of market-oriented reforms, favourable global commodity prices, significant foreign direct investment (FDI) in the energy sector and macroeconomic stability. During this period, Kazakhstan transitioned into an upper-middle-income country, significantly enhancing the living standards of its population, and substantially reducing poverty. Over the last decade, however, Kazakhstan has fallen into a middle-income trap, experiencing average economic growth of 2.9 per cent (Figure 4), largely influenced by low economic complexity, stagnant productivity growth, low levels of diversification, and increasing imbalances in public finance.

The economy of Kazakhstan is highly sensitive to fluctuations in crude oil prices. For example, in 2022, the oil and gas sector accounted for 20 per cent of GDP and over 60 per cent of the total exports of Kazakhstan (Figure 5). Of the 50 largest taxpayers in 2022, 27 were from the oil and gas sector. Taxes from this sector contribute approximately 20 per cent of the national budget, 8 per cent of local budgets, and more than 90 per cent of the National Fund, collectively accounting for over 40 per cent of the country's total tax revenue. Thus, declines in crude oil prices in 2009, 2015-2016, and 2020 led to significant economic slowdown and contraction during the COVID-19 pandemic (Figure 4). This correlation remained strong except in 2012 when Kazakhstan joined the Customs Union and subsequently experienced lower net exports.

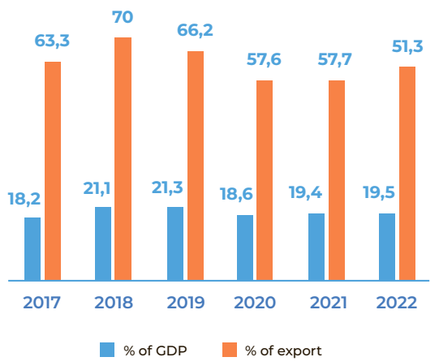
Figure 4 Economic growth in Kazakhstan versus global oil prices



Source: BNS ASPR, World Bank Commodities Price Data: January 2024

Furthermore, overdependence on oil production has inevitably caused volatility and depreciation of the local currency, which has been steadily devaluing relative to the USD from KZT 179 in 2014 to KZT 456 in 2023 after each plunge in crude oil prices (Figure 6). Low oil prices significantly impact Kazakhstan's vulnerable population, affecting employment due to potential layoffs, reducing government revenue for essential services, and potentially increasing inflation, thus diminishing the purchasing power of those in need.

Figure 5 Share of oil and gas sector in GDP and total exports,%



Source: BNS ASPR, the National Bank of Kazakhstan

Figure 6 Exchange rate USD/KZT in the last decade,%

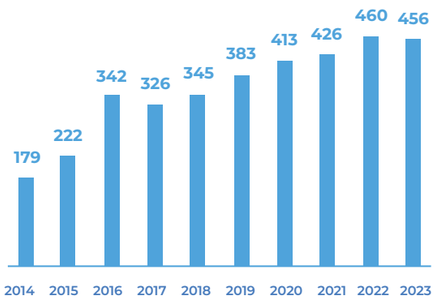
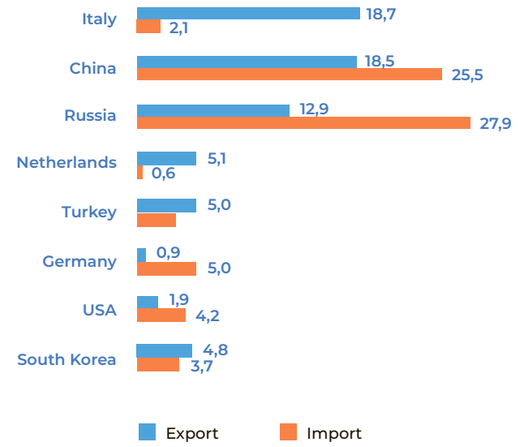
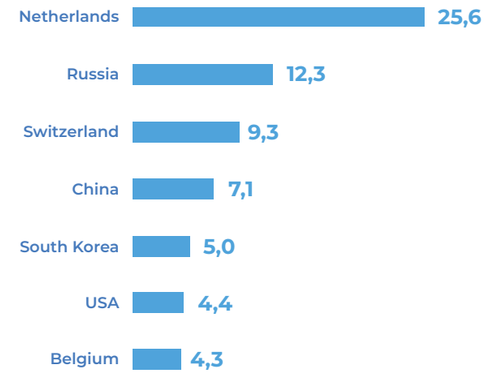


Figure 7 Key trading partners,%



Source: BNS ASPR, the National Bank of Kazakhstan

Figure 8 Gross inflow of FDI by country,%



The key challenge in the oil and gas sector is the deteriorating production at existing fields. The peak production volume of crude oil and condensate is expected to reach 104 million tonnes by 2030 [4]. Apart from three giant oil fields — Tengiz, Kashagan, and Karachaganak — most of the other fields are in the depletion stage. For instance, the production in the three largest subsidiaries of the National Company KazMunayGas — Kazakhoil Aktobe, MangistauMunaiGas and OzenMunaiGas — is expected to decline by 15-30 per cent by 2030, whereas in Kyzylorda and Aktobe oblasts, the situation is even worse, with production potentially halving in the next decade [5].

This decline is further exacerbated by the low attractiveness of developing new fields. This is because the domestic oil selling price is 40 per cent lower than the global level, while the purchase price of natural gas from subsoil users is below its extraction cost. Companies are also often obligated to provide 60 per cent to 70 per cent of their production volume to the domestic market [6]. Given that 85,000 people work in oil extraction companies and around 200,000 in the oilfield services sector, the challenges outlined could result in job losses, elevated energy costs, and diminished access to essential services for vulnerable populations, particularly in mono-cities where oil extraction serves as a primary income source.

The extended shutdown of the Caspian Pipeline Consortium (CPC), through which 80 per cent of Kazakhstan's crude oil and condensate (56.5 million tonnes) was exported in 2023, poses a serious risk of economic and fiscal revenue losses. The CPC, which operated without any disruption for more than 20 years, has been disrupted several times since the beginning of the war in Ukraine. Despite government efforts to diversify export routes, Kazakhstan remains reliant on the CPC pipeline. Although Kazakhstan increased its exports via the Baku-Tbilisi-Ceyhan pipeline by 5.5-fold to 1.5 million tonnes in 2023, this is still small compared to CPC volumes [7]. Additionally, alternative routes — such as the Atyrau-Samara pipeline, railroad

[4] Decree of the President of the Republic of Kazakhstan 'On Approval of the National Development Plan of the Republic of Kazakhstan until 2029 and the Repeal of Certain Presidential Decrees of the Republic of Kazakhstan'. https://adilet.zan.kz/rus/docs/U2400000611

[5] Ibid, p.42

[6] Ibid, p.42

[7] S&P Global (2024) Kazakhstan 'BBB-/A-3' Ratings Affirmed; Outlook Remains Stable. https://disclosure.spglobal.com/ratings/en/regulatory/article/-/view/type/HTML/id/3133510

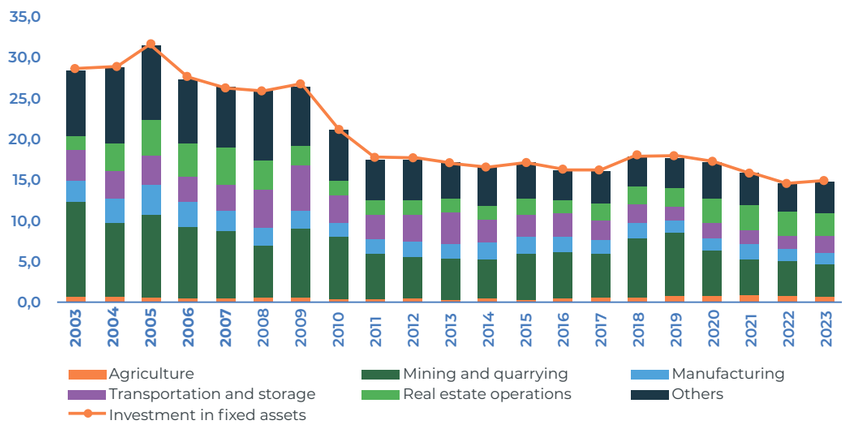
transportation to China, trans-Caspian tanker traffic, and the Baku-Tbilisi-Ceyhan pipeline — are costly, face infrastructure constraints, and require substantial investment.

Imports surged by 20 per cent to USD 61.2 billion, mainly due to strong demand for machinery and equipment as well as increased exports to the Russian Federation. Meanwhile, exports decreased by 7 per cent to USD 78.7 billion due to a plunge in oil prices. Figure 7 presents the country's key trading partners. The share of Russia in Kazakhstan's total imports decreased from 42.5 per cent in 2021 to 27.9 per cent in 2023. About 41 per cent of Kazakhstan's exports went to the European Union (EU), while the EU accounts for 19.0 per cent of Kazakhstan's total imports. At the same time, in 2023, the gross inflow of FDI reached USD 23.4 billion, with 30 per cent allocated to the mining and quarrying sector. The top three largest investors were the Netherlands (25.6 per cent), Russia (12.3 per cent), and Switzerland (9.3 per cent) (Figure 8).

The overall decrease in investment restrains economic growth in the country. For example, the share of investment in fixed assets as a percentage of GDP has steadily declined over the past two decades, dropping from 28.8 per cent of GDP in 2003, peaking at 31.9 per cent in 2005, to 15 per cent in 2023 (Figure 9). This decline can be attributed to a significant decrease in investment in the mining sector from 11.9 per cent to 3.9 per cent of GDP over the same period. Unfortunately, investment in manufacturing has also decreased from 2.7 per cent to 1.4 per cent of GDP. At the same time, an increase in investment in fixed assets has been observed in real estate operations (1.7 per cent versus 2.7 per cent) and agriculture (0.5 per cent versus 0.8 per cent).

Apart from a decline in FDI, another reason for declining investment in fixed assets in Kazakhstan is the decreasing availability of loans to businesses. Since the beginning of COVID-19, the lending focus of the commercial banks has been on consumer credit as illustrated in Figure 10. As of 1 January 2024, the volume of loans issued to individuals exceeds the volume of loans issued to business entities by 27.2 per cent or KZT 3.6 trillion. In this regard, the President highlighted the need to increase financing by commercial banks for the real sector of the economy and ensure annual growth of lending to it at a level of 20 per cent and higher[8]. As a result, businesses face greater challenges in securing the necessary funding for capital expenditures, leading to a decline in investment in fixed assets and subsequently impacting economic growth and industrial development in Kazakhstan.

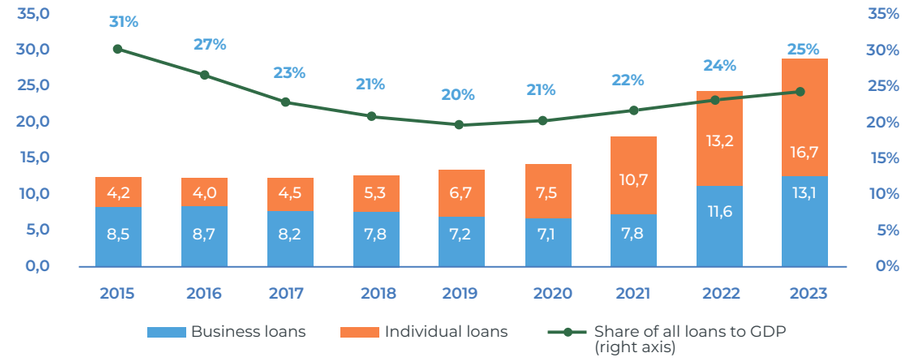
Figure 9 The structure of investment in fixed assets, as% of GDP



Source: BNS ASPR

[8] Akorda.kz (2023) Address of the Head of State Kasym-Jomart Tokayev to the people of Kazakhstan «Economic Course of Fair Kazakhstan». https://shorturl.at/otxC5

Figure 10 Loan portfolio of commercial banks in KZT trillion and its share to GDP,%



Source: BNS ASPR, the National Bank of Kazakhstan

Among different age groups, the number of borrowers aged 18 to 24 in the unsecured consumer loan segment more than doubled, rising from 376,000 in 2020 to 824,000 people in 2022. The 35-44 age group saw a 32.2 per cent increase, followed by the 45-54 age group with a 26.8 per cent increase; and those over 65 with a 26.7 per cent increase[9]. This significant rise in unsecured consumer loans, particularly among young people, poses financial risks for vulnerable groups. It can lead to higher levels of debt and financial instability. The increasing debt burden can push individuals and families into poverty and cause them to struggle to afford nutritious food. It also limits the ability of individuals to invest in their own businesses or pursue entrepreneurial opportunities, thereby stifling economic growth.

Kazakhstan's industrial landscape has undergone notable shifts. Kazakhstan's SDG 9 Industry Index rank rose substantially from 100 in 2000 to 80 in 2021; its score improved from 0.193 to 0.243, reflecting progress in industrial development. The evolution of the industrial sector, however, has been uneven. The share of medium and high-tech industries in total value added tripled from 5.1 per cent to 15.1 per cent, demonstrating a move towards more sophisticated manufacturing. Yet, the proportion of small-scale industries in total industry value added declined slightly from 4.7 per cent to 4.1 per cent, pointing to ongoing challenges in fostering and sustaining smaller industrial enterprises[10].

A unique pattern emerges when looking at the wider Central Asia region. The region leads with a 48 per cent infrastructure development rate aligned with SDG 9, outpacing the slower progress seen in Eastern, South-Eastern, Western, and Southern Asia. Despite this infrastructure advancement, Central Asia, including Kazakhstan, still lags in industrial performance and innovation, underscoring an urgent need to prioritize enhancements in technological and creative capacities[11]. This can be observed through Kazakhstan's export basket, which has become less sophisticated[12]. For example, in 1998, Kazakhstan was ranked 37th out of 90 countries on the Economic Complexity Index, with a value of 0.31. In contrast, by 2022, the country had dropped to 77th out of 133 countries, with a value of –0.17.

[9] National Bank of Kazakhstan (2023) Financial Stability Report 2022. https://shorturl.at/7p4SY

[10] United Nations Industrial Development Organization (UNIDO) Statistics Portal: https://stat.unido.org/analytical-tools/sdg?tab=charts&country=398

[11] UNIDO Industrial Development Report 2024 https://shorturl.at/Npm5L

[12] Felipe, J. & Hidalgo, C. A. (2016) Economic diversification: implications for Kazakhstan. In: FELIPE, J. (ed.) *Development and Modern Industrial Policy in Practice: Issues and Country Experience.* Cheltenham, UK: Asian Development Bank and Edward Elgar Publishing.

The key issues with the industrial policies include the overly broad identification of priority sectors, which has led to the dispersion of limited financial resources. There is also a paucity of institutional memory and intellectual continuity in industrial policy, and a lack of coherence between public policies. Moreover, there are high levels of corruption and low coordination between state institutions.

Limited diversification hinders the ability of an economy to achieve and sustain high levels of productivity. According to the World Bank, after a robust average annual growth of 4.5 per cent from 2000 to 2007, Kazakhstan's total factor productivity growth fell to 0.9 per cent between 2012 and 2022[13]. Although slower productivity growth is a global phenomenon, stagnation over this period in Kazakhstan has been characterized as the country's «lost decade»[14]. Meanwhile, real income growth outpaced productivity growth in the same period, indicating potential sustainability issues for the economy, as long-term growth requires consistent productivity gains to support rising incomes.

Kazakhstan maintains robust levels of labour participation. In 2023, the employment rate for the population aged 15 years and older stood at 65.2 per cent with 60 per cent for women and 70.9 per cent for men. This gap suggests that women have potentially untapped participation in the labour market that might be constrained by factors such as limited access to childcare, caregiving responsibilities, traditional gender roles. Furthermore, the employment rate for the labour force workforce was 95.3 per cent. Consequently, the unemployment rate was 4.7 per cent affecting 452,200 people, with a rate of 4.2 per cent for men and 5.3 per cent for women. However, according to KPMG estimates, the real unemployment rate may significantly exceed the official figure, potentially reaching 10-20 per cent, when including temporarily unemployed and non-productive self-employed individuals[15].

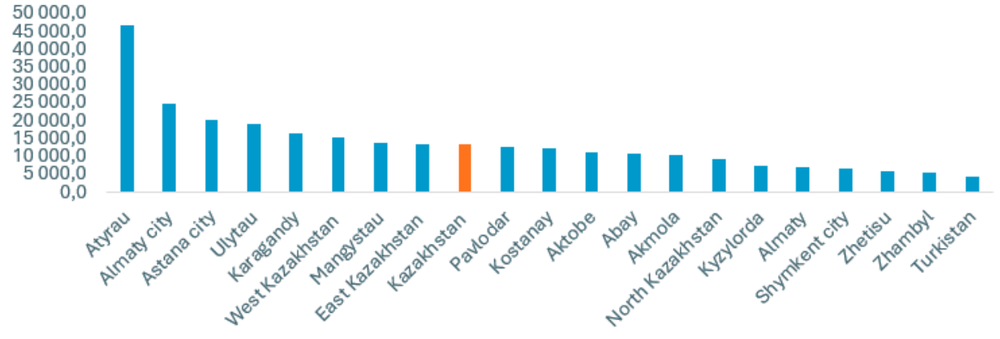
Furthermore, there were 2.2 million self-employed individuals, representing 24.1 per cent of the employed population, with 1.212 million men and 976,209 women. Among them, 44.8 per cent earn less than KZT 100,000 per month as well as 2 per cent of them receiving incomes below the minimum subsistence level. Furthermore, 1,161,444 people are informally employed, including 617,256 men and 544,188 women. Men are mostly informally employed in agriculture (49.6 per cent), construction (13.4 per cent) and trade and repair of vehicles and motorcycles (11.2 per cent). Women are primarily informally employed in agriculture (49.5 per cent), trade and repair of vehicles and motorcycles (18.3 per cent), and accommodation and food services (5.8 per cent). Informal workers often lack legal protection and social benefits leaving them particularly vulnerable to exploitation and economic insecurity.

There are several challenges that the labour market faces. First, mismatches present an ongoing challenge as 7.1 per cent of workers possess insufficient skills for their job despite meeting the formal qualifications and at least 1 in 3 businesses are operating in low-skill level[16]. Second, Platform employment (e. g., Yandex, Glovo, Wolt) in the service sector is growing rapidly, with about one million people involved in 2022. This includes hiring individuals through online platforms for short-term or project-based tasks, creating job opportunities but also bearing risks due to the absence of social guarantees. Third, only 2.1 million quality jobs in the economy, making up 32 per cent of total employment[17].[18],Labour productivity differs substantially across industries in Kazakhstan. High productivity is observed in sectors that are well integrated into global value chains and/or are export oriented. These sectors include petroleum, metallurgy, pharmaceuticals, automotive and beverage production and they have access to finance, knowledge and highly qualified professionals through a parent company or fellow subsidiaries. Nevertheless, even the most productive sectors lag five to ten times behind the leading countries in productivity.

At the same time, low labour productivity is observed in agriculture, light industry, construction, machinery, wholesale and retail sectors. Most companies in these sectors are mainly oriented towards the domestic market, getting stuck in a vicious circle of impossibility for technological modernisation due to an inability to exploit economies of scale by entering foreign markets.

In addition, regional disparities in Kazakhstan are pronounced, reflecting significant economic and social differences between various oblasts (regions) of the country. For example, the highest Gross regional product per capita was observed in Atyrau oblast (USD 46,900), followed by Almaty (USD 24,787) and Astana (20,265 USD) cities, whereas the lowest was observed in Turkistan oblast at USD 4,286 per capita (Figure 11). Almaty and Astana have experienced strong growth and development-attracting investments and offer higher living standards, better healthcare and education as well as more diverse job opportunities. In this regard, the Government of Kazakhstan has introduced regional standards for different settlements to create a more balanced and inclusive economic landscape and ensure that all settlements have the infrastructure, basic services, and opportunities necessary for sustainable development[19].

Figure 11 Gross regional product per capita in 2023, USD



Source: BNS ASPR

From the perspective of economic development, these persistent sociodemographic and economic imbalances do not serve Kazakhstan. The population is growing significantly in the southern and western oblasts and in the major cities namely Astana, Almaty and Shymkent, while the northern oblasts are experiencing decline. The situation results in decreased economic activity in the northern oblasts, excess labour force in the southern oblasts and overburdened infrastructure in big cities. At the same time, predominantly young population creates conditions for demographic window of opportunity in the future when children (34 per cent of total population)

reach the working ages. In his Message to the people of Kazakhstan, Kassym-Jomart Tokayev stated that, «the Government's goal is to turn current demographic trends into competitive

[13] Agaidarov, A., Knight, D.S., Sharma, N. (2024) *Kazakhstan Economic Update: Shaping Tomorrow: Reforms for Lasting Prosperity (English).* Kazakhstan Economic Update Washington, D.C.: World Bank Group. https://shorturl.at/GUI06

[14] Ibid, p.26

[15] Analytical Centre of AFK (2022) KPMG: the real unemployed in Kazakhstan — two million people https://cutt.ly/TMxmETf

[16] World Bank and WDC. 2024. More, Better and Inclusive Jobs in Kazakhstan. Washington, DC: World Bank. License: Creative Commons Attribution Non-commercial (CC BY-NC 3.0 IGO). https://documents1.worldbank.org/curated/en/099030724012521561/pdf/P17983812e207b06a188db1b5af589b895f.pdf

[17] Resolution of the Government of the Republic of Kazakhstan dated November 29, 2023, No. 1050 «On the Approval of the Concept for the Development of the Labor Market of the Republic of Kazakhstan for 2024-2029».

[18] These jobs encompass salary above the median average, social protection, healthy working conditions, opportunities for professional development. The Government of Kazakhstan aims to raise the share of such jobs to 3.6 mln by 2030, constituting 45% of the total employment.

[19] The system of regional standards for settlements adopted in 2019. https://adilet.zan.kz/rus/docs/V1900018592

advantages». Securing the developmental benefits requires significant upfront investments in human capital[20]. The Government has recognized human capital as a «key basis for economic growth», taking action by opening internationally competitive universities and raising the status and salaries of scientists, among other initiatives[21]. It also depends on improving the quality of the population's health, skills, and labour force participation.

Government measures to direct migration towards the northern regions have been insufficient[22]. The South-to-North resettlement programme faces obstacles concerning employment and accommodation as well as challenges regarding adaptation and integration. Moreover, according to the BNS ASPR, the share of the urban population in Kazakhstan increased from 56.1 per cent in 2009 to 62.2 per cent in 2023. The share of women (63.6 per cent) living in urban areas is higher compared to men (60.6 per cent). While urban migration enhances economic productivity and quality of life, optimizing state infrastructure costs, it also risks placing disproportionate pressure on utility networks and service sectors. The issue is exacerbated by ageing and inadequate infrastructure, with over 50 per cent of utility networks in disrepair,housing shortages, and a growing national electricity deficit[23].

Infrastructure can have multiple effects across several SDGs, contributing to the achievement of 92 per cent of SDG targets[24]. To sustain economic and demographic growth, on average USD 292 billion must be invested in the country's infrastructure by 2040[25]. Today, the Government is implementing the state programme «Tariff in Exchange for Investment for 2023-2029» to reduce wear and tear on utility infrastructure by 20 per cent by 2029 through attracting KZT 3 trillion in investments for modernization. In May 2024, year-on-year tariffs increased significantly: water disposal by 43.9 per cent; water by 35 per cent; central heating by 33 per cent; and electricity by 31.4 per cent. To lessen the burden of these tariff increases, local authorities provide partial compensation to vulnerable groups. Consequently, the rise in prices for paid services (13.9 per cent in May 2024 versus 15 per cent in February 2023) has slowed down at a lower rate than food prices (5.5 per cent versus 26.2 per cent) and overall inflation (8.5 per cent versus 21.3 per cent).

With inflation decreasing, the National Bank of Kazakhstan has lowered the base rate from 16.75 per cent in December 2022 to 14.75 per cent in May 2024[26]. It remains significantly higher, however, than the 9.75 per cent level in 2021, despite the inflation rate being almost the same (Figure 12). A high base rate discourages investments in general and has further negative impact on capital-intensive industries through increasing borrowing costs. It also reduces business activities by putting investment projects on hold thereby increasing shutdowns, particularly among small and medium-sized enterprises (SMEs). For instance, the average-weighted interest rates on long-term business loans in the national currency rose to 23.3 per cent in April 2024, up from 14.3 per cent in January 2022 at the start of the war in Ukraine[27]. Therefore, finding a balance between inflation targeting and investment growth, along with clear policy messages, can support sustainable economic growth.

[20] Akorda.kz (2023) Address of the Head of State Kasym-Jomart Tokayev to the people of Kazakhstan «Economic Course of Fair Kazakhstan». https://shorturl.at/otxC5

[21] Primeminister.kz (2023) «Human capital development — key basis for national economic growth» https://primeminister.kz/en/news/human-capital-development-key-basis-for-national-economic-growth-25223

[22] Radio Azattyk (2024) Kazakh authorities said that the programme of resettlement from the south to the north has not brought results, https://rus.azattyq.org/a/32828571.html

[23] Primeminister.kz (2023) Increase in utility tariffs will be phased — Alibek Kuantyrov. https://primeminister.kz/ru/news/povyshenie-tarifov-na-kommunalnye-uslugi-budet-poetapnym-alibek-kuantyrov-24742

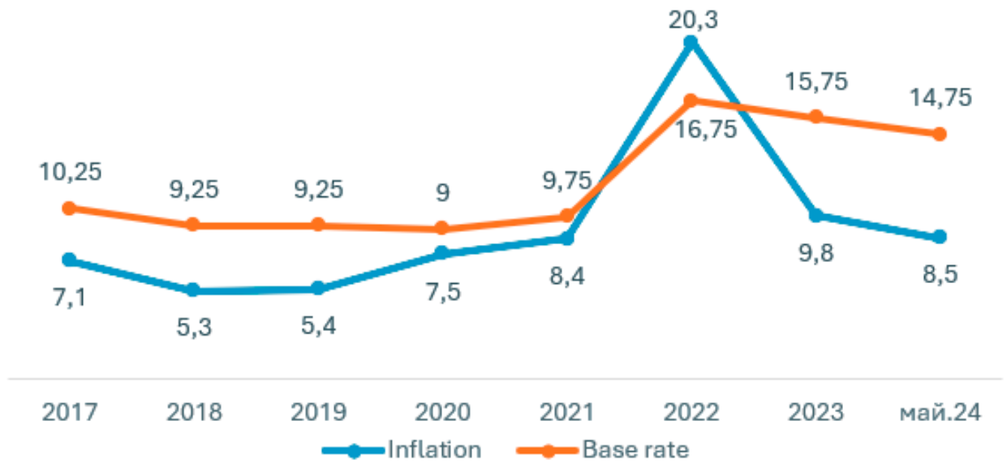
[24] Thacker, S. (2018) Infrastructure: Underpinning sustainable development. UNOPS. https://shorturl.at/y1yWX

[25] OECD (2019) *Sustainable Infrastructure for Low-Carbon Development in Central Asia and the Caucasus: Hotspot Analysis and Needs Assessment*, Green Finance and Investment, OECD Publishing, Paris, https://doi.org/10.1787/d1aa6ae9-en

[26] National Bank of Kazakhstan (2023) 2015-2023 Decision Making Schedule. https://shorturl.at/gjKPQ

[27] National Bank of Kazakhstan (2024) Statistical Bulletin of the National Bank of Kazakhstan. https://shorturl.at/mY8nG

Figure 12 Annual inflation and base rate at the end of the period,%



Source: BNS ASPR, the National Bank of Kazakhstan

The President of Kazakhstan has set an ambitious goal to achieve at least 6 per cent economic growth and double the national economy to USD 450 billion by 2029[28]. In this context, the National Development Plan until 2029[29] has been developed, focusing on 17 developmental areas grouped into the following four blocks.

1. High quality of life: healthcare; education and science; social protection; and comfortable environment.
2. A strong foundation for the economy: mineral resource base: oil and gas; mineral resource base: metals and other minerals; energy; and manufacturing.
3. New growth points: transport and logistics complex; agro-industrial complex; innovation, digital and creative economy; and tourism[30].
4. Cross-cutting transformations of the economy and society: creating a dynamic business environment; a new investment cycle; improving environmental sustainability; effective public finance; ensuring the rule of law; and improving the effectiveness of public administration.

[28] Akorda.kz (2023) Address of the Head of State Kasym-Jomart Tokayev to the people of Kazakhstan «Economic Course of Fair Kazakhstan». https://shorturl.at/otxC5

[29] Decree of the President of the Republic of Kazakhstan 'On Approval of the National Development Plan of the Republic of Kazakhstan until 2029 and the Repeal of Certain Presidential Decrees of the Republic of Kazakhstan'. https://adilet.zan.kz/rus/docs/U2400000611

[30] In Kazakhstan, a stable positive dynamic in the development of the tourism industry is observed every year. In 2023, 9.2 million foreign citizens visited Kazakhstan, which is 2 times more than in 2022; more than 9.6 million domestic citizens travelled within the country, and tax revenues from tourism to the budget amounted to KZT 450 billion, which is KZT 64 billion more than in 2022

1.4 Poverty and inequality

Kazakhstan has made significant progress in reducing poverty over the last two decades. The share of the population with incomes below the minimum subsistence level (poverty level)[31] has decreased from 46.7 per cent in 2001 to 5.2 per cent in 2023[32],[33]. By gender, 5.1 per cent of women (2022) and 5.4 per cent of men live below the poverty level[34]. Nationwide, 1,035,620 people were below the poverty level in 2023.

At the same time, rural areas experience a higher poverty rate (7.0 per cent) compared to urban areas (4.1 per cent), leading to internal migration and impacting agricultural labour availability and rural community stability. Besides, there are significant regional disparities, with the highest poverty levels in Turkestan (9.0 per cent), Abay (8.0 per cent), Zhetysu (7.8 per cent), and Mangystau (7.0 per cent) oblasts, while Astana city (2.4 per cent) and Atyrau oblast (2.6 per cent) had the lowest values.

The internationally comparable poverty rate, defined as the share of the country's population living on less than USD 6.85 per day for upper-middle-income countries, has also decreased from 14.4 per cent in 2019 to 8.8 per cent in 2023 (Figure 13). In response to a series of shocks during this period, including the COVID-19 pandemic, inflation pressures, and the war in Ukraine, the government of Kazakhstan doubled the minimum monthly wage from KZT 42,500 to KZT 85,000 between 2019 and 2024. This resulted in an income increase for over 1.8 million employees across all sectors of the economy, including 350,000 public sector employees[35].

Families with children are more vulnerable to poverty and exclusion, and children are overrepresented among the poor. The poverty rate among households with five or more persons at the end of 2023 was 9.39 per cent, while the same indicator for households with two to four persons was 0.42 per cent and 2.79 per cent, respectively. Furthermore, in 2022, the share of the population aged 0-17 years with incomes below the subsistence level increased to 9.1 per cent (urban at 6.1 per cent, rural at 10.2 per cent) compared to 7.7 per cent in 2021[36].

In terms of internationally comparable poverty rates in 2022, the estimates showed that 1,728 children lived in extreme poverty (below USD 2.15 per day) in Kazakhstan and 41,934 children lived below USD 3.65 while 1,081,530 children lived below USD 6.85[37]. Finally, the multidimensional child poverty analysis indicates that 28.5 per cent of children in Kazakhstan face multiple deprivations, including one in three children living in rural areas and one in four in urban areas[38].

The Government of Kazakhstan provides systematic measures to support vulnerable groups. In 2023, job loss benefits totalled KZT 49.9 billion, supporting 224.1 thousand individuals, more than double the recipients compared to 2022[39]. This increase is attributed to the implementation of the Family Digital Card, where job loss benefits are proactively assigned. The average monthly benefit was about KZT 60,000. Furthermore, in 2023, targeted social assistance (TSA) was provided to 598.4 thousand people (728.7 thousand in 2022) from 114.1 thousand families, with a budget expenditure of KZT 57.4 billion[40]. In addition,

[31] In 2023 the minimum subsistence level per month for calculating the amount of basic social payments amounted to KZT 40,567 (~USD 89).

[32] BNS ASPR (2022) The dynamics of key socio-economic indicators of Kazakhstan. https://old.stat.gov.kz/for_users/dynamic

[33] BNS ASPR (2024) Main indicators of income differentiation of the population of the Republic of Kazakhstan in 2023. https://shorturl.at/2ROoZ

[34] BNS ASPR (12 June 2024). Personal communication.

[35] Ministry of Labour and Social Protection of the Population of the Republic of Kazakhstan (2023) About 1.8 million Kazakhstanis will be affected by the minimum wage increase. https://shorturl.at/aJFko

[36] BNS ASPR (2023) Children of Kazakhstan 2018-2022. Statistical Yearbook.

[37] World Bank Group (2023) Global Trends in Child Monetary Poverty According to International Poverty Lines. Policy Research Working Paper 10525.

[38] UNICEF (2023) Country Office Annual Report 2023: Kazakhstan. https://www.unicef.org/media/152031/file/Kazakhstan-2023-COAR.pdf

[39] Ministry of Labour and Social Protection of the Population (2024) About 1.3 million people received social payments from the State Social Insurance Fund in 2023. https://www.gov.kz/memleket/entities/enbek/press/news/details/689699?lang=ru

[40] Ministry of Labour and Social Protection of the Population of the Republic of Kazakhstan (2024) *More than 598 thousand people received targeted social assistance in 2023. https://www.gov.kz/memleket/entities/enbek/press/news/details/688303?lang=ru*

Figure 13 Different measurement of poverty, %

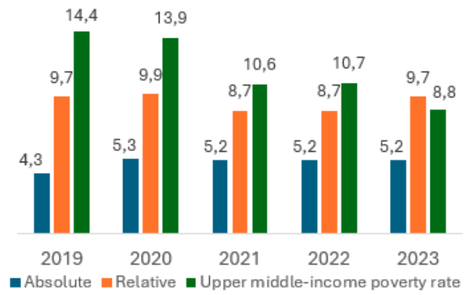
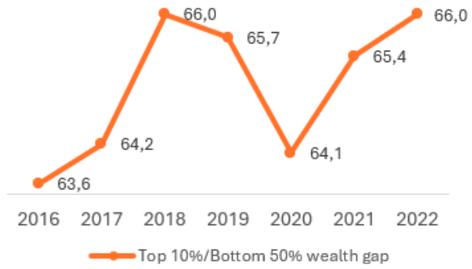


Figure 14 Wealth inequality



Source: World Bank, World Inequality Database, BNS ASPR

Note: Absolute poverty computed using the national poverty level and relative poverty using share of population with income below 60 per cent of the median; upper middle-income poverty rate at USD 6.85 in 2017 purchasing power parity based on World Bank's classification. Actual data: 2021. Nowcast: 2022–2023.

the Government launched the 'National Fund for Children', distributing 50 per cent of its investment income among all children under 18. Upon reaching 18, beneficiaries can use the funds for education or housing.

The TSA provides social support on a quarterly basis for citizens whose incomes do not exceed 70 per cent of the regional subsistence minimum and additional monthly payment to children from low-income families aged 1 to 6 years in the amount of 1.5 monthly calculation index (KZT 5,175) per child. In 2023, 186.8 thousand children aged 1-6 years received additional payments, totalling KZT 7.2 billion. TSA also includes employment support, grants to initiate businesses, and assistance with professional training courses. In addition, the Social Code, adopted in 2023, introduced progressive measures such as extending childcare benefits from 12 to 18 months.

Public finance review conducted by the World Bank indicates that improved design and targeting are needed regarding spending on social protection[41]. Instead of directly targeting the most vulnerable populations, the social assistance system is more focused on supporting selected categories, leading to exclusion and inclusion errors. Based on World Bank analysis, about 50 per cent and 35 per cent of beneficiaries of housing allowances and child and family benefits respectively are defined as non-poor (i. e.., they do not belong to the bottom 10 per cent of income distribution). For instance, reducing leakage from social support for families with children can provide KZT 177 billion (0.14 per cent of GDP in 2021) at no cost.

For better targeting and design, existing categorical programmes for families with children and TSA can be merged into one poverty-targeted programme. This could increase coverage of the vulnerable population after revising the national poverty line. In this regard, the Social Code, envisions that from 2025 the national poverty line — the criterion used for providing TSA — will shift from 70 per cent of the subsistence minimum to 50 per

[41] World Bank (2023) Kazakhstan: Strengthening public finance for inclusive and resilient growth. Public finance review.

cent of the median income. This change will slightly increase the number of people who are eligible for state TSA.

Despite the efforts made in the development of the social protection system, there are still some challenges that make it difficult to further accelerate the improvement of this system. These include: (i) a focus on responding to difficult life circumstances rather than preventing them; (ii) the unavailability or poor quality of services in rural areas; (iii) insufficient development of the network of institutions providing specialized social services to the population; (iv) inefficiency of financing and management mechanisms; (v) insufficient qualifications and experience of social workers and specialists in the field of social and vocational rehabilitation and adaptation, as well as high staff turnover; and (vi) weak interagency cooperation in solving the problems of people in difficult situations.

Although Kazakhstan has an abundance of natural resources, it has encountered challenges in implementing an inclusive development agenda. The World Inequality Database[42], which adjusts for data often missing in surveys, reveals that in 2022 the richest 10 per cent of adults in Kazakhstan earned 35.3 per cent of the total income, whereas the poorest half made only 19.6 per cent of it. At the same time, women earned 36.4 per cent of Kazakhstan's labour income, whereas gender parity would be reached at a female labour income share of 50 per cent. Since female labour force participation accounts for 48 per cent of the total employed population, one factor contributing to a low female labour income share is the under-representation of women in top-paying jobs.

Wealth inequalities are even more pronounced than income inequalities. As Figure 14 shows, the richest 10 per cent owned 66 times more wealth than the poorest half of the population. The further increase in wealth inequality observed since 2020 may exacerbate social tensions and jeopardize the country's social cohesion, especially if there is a deterioration of the geopolitical situation and secondary sanctions are imposed against Kazakhstan or there is accelerating inflation and the overall slowing of global growth.

1.5 Agri-food systems

Agri-food systems are defined as all the interconnected activities and actors involved in getting food from field to fork. This broad definition encompasses everything from agricultural production and processing to distribution, consumption and waste management. It also highlights the critical role of economic, social, and environmental factors in shaping food security, highlighting the need for an inclusive approach, particularly regarding gender and rural — urban disparities.

Kazakhstan boasts significant agricultural potential with its vast land area ranking it sixth globally. Despite its importance to the national economy and employment, the agricultural sector's contribution to GDP remains modest at 5 per cent, with productivity levels notably lower than the national average. The Agriculture Orientation Index for government expenditures increased from 0.3 in 2001 to 0.83 in 2021[43], indicating a significant rise in the proportion of government spending allocated to agriculture relative to GDP. This reflects positive trends in agricultural investment. However, concerns about the sustainability, effectiveness, transparency, and universal accessibility of these subsidies persist, especially regarding their allocation and the unintended cost increases in agricultural inputs. While Kazakhstan shows strong competitive advantages in specific agri-food products like grain and fats[44], constraints on competitiveness in other areas of the agri-food sector remain unaddressed.

The processing capacity utilization rates vary significantly across different sectors, with grain processing at 33 per cent, meat processing at 50 per cent and dairy processing at 77 per cent[45]. There were around 1,168 agri-food processing businesses with an average capacity utilization of 51 per cent as of early 2023[46]. The Government prioritizes the development of deep processing of agricultural products and plans for processed products to constitute 70 per cent of the total agricultural export volume by 2030[47]. The vision for the agri-food complex perceives the processing industry primarily as an element of the large food ecosystems targeted for state intervention[48], rather than as a sector of the economy requiring a supportive regulatory framework that considers the need of diverse stakeholders, including women and youth.

Kazakhstan's food safety landscape presents a mixed picture. While access to safe drinking water is high in rural areas (94.5 per cent)[49], concerning gaps exist in other areas. Only 5 per cent of agri-food businesses implemented Hazard Analysis and Critical Control Points systems in 2016, indicating a need for wider adoption of international food safety standards[50]. Reported foodborne illness incidents in 2022[51], affecting over 700 people (including 206 children), highlight a public health concern. Furthermore, the ratio of just 21 trained food safety inspectors per 20 million people[52] — and a limited network of 19 accredited laboratories[53] at the regional level — indicate insufficient resources for comprehensive oversight and testing.

Food loss throughout the supply chain presents a multifaceted challenge, compounded by a lack of comprehensive data to accurately quantify the losses at each stage. There is a noted deficit in storage capacities, with shortages of over 63 per cent in potato storage, 56 per cent in fruit storage, and 3 per cent in vegetable storage. It is estimated that around 35-40 per cent of the total harvested produce is lost due to improper storage. The Comprehensive Plan aims to modernize vegetable storage facilities with a target completion date of 2025. Between 2021 and 2022, 201,000 tons of storage capacity were built, with an additional 136,000 tons planned by the end of 2025.

While the processing and packaging stage shows a reduction in loss levels due to increased mechanization, issues like the sorting and bagging of potatoes still result in waste[54]. According to the UN 2019 Environmental Performance Review, a significant portion — 37 per cent — of the country's municipal waste comprises food or green waste[55].

Although, Kazakhstan has policy frameworks to empower vulnerable groups. such as women and youth, by integrating them into agri-food systems as active participants, only 11 per cent of female employment is in agriculture[56]. Even with its vast territories, Kazakhstan is not able to ensure sufficient access to land for all those wishing to expand or start farming, including young farmers, women, smallholders, and other groups, with females heading 26 per cent of peasant farms and 17 per cent of corporate producers. Additionally, a shadow land market of ownership and use rights exists including the subleasing of agricultural land despite the 2016 moratorium on the allocation

[42] World Inequality Database (2024) Country Profile: Kazakhstan. https://wid.world/country/kazakhstan/

[43] United Nations (2024) SDG Country Profile. Kazakhstan. https://unstats.un.org/sdgs/dataportal/countryprofiles/KAZ#goal-15

[44] UNCTADstat — RCA Radar. https://unctadstat.unctad.org/EN/RcaRadar.html

[45] FAO Kazakhstan Food Systems Assessment. Internal document.

[46] Ibid.

[47] Resolution of the Government of the Republic of Kazakhstan 'On approval of the Concept for the Development of the Agro-Industrial Complex of the Republic of Kazakhstan for 2021-2030', 30 December 2021, No. 960, https://adilet.zan.kz/rus/docs/P2100000960

[48] Resolution of the Government of the Republic of Kazakhstan 'On Approval of the Comprehensive Plan for the Development of Processing of Agricultural Products for 2024-2028', 28 June 2024, No. 512. https://adilet.zan.kz/rus/docs/P2400000512

[49] Ministry of Trade and Industry (2022) Global Diet Quality Project. DQQ data Collected Sep 4 — Oct 19, 2021

[50] Kazinform (2016) 5 per cent of food enterprises in Kazakhstan have implemented international HACCP safety standards. https://www.inform.kz/ru/5-pischevyh-predpriyatiy-rk-vnedrili-mezhdunarodnye-standarty-bezopasnosti-hassp_a2892378

[51] Committee for sanitary and epidemiological control, Ministry of Health. Internal document.

[52] Ibid.

[53] National Centre for Expertise, Committee for sanitary and epidemiological control, Ministry of Health. Internal document.

[54] Shortan, S. (2014) Food losses and waste in Kazakhstan. Country Report. Food and Agriculture Organization of the United Nations. https://www.fao.org/fileadmin/user_upload/reu/europe/documents/FLW/FLW_assessment_Kazakstan.pdf

[55] UNECE (2019) 3rd Environmental Performance Review of Kazakhstan. https://unece.org/sites/default/files/2021-08/ECE_CEP_185_Eng_0.pdf

[56] World Bank Group (2024) Employment in agriculture, female (per cent of female employment) (modelled ILO estimate) — Kazakhstan. https://data.worldbank.org/indicator/SL.AGR.EMPL.FE.ZS?locations=KZ

of state land to private ownership through auctions. This disparity affects women and youth disproportionately, limiting their access to resources and opportunities.

The rural–urban continuum further exacerbates these gender dynamics. Rural areas often face systemic challenges such as limited access to markets, education, and technology, which can hinder women's participation in agri-food systems. In contrast, urban areas may offer more opportunities for employment and entrepreneurship; yet women in these contexts still face significant barriers, including gender bias and limited access to finance and training. This rural — urban divide necessitates targeted policies that address not only the specific needs of women in agriculture, but also promote equitable access to resources and opportunities across the continuum.

Crop production dominates the agricultural landscape, driven by strong exports, primarily in cereals. However, there is limited crop diversification, with grain crops dominating and monoculture prevalent in key grain-growing regions despite diversification efforts. Yield levels lag behind similar climatic regions. The lag is attributed to soil degradation; climate change; inefficient irrigation practices; insufficient extension, advisory, and research services; and inadequate supply of high-quality seeds and machinery.

According to a World Bank assessment, 75 per cent of Kazakhstan is at increasing risk of adverse climate change impacts[57]. These include more frequent droughts, floods, changes in run-off distribution, precipitation patterns, and dangerous hydrological phenomena. These changes will increase the vulnerability of agriculture to climate change with a sharp deterioration of land productivity, a decrease in crop yields, an increase in air temperature, a decrease in water availability, and an increase in aridity.

By 2030, it is expected that crop yields in the plains of southern Kazakhstan (Almaty, Zhambyl, Turkestan, Kyzylorda, and Mangistau oblasts, south of Aktobe and Karaganda oblasts) will decrease by 5-14 per cent. Given that Kazakhstan is the 9th largest wheat producer and 7th largest wheat exporter in the world and the only wheat exporting country in Central Asia, the lack of climate change adaptation measures in Kazakhstan could pose a threat to food security in the entire region[58].

The agricultural sector also faces challenges in infrastructure and equipment modernization and irrigation efficiency. Equipment deterioration rates are high, according to the Ministry of Agriculture, with the average wear of the machine and tractor fleet at about 80 per cent[59]. This hinders productivity, while irrigation practices suffer from inefficiencies and low adoption of water-saving technologies. Addressing these challenges requires comprehensive strategies focused on soil conservation, seed production enhancement, and irrigation modernization.

Limited access to credit, high borrowing costs, and perceived risks deter investors from participating in agri-food sector infrastructure development projects. Complex regulatory frameworks and bureaucratic procedures can further hinder the process of addressing these infrastructure challenges. Furthermore, 80 per cent of agricultural businesses need additional specialists while only 55 per cent of graduates in agricultural specialties were employed according to qualifications[60]. There is currently a shortage of 800 qualified veterinarians[61]. Financing of agricultural research is on average 10 times lower than in technologically advanced countries[62].

[57] Oladejo, T.O., Balogun, F.O., Haruna, U.A. et al. (2023) Climate change in Kazakhstan: Implications for population health. *Bull Natl Res Cent* 47, 144. https://doi.org/10.1186/s42269-023-01122-w

[58] Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan, United Nations Development Programme in Kazakhstan, Global Environment Facility (2022) 8th National Communication and 5th Biennial Report of the Republic of Kazakhstan to the United Nations Framework Convention on Climate Change. https://www.undp.org/kazakhstan/publications/8th-national-communication-and-5th-biennial-report-republic-kazakhstan-un-framework-convention-climate-change

[59] Resolution of the Government of the Republic of Kazakhstan 'On Approval of the Concept of Development of the Agro-Industrial Complex of the Republic of Kazakhstan for 2021-2030', 30 December 2021, No. 960. https://adilet.zan.kz/rus/docs/P2100000960

[60] Zhanaltay, Zh. (2023) Agricultural development of Kazakhstan. Eurasian Research Journal ERJ, Vol. 5, No. 4, pp. 45-58. https://erj.eurasian-research.org/yonetim/icerik/makaleler/285-published.pdf

[61] Ibid.

[62] SDG Transformation Centre's Data Hub

1.6 Gender equality and women's empowerment

Kazakhstan has made significant progress towards gender equality and women's empowerment through ratifying key international conventions and introducing gender-responsive policies. The country ratified International Labour Organization Conventions No. 183 on Maternity Protection and No. 156 on Equal Opportunities and Equal Treatment for Men and Women Workers in 2012, thereby laying the foundation for pursuing further gender equality policies. Another critical achievement to promote gender equality is that Kazakhstan repealed the List of Prohibited Occupations for women in 2021[63].

In 2022, the updated Concept of Family and Gender Policy of Kazakhstan until 2030, along with its Action Plan, integrates gender equality principles into all areas and levels of decision-making and implementation[64].The Concept envisions an increase in the proportion of women at the decision-making level to 30 per cent by 2030. The National Commission for Women's Affairs and Family and Demographic Policy, an advisory body under the President, is responsible for implementing this policy. At regional level, Astana, Almaty and Shymkent cities, the deputy regional governor oversees gender policy implementation as the Chairperson of the Regional Commission on Women's Affairs and Family and Demographic Policy. While the Commission plays a key role in advancing gender equality, its focus on both gender and family policy should align with international standards that recommend separate implementation.

In December 2023, the President signed the Action Plan on Human Rights and Rule of Law, which includes a focus on gender and women's empowerment. Public advisors on gender equality will be appointed in each local administration, family support centers will be expanded, and the Government's Action Plan to promote equal rights and opportunities for men and women — addressing domestic violence and sexual harassment in the workplace — will be developed and adopted.

The Government Action Plan for the Promotion of Equal Rights and Opportunities for Men and Women for the period 2024 to 2027 includes 46 activities covering various areas such as gender education, healthcare, social protection, marriage and family relations, and strengthening gender machinery. The planned actions aim to promote gender equality in the teaching profession, monitor equal rights in the labour market and extend social benefits to support the effective implementation of the Law of the Republic of Kazakhstan «On State Guarantees of Equal Rights and Equal Opportunities for Men and Women».

In June 2024, Kazakhstan updated its National Action Plan for 2022-2025 for the implementation of UN Security Council resolutions 1325 (2000), 1820, 1888, 1889, 1960, 2106, 2122, 2242, 2467. It consists of 34 activities with the aim of actively involving women in conflict prevention and peacekeeping. Key changes include providing training to female military advisers on gender issues, promoting women to leadership positions in the security forces, developing a gender-sensitive approach to professional development in the security sector, and involving female diplomats in international disarmament and security negotiations.

Kazakhstan also plays a prominent role on the regional stage. In 2023, the country co-hosted the Regional Generation Equality Midpoint Event, which emphasized accelerating digitalization for women's economic empowerment in Europe and Central Asia. Kazakhstan showcased its national mechanisms for implementing the commitments of Action Coalitions, positioning itself as a leader in localizing the Generation Equality process. In addition, Kazakhstan chaired the Women Leaders Caucus of Central Asia the same year. This platform facilitated dialogue between women parliamentarians, civil society organizations (CSOs), and experts from five

[63] In accordance with the Law on Amendments and Additions to Certain Legislative Acts of the Republic of Kazakhstan on Social Protection where in the subparagraph 27 of Article 16 the words «the list of jobs on which the use of women's labour is prohibited» were excluded.

[64] Decree of the President of the Republic of Kazakhstan 'On Approval of the Concept of Family and Gender Policy in the Republic of Kazakhstan until 2030', 6 December 2016, No. 384. https://adilet.zan.kz/rus/docs/U1600000384

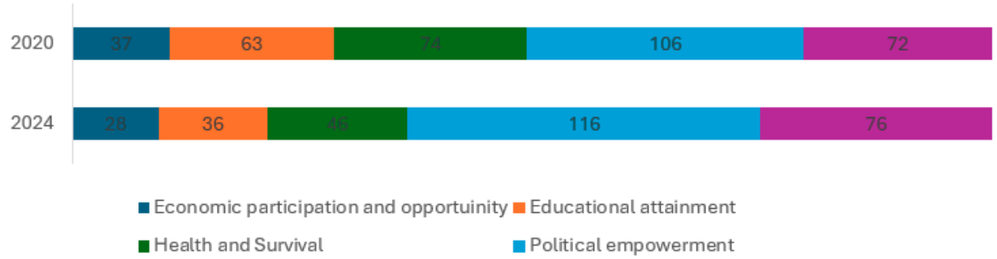
Central Asian countries, thereby strengthening cooperation in addressing GBV; advancing technology and innovation; promoting women, peace and security; and boosting women's economic empowerment. State investments to implement its commitments under the Generation Equality Forum Action Coalitions will reach USD 820 million by 2025.

In 2024, Kazakhstan ranked 76th out of 146 countries in the World Economic Forum's Global Gender Gap Index (Figure 15). Significant improvements were made in the area of education (63rd in 2020 versus 36th in 2024), with an increase by 28 positions in health and survival subindexes (74th in 2020 versus 46th in 2024), as well as positive upward trends in the area of economic participation and opportunities (37th in 2020 versus 28th in 2024).

The picture in the field of political participation, however, has worsened (106th in 2020 versus 116th in 2024).

In 2022, Kazakhstan also ranked 42nd out of 191 countries (44th out of 162 countries in 2020) in the Gender Inequality Index (0.177). The Index assesses the degree of gender inequality across three dimensions: reproductive health, impact and economic opportunity, and women's participation in the labour market. Furthermore, although the value of the Gender Development Index for Kazakhstan decreased slightly from 1.003 in 2020 to 0.998 in 2022, Kazakhstan is included in the 1st group of countries with very high equality in Human Development Index achievements between men and women.

Figure 15 Kazakhstan's Global Gender Gap Index in 2020 and 2024



Source: The World Economic Forum Global Gender Gap Report 2024, 2020

Nevertheless, gender disparities persist, particularly in wage equality and occupational segregation. Women constitute 51 per cent of the total population and 48 per cent of the workforce. The share of young women (age 15-24) who are not in employment, education and training (NEET) is almost double that of men, with 5.8 per cent for women compared to 3.4 per cent for men[65]. Data from the most recent period between 2016 and 2024 indicate that only 29 per cent of women own a business in comparison to 71 per cent of men[66].

Despite progress in narrowing the gender pay gap to 21.7 per cent in 2021 from 34.2 per cent in 2018, the gap increased to 25.2 per cent in 2022, indicating that more efforts are needed. In the finance sector the gap further widens to 33 per cent. In part the gap is due to the fact that women are predominantly employed in lower-paying sectors such as education (73.4 per cent of the total employed) and healthcare and social services (67.1 per cent), while men dominate in higher-paying industries, such as oil and gas and energy sectors.

Despite high employment and educational equality, traditional gender stereotypes persist in Kazakh society. According to Gender Social Norms Index covering the period from 2017 to 2022, biases against women persist in the Kazakh society, with 68.41 per cent of people biased regarding women's participation in the political sphere and 66.18 per cent of people biased regarding women's participation in the economy[67]. Additionally, women often bear a «double burden,» spending three times as much time on unpaid domestic and care work as men[68]. Even in hypothetical situations where men are not working, a large majority of both men and women respondents believe that women should still do most household chores[69].

A sociological survey conducted among 2,000 women revealed that half of the respondents experienced gender discrimination during hiring processes[70]. Over 16 per cent of respondents faced forced dismissal during pregnancy through unacceptable working conditions, refusal to transfer to lighter duties, or wage reduction to compel resignation. Furthermore, 44 per cent of surveyed women reported being assigned unpaid tasks such as making drinks or cleaning, which underscores the need for strong enforcement of labour rights based on gender equality and gender-sensitive workplace policies.

A safe and healthy working environment is a fundamental right. In 2023, a total of 1,474 people were injured, and 251 workers died at work. There were 249 women injured and 9 women lost their lives[71]. Among women, 673,000 are employed in hazardous and other unfavourable conditions; 88,000 work in environments that fail to meet sanitary and hygiene standards; 23,000 are exposed to excessive noise and vibration; and 17,000 are subjected to high levels of dust and gas pollution.

1.7 Education

There has been considerable expansion in access to early childhood education and care. Between 2020 and 2022, the number of pre-schools increased by 454, creating over 80,000 new places. This expansion raised pre-school attendance for children aged 2-6 to 89.4 per cent based on the number of children registered on the waiting list. However, the share of children attending pre-school relative to the total number of children aged 2-5 in Kazakhstan was about 65 per cent[72].

The increase in the birth rate in 2020 and 2021 will further drive demand for pre-school organizations between 2023 and 2029. Another challenge is the high workload on educators in pre-schools with a ratio of 25 children per teaching staff (OECD average is 13.1)[73]. The situation is exacerbated by the fact that the early childhood education and care system in Kazakhstan has lower qualification requirements for educators compared to OECD countries; students take short tertiary programmes when compared to bachelor's degrees[74].

[65] BNS (2022) The Sustainable Development Goals in Kazakhstan. https://shorturl.at/4Dg2X

[66] World Bank (2024) Gender Data Portal. https://genderdata.worldbank.org/en/economies/kazakhstan

[67] UNDP, Gender Social Norms Index (2023) Breaking Down Gender Biases Shifting social norms towards gender equality. https://hdr.undp.org/system/files/documents/hdp-document/gsni202303.pdf

[68] World Bank Group (2024) Gender Data Portal. Kazakhstan. https://genderdata.worldbank.org/en/economies/kazakhstan

[69] UNFPA Kazakhstan (2022) Situational analysis of men and gender equality in the Central Asia region. https://shorturl.at/bYRaN

[70] Welcoming remarks of the Chairman of the Federation of Trade Unions of the Republic of Kazakhstan, Satybaldy Dauletalin, at the First Forum of Working Women of Kazakhstan «Women in the world of work: time for new solutions» on 12 April 2024

[71] Federation of Trade Unions of the Republic of Kazakhstan (2024) Forum of working women: Federation of trade unions advocates for equal opportunities and justice in the field of work. https://kasipodaq.kz/2024/04/12/i-forum-of-working-women-federation-of-trade-unions-advocates-for-equal-opportunities-and-justice-in-the-field-of-work/

[72] Decree of the President of the Republic of Kazakhstan 'On Approval of the National Development Plan of the Republic of Kazakhstan until 2029 and the Repeal of Certain Presidential Decrees of the Republic of Kazakhstan'. https://adilet.zan.kz/rus/docs/U2400000611

[73] OECD (2024) Students per teaching staff. https://data.oecd.org/teachers/students-per-teaching-staff.htm

[74] UNICEF (2021) A snapshot of early childhood education and care in Kazakhstan. https://shorturl.at/BCOTZ

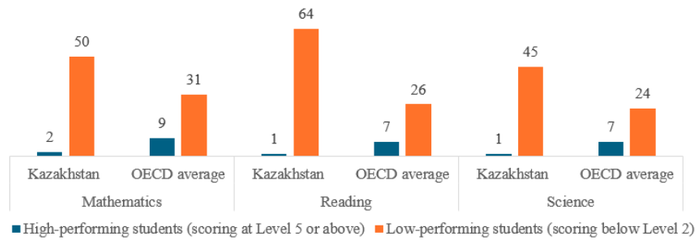
Only 1.4 per cent of children enrolled in preschools in Kazakhstan were children with disabilities[75]. However, a recent survey showed that 11 per cent of caregivers report that their child was diagnosed with a developmental delay and 6 per cent report that their child was at risk of becoming disabled[76]. This raises concern that a high number of children with disabilities may have been left behind and are not receiving education in preschools. Doctors and specialists from the Psychological-Medical-Pedagogical Consultations play an important role in determining whether and where children with disabilities should attend school. According to Psychological-Medical-Pedagogical Consultations, over 47,000 preschool-aged children need tailored assistance. Of these, 9,709 attend special kindergartens and special groups of preschools, while 16,305 are in regular preschool programmes[77].

Creating an enabling environment in early childhood education and care centres would support government efforts to include children with disabilities in educational settings and opportunities alongside children without disabilities. Indeed, a United Nations Children's Fund's (UNICEF) study revealed that while most caregivers of children with or without disabilities believed children with developmental delays should be enrolled in preschools (70 per cent), nearly half of caregivers reported not being okay with a child with developmental delays learning in the same classroom or playing with their child. Additionally, a quarter of education specialists did not think that children with disabilities should learn alongside typically developing children in the same classroom[78].

While school enrolment rates in Kazakhstan are high, concerns persist regarding quality of education. According to 2022 Programme for International Student Assessment (PISA) results, the performance of 15-year-old students in math (425) and science (423) improved by 2 and 26 points respectively, despite the challenges posed by COVID-19[79]. However, reading scores (386) saw a slight decline of one point compared to PISA 2018. Students in Kazakhstan scored less than the OECD average in mathematics (480), reading (482) and science (491). Students in rural areas performed significantly lower than those in urban areas, with regional disparities also evident in school performance and learning outcomes. Boys and girls performed similarly in mathematics on average, but girls outperformed boys in science and reading by 5 and 27 points respectively. Sixty-four per cent of students in Kazakhstan scored below level 2 in reading, indicating functional illiteracy, compared to the OECD average of 26 per cent (Figure 16). Also, only 2 per cent of students in Kazakhstan were top performers in math by attaining Level 5 or 6 in PISA. By comparison, the OECD average is 9 per cent, Singapore is 41 per cent and Taiwan, Province of Chinas 32 per cent.

Modern school infrastructure and highly qualified teachers are essential for ensuring quality education and inclusivity. In the 2022-2023 academic year, there was a shortage of 270,000 student places, with 167,000 in urban areas and 96,000 in rural areas.[80] There were 143 three-shift schools and 52 emergency-status schools.[81] In addition, in 2023 30 per cent of schools lacked high-speed Internet (20 Megabits per second (Mbps) or higher), limiting access to digital educational resources.[82]

Figure 16 Top and low performing students at PISA,%



Source: OECD, PISA 2022 Results

The education sector also faces a shortage of qualified teachers: over the past five years, only 32.2 per cent of 200,000 trained specialists have been employed in their field and more than 50 per cent of teachers fail to meet the annual national qualification test threshold.[83] Professional development programmes for mentors have limited reach, raising doubts about support for new teachers. The mentoring plan template also lacks requirements for reporting results and feedback, hindering impact evaluation.[84]

With regard to information skills, only 58.3 per cent of teachers report knowing how to verify information they find online, while less than half (49 per cent) report knowing how to check if a website is trustworthy.[85] Teachers also report feeling less confident in various creative skills or more advanced operational skills related to the digital environment, such as programming. For example, only 37.3 per cent of teachers know what types of licenses apply to online content, 46.3 per cent know how to make basic changes to online content created by others, and just 2.2 per cent (or 7 teachers) know how to create their own website.

In the 2023-2024 academic year, 711 technical and vocational education and training (TVET) organizations served 548,000 students.[86] Male trainees represented 51.9 per cent of total enrolment, while females accounted for 48.1 per cent. Also, 63.6 per cent of students received state grants. Over 220 public TVET organizations managed to create equal conditions and barrier-free access for students with disabilities in the same year.

Three additional quotas for admission to TVET organizations were added, including 5 per cent for children from larger families, 1 per cent for children from single-parent families and 1 per cent for children from families with children with disabilities. As a result, the number of students from vulnerable families increased to 3,445 in 2022-2023 (2,913 in 2020-2021).

In 2023, the employment rate of TVET graduates in Kazakhstan in 2023 was 60.8 per cent — significantly below the OECD average of 79 per cent.[87] One of the reasons for such a low employment rate can be the low quality of TVET education, which employers rated at 3.8 out of 7.0, placing Kazakhstan 90th out of 141 countries.[88] Furthermore, workforce demand

[75] Ibid.

[76] UNICEF (2022) Report on the Knowledge, attitudes and practices survey on early childhood developmental monitoring in Kazakhstan

[77] Resolution of the Government of the Republic of Kazakhstan 'On Approval of the Concept of Development of Preschool, Secondary, Technical and Vocational Education of the Republic of Kazakhstan for 2023-2029', 28 March 2023, No. 249. https://adilet.zan.kz/rus/docs/P2300000249#z81

[78] UNICEF (2022) Report on the knowledge, attitudes and practices survey on early childhood developmental monitoring in Kazakhstan

[79] OECD (2022) PISA 2022 Results (Volume I and II) — Country Notes: Kazakhstan. https://shorturl.at/ZIu6P

[80] Resolution of the Government of the Republic of Kazakhstan 'On Approval of the Concept of Development of Preschool, Secondary, Technical and Vocational Education of the Republic of Kazakhstan for 2023-2029', 28 March 2023, No. 249. https://adilet.zan.kz/rus/docs/P2300000249#z81

[81] Ibid.

[82] Digital Business (2024) Ministry of Education: 69.6 per cent of Kazakhstani schools are provided with high-speed Internet access. https://shorturl.at/iy1MP

[83] Decree of the President of the Republic of Kazakhstan 'On Approval of the National Development Plan of the Republic of Kazakhstan until 2029 and the Repeal of Certain Presidential Decrees of the Republic of Kazakhstan'. https://adilet.zan.kz/rus/docs/U2400000611

[84] Tursynbayeva, X. & Sherbakov A. (2024) Teacher Policy Digest Report: Kazakhstan. UNESCO Almaty (forthcoming).

[85] UNICEF (2023) Kazakhstan Kids Online.

[86] BNS ASPR (2024) Statistics on Education, Science and Innovation. Technical and vocational, post-secondary education in the Republic of Kazakhstan (as of the beginning of the academic year 2023-2024). https://shorturl.at/RRBWB

[87] OECD (2023) Education at a Glance 2023. https://shorturl.at/ORMAL

[88] WEF (2019) Global Competitiveness Report. https://shorturl.at/a8VlL

forecasts do not align with current market needs, and there are weak linkages with the real sector of the economy, businesses, and service sectors.

Moreover, despite the prioritization of 21st-century skills and functional literacy in education policy and strategic documents, there is no direct reference to Education for Sustainable Development (ESD), which is linked to SDG 4.7 and related sustainable development topics. According to a study by United Nations Educational, Scientific and Cultural Organization's (UNESCO) and Narxoz University,89 the integration of ESD into school curricula ranges from 3 per cent to 16 per cent. This insufficient integration fails to develop necessary competencies and skills among students at all levels of education. There is no systematic approach to integrating ESD into policy, curriculum, teacher training and assessment. Currently, there is progress only in educational standards and curriculum at the secondary education level. However, there is no consistency in integrating ESD into standard programmes at all other levels, and no comprehensive vision or systematic approach for ESD integration in the education sector.

Furthermore, while education can play an important role in mainstreaming gender equality in and through education, and strengthening the culture of non-violence and non-discrimination, there is a significant gap in gender-mainstreaming in education policy as well as equal representation of women and girls in education programmes and textbooks. In fact, textbooks are designed in a way to further cultivate traditional gender norms, gender roles and stereotypes.[90]

In the field of higher education, Kazakhstan has made significant progress by expanding access to higher education, increasing university autonomy, strengthening the independent quality assurance system in higher education, building university leadership capacity, including setting ambitious goals in the area higher education internationalization.[91] At the same time, challenges remain, such as the skills mismatch with the demands of the labour market, and higher education programmes are not flexible enough to respond to the rapidly changing needs of the students and employers. Although there is significant potential for universities to actively participate in promoting lifelong learning by offering flexible learning pathways and providing micro-credentials in a constantly evolving market economy and in line with the current global challenges such as the digital divide, climate change, conflicts, and more.[92]

Moreover, as the second function of higher education institutions is to conduct research, many research projects and themes do not necessarily address societal changes and there is a lack of linkage between research and higher education programmes. In addition, universities should play a pivotal role in addressing local community challenges and contributing to sustainable development by actively working towards their so-called 'third mission'. However, in Kazakhstan, only a few universities are addressing SDG related topics and issues.[93]In addition, Kazakhstan needs to strengthen its national qualifications framework, linking it to quality assurance and qualification recognition systems, as it strives to expand its higher education beyond the region and pursue ongoing plans to open foreign university campuses.[94]

1.8 Healthcare

Ensuring healthy lives and well-being for all requires a resilient healthcare system that protects citizens from large or unexpected medical expenses. Despite healthcare expenditure rising to 3.9 per cent of GDP in 2021, it remains the second lowest in the World Health Organization (WHO) European region.[95] Also, per capita health spending in Kazakhstan was USD 1,114 adjusted for purchasing power parity, which is higher than the Central Asia average (USD 680) but lower than the average for upper-middle-income countries in the WHO European Region (USD 1,646).

Kazakhstan offers two complementary benefits packages for publicly funded health services: the state-guaranteed benefits package and the mandatory social health insurance package. The state-guaranteed benefits package is available to all legal residents, regardless of their insurance status. Access to the social health insurance package depends on contributions to the Social Health Insurance Fund. The main sources of the fund are employer and employee contributions (56 per cent of the total fund), and state contributions (40 per cent).

As of early 2024, 16 per cent of Kazakhstan's population did not have health insurance coverage,[96] primarily among the self-employed and rural residents without permanent employment. Currently, the mandatory health insurance system in Kazakhstan fails to ensure sufficient quality and accessibility of healthcare. Medical organizations face financial shortages, and funds are spent inefficiently and non-transparently, with persistent corruption risks.[97] The relatively high out-of-pocket expenditures (25 per cent in 2021)[98] exacerbate this situation, posing risks for vulnerable groups.

Improving the accessibility and quality of the healthcare system is a priority for Kazakhstan. In 2022, Kazakhstan had 40.1 doctors per 10,000 people, surpassing the OECD average of 33. However, there are significant urban-rural (3-7 times) and regional (1.7 fold from the national average) disparities.[99] The main reasons for these shortages include low motivation, legal insecurity, high stress, and insufficient social guarantees. Medical students and doctors prefer big cities due to better opportunities, leading to a rural deficit of 1,400 medical staff in 2022.

Furthermore, insufficient financial resources delay the modernization of healthcare facilities and medical equipment, which have a depreciation rate of 49.3 per cent and 66.3 per cent respectively.[100] At the same time, Kazakhstan adopted national water, sanitation and hygiene standards to improve schools, thereby aligning with international norms and driving reforms in school construction and maintenance — with an emphasis on gender equality and water management.

The COVID-19 pandemic has highlighted the need for robust health systems to detect and respond to outbreaks. In this regard, Kazakhstan has developed several new regulations and strategies, including the national International Health Regulations Roadmap for 2024-028, the national Infection Prevention Control Strategy, and the national Anti-microbial Resistance Roadmap for 2023-2025.

In addition, in 2024 the Ministry of Healthcare of Kazakhstan, jointly with WHO Kazakhstan, will start implementing two Pandemic Fund projects. A single country grant focuses on improving epidemiological surveillance, border health, laboratory quality, biosafety and biosecurity, early detection and response, and healthcare worker training in Kazakhstan. A multi-country grant focuses on pandemic preparedness and response through a One Health Approach in Central Asia.

Kazakhstan continues to ensure universal access to essential health services, including immunization. In 2023, Kazakhstan faced

89 Mukhamedkhanova et al. (2022) Analytical review of integrating ESD into the content of State Educational Standards, Model Education Programmes for Secondary Education (Grades 1-11). National Academy of Education of the Ministry of Education of Kazakhstan, Narxoz University and UNESCO. https://shorturl.at/WkpaK

90 Mukhamedkhanova, A. & Bekzhanova, Zh. (2024) Anti-discrimination and gender-lensed analysis of educational programme materials in Kazakhstan. UNESCO Almaty. (not published)

91 Concept of higher education and science development of Kazakhstan for 2023-2029

92 UNESCO 2020. Ensuring lifelong learning for all in Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan: country evidence and policy recommendations

93 UNESCO 2021. Policy brief: higher education in Central Asia

94 UNESCO 2018. Guidelines on developing and strengthening qualifications frameworks in Asia and the Pacific: building a culture of shared responsibility

95 Global Health Expenditure Database (WHO). The latest year for which internationally comparable data are available

96 Social Health Insurance Fund (2024) Coverage of the population with Compulsory Social Health Insurance. https://fms.kz.

97 Decree of the President of the Republic of Kazakhstan 'On Approval of the National Development Plan of the Republic of Kazakhstan until 2029 and the Repeal of Certain Presidential Decrees of the Republic of Kazakhstan'. https://adilet.zan.kz/rus/docs/U2400000611

98 WHO (2024) Health expenditure profile for Kazakhstan. https://apps.who.int/nha/database/Country_Profile/Index/en

99 Decree of the President of the Republic of Kazakhstan 'On Approval of the National Development Plan of the Republic of Kazakhstan until 2029 and the Repeal of Certain Presidential Decrees of the Republic of Kazakhstan'. https://adilet.zan.kz/rus/docs/U2400000611

100 Ibid.

a significant measles outbreak with 39,544 confirmed cases by April 2024. To address this, the government allocated KZT 3.1 billion from its reserve for the Supplementary Immunization Programme, vaccinating over one million people. In May 2024, an additional KZT 5.8 billion was allocated for immunizations against various diseases to prevent outbreaks during the spring floods.[101] In 2024, Kazakhstan included the Human Papillomavirus vaccine in the National Immunization Calendar for 11-year-old girls to prevent cervical cancer, thereby aligning with the National plan for the introduction of the Human Papillomavirus vaccine for 2023-2025 and the Comprehensive plan to combat cancer for 2023-2027.

Mortality patterns in Kazakhstan are closely linked to the prevalence of non-communicable diseases (NCDs). Mortality from diabetes and chronic kidney diseases has increased notably among females. NCDs contribute significantly to premature mortality among individuals aged 30-69 years in Kazakhstan. The primary NCDs — cardiovascular diseases, cancers, diabetes mellitus, and chronic respiratory diseases — are the leading causes of premature deaths in the country.

The rate of premature deaths from NCDs in Kazakhstan (451 deaths per 100,000 population) remains considerably higher than the average for the WHO European Region (359 deaths) but is lower than the average in Central Asia (546 deaths).[102] Tobacco use, physical inactivity, the harmful use of alcohol, unhealthy diets and air pollution all increase the risk of dying from an NCD. In June 2024, Kazakhstan banned the import, sale, and distribution of vapes, vaping liquids, and flavouring substances following new tax measures on heated and conventional tobacco products.

The contraceptive prevalence rate for modern methods is 55.7 percent, with an unmet need for family planning at 9.8 percent.[103] Moreover, official data from the BNS ASPR shows that over the past five years, only around 30 per cent of women aged 15-49 (as of 2023) had their needs for modern contraceptives met. Contributing factors include the high cost of contraceptives, lack of confidentiality in family planning services and gender inequalities and sociocultural norms. Currently, contraceptives are not provided free of charge to the general population. There are also no direct requirements to offer free contraceptives to vulnerable groups.

Kazakhstan made significant progress in reducing its maternal mortality ratio from 60.9 deaths per 100,000 live births in 2000 to 13.7 in 2019. During the COVID-19 pandemic, however, Kazakhstan's maternal mortality rate increased sharply to 44.7 in 2021. By 2023, it decreased considerably to 11.4 per 100,000 live births. As such, there is a need to study the structure of the causes of maternal mortality more carefully. According to the latest confidential auditing of maternal deaths, 60 per cent of maternal deaths were preventable.[104] Furthermore, the infant mortality rate has slightly improved over the last five years from 7.93 deaths per 1,000 live births in 2017 to 7.68 in 2022 (4.0 — OECD average in 2021). However, it remains higher in rural areas (8.41) than in urban areas (7.2).

For maternal mortality reduction, assessing and addressing the key factors contributing to maternal mortality, including strengthening the prevention and management of healthcare-associated infections, early registration of pregnant women, provision of specialized medical care, establishment of consultative and diagnostic centres, and integrating modern technologies for perinatal care into medical university education are key. To address infant mortality, it is essential to enhance prenatal diagnostics, implement modern perinatal technologies for newborn care and to prevent miscarriage and pregnancy complications.

Reproductive health preservation in adolescents remains one of the more serious challenges in Kazakhstan. In 2022, the number of deliveries per adolescent girl aged 15-19 was 19.71 per 1,000 girls (34.72 per 1,000 in 2014). The highest values for this indicator were in Mangystau (30.79), Turkestan (30.16), Zhambyl (29.33), Ulytau (24.14) and Almaty oblasts (23.87). Rural teenage girls give birth on average 58 per cent more often than their urban counterparts (25.92 versus 15.25 per 1,000 girls aged 15-19 in 2022). At the same time, adolescent girls living in rural areas are more exposed to the risk of unwanted pregnancy and childbirth than in urban areas.

Preliminary data for 2024[105] compared to 2018[106] show some changes in adolescent sexual behaviour. The share of adolescents aged 15-19 with sexual experience increased from 29.4 per cent (2018) to 36.9 per cent. At the same time, the share of adolescents with more than one partner decreased from 44.1 per cent to 34 per cent.

1.9 Digital transformation

The focus of Kazakhstan on digital transformation of the public sector is evident as it advanced to 24th place out of 193 countries in the UN E-Government Development Index (EGDI) in 2024,[107] maintaining a regional lead in digital public goods. Among the landlocked developing countries (LLDCs), Kazakhstan holds the highest EGDI score (0.9009), placing it in the very high EGDI group, further solidifying its leadership in the region, while many services are moved to a proactive format.

Kazakhstan not only utilizes existing digital public goods to fast-track its digital economy but also develops new ones for international use. For instance, Kazakhstan initiated the GovStack Regional Project on Digital Government Cooperation for Central Asia and Caucasus countries with the objective of providing governments and public institutions access to better knowledge, resources, and tools to achieve digital transformation.[108] Notable projects include the Accessible Kazakhstan website and app, the first in Central Asia to achieve digital public good status, enhancing public facility access for those with limited mobility.[109] Other well-recognized initiatives include the Ozim Platform, a mobile app for parents,[110] and CodiPlay, a gamified mobile application to develop information technology (IT) skills among schoolchildren.[111]

Kazakhstan continues to demonstrate its commitment to cybersecurity and digitalization. The Global Cybersecurity Index 2024 placed Kazakhstan in the «Advancing» tier, with a total score of 94.04 out of 100, highlighting its strong legal frameworks, technical measures, and international cooperation. The country has made significant strides in capacity development and organizational measures, positioning itself as a regional leader in cybersecurity efforts while continuing to enhance its infrastructure to address emerging cyber threats.[112] However, Kazakhstan's Top Level Domain Name Servers remain unsecured as Domain Name System Security Extensions have not yet been enabled. This could lead to forged or manipulated Domain Name Servers data and an inability to validate the authenticity of Domain Name Servers information.[113] Despite the measures taken in the field of cybersecurity, critical issues need to be addressed in the medium term such as growth in cyber-attacks, improving digital literacy and the protection of personal data.

Kazakhstan's innovation performance is below expectations for its level of development,

[101] Vlast.kz (2024) KZT 5.8 billion allocated from the government's reserve for additional immunization of Kazakhstanis. https://shorturl.at/78XRE

[102] WHO & the European Observatory on Health Systems and Policies (2022) Health systems in action: Kazakhstan. https://shorturl.at/AQiDi

[103] BNS ASPR (2015) Multiple Indicator Cluster Survey (MICS) in Kazakhstan. https://stat.gov.kz/en/cluster/mics-2015/intro/

[104] UNFPA (2019) Report on confidential enquiry of maternal death

[105] UNFPA and UNESCO (2024) Preliminary Report on the status of reproductive health of adolescents (aged 15-19) and youth (aged 20-24), their sexual behaviour and access to information and services in sexual and reproductive health.

[106] UNFPA (2018) Report on the status of reproductive health of adolescents (aged 15-19), their sexual behaviour and access to information and services in sexual and reproductive health

[107] UN-ilibrary (2024) United Nations E-Government Survey. https://shorturl.at/fAc3F

[108] Govstack (2024) Central Asia and Caucasus: Regional Cooperation on Digital Government. https://shorturl.at/Rmmkj

[109] Accessible Kazakhstan Portal, https://doskaz.kz/

[110] Ozim Platform, https://ozimplatform.com/ Ozim platform is the finalist of Women's Entrepreneurship Expo, nominated as jury's choice at EBAN congress in May 2024 in Tallinn, Estonia

[111] CodiPlay, https://codiplay.kz/#coditeach

[112] ITU (2024) Global Cybersecurity Index (GCI) by the International Telecommunication Union (ITU) https://shorturl.at/Qjclc

[113] ITU (2022) Kazakhstan: Digital Data, Resilience, Digital Development Policy Assessment. https://cutt.ly/M1xpxB0

ranking 22nd among the 34 upper-middle-income group economies according to the Global Innovation Index 2024.[114] This underperformance is underscored by the fact that despite a 1.7-fold increase in innovation product volume from 2019 to 2022, its share in GDP remained at 1.8 per cent in 2022.[115] To address this, the new Concept for Digital Transformation, ICT Development, and Cybersecurity for 2023-2029 envisions increasing exports of IT products and services from KZT 84 billion to KZT 700 billion between 2023 and 2029, preparing at least 35,000 highly skilled IT professionals annually by 2029, and providing 100 Mbps of high-speed Internet for the general population and businesses, among other goals.[116] The Artificial Intelligence Development Plan until 2029[117] was adopted in July 2024 while the Digital Code[118] is currently under development.

In sectoral digitalization, Kazakhstan has significantly advanced in digital health since the 2010 Unified Health System reform, which relied on digitalization to improve healthcare financing and patient pathway management. The government invested in strengthening the institutional framework, including legislation, standards, and capacity building, and promoted private sector engagement to enable the rapid introduction of digital solutions across healthcare providers nationwide. In line with the ongoing digital transformation of government services, the health sector collaborates with education, social, and labour sectors to deliver proactive support for Kazakhstan's population. However, challenges remain due to the lack of full-scale interoperability of health data among providers and levels of care, leading to fragmentation, inefficiencies, and limitations in evidence-based clinical and policy decision-making.

Figure 17 Individuals using the Internet by age group in 2022,%

Source: Datahub ITU (2024)

According to the ITU, the number of Internet-users is growing and reached 92.9 per cent in 2023 compared to 81.9 per cent pre-pandemic in 2019. Kazakhstan demonstrates gender digital parity with high nationwide Internet usage rates of 94.1 per cent among men and 91.8 per cent among women. However, there is still inequality of Internet access based on age, as only 38 per cent of individuals aged 75 years and older use the Internet (Figure 17). The proportion of Internet users in urban areas (93.5 per cent) is slightly higher than in rural areas (90.3 per cent).[119] Furthermore, according to the ESCAP's e-resilience portal, the socioeconomic gap in digital payment usage has notably decreased from 2020 to 2022.[120]

There is a lack of data, however, on digital inclusion for persons with disabilities. The ITU study highlights the absence of data on digital skills among persons with disabilities, which complicates policy and programme development regarding labour market integration and educational access.[121] Additionally, there are concerns that the digitalization of state processes and public services might reduce accessibility for persons with disabilities.

A higher share of Internet users reflects affordability. Both fixed and mobile broadband Internet price baskets remain affordable even for the poorest 20 per cent of the income earners and broadband Internet access costs much less than 2 per cent of Gross national income per capita — the UN Broadband Commission for Sustainable Development affordability target for 2025. However, Kazakhstan lags behind the world average in terms of fixed broadband penetration with only 15.4 per 100 people in 2022 having a fixed broadband Internet subscription.[122] Kazakhstan's broadband remains slow with mean download speed of 13.92 Mbps, ranking the country 169th globally in the Cable.co.uk study, behind the Russian Federation (68th) and Uzbekistan (145th) in 2024.[123]

The following key factors constrain innovation in Kazakhstan's economy within the Fourth Industrial Revolution: skills; infant IT sector; start-up ecosystem; and insufficient digital infrastructure. Regarding ICT skills, the rise of cyber-physical systems and digital technologies is eliminating routine jobs but creating new roles in Artificial Intelligence (AI), robotics, and cloud technologies that require advanced skills. According to ITU 2021 data, however, only 29 per cent of Kazakhstan's population have «basic» ICT skills, 24 per cent have «standard» and 6 per cent have «advanced», highlighting a significant need for enhanced IT education and training across the country's educational system and public administration.[124]

Kazakhstan faces significant challenges in achieving gender equality in science, technology, engineering and mathematics (STEM) education due to traditional gender roles and structural barriers.[125] This issue is global, with only about 30 per cent of female students worldwide pursuing STEM degrees, and just 3 per cent choosing ICT. In Kazakhstan, women make up only 32 per cent of ICT students, yet they dominate in sectors like education and health.[126]

The infant IT sector in Kazakhstan is relatively small. In the past decade, the total production and sale of IT goods and services have not exceeded about 2 per cent of the GDP of Kazakhstan.[127] The highest share of the IT market belongs to the IT equipment sector (46 per cent), in which wholesale trade in computers and peripheral equipment (96.2 per cent), predominantly of foreign production, is more prevalent than the manufacture of IT equipment (3.8 per cent). Besides, special attention is needed to address the digital skills gap in the cultural and creative sectors, as these sectors were among the hardest hit by the COVID-19 crisis. The country is now witnessing a significant shift of cultural activities to online and hybrid formats.

Kazakhstan's startup ecosystem is flourishing, leading Central Asia and ranking third in Central Eurasia, according to the Startup Central Eurasia Ecosystem Ranking.[128] The Astana Hub technology park is central to this growth, nurturing an innovative culture and enhancing the startup environment. It provides acceleration, business incubation, consulting, and educational services, focusing on sectors like Fintech, Gamedev, Blockchain, Edtech, and Govtech. However, the startup ecosystem faces several challenges, including weak collaboration among science, business, and government actors; a limited number of knowledge-intensive startups;

[114] World Intellectual Property Organization (2024) Global Innovation Index 2024. Unlocking the Promise of Social Entrepreneurship. https://shorturl.at/FVAtx

[115] Akorda.kz (2023) Address of the Head of State Kasym-Jomart Tokayev to the people of Kazakhstan «Economic Course of Fair Kazakhstan». https://shorturl.at/otxC5

[116] Resolution of the Government of the Republic of Kazakhstan 'On Approval of the Concept of Digital Transformation, Development of the Information and Communication Technologies Industry and Cybersecurity for 2023-2029', 28 March 2023. No. 269. https://adilet.zan.kz/rus/docs/P2300000269

[117] Resolution of the Government of the Republic of Kazakhstan 'On Approval of the Concept of Artificial Intelligence Development for 2024-2029', 24 July 2024, № 592. https://shorturl.at/QvXFr

[118] Dossier on the Draft Digital Code of the Republic of Kazakhstan. https://shorturl.at/3jzVd

[119] DataHub (2024) Kazakhstan. Individuals using the Internet. https://shorturl.at/4tiyV

[120] ESCAP (2024) E-Resilience Monitoring Dashboard. https://www.unescap.org/projects/e-resilience/data-table

[121] ITU (2022) Kazakhstan: Assessing ICT data availability, digital sustainability, regulatory measures. Connect2Recover. https://shorturl.at/aALOS

[122] ITU (2023) DataHub: Kazakhstan's profile. Active mobile-broadband subscriptions. https://datahub.itu.int/data/?e=KAZ&i=11632

[123] Cable.co.uk (2024) Worldwide broadband speed league 2024 https://www.cable.co.uk/broadband/speed/worldwide-speed-league/

[124] ITU (2024) Digital Development Dashboard. Kazakhstan's profile. https://shorturl.at/6xbJC

[125] Cohenmiller, A., Saniyazova, A., Sandygulova, A. & Izekenova, Zh. (2021) Gender Equity in STEM Higher Education in Kazakhstan.

[126] UNDP (2021) Why is technology a great career choice for women? https://cutt.ly/QMxUg4P

[127] BNS ASPR (2022) Statistics of national accounts. https://stat.gov.kz/official/industry/11/statistic/7

[128] Startup Central Asia (2023) What are the strengths and challenges of Startup Ecosystems of Central Asia. https://startupcentraleurasia.com/news/28

regional disparities in infrastructure access; and the nascent stage of venture financing development.

While challenges persist, Kazakhstan is striving to overcome them, with some results already visible. In 2023, Kazakhstan became the first Central Asian country to join the Global Cleantech Innovation Programme, sponsored by the Global Environment Facility (GEF). This initiative, supported by the Ministry of Ecology and Natural Resources, aims to promote innovation and support small and medium-sized businesses and startups in green technologies.[129]

Kazakhstan faces challenges in achieving comprehensive Internet coverage due to its vast and sparsely populated regions and insufficient digital infrastructure. There are areas within the country that remain without adequate Internet access, highlighting the need for targeted infrastructure development. The national project, Accessible Internet for 2024-2027,[130] aims to ensure universal mobile broadband coverage of rural settlements by 2027. SpaceX's Starlink system is set to launch in Kazakhstan, initially connecting 2,000 rural schools in a pilot project.[131] In May 2024, Parliament passed legislation to regulate satellite communication technologies, including non-geostationary satellites like Starlink and OneWeb, through 2026. The law also mandates the integration of fibre optic lines along highways, ensuring high-quality Internet access for rural areas.[132]

1.10 Environment and climate change context and progress on global commitments

Kazakhstan faces a diverse set of natural hazards, and climate change is likely to exacerbate the situation. Key threats include floods, drought, avalanches, and landslides.[133] Geophysical hazards, such as earthquakes and landslides represent a serious threat to the country, especially in the southern regions. In 2024 alone, several earthquakes with a magnitude above 5 have struck the capital Almaty and the neighbouring area, with the strongest earthquake reaching magnitude 7 in January.[134]

The 2022 INFORM Subnational Risk Index for Central Asia shows that the region around Almaty, as well as Akmola, Aktobe, Atyrau, East Kazakhstan, Kostanai, Pavlodar, Turkestan, West Kazakhstan and Zhambyl have «high» to «very high» physical exposure to floods.[135] The recent floods from March 2024, which were the largest floods in 80 years, affected 17 regions in the country, flooded 6,000 houses and displaced approximately 118,200 people, almost 44,300 of whom children.[136] More than 50,000 volunteers helped in various activities across the country during the flooding. The support of the National Volunteer Network and a network of the Regional Front Offices of Volunteers was instrumental in responding to the emergency.[137]

Spring flooding commonly occurs once the harsh winter snows start melting. Climate change impacting glacial melt in the mountainous regions further exacerbates the risk of flooding. The protective Medeu dam built in the 1970s upstream of Almaty has helped reduce the risk of massive glacial-lake outburst floods (GLOFs) but a number of sites at risk remain unprotected. Such floods could have high negative impacts on tourism and strategic infrastructure, such as hydropower, mining sites and roads.[138]

At the same time, the official statistics of the Ministry of Emergency Situations of Kazakhstan reported that from 2018 until 2021 there was a significant number of technogenic emergencies (60 858 technogenic events in comparison to 7 711 natural events).[139] In this regard, it would be essential that the country employs an all-hazard approach and considers the cascading impact of hazards, which could have a number of socio-economic spill-over effects, considering the cross-border nature of disasters. Strengthening the resilience of critical infrastructure, especially in high-risk seismic areas, or areas prone to floods, mudslides and fires, and developing integrated regional approaches could support the prevention of new risks and preparedness for existing risks. This could include streamlining of disaster risk reduction (DRR) and climate change adaptation policies into infrastructure planning and financing, improved monitoring and evaluation of infrastructure projects, the development and update of building codes, improved safety measures, and awareness raising and capacity development, among others.

Furthermore, modelling suggests an uptick in the occurrence of regional fire weather, including increased temperatures and greater rainfall variance. Climate change could also increase fire severity.[140] According to the Ministry of Ecology and Natural Resources, in 2023 forest fires affected approximately 116,800 hectares, including 77,800 hectares of forested land, with 61,100 hectares of tree-covered area, and 53,400 hectares of crown fires. The total damage is estimated at KZT 163.2 billion.

Kazakhstan is warming at a rate faster than the global average and most other Asian nations.[141] Temperatures are expected to increase on average by 1.7-1.9 °C before 2030 and 2.4-3.1 °C by 2050, and further by 3.2-6.0 °C before 2100. Higher temperatures mean more extreme weather events and disasters, including desertification and melting glaciers that increase the risk of floods, mudslides, and the depletion of water resources. Likely consequences include the continued expansion of deserts and arid areas, with the possible loss of coastline due to the lowering of the Caspian Sea level.[142]

Efforts should concentrate on embedding prevention, DRR and climate change adaptation principles into national planning and investment strategies, thus aligning with internationally recognized frameworks, notably the Sendai Framework for Disaster Risk Reduction 2015-2030. The Sendai Framework advocates for developing measures and policies for prevention, mitigation and reduction of risks, as well as for the build back better principle focused on both recovery and enhancement of infrastructure resilience against future disasters.[143]

In this regard, the Government of Kazakhstan has specifically emphasized the need to enhance early warning, in line with the UN global initiative on Early Warning for All (EW4All). The Minister for Emergency Situations of Kazakhstan has signed a formal letter to UN Secretary General requesting to expand the EW4All initiative for the wider Central Asia region, recognizing the need of transboundary disaster risk management measures among the Central Asian countries. The collection of local, national and regional level quality, gender and age disaggregated disaster loss and damage data supports the EW4All initiative,

[129] Global Cleantech Innovation Programme: https://gcip.tech/country/kazakhstan/

[130] The national project «Accessible Internet» for 2024-2027 approved by the Decree of the Government of Kazakhstan № 949 dated 27 October 2023. https://adilet.zan.kz/rus/docs/P2300000949

[131] Digital Business (2024) All about Starlink in Kazakhstan: What is known at the moment. https://shorturl.at/UfKUr

[132] Aubakirova, A. (2024) Kazakhstan Parliament Adopts Law on Internet Use by Elon Musk. https://shorturl.at/7IGFJ

[133] Climate Change Knowledge Portal. Data for Kazakhstan. https://shorturl.at/e9g47

[134] Earthquakelist.org (2024) Almaty Earthquake Report. https://earthquakelist.org/kazakhstan/almaty/almaty/#:~:text=A%20relatively%20large%20number%20of, magnitude%20of%204%20or%20above.

[135] INFORM Subnational Risk Index CA (2022). https://drmkc.jrc.ec.europa.eu/inform-index/INFORM-Subnational-Risk/Central-Asia

[136] ACAPS (2024) Kazakhstan Floods. https://www.acaps.org/fileadmin/Data_Product/Main_media/20240423_ACAPS_briefing_note_Kazakhstan_floods.pdf

[137] Akorda (2024) A solemn ceremony of awarding nationals of Kazakhstan who took an active part in flood relief https://shorturl.at/UMnbR

[138] UNESCO (2022) Reducing the vulnerability of Central Asian populations to glacial lake outburst floods in a changing climate. https://unesdoc.unesco.org/ark:/48223/pf0000390139/PDF/390139eng.pdf.multi

[139] ADPC, CIMA, UNDRR (2024) Country Disaster Risk Profile of the Republic of Kazakhstan. https://www.undrr.org/publication/country-disaster-risk-profile-republic-kazakhstan

[140] ThinkHazard (2024) Kazakhstan. Water Scarcity._ https://thinkhazard.org/en/report/132-kazakhstan/DG

[141] World Bank Group & Asian Development Bank (2021) Climate Risk Country Profile: Kazakhstan https://shorturl.at/EfOq4

[142] The Government of Kazakhstan (2023) Kazakhstan First NDC (Updated submission). https://unfccc.int/documents/630387

[143] UNDRR (2024) Implementing the Sendai Framework. https://shorturl.at/qddOV

as well as strengthen the development of data-based DRR and climate change adaptation policies in the country.

Despite global frameworks advocating for gender-responsive approaches in DRR, Kazakhstan's policies remain largely gender-neutral and lack specific measures to address the unique vulnerabilities and capacities of women and girls in disaster contexts. The Sendai Gender Action Plan, a strategic framework to accelerate gender integration in DRR, emphasizes the importance of incorporating gender-responsive strategies for achieving the Sendai Framework's goals.[144]However, Kazakhstan's current DRR policies lack targeted actions to address the differentiated impacts of disasters on women and girls or to leverage their potential contributions to resilience-building.

Kazakhstan faces a considerable care deficit, with women spending 14.8 per cent of their annual time on unpaid care and domestic work, three times more than men.[145] In 2022, 93 per cent of women in rural areas reported working less than 40 hours per week due to caregiving responsibilities, limiting their labour force participation and hindering career advancement.[146]In disasters, unpaid care work for women often increases significantly, as they tend to be responsible for children, older persons, and persons with disabilities, limiting their ability to evacuate quickly or seek safety and resources. In addition, women's lower access to resources, such as credit or insurance, hinders their ability to rebuild homes and livelihoods post-disaster, compounding economic insecurity and limiting their influence on DRR policies that could better protect and empower them.

Moreover, women's psychological and physical safety is at greater risk during disasters. Evacuation centers and shelters often lack resources to meet women's health and hygiene needs, and reports of gender-based violence frequently spike in disaster aftermaths. Addressing these realities in Kazakhstan requires a gender-responsive approach in DRR planning that acknowledges and proactively mitigates the specific challenges women face.

While the growth of the extractive industry has propelled Kazakhstan's economic development, the country is actively transitioning to sustainable development and a green economy. On 10 June 2024, Kazakhstan took a significant step forward in its commitment to environmental sustainability. President Kassym-Jomart Tokayev issued a decree updating the nation's Concept for Transition to a Green Economy («Green Economy Concept»). The updated concept is built around a clear vision for a green economy, emphasizing the importance of achieving the SDGs, reducing greenhouse gas (GHG) emissions in line with the Paris Agreement, and fostering a prosperous, fair and environmentally sustainable society.

Importantly, the Green Economy Concept identifies transforming the waste sector as one of Kazakhstan's key drivers of the green economy. The goal is that by 2050 the entire population will be covered by waste collection with 50 per cent of waste recycled and 95 per cent of landfills in compliance with environmental and sanitary requirements.[147] The country practices a waste management hierarchy that makes maximum efforts to prevent waste generation — unless impossible to avoid. In this case, materials must be sorted and processed with burial and incineration as the last options. This is particularly important considering fast growing waste streams like electronic rate which is expected to grow by 9 to 10 kt per year, while still the subject of low recycling rates.[148]

[144] UNDRR (2024) What is the Sendai Gender Action Plan? https://www.undrr.org/news/what-sendai-gender-action-plan

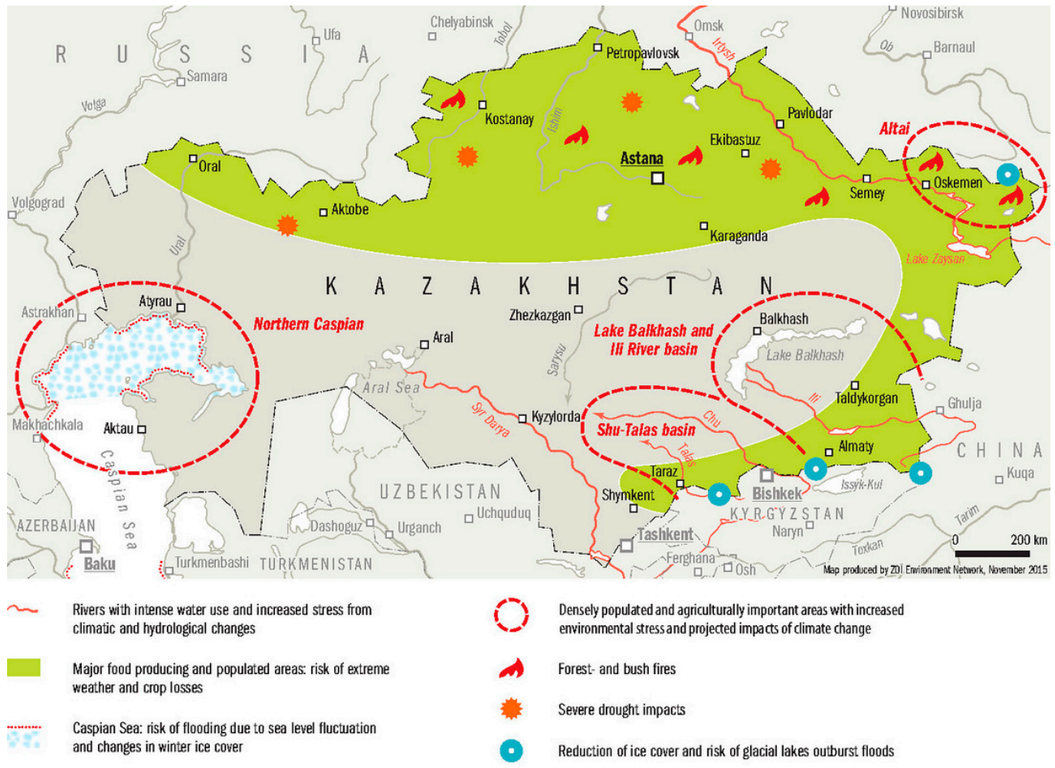
[145] BNS (2022) Average number of hours, spent on paid and unpaid housework (total labor burden), by sex. https://gender.stat.gov.kz/page/frontend/detail?id=27&slug= –22&cat_id=2&lang=ru

[146] BNS (2024) Publications: Employment and unemployment. https://stat.gov.kz/en/industries/labor-and-income/stat-empt-unempl/publications/

[147] PAGE (2020) Kazakhstan's transition to a Green Economy: A stocktaking report. https://shorturl.at/xEtKk

[148] United Nations Institute for Training and Research / Ministry of Ecology and Natural Resources of the Republic of Kazakhstan / Center Cooperation for Sustainable Development (2023) National E-waste Monitor 2023: https://ewastemonitor.info/the-national-e-waste-monitor-kazakhstan/

Figure 18 Impacts of climate change in Kazakhstan



Source: Zoi Environment Network, 2016

Kazakhstan has also identified the country's vulnerability to climate change in the areas of agriculture (both crops and livestock), water resources, human health, and social and economic development. Vulnerability is marked in the following sectors: agriculture, water, urban, and energy. Adaptation priorities in these areas include technical and administrative measures and technological and infrastructural improvements.[149] In managing its water resources and land, Kazakhstan needs to improve water management practices and increase sustainable land use to enhance agricultural productivity and resilience.[150]

Worsening water deficit is the key climate-related challenge in the country, impacting all areas of socioeconomic development. The combination of climate change (drier, hotter summers), natural environmental characteristics (about 50 per cent of rivers have sources in neighbouring countries) [151] and intensive water use for agriculture results in large water deficits. Urban areas also face dangerous water shortages. Indeed, the overall situation presents one of the country's critical development barriers.

Water infrastructure is pivotal not only for sustainable development but also for climate mitigation and adaptation strategies in

[149] Climate Change Knowledge Portal. Data for Kazakhstan. https://shorturl.at/e9g47

[150] SDG 6 Snapshot in Kazakhstan. https://www.sdg6data.org/en/country-or-area/kazakhstan

[151] Decree of the President of the Republic of Kazakhstan 'On the Concept for the Transition of the Republic of Kazakhstan to a Green Economy', 30 May 2013, No. 577. https://adilet.zan.kz/rus/docs/U1300000577

Kazakhstan. Effective infrastructure for water management supports the stable water supply essential for agriculture, industry, and domestic use, and is a key defence against the impacts of flooding and droughts. Kazakhstan has 405 reservoirs with a total live storage capacity of 87.8 km^3. Given the average total surface water resources of 106 km^3, dams in Kazakhstan control almost 83 per cent of surface water, a high percentage that plays a crucial role in flood management. The 2024 flood events exposed critical deficiencies in the country's flood preparedness and dam operations. There is, therefore, an urgent need for robust infrastructure and comprehensive DRR strategies.

Modernization and expansion of DRR and climate change adaptation measures and mechanisms are crucial for adapting to changing climatic conditions and addressing water scarcity, thereby playing a significant role in climate resilience. Such investments also promote public health and economic growth, while contributing to GHG reduction through improved efficiency and sustainable management practices. The United Nations 2022 World Water Development Report highlights these aspects, emphasizing integrated water resources management as fundamental to achieving water security and supporting broader climate goals.[152]

Soil and pasture degradation is a significant concern, with about 44 per cent of agricultural land negatively impacted by salinization and alkalinization, and 14 per cent of the land damaged by water and wind erosion.[153] Severe pasture degradation affects approximately 26.6 million hectares, primarily due to overgrazing around populated areas. Implementing sustainable agricultural practices and adopting eco-friendly production methods can mitigate environmental impacts.

In January 2024, the Government of Kazakhstan supported an initiative by senators to develop a draft law entitled «On Soil Protection» to address issues of grazing, use of pastureland, and soil degradation,[154] as well as to introduce a holistic, multidisciplinary green agriculture approach for greening agri-food systems in support of the Green Economy Concept. To promote soil health, increase soil organic carbon stocks, and address soil pollution, the Food and Agriculture Organization's (FAO) Global Soil Partnership and the Government of Kazakhstan are taking steps to introduce the Recarbonization of Global Agricultural Soils initiative in Kazakhstan.[155]

In response to these serious challenges, and as one of the planet's leading GHG emitters per capita, Kazakhstan announced its intention to reach carbon neutrality[156] by 2060 during the Climate Ambition Summit in December 2020. The long-term goals, among others, include achieving net zero GHG emissions by 2060; reducing the energy intensity of the GDP by 50 per cent from the 2008 level by 2050; and increasing the share of alternative sources (including nuclear) in electricity generation by 50 per cent by 2050. On 2 February 2023, the President of Kazakhstan approved the Strategy on Achieving Carbon Neutrality by 2060, thereby enshrining the net zero target in law.[157] Nowadays, the Government of Kazakhstan is also working on developing the Carbon Neutrality Roadmap, National Adaptation Plan, Nationally Determined Contribution, and Biennial Transparency Report.

In accordance with international best practices, the main legal act for the protection of the environment in Kazakhstan is the Environmental Code of the Republic of Kazakhstan (the «Environmental Code»), adopted 2 January 2021, and effective 1 July 2021. The new Environmental Code updated key environmental norms, standards, and indicators in the country. Two principles underpin the Code, including the precautionary principle that calls for reasonable and proportionate measures to prevent significant environmental damage, and the pollution prevention principle calling for the use of best available technologies at the source of pollution. The Code regulates the activities of legal entities and individuals that may negatively affect the environment.[158]

As of January 2024, strategic environmental assessments have become obligatory in Kazakhstan at the drafting stage of city development master plans and territorial development plans, as mandated by the Environmental Code. In 2023, a pilot strategic environmental assessments of the Astana City Master Plan until 2035 was completed, with support from the UN Partnership for Action on the Green Economy. The pilot serves as a blueprint for other municipal plans.

Finally, Kazakhstan is a party of Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters and hosts a wide network of Aarhus Centres contributing to the implementation of the Convention and promoting environmental justice. In 2020, Kazakhstan acceded to the UNECE Protocol on Pollutant Release and Transfer Registers (PRTRs).

1.10.1 Climate change and energy

Kazakhstan is one of the most energy-intensive countries in the world and relies heavily on fossil fuels for energy, industry, exports, and revenue — with coal dominating the energy mix at 48.2 per cent. The next largest shares are natural gas at 26.4 per cent and oil and petroleum products at 23.5 per cent of total primary energy consumption. Kazakhstan ranks 18th globally in greenhouse gas emissions per capita.[159] Ageing and poorly regulated fossil fuel infrastructure and industries are failing to meet the needs of citizens who have contended with energy shortages more regularly in recent years. In terms of climate change impacts, geographic characteristics and economic dependence on fossil fuels contribute to the country's vulnerability.[160] Climate change affects energy supply in several ways. For instance, reduction in river flows connected to glacial loss could reduce long-term hydroelectricity capacity, which produced 7.8 per cent of electricity in 2023.[161]

In June 2023, Kazakhstan submitted its updated Nationally Determined Contribution (NDC) of the Republic of Kazakhstan to the global response to climate change,[162] committing to a 25 per cent emissions reduction by 2030, compared to 1990 levels, and conditional on international support. The NDC sets an unconditional emissions reduction target of 15 per cent by 2030 compared to 1990 levels. For the first time, the revised NDC includes adaptation components focusing on agriculture, water, forestry, and disaster risk management. Currently, Kazakhstan is developing NDC 3.0 with more ambitious goals based on the Global Stock Take agreed at 28th Conference of the Parties.[163]

It is important to note several gaps in the current NDC 3.0 that should be addressed in the next version. The two-year approval process was completed without key sectoral indicators or a roadmap. Current NDC targets are low given Kazakhstan's objective to reach carbon neutrality by 2060.

[152] UN-Water (2022) UN World Water Development Report 2022. https://shorturl.at/R6Uqq

[153] BNS ASPR (2024) Environment. https://stat.gov.kz/en/

[154] Primeminister.kz (2024) Government develops comprehensive approaches and systemic measures in land relations. https://shorturl.at/DVCJ2

[155] FAO (2024) Towards soil recarbonization in Kazakhstan through the RECSOIL initiative. https://shorturl.at/9y42r

[156] Carbon neutrality means striking a balance between the emission of carbon and its absorption from the atmosphere in what are called carbon sinks. https://www.europarl.europa.eu/topics/en/article/20190926STO62270/what-is-carbon-neutrality-and-how-can-it-be-achieved-by-2050

[157] Presidential Decree No. 121 validating the Strategy for achieving carbon neutrality of the Republic of Kazakhstan until 2060. As of November 2023, Kazakhstan has not yet submitted the strategy as an official long-term strategy to the UNFCCC. The One UN Partnership for Action on the Green Economy (PAGE) is supporting the development of the strategy. https://climateactiontracker.org/countries/kazakhstan

[158] IEA (2022) Environmental Code of the Republic of Kazakhstan, № 400-VI (as amended). https://www.iea.org/policies/12917-environmental-code-of-the-republic-of-kazakhstan-400-vi-as-amended .

[159] EDGAR (2023) GHG emissions of all world countries. https://edgar.jrc.ec.europa.eu/report_2023?vis=co2pop#emissions_table

[160] Oladejo, T.O., Balogun, F.O., Haruna, U.A. et al. (2023) Climate change in Kazakhstan: Implications for population health. Bull Natl Res Cent 47, 144. https://doi.org/10.1186/s42269-023-01122-w

[161] KEGOC (2024) National Power System. https://shorturl.at/6QiFQ

[162] Decree of the Government of the Republic of Kazakhstan on 'Updated Nationally Determined Contribution of the Republic of Kazakhstan to the global response to climate change', 19 April 2023, № 313. https://unfccc.int/sites/default/files/NDC/2023-06/12updated%20NDC%20KAZ_Gov%20Decree313_19042023_en_cover%20page.pdf

[163] UNFCCC (2024) Central Asia and NDC 3.0: A Roadmap for Climate Action Central Asia Climate Change Conference — CACCC 2024. https://unfccc.int/event/central-asia-and-ndc-30-a-roadmap-for-climate-action

Indicators are missing across every sector, including agriculture and energy. There are no established adaptation indicators, nor a complete description of the adaptation mechanism. Furthermore, risks to the attainment of NDC targets include unpredictable climate change consequences, resistance from both business and governmental bodies, limited resources, and dependence on international funding.

While in 2013 Kazakhstan became the first country in Central Asia to set up an emissions trading scheme at the national level, emissions reductions have been limited by free quotas and generous benchmarks.[164] The emissions trading scheme targets emissions from 199 installations belonging to 128 large companies from electricity, oil and gas, mining, metallurgy, chemical, and manufacturing sectors. Carbon pricing is substantially low in Kazakhstan. According to the National Carbon Plan for 2022-2025, the country will decrease free quotas by 5 per cent from 166 million tonnes in 2022 to 159 million tonnes in 2025.[165] The revised NDC states that in the next carbon budgeting period from 2026 to 2030, the annual carbon reduction targets will increase from 1.5 per cent to a range between 2.25 per cent and 5.1 per cent, relative to the carbon budget of the previous year. It will also be vital to adopt policy measures to reduce emissions from sectors not covered by the emissions trading scheme — including transport, the residential sector, and services.[166]

While Kazakhstan has indicated a strong commitment to Agenda 2030 for Sustainable Development by integrating the SDGs into its national development strategies, challenges remain regarding affordable and clean energy, climate action, and the concept of an equitable or «just transition'' to a sustainable, net-zero future.[167]

The Government plans to provide a favourable investment climate to promote decarbonization of economic sectors, modernization of enterprises, and support for socially vulnerable populations. Predictions from the Climate Action Tracker in Figure 20, however, show that Kazakhstan will not meet its climate targets, as emissions will grow until 2035 (at least) under current policies. For instance, in April 2024 Kazakhstan signed an agreement with the Russian Federation to construct three coal-fired thermal power plants.[168]

As the Climate Action Tracker notes, to enhance the country's implementation of long-term climate objectives, the government could create an enforceable implementation plan with binding sectoral targets, clear accountability, and a rigorous review process. The country could update short-term emissions reduction targets and scale up renewable energy targets to enable more auctions.[169] Grid capacity needs enhancement to keep up with renewable energy (RE) growth and should be extended to northern areas of the country. A further recommendation is to create a coal phase-out plan that is 1.5 °C compatible. Since coal is the main source of home heating and jobs, a phase-out plan will be important to ensure the transition is just.[170]

[164] IEA (2022) Kazakhstan 2022, IEA, Paris. https://www.iea.org/reports/kazakhstan-2022, Licence: CC BY 4.0

[165] Order of the Minister of Ecology, Geology and Natural Resources of the Republic of Kazakhstan 'On Approval of the National Carbon Plan', 11 July 2022, No. 525. https://adilet.zan.kz/rus/docs/V2200028798

[166] IEA (2022) Kazakhstan 2022, IEA, Paris. https://www.iea.org/reports/kazakhstan-2022, Licence: CC BY 4.0

[167] UNDP (2022) What is just transition? And why is it important? https://climatepromise.undp.org/news-and-stories/what-just-transition-and-why-it-important

[168] The Times of Central Asia (2024) Russia to Aid Construction of Coal-Fired Thermal Power Plants in Kazakhstan. https://timesca.com/russia-to-aid-construction-of-coal-fired-thermal-power-plants-in-kazakhstan/

[169] USAID (2022) What is a renewable energy auction? Renewable Energy Auctions Toolkit. https://www.usaid.gov/energy/auctions/auction-explainer-video

[170] The Climate Action Tracker (2024) Kazakhstan. Country summary. https://climateactiontracker.org/countries/kazakhstan/

Figure 19 Carbon footprint per capita (in comparison to select other countries)

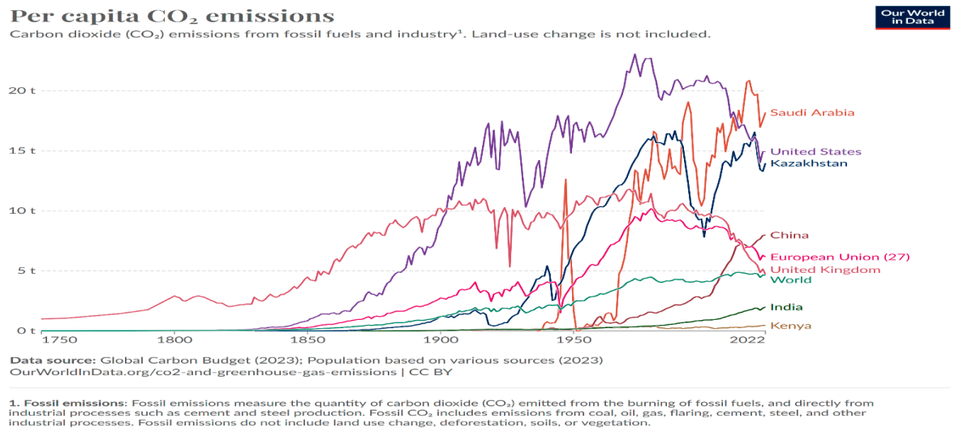
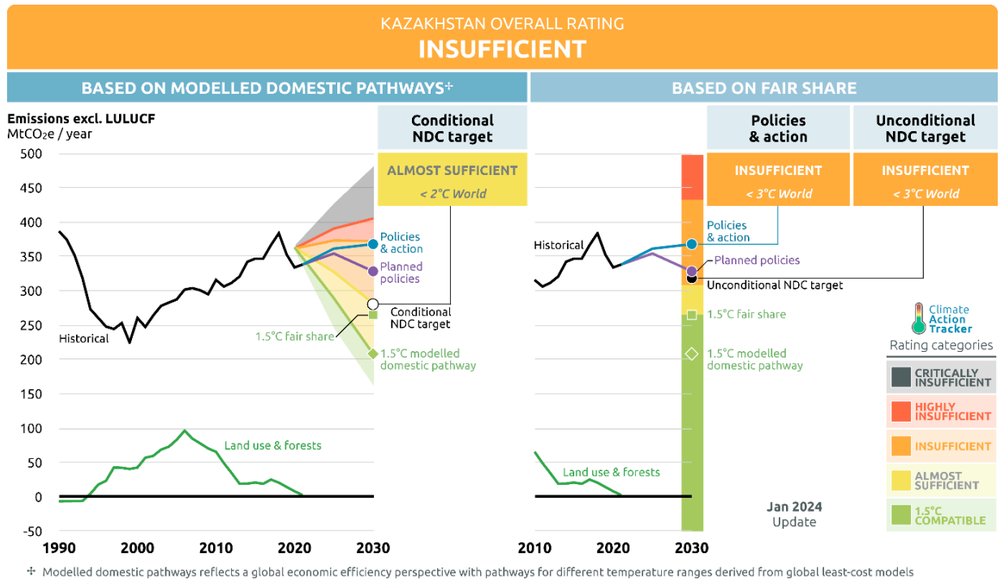


Figure 20 Kazakhstan and climate action



Source: Climate Action Tracker: Kazakhstan, 2023

Methane emissions

Methane emissions arise from human activity, such as agriculture, and from industry. The energy sector is the largest source of methane emissions, about 75 per cent of total methane emissions, including from oil and gas production and coal mining. In 2023, there was a major well blowout of methane in Karaturun East oil field. Satellite imagery suggests the leak was active for 205 days, releasing an estimated 128±36 kt 128 of methane.[171] Methane levels were measured at 480 times the legal limit, and the operator was fined USD 780,000.[172,173] Methane emissions continue to be detected by satellites, and are compiled through UNEP's Methane Alert and Response System (MARS), which also provides notifications directly to governments on major methane emissions events. Kazakhstan has nominated focal points to receive information on methane emissions observed in Kazakhstan.

At 28th Conference of the Parties in 2023, Kazakhstan joined the Global Methane Pledge — a voluntary agreement by over 150 nations to cut emissions by 30 per cent by 2030. The national oil company KazMunayGas joined the Oil and Gas Methane Partnership 2.0. At 29th Conference of the Parties in November 2024, Kazakhstan will release its programme to curb methane emissions. The country is set to slash emissions by 4.9 per cent from 2020 levels or up to 2 million metric tonnes, spending at least USD 1.4 billion through to 2030.[174]

Kazakhstan can dramatically reduce its methane emissions at low cost. It is estimated that methane emissions could be reduced by almost 60 per cent, and around half from the sector could be reduced at no net cost, thereby supporting Kazakhstan to achieve the deep reductions in methane emissions necessary to achieve the Paris Agreement. Over 70 per cent of oil and gas sector emissions can be abated with available technologies.

Renewable energy

The country has enormous potential for RE — hydro, wind, solar — that could both help diversify its energy mix away from fossil fuels and become a critical engine for economic growth. Indeed, the country's ambition is to become a «renewable powerhouse» in Central Asia and lead the green transition. As of July 2024, Kazakhstan has 148 RE facilities in operation with an installed capacity of 2,903.7 MWs. The country plans to commission six RE facilities producing 196.9 MWs by the end of 2024.[175]

In 2023, RE facilities created 6.675 billion KWh of electricity or 5.92 per cent of all electricity. If large hydroelectric power stations are included, the number is 13.7 per cent. Kazakhstan aims to generate 15 per cent of national electricity from RE sources by 2030 (excluding large hydropower) and 50 per cent by 2050 (including alternative energy sources). The Ministry of Energy intends to hold yearly auctions and carry out large-scale projects.[176] Although the country has considerable potential for RE, foreign and national investors can face barriers — including the lack of an effective legal and regulatory framework, out-of-date distribution networks and power grids, low support for research and development, low electricity tariffs, and an aversion to RE by the conventional energy sector.[177]

As the world's leader in natural uranium mining — Kazakhstan contributes 22 per cent to global uranium production[178] — the country is considering nuclear energy as an alternative electricity source. The key priority for energy policy is to both maintain the competitiveness of the uranium mining industry and expand it while also diversifying power supply through investment in nuclear power generation. Currently, a power plant is under consideration in the Almaty region that could produce 8.4 billion KWh in 2032 or 5.6 per cent of total electricity production. The number could increase to 19.8 billion KWh in 2035 or 13 per cent of total production.

The issue, however, was not without substantial debate. As such, the national referendum on whether to construct a nuclear power was held on October 6, 2024, with 71.12 per cent voted in favour of the construction.179 Developing a nuclear power plant in Kazakhstan offers energy security and emission reduction benefits, leveraging the country's vast uranium resources. However, it carries significant environmental and safety risks, particularly regarding radioactive waste and potential accidents, which demand rigorous safety protocols. High economic costs and public scepticism, especially given Kazakhstan's history with nuclear testing, add complexity to the decision. Balancing these factors requires strong regulatory frameworks, transparent public engagement, and careful feasibility studies to ensure sustainable, safe energy development.

As a country with significant hydropower potential, Kazakhstan is looking to expand its use of this RE source, especially in its eastern, southern, and south-eastern regions. With technical hydropower potential estimated at 62 GWh annually, the country aims to bridge the gap between current production and its economically feasible capacity of 25-27 GWh per year. A key focus is on developing small hydropower plants, particularly in the south and south-east where water resources are abundant.

Despite these ambitions, challenges such as outdated infrastructure, high initial investment costs, and competition from subsidized thermal power generation persist. The Government is addressing these issues through regulatory support, including incentives for small hydropower plants development, and strategic plans targeting increased capacity by 2030. However, for hydropower to significantly contribute to the energy mix, further modernization of the power grid and enhanced investment in small hydropower plants infrastructure will be crucial.180

As part of its international obligations to reduce emissions, Kazakhstan plans to develop hydrogen energy. According to the 2024 draft Concept for the Development of Hydrogen Energy in the Republic of Kazakhstan Until 2040, emissions can be cut through hydrogen produced using carbon dioxide capture and storage technologies and water electrolysis using energy from RE and nuclear power facilities. The draft concept proposes a scientific and technological infrastructure, including private initiatives, to support the development and implementation of domestic hydrogen energy technologies.[181] A pilot project is in the works to build hydrogen vehicles such as trucks and buses as well as rail transport in large cities. This project will include infrastructure for hydrogen transportation and the development of experimental production sites. The country will also pilot hydrogen in communal services and in housing.[182]

Just transition

The principles of just transition are embedded in the country's Strategy on Achieving Carbon Neutrality by 2060 and ensure that those whose jobs are lost in the energy transition have social guarantees and the chance to retrain for employment in new low-emission industries.[183] The loss of direct employment in the coal mining sector by 40 per cent — from 30,260 workers in 2020 to 18,210 workers

[171] Guanter, L. et al. (2024) Multisatellite Data Depicts a Record-Breaking Methane Leak from a Well Blowout. Environmental Science & Technology Letters. 30 June 2024. https://pubs.acs.org/doi/10.1021/acs.estlett.4c00399

[172] The document uses United States dollars.

[173] Venkina, E. (2024) Kazakhstan courting international investment to curb methane emissions. https://eurasianet.org/kazakhstan-courting-international-investment-to-curb-methane-emissions

[174] U. S. Department of State (2023) U.S.-Kazakhstan Joint Statement on Accelerating Methane Mitigation to Achieve the Global Methane Pledge. https://shorturl.at/b3KxQ

[175] The Ministry of Energy (2024) The share of renewable energy sources for 6 months of 2024 in electricity generation in Kazakhstan was 6.5 per cent. https://www.gov.kz/memleket/entities/energo/press/news/details/814318?lang=ru

[176] Nakispekova, A. (2024) Kazakhstan to Allocate Over USD 110 million Investment in Renewable Energy in 2024. https://shorturl.at/aylPG

[177] Aben, D. (2017) Renewable Energy as a Potential Driver of Kazakhstan's Growth. https://shorturl.at/HDius

[178] NAC Kazatomprom JSC (2022) Integrated Annual Report

[179] Kazinform (2024) Referendum result: Kazakhstan votes in favor of building its first nuclear plant. https://shorturl.at/B5jrS

[180] UNIDO & ICSHP (2022) World Small Hydropower Development Report: Central Asia. https://www.unido.org/sites/default/files/files/2023-08/CENTRAL%20Asia-2022.pdf

[181] Concept of hydrogen energy development in the Republic of Kazakhstan until 2040. https://legalacts.egov.kz/npa/view?id=15028374

[182] Ibid.

[183] PAGE (2023) Major step towards Carbon Neutrality in Kazakhstan. https://www.un-page.org/news/major-step-towards-carbon-neutrality-in-kazakhstan/

in 2030 — poses a challenge for a just energy transition (Figure 21). The Government would have to allow workers to transition to retirement or into other sectors.

For decades coal mining has been much more than an occupation as it has provided a sense of identity and belonging to communities.[184] Therefore, a comprehensive, system-wide strategy that addresses technological, environmental, social and cultural factors is essential for effective transitioning coal-mining regions. It is crucial to empower people to make their own choices regarding the transition, take ownership of the process, and be accountable for the outcomes. Moreover, beyond merely producing energy, coal can be refined and utilized for high value resources, such as graphene and carbon nanotubes. Additionally, coal mining areas often hold reserves of lithium and rare earth elements, providing further opportunities for modernization. Finally, post-mining areas can often serve as ideal locations for renewable energy generation, hydrogen production, or energy storage sites, as they are equipped with strong infrastructure and offer easy access to a skilled workforce.

It is likely that labour in coal power generation will be partly transferred to gas power generation, following coal-to-gas plant conversion; however, it is possible that not all workers can be transferred to gas-fired generation. To mitigate negative socioeconomic impacts, some labour from coal power generation may need to be re-trained and transitioned to renewable power generation that, according to projections, will require a significant amount of labour by 2030.

A critical underpinning of the just transition is the role of women. Efforts to better include women in the sector reflect SDG 5 (Gender equality) and SDG 7 (Affordable and Clean Energy). According to the OSCE study of Central Asian States, to realize the potential socioeconomic benefits of the transition will require women's full participation.

The study recommends collecting gender-disaggregated data by companies, government agencies, and organizations and supporting women to develop the skills required by the energy transition.

Since the RE sector is in its early stages of development, there is an opportunity to create a more inclusive work environment from the outset that attracts both women and men.[185] A 2023 in-depth UNDP analysis indicates that the proportion of women in Kazakhstan's energy sector remains lower than men — with women making up just 22 per cent in the coal sector and 18 per cent in oil and gas, whereas in RE women comprise up to 30 per cent, reflecting the sector's growing attractiveness.

This positive trend notwithstanding, women predominate in low-skilled roles, occupying just 16 per cent of managerial roles and 19 per cent of technical jobs. Female students majoring in energy comprised under 10 per cent in 2022.[186] The low engagement of women and girls in Kazakhstan's energy sector can be partly due to societal perceptions. A 2024 study by UNDP and UN Women found that over 54 per cent of respondents believe that STEM fields are not well-suited for women.[187]In addition, analysis shows that key policy documents related to climate change in Kazakhstan lack explicit or implicit references to gender equality or women's rights, despite international frameworks requiring national governments to consider these aspects.[188]

[184] Based on presentation «Transformation of coal-mining areas and communities– what worked, what did not, and how the issue can be effectively tackled in the future «by Michal Drabik, Secretary of the UNECE Group of Experts on Coal Mine Methane and Just Transition, delivered at the Just transitions from mining and fossil fuels to a green economy in Kazakhstan workshop by IBC on Environment and Climate Change for Europe and Central Asia

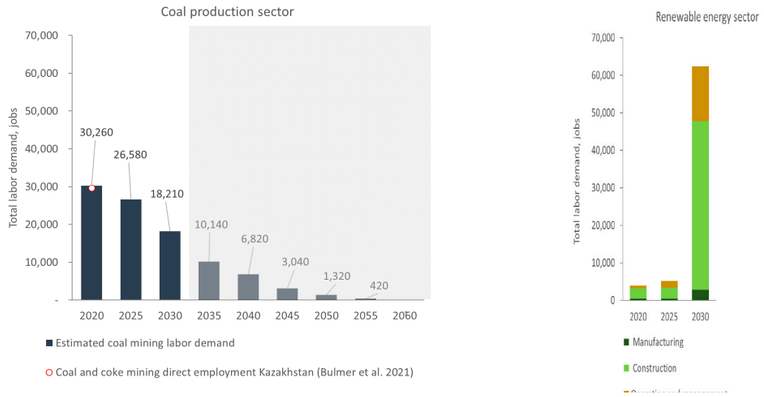
[185] Zoi Environment Network (2024) Advancing a Just Energy Transition in Central Asia: Women's Key Role in the Energy Sector, Organization for Security and Co-operation in Europe. https://zoinet.org/product/osce-energy-women/

[186] UNDP (2023) UNDP report shows women's rising role in the Kazakhstan renewable energy sector. https://www.undp.org/kazakhstan/news/undp-report-shows-womens-rising-role-kazakhstan-renewable-energy-sector

[187] UN Women & UNDP (2024) Public Perception of Gender Equality and Expansion of Women's Rights and Opportunities in Kazakhstan. https://shorturl.at/qCLGf

[188] MENR, UNDP, GIZ (2023) Eighth National Communication and Fifth Biennial Report of the Republic of Kazakhstan to the UN Framework Convention on Climate Change. https://shorturl.at/ByPI9

Figure 21 Labour decrease in coal production and increase in renewable generation sector



Source: Energy Transition in Monocities. Coal Phase-out Roadmap and Just Transition Action Plan for Ekibastuz (Kazakhstan)189

To improve the representation of women in the country's energy businesses, it is essential to sensitize policy making pertaining to just transition and improve women's working conditions.[190] For instance, UNDP facilitated the establishment of «Women for Just Transition» network aimed at strengthening gender advocacy in this field.Fostering networking among women professionals in the field is an enabling factor to make the renewable energy sector more attractive to women and strengthen their leadership skills.

In terms of meeting the requirements for a just transition, data from the International Renewable Energy Agency indicates that not only does RE increase jobs by 2.1 per cent and grow GDP by 0.5 per cent but it also improves welfare. The Energy Transition Welfare Index[191] measures a 10.6 per cent improvement in welfare, partly as a result of health improvements connected to reduced outdoor and indoor pollution.[192]

[189] Kuznetsova E. and Vaillancourt K. (2023) *Energy Transition in Monocities. Coal Phase-out Roadmap and Just Transition Action Plan for Ekibastuz (Kazakhstan). https://www.un-page.org/static/dc101316a8f9f1411d844e623463c9/esmia-undp-kazakstan-ekibastuz-2023-06-29-final.pdf*

[190] UNDP (2023) Gender Balance in the Renewable Energy Sector in Kazakhstan: current status, challenges and solutions. https://www.undp.org/kazakhstan/publications/gender-balance-renewable-energy-sector-kazakhstan-current-status-challenges-and-solutions

[191] The IRENA Energy Transition Welfare Index combines social, economic, environmental, distributional and energy access indicators.

1.10.2 Water use

Signalling renewed focus on water issues, in late 2023 Kazakhstan established a Ministry for Water Resources. The country may face high water stress by 2040, although currently the country is experiencing moderate water stress, with the SDG 6.4.2 water stress level reaching 34 per cent in 2022. The main volume of water resources is provided by surface water in the average annual volume of 102.3 km^3, which will decrease to 99.4 km^3 by 2030. This reduction in water availability poses a significant challenge for both agricultural and domestic use. The total water withdrawal in 2022 was 24.97 cubic km, with agriculture in Kazakhstan consuming 14.2 $km^3$of water annually, primarily for irrigation purposes.

[192] Zoi Environment Network (2024) Advancing a Just Energy Transition in Central Asia: Women's Key Role in the Energy Sector. https://zoinet.org/product/osce-energy-women/

Despite the large, irrigated area of 1.6 million hectares, only 17.4 per cent is equipped with efficient sprinkler and drip irrigation systems.[193] Although the water infrastructure in Kazakhstan is satisfactory, water losses in some irrigation systems are estimated to be as high as 50 per cent, contributing to inefficiency and water wastage.[194]

According to the updated Green Economy Concept, with water scarcity increasing, the costs associated with potential water resource shortages will rise. Economic losses, in the form of wheat crop failures and reduced livestock production, are projected to amount to approximately USD 2 billion by 2050. The expected damage to the energy sector includes a 20 per cent reduction in the capacity for hydroelectric power generation and a 4 per cent reduction in thermoelectric power due to decreased river flows and a lack of water for cooling generators. Since nearly all sectors of the economy depend on water, GDP could decrease by 6 per cent by 2050 due to its scarcity.

Kazakhstan has been a Party to the Water Convention since 2001. The International Water Assessment Centre, established in 2000 and based in Astana since 2017, serves as an effective operational arm of the Convention and its Protocols. At the same time, the critical issue for Kazakhstan is transboundary water cooperation, given none of its transboundary aquifers has in place operational arrangements. Developing cooperation with Uzbekistan on the Pre-Tashkent transboundary aquifer is a promising step.

There are also issues in managing transboundary river and lake basins, including the absence of trilateral cooperation with Russia and the People's Republic of China regarding the Irtysh River; lack of agreement with China on water allocation; issues around implementation of the 1992 Agreement of Central Asian countries and other Aral Sea agreements; and the 2010 Kazakhstan-Russia agreement that refers to groundwater but does not directly address the issue.

Further challenges include lack of joint strategies for climate change adaptation and DRR in basins as well as limited public participation in transboundary water cooperation, with the exception of the Chu-Talas basin. At the same time, however, women's participation in policy or law in the country for both rural drinking water and water resource management is high.[195]

The National Development Plan of the Republic of Kazakhstan calls for the use of alternative water sources, modernizing water infrastructure and the digitalization of water resources management, use of water-saving technologies in agriculture, and revision of water tariffs to encourage economical use. To enhance water quality management and reduce environmental pollution, it is critical to improve solid waste management and sanitation systems. Furthermore, Kazakhstan is currently in an advanced stage of accession to the UNECE (United Nations Economic Commission for Europe)-WHO/Europe Protocol on Water and Health, a legally binding tool aimed at ensuring adequate supply of safe drinking water and sanitation for all. This is achieved by setting intersectoral targets on water, sanitation, hygiene and health, along with mandatory reporting.

In February 2024, the Government adopted a Concept of Water Resources Management System Development for 2024-2030 [196] to improve water security and reduce transportation water losses in agriculture from 50 per cent to 25 per cent while adding 2.4 cubic kilometres of water resources. Twenty reservoirs will be built, and 15 existing ones rebuilt while 14,450 km of irrigation canals and hydraulic structures will be brought up to date. Farmers will be supported with water-saving technologies, a digital platform will collect and analyse water resources, and negotiation processes will be used to resolve issues around transboundary water usage. In 2024, the country also joined the UN Watercourses Convention on the equitable distribution of transboundary river water.[197]

1.10.3 Air pollution

Air pollution in Kazakhstan remains a critical issue, especially in winter, and improving air quality is a national priority. Despite a gradual decrease in overall emissions,198 harmful pollutant concentrations in densely populated areas of Kazakhstan remain significantly above international standards, severely impacting human health. The World Bank estimates that air pollution causes over 10,000 premature deaths annually and costs the economy more than USD 10.5 billion each year. Levels of urban fine particulate matter (PM2.5) – the most harmful for human health – exceed WHO standards by two to five times (Table 1).199 The primary sources and factors of this pollution are both human-made and natural, with the consumption of coal and other solid fuels as the main source.200

Kazakhstan's significant production of coal, oil, gas, and copper – and its heavy industries, such as metallurgy and refineries – contribute to higher pollution levels, particularly in regions with extensive industrial activities like Pavlodar and Karaganda.201 In the two largest cities, Almaty and Astana, residential heating using coal is the major source of PM2.5 pollution during winter, exacerbated by inefficient energy use and low-quality coal. Besides, PM2.5 and PM10 levels are also elevated due to sand and dust storms, which transport particles from bare soil and desert areas, including the Aral Sea region.202

The greatest potential for reducing harmful PM2.5 exposure is to transition to more efficient and cleaner residential heating. This includes replacing decentralized coal use in homes and buildings with district heating or natural gas, complemented by emission reductions from coal-fired CHPs.[203] An integrated approach is necessary to understand the synergies and trade-offs between improving air quality and facilitating long-term decarbonization and just transition, particularly in the most polluted cities.[204] As estimated by the World Bank, decarbonizing the energy system in Kazakhstan could reduce air pollution by 86 per cent from 2022 levels, resulting in substantial health and economic benefits, including GDP savings from fewer lost working days and reduced health expenses, as well as long-term GDP improvement.[205]

Improving air quality is one of the top priorities in the National Development Plan until 2029. While Kazakhstan has a basic legal framework for air pollution control, it would benefit from more comprehensive air quality management policies at both national and local levels. Although some technical measures are integrated into climate, green economy, energy, and transport strategies, more targeted actions are needed, particularly in the most populated areas.

[193] SDG 6 Snapshot in Kazakhstan. https://www.sdg6data.org/en/country-or-area/kazakhstan

[194] Resolution of the Government of the Republic of Kazakhstan 'On Approval of the Concept of Development of the Water Resources Management System of the Republic of Kazakhstan for 2024-2030', 5 February 2024, No. 66. https://adilet.zan.kz/rus/docs/P2400000066

[195] UN-Water Integrated Monitoring Initiative for SDG 6 Progress in achieving the water-related SDGs in Kazakhstan presented at the informal discussion in Kazakhstan with relevant UN agencies, 29 August 2023 (internal document).

[196] Resolution of the Government of the Republic of Kazakhstan 'On Approval of the Concept of Development of the Water Resources Management System of the Republic of Kazakhstan for 2024-2030', 5 February 2024, No. 66. https://adilet.zan.kz/rus/docs/P2400000066

[197] Astana Times (2024) Kazakhstan Joins UN Watercourses Convention to Enhance Cross-Border Cooperation. https://astanatimes.com/2024/01/kazakhstan-joins-un-watercourses-convention-to-enhance-cross-border-cooperation/

198 Ministry of Ecology and Natural Resources of the Republic of Kazakhstan (2022) National Report on the State of the Environment and Use of Natural Resources of the Republic of Kazakhstan for 2022. https://shorturl.at/abF3N

199 Montenegro, M. (2023) 2023 IQAir World Air Quality Report. https://www.iqair.com/newsroom/waqr-2023-pr

200 World Bank Group (2022) World Bank Climate and Development Report for Kazakhstan. https://shorturl.at/P220i

201 Bohovic, R. et al. (2023) Air Pollution in Kazakhstan as Seen from Space. https://shorturl.at/xUNuf

202 Arnika (2023) Report: Air Pollution in Kazakhstan as Seen from Space. https://arnika.org/en/publications/air-pollution-in-kazakhstan-as-seen-from-space

203 Zlatev, V., Amann, M., Peszko, G., Wang, Q., Schoepp, W. (2022) Clean Air and Cool Planet – Integrated Air Quality Management and Greenhouse Gas Reduction for Almaty and Nur-Sultan. The World Bank: Washington D.C.

204 Zlatev, V., Cofala, J., Peszko, G., Wang, Q. (2021) Clean Air and Cool Planet – Cost-Effective Air Quality Management in Kazakhstan and Its Impact on Greenhouse Gas Emissions. The World Bank: Washington DC.

205 World Bank Group (2022) World Bank Climate and Development Report for Kazakhstan. https://shorturl.at/P220i

Table 1 Historic PM2.5 annual average for top 5 most populated cities, µg/m3

	2019	2020	2021	2022	2023
Almaty	no data	39.3	34.2	29.9	26.7
Astana	23.6	21.9	22.0	21.4	16.6
Shymkent	no data	no data	43.5	35.1	34.1
Aqtobe	no data	no data	10.6	4.2	12.6
Karaganda	no data	no data	75.5	77.8	71.2

PM2.5 concentration and WHO guideline legend:

0-5 Meets WHO guidline	5.1-10 Exceeds by 1 to 2 times	10.1-15 Exceeds by 2 to 3 times	15.1-25 Exceeds by 3 to 5 times	25.1-35 Exceeds by 5 to 7 times	35.1-50 Exceeds by 7 to 10 times	> 50.1 Exceeds over 10 times

Source: IQAir (2023) Interactive global map of 2023 PM2.5 concentrations by city. https://www.iqair.com/us/world-air-quality-report

Kazakhstan also adheres to the Montreal Protocol on ozone-depleting substances, is a Party to the UNECE Convention on Long-Range Transboundary Air Pollution (Air Convention) and is a member of the Climate and Clean Air Coalition, which addresses short-lived climate pollutants.[206] Best available technologies and associated emission limit values are key tools for reducing atmospheric emissions and are reflected in the provisions of the amended Gothenburg Protocol to the Air Convention. Given the synergies between the Environmental Code and the Gothenburg Protocol,[207] the accession of Kazakhstan to the Protocol will assist the country in further harmonizing air quality management with international standards.

Clean air should be viewed as an economic and social asset, with more assessments undertaken to understand and document the impacts of air pollution on the economy and human health, especially among vulnerable groups such as women, children, older persons, and individuals living with chronic diseases or disabilities. It is essential to monitor population exposure and to close gaps in air quality data collection and monitoring. Reducing coal usage, promoting RE, bolstering regulatory frameworks, enhancing energy efficiency, improving the environmental friendliness of transport, and raising public awareness are critical strategies for improving air quality in Kazakhstan.[208,209]

206 Climate and Clean Air Coalition: Kazakhstan (2023), available at: https://shorturl.at/J7xEf

207 UNECE Protocol to Abate Acidification, Eutrophication, and Ground-level Ozone (Protocol to the UNECE Convention on Long-Range Transboundary Air Pollution (LRTAP). https://shorturl.at/JzTQM

208 Zlatev, V., Cofala, J., Peszko, G., Wang, Q. (2021) Clean Air and Cool Planet – Cost-Effective Air Quality Management in Kazakhstan and its Impact on Greenhouse Gas Emissions. The World Bank: Washington DC.

209 Bohovic, R. et al. (2023) Air Pollution in Kazakhstan as Seen from Space. https://shorturl.at/xUNuf

1.10.4 Biodiversity

Biodiversity conservation is a national priority, and desertification and land degradation are among the critical threats to the country's sustainable development and biodiversity. Over 90 million hectares, or 41 per cent of all agricultural lands, are eroded or at risk of erosion. Soil degradation is seen in a significant decrease in soil organic matter and nutrient content. Between 2017 and 2020, humus levels dropped by 9.7 per cent, and phosphorus levels fell by 14.3 per cent, highlighting the ongoing impact of degradation processes. This loss of soil fertility affects agricultural productivity and poses a threat to food security.

Desertification is also accompanied by a reduction in biodiversity, as many species of plants and animals lose their natural habitat, leading to imbalances in ecosystems and decreased resilience to external forces and impacts.[210] Indeed, Kazakhstan's rich biodiversity faces significant challenges including habitat fragmentation, pollution, and the spread of invasive species – all of which are compounded by escalating climate change impacts. Despite these issues, recent progress in environmental conservation offers hope for mitigating such threats.

In 2023, Kazakhstan began developing its National Biodiversity Strategy and Action Plan with the support of the UNDP-GEF project "Global Biodiversity Framework – Early Action Support". This initiative represents a significant step towards fulfilling the country's commitment to the goals set forth in the Kunming-Montreal Global Biodiversity Framework by enhancing and integrating biodiversity conservation into national and sectoral strategies.

In September 2024, the Ministry of Ecology and Natural Resources, in partnership with UNEP-WCMC, launched the SPACES initiative to advance the nation's biodiversity goals outlined in its National Biodiversity Strategy and Action Plan (NBSAP). This program is designed to strengthen biodiversity resilience by expanding Protected Areas (Pas) and establishing Other Effective Area-Based Conservation Measures (OECMs), such as hunting reserves and ecological corridors. Indeed, Kazakhstan is one of the few countries in Central Asia that recognized ecological corridors in national law with its Environmental Code but struggles with land fragmentation due to agriculture, urbanization and infrastructure development. The SPACES initiative provides strategic guidance for creating new protected areas, with support for feasibility studies and inclusive conservation planning, helping to ensure sustainable management of these critical ecosystems.

As of August 2024, the total area of protected territories in Kazakhstan amounted to 30.8 million hectares, representing 11.3 per cent of the country's land. In alignment with the flagship "30 x 30" target of the Global Biodiversity Framework, Kazakhstan is actively expanding its conservation efforts. Notably, since 2020 the country has worked to establish its first marine protected area in the Caspian Sea. This initiative aims to safeguard the ecosystem and the habitat of unique species, such as the Caspian seal. By 2029, the country plans to increase the share of specially protected natural areas, enhance the materials and technical equipment of environmental and forest-related institutions, and expand forest cover.

Expanding Protected Areas has been identified as a core national priority for Kazakhstan. Efforts directed toward achieving this objective are ongoing, with the implementation of the High Conservation Value Forests (HCVF) concept for example. However, current funding levels remain insufficient to fully meet this goal. The Environmental Code provides new biodiversity financial tools to advance wild biodiversity economy. This includes biodiversity offsets and voluntary payments for ecosystem services. These financial mechanisms are still in the early stages and should carefully draw from lessons learned from pilot projects and should be considered as a last resort in the mitigation hierarchy.

Kazakhstan's Environmental Code has also encouraged the development of community-based eco-tourism, aiming to reduce the negative impacts of tourism while maximizing income generation for local communities. Eco-tourism in national parks holds great

210 Ministry of Agriculture of the Republic of Kazakhstan (2021) Consolidated Analytical Report on the Status and Use of Land in the Republic of Kazakhstan for the Year 2021. https://shorturl.at/uoA2F

potential in Kazakhstan, with some promising initiatives already underway, such as in the Aksu-Zhabagly Nature Reserve, which is included in the UNESCO World Heritage list. While the country benefits from a diverse wildlife, well-developed transportation, and rich ethnocultural resources, the success of eco-tourism will depend on strong institutional support, transparent policies, training for community-based tourism, and the modernization of infrastructure.

To combat desertification, Kazakhstan has embraced Nature-Based Solutions (NBS) through the landscape restoration program RESILAND, implemented by the World Bank. With the Government, the focus has been on increasing the productivity of pastureland and ecosystem services through tree planting and community-centered agroforestry practices.

On 11 December 2023, the International Union for Conservation of Nature reclassified the saiga antelope (*saiga tatarica*) from "critically endangered" to "near threatened" on its Red List,[211] reflecting a significant population recovery in Kazakhstan. Home to over 90 per cent of the world's saiga population, the country's coordinated conservation efforts have reversed a dramatic decline from 21,000 in 2003 to 1.9 million today. This success is due largely to the effectiveness of a hunting moratorium instituted in 1999 and extended until 2024.

The 14th meeting of the Conference of the Parties to the Convention on the Conservation of Migratory Species of Wild Animals CMS (Bonn Convention) concluded on 17 February 2024, in Samarkand, Uzbekistan,[212] marking significant developments for Kazakhstan. The convention upgraded the conservation status of two small cat species native to Kazakhstan, the Pallas's cat and the lynx, by listing them in Appendix II. Moreover, the conference initiated the Central Asian Flyway Initiative to safeguard migratory birds traveling from Siberia to South Asia and the Maldives, with Kazakhstan among the 30 participating countries. Additional key measures included conservation strategies for the steppe eagle and the great bustard. As of 2023, efforts in the Ile-Balkhash State Natural Reserve have included ecosystem restoration, protective measures, and the successful reintroduction of tugai deer and kulans, as well as an increase in the number of wild boars and gazelles listed in the country's Red Book.

The United Nations Central Asian Mammals and Climate Adaptation project contributes to the protection of mammals in the Ili-Balkhash and Zhongar Alatau regions through improved climate-smart management of protected areas and supporting surrounding communities to adapt to climate changes using ecosystem-based adaptation to avoid negative impacts on biodiversity.[213]

The implementation of the Government's programme to plant two billion trees by the end of 2027 could add about 1.3 million hectares or 10 per cent of new forests. Creating green belts around cities will improve air quality and provide wind protection. By 2030, private initiatives and state afforestation programmes are expected to add another 1.6 million hectares of forest. These measures will restore the carbon absorption capacity of forests to a level where forest areas will once again become a net carbon sink.

Given that much of Central Asia's ecological richness is found in remote mountains, many PAs span international borders, making transboundary governance essential for environmental protection in the region. Kazakhstan has recognized the need for transboundary cooperation and collaborates with Kyrgyzstan, Uzbekistan, and Tajikistan on the conservation of the snow leopard in the West Tien-Shan and Pamir Alai. This collaboration follows an MoU signed by the countries´ Environment Ministries at COP26 in 2021. Their joint efforts include biodiversity assessments, capacity building, information exchange, and monitoring emerging diseases.

A unified approach on specially protected natural areas would be particularly relevant in the border regions of Russia and Kazakhstan to ensure an effective protection of the steppe and forest-steppe species in transboundary areas. Regional cooperation through joint projects focused on ecological corridors, particularly the Tyumen region, could enhance conservation outcomes.

211 IUCN SSC Antelope Specialist Group (2023) *Saiga tatarica*. *The IUCN Red List of Threatened Species* 2023: e.T19832A233712210. https://dx.doi.org/10.2305/IUCN.UK.2023-1.RLTS.T19832A233712210.en

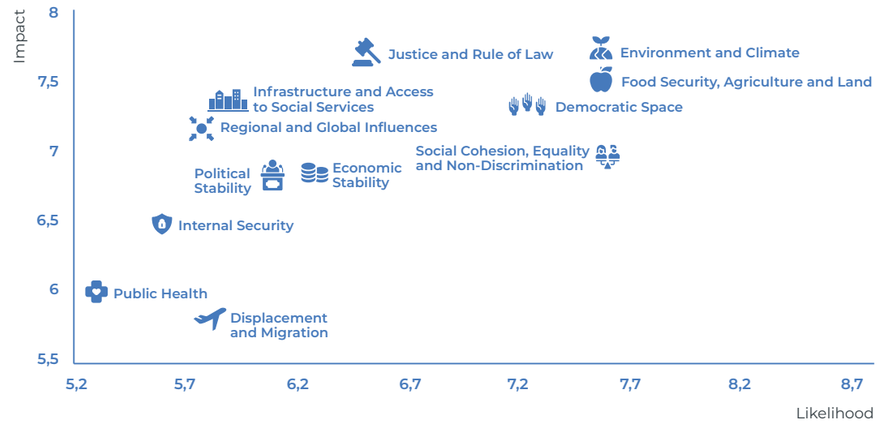
212 Convention on the Conservation of Migratory Species of Wild Animals (2024) Historic UN Wildlife Meeting Concludes with Major Set of Actions for the Conservation of Migratory Species of Wild Animals. https://shorturl.at/mtEqy

213 The Central Asian Mammals and Climate Adaptation (CAMCA) Project. https://camcaproject.org

2. MULTI-DIMENSIONAL RISK ASSESSMENT

The multidimensional risk analysis provides a holistic understanding of the country's diverse challenges[214]. The respondents of the multidimensional risk assessment survey[215] identified risks related to «Environment and Climate Change» as the most likely to engender very significant impacts on the country (Figure 22). «Justice and Rule of Law» and «Food Security, Agriculture, and Land» share the second and third places in the priority risk ranking. Overall, the respondents rarely assigned low and moderate likelihood and impact levels to the SDG-related risks. The lowest likelihood and impacts were assigned to «Displacement and Migration», «Internal Security», and «Public Health» risks.

Figure 22 Likelihood and impact ranking of 12 dimensions of SDG-related risks



Note: the likelihood and impact scores ranges from 0 to 10

The assessment of Government commitment and capacity to address multidimensional SDG-related risks indicated high commitment to those related to "Political Stability" and "Internal Security". As well, assessment of the Government's capacity to address these risk factors is the highest (Figure 23). The respondents ranked the Government's commitment to mitigate "Justice and Rule of Law" and "Equality" risks as the lowest. Regarding capacity, the lowest assessment was in the risk areas concerning "Quality of Governance", "Quality of Infrastructure" and "Environment and Climate Change".

A comparison shows a significant mismatch between the risk priorities identified by respondents and the ability of the Government to address SDG-related risks (Table 2). For instance, the risk related to "Environment and Climate Change" has the highest priority but one of the lowest commitment/capacity scores, indicating the need to increase focus and resources on environmental issues. Similarly, "Food Security, Agriculture, and Land" received high risk index (57) but a relatively lower commitment score (945), suggesting insufficient attention to this risk area. Both "Economic, Financial, and Fiscal Stability"

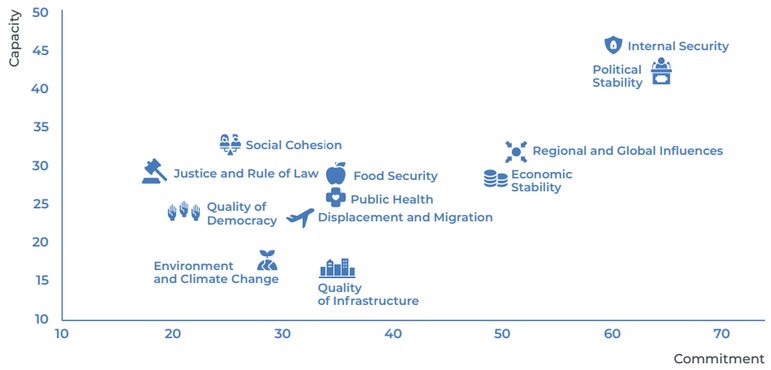
[214] The analysis uses extensive data from a desk review, the findings from strategic sessions with civil society and private sector, and the Multidimensional Risk Analysis Survey. The extended results of the multidimensional risk analysis are presented in Annex 2.

[215] The final survey sample consists of 63 responses: 36 female, 26 male, and 1 non-response. 90 per cent of respondents were national experts, while 10 per cent were international experts. Most worked in CSOs (23.8 per cent), academia (19 per cent), government or public organizations (15.9 per cent), research think tanks (12.7 per cent), international organizations (11.1 per cent), and other organizations (9.5 per cent). Respondents from UN agencies composed the smallest group at 7.9 per cent.

and “Access to Basic Social Services” show a balanced approach.

However, “Justice and Rule of Law” and “Democratic Space” related risk areas are associated with high risks but have a low commitment/capacity score, indicating the country’s ability to achieve SDGs might be hindered, particularly those related to SDG 16 (Peace, Justice, and Strong Institutions).

Figure 23 Ranking government commitment and capacity to address SDG risks



Note: Scores can be interpreted and visualized through quartile scores, where the breakdown of a 0 to 100 scale is as follows: First Quartile (0-25): Low; Second Quartile (26-50): Moderate; Third Quartile (51-75): High; Fourth Quartile (76-100): Very High

In addition, “Equality and Non-Discrimination” have a relatively high-risk index (47) and the lowest capacity/commitment score (325), thus highlighting a need for increasing institutional commitment, enhancing capacity, and implementing effective policies and programmes to ensure fair treatment and equal opportunities for all. The respondents characterized Equality and Non-Discrimination as an area of emerging risk due to decreased social cohesion, a lack of ideology consolidating society, and insufficient integration of human rights and gender equality into policymaking.

The respondents attribute the highest level of analytical capacity – defined as the ability to access and apply technical and scientific knowledge – to the UN (3.6 out of 5.0), followed closely by other international organizations (3.5) and academia (3.0) (Table 3). In terms of the capacity to manage human, budget, and material resources, international organizations and the private sector demonstrated moderate ability. International organizations, including the United Nations, and the national Government have the highest political capacity to advocate for and carry out long-term reforms while mitigating varying stakeholder views. Although CSOs demonstrate a reasonable analytical capacity, there is room for improvement in enhancing their capacities to better support SDG initiatives.

Local and regional governments demonstrated the lowest score across three capacities, highlighting significant challenges in effectively contributing to SDG-related risk mitigation. The rankings across all governmental and non-governmental actors show a clear trend: analytical capacity is rated the highest, operational capacity is rated medium, and political capacity is rated the lowest. This trend aligns with academic literature, highlighting the challenges for national governments to maintain long-term political commitment and coherence in developmental reforms.[216,217]

[216] Bali, A. S., & Ramesh, M. (2021). Governing healthcare in India: a policy capacity perspective. *International Review of Administrative Sciences*, *87*(2), 275-293. https://doi.org/10.1177/00208523211001499

[217] Dunlop, C. A. (2015). Organizational political capacity as learning. *Policy and Society*, *34*(3-4), 259-270. https://doi.org/10.1016/j.polsoc.2015.09.007

Table 2 Risk priorities versus the ability of the Government to address these risks

Risk Index Priorities	Index	Commitment/Capacity	Index
Environment and Climate Change	59	Political Stability	2795
Food Security, Agriculture, and Land	57	Internal Security	2760
Justice and Rule of Law	57	Regional and Global Influences	1664
Democratic Space	54	Economic, Financial, and Fiscal Stability	1421
Infrastructure and Access to Social Services	50	Access to Basic Social Services	1392
Regional and Global Influences	50	Food Security, Agriculture, and Land	945
Social Cohesion, Equality and Non-Discrimination	47	Public Health	875
Economic Stability	43	Social Cohesion	825
Political Stability	43	Displacement and Migration	768
Displacement and Migration	38	Education	735
Internal Security	34	Quality of Governance	608
Public Health	31	Quality of Infrastructure	560
		Justice and Rule of Law	551
		Quality of Democracy	550
		Environment and Climate Change	493
		Equality and Non-Discrimination	325

Note: The Risk Priority Index was calculated by multiplying the “likelihood” and “impact” scores from Figure 22, while the ability to address the risk was computed by multiplying governmental commitment by its capacity scores in Figure 23.

Table 3 Assessment of the capacities of various actors to mitigate SDG-related risks

	Analytical218	Operational	Political
Local and Regional Government	1.9	2.3	2.2
National Government	2.9	2.8	2.7
Civil society organisations	2.9	2.6	2.5
United Nations	3.6	3.2	3.2
Other international organisations	3.5	3.2	2.8
Academia/Universities	3.0	2.5	2.4
Private sector	2.8	3.2	2.6

Note: Capacity: 1 indicated very low and 5 indicates very high.

218 According to the article *Policy capacity: A conceptual framework for understanding policy competences and c*apabilities by Wu X. et al. (2015): «Analytical capacity is the ability to access and apply technical and scientific knowledge. Operational capacity is the management of human, budget, and material resources efficiently and effectively. Political capacity is advocating and carrying out long-term reforms while mitigating varying stakeholder views».

3. FORESIGHT ANALYSIS

The UNCT in Kazakhstan conducted a foresight exercise using a driver-based scenario with the key question: «How will sustainable development evolve in Kazakhstan from 2024 to 2030?» The primary purpose of the foresight analysis was to evaluate — in a methodologically coherent manner — the drivers, factors, and actors and the dynamic interplay between them, to identify possible futures for Kazakhstan by 2030.

It is important to emphasize that foresight scenarios are not predictions; rather, they present plausible (though sometimes impossible) scenarios of the future. The value of the foresight exercise for the UNCT was primarily in extending shared knowledge and coming to a joint understanding of situational factors that go beyond the mandates and expertise of individual agencies. The foresight analysis is based on transforming the understanding of the situation by all those involved. The objective is to transform relationships and ultimately lead to transformed actions. This is why the UNCT scenario planning was more about the process than the product, which in reality is in flux due to the ambiguities inherent to the context unfolding globally, regionally and within the country.

The UNCT has developed a set of complex drivers, including political stability, economic diversification, inclusive economic improvement, internal regional disparities, grassroots support for the Government, investment in green transformation, human rights and rule of law, civil space, digital transformation, industrial and innovation development, access to basic services and many others. Causal loops built between these factors underscored the interdependency of all factors. The discussion of the different roles of various actors allowed for a better understanding of the complex and dynamic systems in which the UN operates in Kazakhstan.

From the perspective of the UNCT, inclusive economic improvement and political stability are the two core drivers with the highest uncertainty and the highest impact in determining development outcomes in the coming five years. By exploring the possibilities of each of these factors to improve or decline over time, the UNCT developed four plausible scenarios in which both the economic situation and political stability improved or declined and two scenarios where the economic and political situations went in different directions — for instance, the economy improved with disruptions in political life, and vice versa.

It is worth noting that experts, through the multidimensional risk analysis survey, also identified emerging risks related to regional and global influences, including potential influence, or invasion, from Russia. This risk was ranked as «likely» with a «highly significant» impact on the country.

Members of the UN Youth Advisory Board have been engaged in creating a «Tree of Vision» group exercise. This exercise visualizes how youth perceive the future of Kazakhstan by developing three scenarios: pessimistic, optimistic, and realistic. In the realistic scenario, the youth felt that Kazakhstan needs to build on scientific and technological advancements made globally and locally. This requires improving the quality of education with equal access to knowledge and education in both urban and rural schools.

The youth also emphasized the importance of nurturing and fostering the spiritual revival of the population, including the younger generation. Although they noted that the national programme «Rukhani Zhangyru» (Spiritual Revival) did not fully achieve its goals, they believe there should be a genuinely national programme focused on the values and morals of sustainability, responsibility, civic activism, engagement, and solidarity.

Through imagining both prosperity and crises — including multiple factors such as greater diversification and reducing dependency on extractives or greater civil participation and inclusion — the UNCT identified the following possible entry points and opportunities to ensure that the CF remains relevant and responsive to future risks.

- Reconfirming the focus and centrality of human rights in the CF implementation. Human rights need to be addressed in their entirety — political, social, economic, environmental, and civil dimensions.
- Emphasizing the importance of building trust between people and the Government and strengthening social cohesion by engaging civil society and enhancing the voices of groups that are left behind.
- Focusing on greening and diversifying the economy to make it resilient to shocks, with a stable and viable agri-food system that is environmentally friendly.
- Taking into account regional dynamics and external risks and focusing on fostering regional cooperation where needed.
- Ensuring that no one is left behind through policy support and governance institution-building across all areas and keeping gender, youth, disability, and other perspectives central to UN operations in the country.
- Addressing long-term climate risks, especially in the area of water scarcity, with the welfare of future generations in mind.

The foresight exercise revealed a complex interplay between political, governance, social, economic, and environmental factors that shape the development context in Kazakhstan. Participants highlighted how economic policies influence social equity and access to social services, with unequal resource distribution often exacerbating existing disparities. Additionally, environmental sustainability emerged as a crucial element, where ecological degradation not only threatens livelihoods but also undermines economic stability and social cohesion. This interconnectedness underscores the necessity of holistic approaches in development planning, where strategies must account for the intricate relationships between various sectors to foster resilient and inclusive growth.

Ultimately, the exercise illustrated that addressing one dimension in isolation risks perpetuating cycles of inequality and environmental harm, emphasizing the importance of collaborative, integrated solutions. The analysis also showed that gender disparities permeate through all areas across the analysis — especially in political leadership and economic and entrepreneurial spheres, directly impacting the development opportunities of the country. The exclusion of women, as one of the largest groups in the society with multiple intersecting vulnerabilities (e.g. women with disabilities, women living in remote areas etc.) remains an important variable in planning the UN development support in Kazakhstan.

4. LNOB ANALYSIS

Leave no one behind (LNOB) is the central, transformative promise of the 2030 Agenda and its SDGs. It represents the unequivocal commitment of all UN Member States to eradicate poverty in all its forms, end discrimination and exclusion, and reduce the inequalities and vulnerabilities that leave people behind and undermine the potential of individuals and humanity as a whole.

This section highlights the challenges vulnerable groups face. The UNCT has decided to focus on eight vulnerable groups who suffer significant deprivations. They were selected based on a combination of factors, including their exposure to multidimensional vulnerabilities and inequalities in light of insufficient data disaggregation. None were prioritized in any specific order, as all groups need support. To enhance the available data on groups left behind, the focus group discussions were conducted with the following vulnerable groups: (i) refugees; (ii) asylum-seekers; (iii) migrants; (iv) GBV and domestic violence survivors; (v) people living with HIV; and (vi) persons with disabilities.

Most vulnerable people face multiple levels of discrimination and deprivation of basic rights and services. For example, women with disabilities in Kazakhstan face limited access to education, inadequate healthcare services, higher vulnerability to GBV, domestic violence and social stigma. One of the reasons are lack of accessibility and infrastructure, insufficient legal and policy framework, limited awareness and training among service providers. As a result, in line with the UN Guidance on Operationalising Leaving No One Behind,[219] during the analysis, the following five key factors were considered: discrimination, geography, vulnerability to shocks, governance, and socioeconomic status. Identifying why people are left behind required understanding not only the immediate, often apparent causes, but also the underlying and root causes that can be more structural, thereby keeping people marginalized and excluded over long periods of time.

4.1 GBV and domestic violence survivors

There were 5,958 criminal offenses in the family and domestic sphere between 2018 and 2023, with the highest number of cases, 1,072, registered in 2020 (923 in 2023)[220]. Despite a significant decline in the total number of intentional homicides over the past six years, domestic-related homicides have remained at about the same level. In 2023, there were 108 homicides related to domestic violence, accounting for 23 per cent of the country's total homicides. This means that every fourth homicide in Kazakhstan occurs within the domestic sphere, with a person dying — usually a woman — from domestic violence approximately every three days[221].

A sociological study conducted in Kazakhstan also revealed that domestic violence was committed in 82.1 per cent of cases against women, 32.4 per cent against children, 11.8 per cent against older persons, 10.2 per cent against men, and 5.6 per cent against persons with disabilities. In 68.6 per cent of cases, the perpetrators were persons in marital relations (partners or cohabitants), and 31.4 per cent were persons in other kinship relations. Another survey of 16,404 households found that some women reported experiencing multiple types of violence simultaneously, such as a mix of physical, sexual, and psychological violence[222].

Kazakhstan has been using protective orders as a measure of prevention since 2009. However, these orders often remain formalities and fail to protect victims from repeated abuse. Focus

[219] United Nations Sustainable Development Group (2022) Operationalizing Leaving No One Behind: Good Practice Note for UN Country Team. https://unsdg.un.org/resources/leaving-no-one-behind-unsdg-operational-guide-un-country-teams

[220] Lastayev, A. (2024) Special report of the Human Rights Commissioner in the Republic of Kazakhstan. https://shorturl.at/VDH5c

[221] Ibid.

[222] BNS ASPR (2023) Women's safety and life experiences. https://stat.gov.kz/api/iblock/element/39985/file/ru/

group discussions with GBV and domestic violence survivors revealed that women seeking support from their families and friends to escape abusive spouses were often blamed, shamed, and ignored for many years[223].

Access to justice can vary by region, and survivors, particularly in remote areas, may lack the awareness or means to obtain protective orders during the first contact with law enforcement. Also, the validity period of up to 30 days is insufficient to ensure protection until a court decision is made. Indeed, during focus group discussions, GBV survivors reported that police officers in regions and small localities are less proactive and not survivor-centred, often sympathizing with perpetrators, failing to detain them, and leaving victims unprotected. As a result, survivors are forced to return to the same environments where the violence initially occurred, exposing them to further harm.

In April 2024 the President signed a law aimed at strengthening protections for women and children, including survivors of domestic violence[224]. Notably, it introduces criminal penalties only for relatively minor offences such as «assault» and «intentional infliction of light bodily harm», excluding all other aspects of GBV and domestic violence committed against vulnerable individuals who are financially or otherwise dependent on the perpetrator. These offences were decriminalised in 2017 but are now subject to tougher penalties. Key provisions of the new law follow.

- Police responsibility: The duty to collect evidence in cases of domestic abuse now lies with the police, shifting away from being solely the survivor's responsibility.
- Mandatory registration and investigation: Police are required to register and investigate all cases of domestic violence, even without a survivor's formal complaint. This includes responding to reports of domestic violence in the media or on social platforms.
- No reconciliation option: The law eliminates the option of seeking «reconciliation» between parties as a way to resolve cases of repeated battery and light bodily harm.
- Family support centres: Family support centres across the country will be established to provide complex services for survivors of violence and the population in general who face difficult life situations.

Kazakhstan will also develop a model law on combating domestic violence for the member countries of the Commonwealth of Independent States's Interparliamentary Assembly. The Senate of the Parliament of Kazakhstan will submit the draft to the Assembly by the end of 2024.

GBV is a global problem and requires systemic and wide-ranging measures to address it, including changing social norms and stereotypes. The existing network of crisis centres for GBV survivors is small and financially unsustainable. In this regard, a United Nations Population Fund's (UNFPA) pilot project in the Turkestan region serves as a model, providing social and psychological support through a multisectoral response system to GBV. This includes building the capacities of local government, health, social support, and police sectors, as well as the staff of 15 Centres for Psycho-Social Support for GBV survivors. Support is also available for persons with disabilities, and the use of Standard Operating Procedures (SOPs) in these sectors integrates the needs of persons with disabilities who are subjected to GBV.

Girls and young women with disabilities are more likely to be subjected to GBV due to limited awareness of their rights, including reproductive rights. Girls with intellectual disabilities are particularly vulnerable to sexual violence[225]. The lack of disaggregated data hinders an effective response to GBV, particularly for the most vulnerable groups such as LGBTIQ+ communities. Additionally, the limited capacities of social workers, health personnel, and staff of crisis centres and hotlines to respond to persons with disabilities subjected to violence prevent an inclusive response. Communication barriers are especially challenging for persons with sensory and intellectual disabilities, making it difficult for them to report violence and seek crisis counselling, security planning, and other protection services. It is essential to enhance accessible information in formats suitable for persons with visual, hearing, and intellectual impairments to guarantee their access to health, social, and GBV protection services.

4.2 Persons with disabilities

In Kazakhstan, persons with disabilities face a multitude of challenges that span various aspects of daily life, from accessing essential services to overcoming social stigma. According to official data, as of July 2024, the country had 732,495 persons with disabilities, making up around 3.6 per cent of the population[226]. This total includes 407,910 men and 324,585 women. A significant urban concentration of 59.3 per cent, compared to 40.7 per cent in rural areas, was observed as families of persons with disabilities are often compelled to move to cities due to the lack of rehabilitation centres, medical equipment, services, and professional staff in rural areas[227]. Notably, in 2022 there were 104,260 children with disabilities aged 0-17[228], including 2,691 children with disabilities in residential care[229].

The Government of Kazakhstan ratified the UN Convention on the Rights of Persons with Disabilities (CRPD) in 2015, and the Optional Protocol to the Convention on the Rights of Persons with Disabilities 13 July 2023. The ratification of the Optional Protocol enables the UN Committee on the Rights of Persons with Disabilities to receive and consider personal communications (complaints) from all citizens. Building on these commitments, the Government established the Institute of Advisors to Akims and Ministries to address issues concerning persons with disabilities[230] and improve awareness of their rights and needs. Reflecting the commitment to inclusion, in 2023 the Mazhilis had six members with disabilities, and across all levels of *maslikhats* there were 71 deputies with disabilities[231]. Despite enhancing representation, the 30 per cent quota for women, youth, and persons with disabilities falls short of ensuring equal representation and full participation in the Parliament and local representative bodies.

In 2022, according to the Law on Improving the Quality of Life of Persons with Disabilities[232], derogatory language towards persons with disabilities and children with disabilities was changed from «invalid» to «person with disabilities» and «child with disabilities». The Law also introduces the concept of «habilitation» in line with the CRPD and includes a set of rehabilitation measures aimed at the formation and development of the domestic, social and professional activities of persons with disabilities.

On 28 March 2023, a decree by the President of Kazakhstan established the institution of the Commissioner (Ombudsperson) on the Rights of Socially Vulnerable Categories of Population[233]. The Commissioner is appointed to serve on a pro bono basis with an aim to guarantee the rights and legitimate interests of socially vulnerable populations as well as restore any violated rights and freedoms in interaction with both state and public

[223] The focus group discussion with GBV survivors was held in Crisis centres «Korgau» in Astana on 17 April 2024.

[224] Law of the Republic of Kazakhstan 'On Amendments and Additions to Certain Legislative Acts of the Republic of Kazakhstan on Ensuring Women's Rights and Children's Safety', No. 72-VIII ZRK, 15 April 2024. https://adilet.zan.kz/rus/docs/Z2400000072

[225] UNFPA (2018) Five things you didn't know about disability and sexual violence.

[226] Information portal «Social Protection of Persons with Disabilities», Statistics. https://inva.gov.kz/ru/highcharts

[227] Focus group discussions with persons with disabilities and parents of children with disabilities were held on 18 April 2024 at the Office of WHO in Kazakhstan in Astana and on 24 April 2024 in the Office of the Public Fund «Diabetes Parents Committee» in Almaty.

[228] BNS ASPR (2023) Social protection of children. Number of children with disabilities from 0 to 17 years of age inclusive. https://shorturl.at/UgQFP

[229] UNICEF TransMonEE database 2022

[230] Order of the Minister of Labour and Social Protection of the Population of the Republic of Kazakhstan 'On the Approval of the Rules for the Appointment of Non-Staff Advisors to Ministers, Akims of Districts, Cities, Cities of Regional Significance, Regions, Cities of Republican Significance, and the Capital on Issues Concerning Persons with Disabilities', 12 July 2024, No. 250

[231] Zakon.kz (2023) Lyazzat Kaltaeva: persons with disabilities have become more comfortable in Kazakhstan. https://shorturl.at/AJQS2

[232] Law of the Republic of Kazakhstan 'On the Introduction of Amendments and Additions to Some Legislative Acts of the Republic of Kazakhstan on Improving the Quality of Life of Persons with Disabilities', 27 June 2022. No. 129-VII ZR. https://adilet.zan.kz/rus/docs/Z2200000129

[233] Decree by the President of the Republic of Kazakhstan No. 154 of 28 March 2023, https://adilet.zan.kz/rus/docs/U2300000154

institutions. Socially vulnerable populations include the following: veterans of the Great Patriotic War as well as veterans entitled to similar privileges; veterans of military actions in other states; persons with disabilities and families with children with disabilities; persons receiving TSA; persons who lost their breadwinners and receive allowances; retirees by age; ethnic Kazakh returnees; and women with many children[234].

The rights of persons with autism and other autism spectrum disorders who are deemed legally as incapacitated are subject to limitations that are not aligned with the CRPD due to the complete transfer of their decision-making authority to their legal representatives. Article 26 of the Civil Code foresees the establishment of guardianship over a citizen with a psychosocial disability and «if recognized incapable» by the court. As of 4 March 2021, 30,500 persons with disabilities were recognized as incapable and deprived of legal capacity by a court decision[235]. A person who is declared «incapable» by a court does not have the right to make key decisions about their own life (e. g., employment, education, marriage, applying to a court to defend their rights or voting in elections). As such, women with autism and other spectrum disorders who have been declared incapacitated may face restrictions on their right to reproductive self-determination. These women may be denied the ability to make autonomous decisions regarding pregnancy, birth and child-rearing, as courts or guardians can make such decisions on their behalf. The declaration of «incapable» also entails social stigma and discrimination.

Kazakhstan classifies disability on a three-level scale depending on the severity of impairment in line with the International Classification of Diseases (ICD-10). It does not apply the WHO International Classification of Functioning, Disability and Health framework (ICF) that assesses disability in the context of environmental factors. The use of ICF in Kazakhstan is limited to medical rehabilitation. Future efforts should prioritize enhancing child functioning assessment using ICF core sets, including topics like public services, personal assistance, and environmental changes that promote participation and individual development[236]. There is a limited number of specialists familiar with the ICF and its role in assessing small children, children with serious health issues and disabilities.

While Kazakhstan has made notable strides in collecting data on children with disabilities to inform policies and programmes and improve access to essential services such as education, health, and social protection, data gaps persist. In 2023, Kazakhstan released national data on child functioning for children over five as part of the 2021 census, aligning with the recommendations of the UN Washington Group on Disability Statistics. Early identification of disabilities in children is crucial for early intervention; however, children aged 2-4 were not included. Additionally, prolonged waiting times in the governmental quota system delay critical treatments and rehabilitation, thus hindering effective speech and cognitive development in children[237].

Furthermore, children with disabilities under the age of four are under the care of institutions within the healthcare system — *Dom Rebenka* (Baby Home). Children in these institutions live in groups of 8-15 babies depending on their age and health conditions. International and national studies advise strongly against the institutionalization of children at such an early age since it has adverse impacts on their development. However, Kazakhstan's system is not yet able to offer alternative family-based care for children under four years old. Fostering in Kazakhstan has not yet taken into account children with different needs, and there is still some reluctance within the wider society to take on the care of a child with disabilities.

[234] https://www.zakon.kz/6388650-sozdan-institut-upolnomochennogo-po-pravam-sotsialno-uyazvimykh-kategoriy-naseleniya.html

[235] Response of the Government of Kazakhstan to the list of issues raised by the Committee on the Rights of Persons with Disabilities of the initial report of the Republic of Kazakhstan on the implementation of the provisions of the Convention on the Rights of Persons with Disabilities. https://cutt.ly/5Mn8CdK

[236] UNICEF report by Judith Hollenweger Haskell, 2022

[237] Focus group discussions with persons with disabilities and parents of children with disabilities were held on 18 April 2024 at the Office of WHO in Kazakhstan in Astana and on 24 April 2024 in the Office of the Public Fund «Diabetes Parents Committee» in Almaty.

Educational opportunities for children with disabilities are hindered by inadequate infrastructure and a lack of specialized educators. Recent focus group discussions with parents of children with disabilities revealed several challenges[238]. First, schools, particularly in rural areas, often lack necessary facilities like ramps and elevators, making attendance impossible for children with physical disabilities and forcing them into homeschooling.

Second, there is also a significant shortage of teachers trained to work with children with hearing impairments or other disabilities. Additionally, not every preschool has trained medical staff and personnel fully equipped to support and care for children with diabetes.

Third, a barrier to higher education is the lack of specialized staff at universities, such as typhlo instructors, audiologists, and sign language interpreters to support students with hearing and visual impairments. Thus, although inclusive education is being piloted, many children with disabilities are still homeschooled or attend special schools with weak curricula. In addition, youth participating in the focus group discussion stated that the lack of transition programmes for youth with disabilities aged 18 to 21 — who are moving into adulthood — leaves them without necessary support and resources.

Finding employment remains a major challenge for persons with disabilities in Kazakhstan. Among 419,900 working-age persons with disabilities, about 25 per cent (104,800) were employed as of 1 April 2024[239]. The Government has intensified efforts to improve labour market access for persons with disabilities by introducing a 2-4 per cent employment quota, depending on the size of the firm and excluding heavy labour and hazardous conditions. This initiative has benefited 3,900 individuals in the first quarter of 2024[240]. However, barriers remain and focus group participants indicated that employment opportunities for persons with disabilities are scarce and often limited to low-paying, unstable jobs. Persons with disabilities cannot serve in law enforcement due to physical and medical requirements. Furthermore, persons with disabilities classified under disability category III are deemed employable and are, therefore, ineligible for supportive housing.

In addition, the focus group discussions highlighted those caregivers, often mothers, who leave their jobs to care for children with disabilities and later lose government support when the child turns 18 — at situation that worsens finances for both caregivers and children and often leads to minimal pensions.

During its latest review conducted in 2024, the UN Committee on the Persons with Disabilities acknowledged the Government's accelerated efforts in undertaking new legislative measures to promote the rights of persons with disabilities, notably including the Social Code, and the Concept of Social Development of Civil Society[241]. The Committee highlighted, however, the following areas of concern that impact the lives of persons with disabilities: the use of the medical model of disability in the Social Code (art. 1, paras. 105 and 106); discriminatory provisions, including derogatory terminology and ableism, in the Civil Code (art. 26), the Code on Public Health and the Health-Care System (arts. 137, 170 and 175) and the Criminal Code (art. 16), affecting persons with disabilities, in particular persons with intellectual and/or psychosocial disabilities.

Additional concerns include incomplete mainstreaming of the rights of persons with disabilities in sectoral policies and programmes and limited information about policies to address the situation of persons with disabilities living in rural areas (44.8 per cent), migrants, asylum-seekers and refugees with disabilities.

The Committee also noted that national legislation lacks provisions defining discrimination on the basis of disability, and its intersection with other grounds, such as age, sex, gender, place of living, residence status, and socioeconomic situation. The provision

[238] Ibid.

[239] BaigeNews.kz (2024) More than 11,000 persons with disabilities are employed in Kazakhstan. https://shorturl.at/BCHZn

[240] Ibid.

[241] UN Treaty Body Database (2024) CRPD Convention on the Rights of Persons with Disabilities 30th Session (04 Mar 2024-22 Mar 2024). https://shorturl.at/RfrA4

of reasonable accommodation is limited to physical accessibility, and the mandate of the Human Rights Commissioner and the Commissioner for the Rights of Socially Vulnerable Categories of the Population to protect persons with disabilities from all forms of discrimination and prevent such discrimination is limited.

The Committee added that current national legislation, including article 26 of the Civil Code, restricts the legal capacity of persons with disabilities on the basis of impairment, in particular of persons with intellectual and/or psychosocial disabilities, and that persons with disabilities are subjected to guardianship and thereby deprived of political and civil rights, including their rights to vote, marry, start a family and manage assets and property. In response, Kazakhstan has accelerated its efforts to draft a new Inclusive Policy to address the issues raised by the Committee.

Saule's story

Despite not having a disability herself, Saule[242] faces significant challenges as the child of two parents with disabilities. Her father passed away when she was young, leaving her mother to raise her alone in Kokshetau, where she worked at a plant. Due to their low income, they relied on dormitory housing provided by the plant and never owned a home. Saule grew up experiencing economic hardship and limited access to essential resources, such as nutritious food, healthcare and a stable living environment. She faces the stigma and discrimination associated with disabilities as well as limited prospects. Additionally, the stress and emotional burden of caregiving responsibilities have long impacted her mental health and overall well-being, thereby highlighting the need for targeted interventions to support children in similar situations to ensure they are not left behind.

[242] The name «Saule» is a pseudonym to protect her identity and privacy. Her story was collected during a focus group discussion.

4.3 Vulnerable children

In 2023, Kazakhstan made notable strides in enhancing its national child protection system (CPS). The Government adopted the 2023-2025 Plan on Protection of Children from Violence, which includes primary prevention initiatives such as a national parental competency training programme and bullying prevention programmes in schools, as well as capacity-building for child specialists. Secondary prevention measures include case management in schools and Commissions on Issues of Children to address complex cases involving children, catering to the unique needs of both genders. The scope of the plan for comprehensive investment in the child welfare and protection system, and particularly secondary services for children at risk, however, remains limited.

To further align with international standards, in 2023 Kazakhstan ratified the Optional Protocol to the UN Convention on the Rights of the Child on a Communications Procedure, thereby enabling children to seek redress through international mechanisms beyond the national justice system. Furthermore, the Human Rights and Rule of Law Action Plan includes child protection reforms such as updating legislation on birth registration, addressing domestic violence, and regulating the status of regional Ombudspersons for children's rights[243].

In 2024, the President enacted a pivotal law introducing critical amendments to the Criminal Code and related laws, prioritizing the rights of women and the safety of children[244]. The new law criminalizes domestic violence and introduces penalties for bullying and cyberbullying of minors, establishes life imprisonment for grave offenses such as paedophilia and the murder of children, and imposes penalties for sexual harassment of individuals under 16 years of age. The new law mandates educational organizations to report any unlawful acts committed by, or against, minors to law enforcement agencies immediately.

In addition, to support families in difficult life situations, the law prescribes the establishment of family support centres throughout the country and a contact line «111» for the protection of families, women and children that is managed by an authorized legal entity. These centres will provide essential support to families identified by the Digital Family Map as experiencing emergency, crisis, or distressed situations. The initiative aims to strengthen families and prevent the separation of children from their parents, reinforcing the law's focus on child protection. State bodies are obliged to cooperate with call centres and provide information on measures taken in response to citizen appeals. The law also criminalizes incitement and assisted suicide, as well as suicide propaganda.

A key aspect of the new legislation is the introduction of regional Ombudspersons for Children's Rights who are responsible for regions, key cities and the capital. To ensure their effectiveness and compliance with international standards, however, further refinement is needed. These positions require adequate financial resources, infrastructure, staffing, and independence to function effectively. Additionally, the law mandates the development and approval of assistance programmes for minors who have been subjected to violence, abuse, bullying, and those who have witnessed personal crimes.

The initial regulatory framework for these programmes has been established, but further enhancements are needed to ensure that children affected by violence, as well as witnesses, receive comprehensive medical, legal, social, psychological, and other services in a single, coordinated setting. To minimize retraumatization and stigmatization, police interviews should be conducted only once, strictly adhering to established procedures, with recorded testimonies admissible in court. It is imperative to completely eliminate any in-person confrontations between the child and the perpetrator and to implement additional critical measures to safeguard the child's well-being throughout the legal process.

Despite progress in the CPS in Kazakhstan, these efforts are underfunded and often lack cohesion, resulting in fragmented services. Priority investment is needed in prevention and response services, as well as in governance at central and subnational levels. First, strengthening and establishing new services is urgently needed to provide comprehensive prevention, support, and rehabilitation. The Government must define a minimum service package for child protection, ensuring essential public services are accessible to every child.

Second, the CPS remains too fragmented with different sectors working in silos. Ministries such as Labour and Social Protection of Population, Education, Healthcare, Internal Affairs, and Culture and Information all play roles in offering child protection services, but a unified framework is lacking. Strengthening multisectoral child protection case management and enhancing the capacity to provide services that meet the Convention on the Rights of the Child standards is essential.

Kazakhstan has made significant progress in creating a favourable legislative and regulatory environment in support of early childhood health, development and protection. The development of positive parenting to ensure sensitive, caring and non-violent treatment of children in the family, one of the five components of early childhood development, is a priority area of action in the national plans until 2030[245]. While parenting programmes have been introduced, they need improvement, including better information dissemination about their value and availability, as well as enhanced training for specialists to deliver them effectively.

The cross-sectoral collaboration strategies that have been proposed to date are temporary and not fully operational. Notable gaps in parenting support include inadequate access to health services for parents and children

[243] Decree of the President of the Republic of Kazakhstan 'On the Human Rights and Rule of Law Action Plan', No. 409, 8 December 2023. https://adilet.zan.kz/rus/docs/U2300000409

[244] Law of the Republic of Kazakhstan 'On Amendments and Additions to Certain Legislative Acts of the Republic of Kazakhstan on Ensuring Women's Rights and Children's Safety', No. 72-VIII ZRK, 15 April 2024. https://adilet.zan.kz/rus/docs/Z2400000072

[245] Decree of the President of the Republic of Kazakhstan 'On Approval of the Concept of Family and Gender Policy in the Republic of Kazakhstan until 2030', No. 384, 6 December 2016. https://adilet.zan.kz/rus/docs/U1600000384

and insufficient social support for vulnerable families. Studies also show that the limited time available to parents and caregivers due to family and work responsibilities is a significant barrier to participation in support programmes[246]. Moreover, social stereotypes related to parenting and custody create additional barriers to accessing parenting support programmes.

To ensure comprehensive child protection, the current legislation lacks a clear definition of the age of consent. It is vital to adopt provisions similar to those in the Council of Europe's Lanzarote Convention, which mandates a clearly defined legal age of consent, classifying any sexual activity involving a child below this age as a serious sexual offense. Additionally, the experience of Kazakhstan in repatriating children and women from conflict zones highlighted several gaps in the national CPS, including underdeveloped family support services. For community-based reintegration programmes, it is crucial to strengthen family-based care and integrate social service delivery and monitoring and quality assurance procedures.

The 2023 UNICEF-supported Global Kids Online study in Kazakhstan reveals that children are exposed to significant online sexual risks and abuse, often from known individuals. Key findings indicate that 11.7 per cent of children reported seeing sexual images, 7.1 per cent received sexual messages, and smaller percentages were offered money for sexual content or were blackmailed into sexual activities. These findings underscore the necessity for safe spaces and psychosocial support systems for children to discuss their online experiences. The enhancement of legislation related to online crimes against children, including criminalizing deepfakes, AI-generated content, and livestreamed violence, is critical. Additionally, it is necessary to extend the statute of limitations for victims to file charges against perpetrators.

Given the current practice of placing children without parental care in institutions — with 12,651 children in such settings and 1,103 children entering the system in 2022 alone[247] — it is critical to enhance multisectoral efforts to prevent these placements. Family Support Centres play a crucial role by working with families in difficult life situations. Strengthening case management processes within these centres, along with enhancing staff capacity through targeted training and professional supervision, is essential.

Additionally, improving the digitalization of assessment processes and case management will ensure more accurate and timely interventions. At the same time, the development of a professional foster care system should be prioritized since 18,291 children currently live in alternative family care. This dual approach will help ensure that more children can remain in family environments rather than being placed in institutions.

4.4 Vulnerable youth

In accordance with the amendments to the Law on State Youth Policy[248], which took effect 1 March 2023, the definition of youth has been expanded to include individuals ranging from 14 to 35 years old, an upper age previously limited to 29 years. As of 1 January 2024, there were 5,759,781 youths, constituting 29 per cent of the total population. Among them, 62.4 per cent (3,591,627 people) lived in urban areas, and 37.7 per cent (2,168,154 people) in rural areas. Gender distribution among youth is nearly equal, with 49 per cent women and 51 per cent men. In regional terms, the highest youth populations are in Almaty city (12.1 per cent), Turkestan oblast (11.5 per cent), Astana city (7.9 per cent). The lowest numbers are in North Kazakhstan (2.3 per cent) and Ulytau (1.1 per cent) oblasts.

In 2023, Kazakhstan was ranked 81st out of 183 countries in the Global Youth Development Index,[249] indicating a high level of youth development. Although Kazakhstan performs well in Employment & Opportunity (35th position) and Equality & Inclusion (46th), Health and Well-being (170th) and Political and Civic Participation (148th) remain significant concerns. Similar findings were obtained during the focus group discussions with members of the UN Youth Advisory Board who ranked the lack of decision-making and civic participation by youth, as well as the lack of proper values and norms, as the top priority issues.[250]

Furthermore, in May 2023, Kazakhstan introduced the national Youth Development Index to evaluate state youth policy across seven pillars: education, health, employment, political and civic participation, leisure, and safety. The Index identifies barriers to effective youth policy, considers young people's opinions, and determines measures to enhance their situation.

In 2023, youth unemployment was 3.5 per cent (3.7 per cent in urban areas and 3.3 per cent in rural areas), while the percentage of NEET (Not in Education, Employment, or Training) youth aged 15-34 was 7.3 per cent (or 394,235 individuals). Unemployment among women was higher at 4.3 per cent compared to 2.9 per cent for men. Of the 129,923 unemployed individuals, 41 per cent had higher education, and 45 per cent had TVET qualifications. According to the National Youth Report 2023,[251] the primary factors affecting youth employability included a lack of jobs in their areas of expertise in rural areas (30.3 per cent), low salaries (29.1 per cent), and inadequate education (17.5 per cent). Therefore, systematic and practical career orientation at school, based on understanding personal abilities (skills, trends, interests) and the specifics of occupations, is vitally important.

Kazakhstan continues to experience one of the world's highest rates of youth suicide — a leading cause of death among individuals aged 15-29. Suicide ranks as the fourth leading cause of mortality, following traffic accidents, tuberculosis, and interpersonal violence. Among individuals aged 15-17, the number of completed suicides over five years (2017-2021) increased by 13.3 per cent and suicide attempts increased by 37.1 per cent.[252] In addition, the National Youth Report 2023 shows that 20.6 per cent of youth reported experiencing depression in the past year. Furthermore, according to a study by the National Centre for Public Health, every fifth Kazakhstani teenager becomes a victim or participant in bullying. Thus, receiving quality and accessible psychological care remains highly relevant.

In response to the Head of State's directive to enhance the well-being and quality of life for young citizens, the Government approved the Concept on State Youth Policy for 2023-2029 on 28 March 2023. Through the approval of the Concept, the Government of Kazakhstan has officially recognized concerns related to mental and reproductive health, bullying, gambling addiction, and sports infrastructure accessibility. Of note, the Concept envisages, inter alia, increasing youth involvement in decision-making to 30 per cent, raising the rate of employment of young people applying to employment centres to 61 per cent, expanding the coverage of mental and reproductive health services in youth health centres to 43 per cent, and boosting the enrolment in higher education to 75 per cent by 2029.[253]

Volunteering serves as a vital channel for youth participation in development. Since 2020, UNICEF, in partnership with the National Volunteer Network of Kazakhstan, has engaged over 10,000 volunteers, reaching more than 100,000 children and their parents across diverse themes such as mental health awareness, child online safety, educational mentoring, climate change, DRR, and early childhood development.

In addition, according to the National Youth Report 2022, the situation with sexually

[246] Under the project «Supporting the scaling up of evidence-based interventions to support parents and caregivers through the health and allied sectors», studies on «Prevalence of Adverse Childhood Experiences among young people» (ACEs), «Situation analysis in Kazakhstan within the European Early Childhood Development (ECD) framework», and «Mapping the policy environment of initiatives to support parents and caregivers in Kazakhstan»

[247] BNS ASPR, submission to the international database TransMonEE, 2023.

[248] Law of the Republic of Kazakhstan 'On State Youth Policy', No. 285-V of 9 February 2015. https://adilet.zan.kz/rus/docs/Z1500000285

[249] The Commonwealth (2024) Global Youth Development Index Update Report 2023. https://shorturl.at/byz5R

[250] The focus group discussions with 23 members of the UN Youth Advisory Board aged 16-34 from about 10 regions was held on 9 July 2024 in Astana at the UN Building.

[251] Scientific Research Centre 'Youth' (2023) National Youth Report 2023 (data from validation meeting on 12 October 2023)

[252] Ibid.

[253] Resolution of the Government of the Republic of Kazakhstan 'On Approval of the Concept of State Youth Policy of the Republic of Kazakhstan for 2023-2029', 28 March 2023, No. 247. https://adilet.zan.kz/rus/docs/P2300000247

transmitted infections remains extremely problematic among young people, with an incidence rate ten times higher than in developed countries.[254] There is a lack of awareness among youth aged 15-19 regarding sexual and reproductive health. Specifically, 47 per cent do not understand the consequences of abortions, and 46 per cent lack knowledge about the repercussions of sexually transmitted infections,[255] while 79 per cent of adolescents are not sufficiently informed about HIV.[256]

Furthermore, Kazakhstan is one of the few countries in the world where the registration of HIV infections is increasing. Thus, in the period 2016 to 2023, the prevalence of HIV infection among adolescents aged 15-19 increased from 39 to 66 cases.[257] Participants from both youth and people living with HIV focus group discussions suggested lowering the age of HIV testing without parental consent from 16 to 14 to encourage early detection and treatment among adolescents. Participants also recommended increased awareness and education regarding pre-exposure prophylaxis and post-exposure prophylaxis among the general population and especially youth.

The focus group discussions conducted with youth have also identified vulnerable youth groups that are left behind. Young male prisoners comprise the first group, facing significant disadvantages due to limited access to education and skills training, poor mental health support, stigmatization, and economic hardship. These young men also struggle with social reintegration and the impact of inadequate rehabilitation programmes. The identified root causes of their incarceration include socioeconomic inequality, educational deficits, unemployment, dysfunctional family environments, and systemic cultural and institutional barriers. Moreover, prisons are breeding grounds for radicalization and violent extremism due to ineffective rehabilitation programmes, negative peer influence, and grievances against society.

The second group is youth in rural areas. Rural youth, predominantly speaking Kazakh, often find themselves disadvantaged compared to their urban counterparts, who are more likely to be proficient in Russian and English. This lack of proficiency in either language limits rural youth access to information, educational resources, and job opportunities, thereby perpetuating their disadvantage. In addition, language barriers create a divide in social identity and in the unity of the nation, tampering with social cohesion among youth in Kazakhstan.

The lack of social mobility and job opportunities in rural areas drives many young people to cities, where they encounter additional challenges, including housing issues and social integration. The root causes include limited access to quality education, economic disparities, cultural and social isolation, inadequate infrastructure, access to basic services, and language barriers.

4.5 Older persons

According to UNFPA-supported projections, by 2050 the population will grow by 23 per cent, adding over four million people, and reaching 24.3 million. This growth is due largely to increased life expectancy for men up to 75 years (70.99 years in 2023) and women up to 84 years (79.06 years in 2023) by 2050 and the relatively high fertility. Despite such increase, the substantial gap in life expectancy between men and women remains over eight years. As such, there is significant gender asymmetry among the older persons, with 2.5 times more women than men at retirement age. There are also gender differences in the economic status of older people due to disparities in the size of pensions and savings between men and women. The situation indicates the phenomenon of the feminization of poverty[258] in older age groups, particularly in rural areas.

As of 2023, Kazakhstan had about 61 dependents (children and seniors) for every 100 persons of working age, representing a relatively high burden compared to the global average of 55 dependents and the upper-middle income country average of 47 dependents.[259] This implies that roughly 7.5 million dependents (5.8 million children aged 0-14 and 1.7 million seniors aged 65 and older) are in Kazakhstan, though the actual figure is likely even higher since many of those aged 15-64 are not economically active. In the 2000s, dependency levels had been falling (reaching 46 per 100) after a period of reduced fertility and corresponding demographic dividend that accompanied a nearly 9-fold increase in GDP per capita. Looking ahead, projections indicate Kazakhstan's dependency burdens will remain at elevated levels for decades if current trends in fertility and longevity continue. The structure of dependency rates will change noticeably, with old-age dependency rising from 20.8 per cent in 2019 to 37.8 per cent in 2050, and the child dependency ratio falling from 79.2 per cent to 62.2 per cent.[260]

Kazakhstan's population is aging. Between the 2009 and 2021 censuses, the cohorts aged 60-64 and 70 and older have already doubled. The share of the population of seniors aged 65+ in Kazakhstan is set to nearly double between 2020 and 2050, rising from 1.4 to 3.4 million (from 8 per cent to almost 15 per cent of the total population).[261] This shift is an inevitable result of medical advances, healthier lifestyles, and the resulting gains in life expectancy. In turn, this will increase the demand for senior care services and age-related healthcare. To support seniors, who are disproportionately at risk of poverty and disability, the Ministry of Labor and Social Protection of the Population has outlined an action plan to open 92 Centers of Active Longevity across the country. These centers aim to support seniors to engage more in intellectual and community activities, improve digital fluency, intergenerational relations, and health-affirming lifestyles. These efforts fall within the broader Demographic Resilience framework, an approach to adapting to demographic change by investing in human capital as a force for development and way to help people reach their full potential.

Active, healthy, and dignified longevity should be a foundation of national development, addressing the needs of current and future generations of older persons through a comprehensive policy. Healthy and active ageing begins at birth. Children who have been given a good start in life have more opportunities for economic and social participation in adulthood and active contributions to society and family life as older persons. At the national level, Kazakhstan actively implements international strategic documents in the field of ageing, such as the Madrid International Plan of Action on Ageing and the Regional Strategy for its Implementation. National actions are guided by the Action Plan for Improving the Situation of Senior Citizens 'Active Longevity' until 2025.[262]

As highlighted in the strategic session with CSOs and the private sector, there is a need to develop a long-term demographic forecast for effective government planning, as the current approach is fragmented by each ministry conducting its own forecast.[263] At the policymaking level, it is also essential to integrate ageing and the needs of older people into national development and emergency response plans. This includes fostering a human rights-based culture of ageing and changing societal attitudes towards older people. Additionally, investing in children and youth is crucial to improve the lives of future generations of older people.

[254] Ministry of Information and Social Development of the Republic of Kazakhstan & Jastar Research Centre (2022) National report 'Youth of Kazakhstan — 2022'. https://shorturl.at/q54Ld

[255] Ibid.

[256] UNFPA & UNESCO (2024) Preliminary Report on the status of reproductive health of adolescents (15-19 y. o.) and youth (20-24 y. o.), their sexual behaviour and access to information and services in sexual and reproductive health.

[257] Kazakh Scientific Centre of Dermatology and Communicable Diseases, official data.

[258] Feminization of poverty means a phenomenon where women are disproportionately represented among the poor, often due to a combination of social, economic, and structural factors that make them more vulnerable to poverty in older age group.

[259] World Bank (2024) Age-dependency ratio. Available at https://shorturl.at/2tFg4

[260] The summary of the «Population Situation Analysis of the Republic of Kazakhstan prepared with technical assistance of UNFPA in Kazakhstan. Available at: https://rb.gy/e8rkk7

[261] UNFPA (2021) Kazakhstan's population ageing to almost double in 30 years' time. Available at: https://rb.gy/dlk8eb

[262] Order of the Minister of Labour and Social Protection of the Population of the Republic of Kazakhstan 'On Approval of the Action Plan to Improve the Situation of Senior Citizens 'Active Longevity' until 2025', 22 February 2021, No. 47. https://online.zakon.kz/Document/?doc_id=36915996

[263] The strategic session «Sustainable Development of Kazakhstan until 2030» with the participation of representatives of civil society and the private sector was held in Astana on 19 April 2024

4.6 People living with HIV

The global 95-95-95 UNAIDS (Joint United Nations Programme on HIV/AIDS) goals have emerged as the cornerstone of collective efforts to halt the spread of the AIDS (Acquired Immunodeficiency Syndrome) epidemic worldwide by 2030. These ambitious targets reflect a paradigm shift in the global approach to HIV, emphasizing the crucial metrics of HIV awareness, treatment coverage, and viral suppression. In alignment with these objectives, the Government, through the Ministry of Health, endorsed the comprehensive Roadmap «Implementation of Measures to Prevent HIV Infection in the Republic of Kazakhstan for 2023-2026» on 16 March 2023.

As of early 2024, the epidemiological landscape of HIV infection in Kazakhstan remains concentrated among key populations, underscoring the need for targeted interventions. In Kazakhstan, as of early 2024, there were 32,659 people living with HIV, with an estimated total of around 40,000 according to the Spectrum programme. In 2023, 3,862 new HIV cases were reported, with men comprising 67.8 per cent and women 32.2 per cent. The sexual mode of transmission remains the predominant mode, constituting 77.6 per cent of HIV cases, with heterosexual transmission accounting for 68.8 per cent and homosexual transmission for 9 per cent. Injection drug use contributes to 18 per cent of transmissions.

Positively, Kazakhstan has made progress towards the 95-95-95 targets, with 82 per cent of people living with HIV aware of their status, 88 per cent receiving antiretroviral treatment (ART), and 92 per cent achieving viral suppression. The country has implemented comprehensive HIV prevention and treatment strategies, providing counselling, testing services for HIV/ Sexually Transmitted infections, access to condoms and lubricants, harm reduction initiatives for people who inject drugs, and pre/post-exposure prophylaxis. These services are provided free of charge across all 20 regions of the country within the framework of guaranteed free medical care and/or mandatory social medical insurance.

Focus group discussions with people living with HIV[264] revealed major challenges. First, the lack of a permanent place of residence in the country often complicates access to essential medical services and social benefits. Second, participants raised concerns about Article 118 of the Criminal Code, which criminalizes the intentional transmission of HIV. This law exacerbates stigma and discrimination against those living with HIV, perpetuates misconceptions, and disproportionately impacts marginalized communities like sex workers, LGBTIQ+ individuals, and people who use drugs. The fear of prosecution may also deter individuals from testing or disclosing their status, limiting access to treatment and increasing the risk of transmission. Third, participants raised concerns about the lack of mentors, doctors, informational brochures, and campaigns available in Kazakh, especially as the Kazakh-speaking population continues to grow. Fourth, there is a need to integrate youth-specific services, educational programmes, and peer support groups to better support young people living with HIV.

Kazakhstan remains steadfast in adhering to the WHO recommendations for HIV treatment and prioritizes the establishment of sustainable financing mechanisms for HIV programmes. Currently 28,855 people living with HIV receive ART, with 91 per cent coverage for women and 87 per cent for men. However, challenges persist, notably in ensuring equitable access to ART treatment for migrant populations without permanent residency status. Furthermore, the emergence of synthetic drugs poses obstacles, necessitating the adaptation of prevention programmes to address evolving drug use patterns.

Given the escalating sexual transmission of HIV, including among men who have sex with men, and the emergence of chemsex practices,[265] the expansion and enhancement of pre-exposure prophylaxis programmes are imperative strategies. Pre-exposure prophylaxis entails the provision of antiretroviral therapy to HIV-negative individuals to mitigate the risk of infection. Kazakhstan offers free pre-exposure prophylaxis to key populations, with significant growth — from 243 clients in 2021 to 11,500 by 2024.

Kazakhstan has made significant progress in reducing human rights barriers to HIV services. The country joined the Global Partnership for Action to Eliminate HIV-Related Stigma and Discrimination in 2021. Through civil society leadership and a multistakeholder process, a national advocacy plan was developed to combat HIV-related stigma. Ongoing consultations are addressing the repeal of restrictions on women living with HIV accessing shelters for domestic violence victims and decriminalizing HIV transmission. In December 2022, the ban on adoption for PLHIV was lifted. While criminalization of HIV transmission (Provision 118) remains a concern, it has only been sporadically enforced and includes exemptions when the victim was informed. Stigma Index surveys in 2015 and 2022 revealed ongoing issues, including mandatory HIV testing and discrimination in healthcare access.[266]

Svetlana's story

Svetlana's life is a testament to resilience and transformation.[267] A former drug user and a prisoner for over twenty years, she now volunteers at a CSO. Her diagnosis in 2018 came as a shock following a three-year period of unwittingly living with it HIV. Svetlana recalls vividly the severe side effects of her initial ART, leading her to stop the medication and turn to alcohol for two years. It was not until the head of the AIDS Centre persistently encouraged her to resume treatment that Svetlana found a medication regimen that worked for her.

Living with HIV has presented numerous challenges for Svetlana – from physical health struggles to social stigma. Her close relatives still do not know about her HIV status. Indeed, Svetlana emphasizes the gender-specific challenges faced by women living with HIV – such as stigma and discrimination combined with societal expectations – that often prevent them from seeking help, ultimately leading to isolation. Svetlana calls for targeted support programmes for women, including adequate mental healthcare services.

Despite these hurdles, Svetlana has found purpose in her advocacy work, driving people struggling with drug addiction to get tested and distributing syringes and condoms to prevent the spread of infections. Last year, Svetlana made a significant impact by bringing the highest number of people to the HIV testing centre.

Svetlana's story underscores the immense value of support and effective treatment.

[264] Focus group discussions with people living with HIV were held on 22 April 2024 at the Office of CSO «Kazakhstan's Union of People Living with HIV» in Almaty, and on 17 May 2024 at the Office of CSO «Zhizn' Vopreki» in Astana and on 18 May 2024 at the Office of CSO «Step in the Future» in Astana.

[265] Chemsex is the intentional combining of specific drugs with sex to enhance intimacy, pleasure, and prolong sexual sessions.

[266] https://www.stigmaindex.org/wp-content/uploads/2022/04/Kazakhstan-SI-2.0-Report-2022_English.pdf

267 The name «Svetlana» is a pseudonym to protect her privacy. This story was collected during the focus group discussion.

4.7 Refugees, asylum-seekers, and stateless persons

As of 1 January 2024, 273 refugees (139 female and 134 male) and 480 asylum-seekers (225 female and 255 male) reside in Kazakhstan. Of these, 111 asylum-seekers (58 girls and 53 boys) and 63 refugees (34 girls and 29 boys) are children. Of the total number of refugees, 182 are nationals of Afghanistan, 68 are nationals of Ukraine and 23 are nationals of other countries. The refugees mainly reside in Almaty city, Shymkent city and Almaty region. They are generally fluent in local languages, attend schools in Kazakhstan, and are well-integrated culturally. Of the total number of asylum-seekers, 198 are nationals of Ukraine, 150 are nationals of Afghanistan and 47 are nationals of other countries. The asylum- seekers reside in almost all the regions of Kazakhstan. In view of recent security situations in Ukraine, the number of asylum-seekers from Ukraine has been increasing since 2022.

In accordance with the Law on the Legal Status of Foreigners, refugees in Kazakhstan receive the status of temporarily residing foreigners. According to the Law on Refugees, refugee status is issued for one year and is subject to annual review. As such, refugees are considered temporarily residing foreigners, regardless of the duration of their residence in Kazakhstan. Kazakhstan is unique among the Contracting States of the 1951 Convention on the Status of Refugees and its 1967 Protocol for granting refugees only 'one-year temporary residency'. International refugee and human rights law requires that states give refugees access to a broad array of social, economic, and civil rights on par with those enjoyed by nationals or permanently residing foreigners.

Due to the temporary nature of their status, however, most refugees can find work only in the informal sector. This is due to legislative restrictions that prevent refugees and asylum-seekers from engaging in entrepreneurial activities. Employers are reluctant to hire them formally due to uncertainty regarding the extension of their status. The lack of inclusion of the «asylum-seeker» certificate as one of the required documents for employment contracts significantly worsens the situation for asylum-seekers. Consequently, many young refugees and asylum- seekers lose interest in pursuing higher education due to a lack of employment prospects[268].

As well, since the Taliban came to power in Afghanistan, some major second-tier banks in Kazakhstan have started to deny financial services to Afghan nationals, forcing refugees and asylum-seekers from Afghanistan to conduct transactions in cash[269]. The situation also hinders their ability to secure official employment, as most employers in Kazakhstan use bank salary projects and are unwilling to pay in cash.

Refugees and asylum-seekers are ineligible for public allowances, such as disability and survivor benefits, childbirth benefits, care allowances, benefits for raising a child with disabilities, and other benefits. As per national legislation, refugees and asylum-seekers cannot have legal recognition of disability. Nor can refugees contribute to pension funds, and they do not receive social benefits that are accorded to citizens and permanently residing foreigners.

Refugees in Kazakhstan receive only a guaranteed «minimum» volume of medical care (which mainly includes ambulance, primary health care, chronic diseases, etc.) and they are excluded from the scope of the compulsory social health insurance scheme, as the right to receive medical care in the state compulsory health insurance system is only available for participants of the insurance plan, including citizens and permanently residing foreigners. All public healthcare services provided within the framework of the health insurance scheme — such as access to medications, ultrasounds, consultations with specialists — are only accessible on a paid basis at rates for foreigners which most refugees and asylum-seekers cannot afford[270]. Consequently, refugees, as temporary residing foreigners, are only entitled to a «minimal» amount of health care.

This right is further limited to asylum-seekers who are entitled to receive a guaranteed amount of «minimum» medical care only for diseases that pose a danger to others. Additionally, the inability to access healthcare services beyond «minimal» level compounds health risks for women, further limiting their capacity to engage in economic activities. Although the consultation of an obstetrician-gynecologist is included in the compulsory social health insurance, since refugees/asylum-seekers are not allowed to become participants of the health insurance system, this service is not available to them.

Ineligibility for public allowances disproportionately affects women. Without access to public assistance, refugee women — particularly single mothers or those caring for family members with disabilities — are more vulnerable to economic insecurity. In such situations, only the local non-governmental organizations, funded by United Nations High Commissioner for Refugees (UNHCR), provides support for extended medical services on a case-by-case basis. The service legally entitled to refugees — targeted social assistance for those below the poverty threshold — does not function in practice. Refugees are not registered at their place of residence, a mandatory requirement for TSA, due to incomplete registration rules and gaps in system implementation. This underscores the urgent need for the Government to ensure that refugees are able to exercise the rights to which they are entitled.

Contrary to Article 34 of the Refugee Convention, refugees are also ineligible to apply for citizenship no matter how long they have lived peacefully in Kazakhstan and irrespective of their integration into the country, for example, by marriage or birth. The annual renewal requirement for refugee status perpetuates a sense of uncertainty and fear of potential rejection despite having lived in Kazakhstan for many years without any violations[271].

The national legislation of Kazakhstan provides for the possibility of applying for asylum at the border. However, the legislation does not contain detailed instructions on the referral of asylum-seekers' applications between border authorities and competent authorities. As a consequence, persons seeking asylum at border points, including international airports and transit zones, may be at risk of return to a country where they may face torture and other cruel, inhuman, or degrading treatment or punishment.

The refugee law is aligned with the Refugee Convention regarding the «non-refoulement» principle that asserts refugees should not be returned to a country where they face serious threats to their freedom or lives. The prohibition of refoulement under international human rights law applies to any form of removal or transfer of persons, regardless of their status, where there are substantial grounds for believing that the returnee would be at risk of irreparable harm upon return on account of torture, ill-treatment or other serious breaches of human rights obligations.

In this regard, during its latest review, the UN Committee against Torture recommended that Kazakhstan ensures no one is expelled, returned, or extradited to another State where there are substantial grounds for believing that he or she would run a personal and foreseeable risk of being subjected to torture[272]. Particular attention is given to expulsion for irregular crossing or violation of migration laws by asylum-seekers and establishing an accessible asylum procedure at border points.

Current legislation in Kazakhstan, however, allows refugees, asylum-seekers, or stateless persons to be expelled (returned) from

[268] Focus group discussions with nine asylum-seekers held on 22 April 2024, at the Office of Red Crescent in Kazakhstan

[269] Focus group discussions with six refugees from Afghanistan held on 22 April 22 2024, at the Office of Red Crescent in Kazakhstan

[270] Ibid.

[271] Focus group discussions with six refugees from Afghanistan held on 22 April 2024, at the Office of Red Crescent in Kazakhstan

[272] CAT/C/KAZ/CO/4, Concluding observations on the fourth periodic report of Kazakhstan, the UN Committee against Torture, released on 8 June 2023, see also https://shorturl.at/pYyzs

the state as punishment for criminal[273] or administrative offenses[274], as well as by the decisions of civil courts[275]. It does not provide exceptions when there are substantial risks of irreparable harm upon return to the country of origin or third country. Furthermore, the national legislation imposes criminal penalties on asylum-seekers on account of their irregular entry into, and irregular residency in, the territory of Kazakhstan, which is not in line with Article 31(1) of the 1951 Refugee Convention to which Kazakhstan acceded without any reservations[276].

As per Article 31(1), the contracting states should not impose penalties, except under certain conditions, on asylum-seekers or refugees due to their irregular entry or presence in the country. As a result, the assurance of non-refoulement remains a significant concern. The forced return of one asylum-seeker from Afghanistan and one from the Russian Federation to their respective countries of origin in 2022, regardless of their pending asylum cases, highlights the pressing need to align national legislation with international standards and the Refugee Convention to ensure the protection of refugees and asylum-seekers.

During the Global Refugee Forum in 2019, Kazakhstan pledged to issue 1951 Convention travel documents to refugees. Despite having adopted a legislative framework mandating the issuance of travel documents, the existing legal gap in national legislation has prevented the Government from initiating this process. This situation underscores the urgent need for the government to fulfil its obligations and ensure that refugees are granted the necessary documentation to exercise their right to freedom of movement.

In addition, at the Global Refugee Forum in 2023, the Government of Kazakhstan pledged to: (i) provide foreigners with refugee status in Kazakhstan with equal access to medical care, employment, education, and social assistance on par with citizens and permanently residing foreigners by 2024-2025; (ii) address gaps in national legislation and establish effective referral mechanisms, fostering a cooperative approach among responsible bodies to streamline the handling of asylum applications at border checkpoints, detention centres, and in cases of asylum-seekers' irregular arrival; (iii) establish relevant legislative safeguards to reduce statelessness in Kazakhstan within 2024-2025; (iv) reduce the number of stateless persons through naturalization in 2024.

The approved Rules for the Reception and Accommodation of Asylum-Seekers with their Mass Influx in Temporary Settlement Points introduces measures to provide refugees with basic necessities and medical care, as well as the right to apply for asylum both upon crossing the border and in temporary settlement points[277]. However, the national legislation on asylum has yet to reflect consideration of vulnerabilities and the recognition of refugee status in group situations where individual status determination is impractical, impossible or unnecessary in large-scale situations (a prima facie approach).

The Rules for the Registration and Consideration of Asylum Applications (Order No. 118, April 7, 2022) need oversee provisions for addressing vulnerable asylum-seekers, including those with disabilities and mandate gender- and age-sensitive approaches. NGOs have reported increasing cases of asylum-seekers being discouraged or unable to apply for refugee status. Statelessness in Kazakhstan is largely a result of the dissolution of the Union of Soviet Socialist Republics (USSR), as many former USSR citizens and their descendants did not confirm or acquire the nationality of Kazakhstan or another USSR successor state. As of 1 January 2024, 7,341 people were registered as stateless in Kazakhstan. There are no official statistics on people with undetermined nationality or at risk of statelessness. Kazakhstan has yet to accede to the 1954 and 1961 Statelessness Conventions but has ratified all other major international human rights instruments that commit it to respect and fulfil the right to a nationality and to safeguard a range of human rights for stateless people.

The joint country-wide identification and documentation effort helped to identify 8,822 undocumented people in Kazakhstan in the period 2020-2022. Of these individuals, 4,868 were confirmed as citizens of Kazakhstan, and approximatively 2,700 were recognized as stateless people. Officially recognized stateless people enjoy rights on equal grounds with other permanently residing foreigners. Thus, they also have the right to apply for naturalization in Kazakhstan on an equal basis with foreign citizens. National legislation does not yet, however, provide accelerated procedures for the naturalization of stateless people, nor does it fully prevent cases of statelessness, including child statelessness, or facilitate the resolution of existing cases.

In April 2024, new rules for determining the legal status of individuals in Kazakhstan without proof of Kazakhstani or any other citizenship were approved. While certain rights are extended, the new requirement of confirmation of non-foreign citizenship from foreign countries may lead to delays in the statelessness determination process, potentially leaving applicants undocumented for an indefinite period.

In June 2020, to implement the amendments to the Code on Marriage and Family, the Ministry of Justice amended the Civil Registration Rules. During her briefing to the Parliament on 14 March 2022, the Deputy Minister of Justice shared that since the end of 2019, over 1,500 children had been registered without their mothers' identity documents. However, the Code on Marriage and Family does not regulate cases of birth registration of a child born outside a medical facility whose parents are stateless, undocumented migrants or people with undetermined nationality.

While Kazakhstan has increasingly aligned its legislation and practices with international law, the country is not yet party to the 1954 Convention relating to the status of Stateless Persons and 1961 Convention on the Reduction of Statelessness.

4.8 Migrants and human trafficking

Since 2018 the Government of Kazakhstan has made meaningful efforts to achieve the objectives of the Global Compact for Safe, Orderly and Regular Migration (GCM)[278] by recognizing human mobility as an integral part of the 2030 Agenda for Sustainable Development. In 2022, Kazakhstan adopted a National Migration Concept and its Action Plan for 2023-2027[279] and submitted the Voluntary National Report on GCM[280]. In 2024, Kazakhstan actively participated in the Second Regional Review of the GCM in the UNECE region.

One of the key components of migration processes in Kazakhstan is ethnic immigration. As of February 2024, 1,129,600 ethnic Kazakhs — mostly from Uzbekistan, China, Turkmenistan, and Mongolia — have returned to their historic homeland and received the status

[273] Article 51 of the Criminal (Penal) Code of the Republic of Kazakhstan dated 3 July 2014. https://adilet.zan.kz/eng/docs/K1400000226

[274] Article 51 of the Code of the Republic of Kazakhstan 'On administrative infractions' dated 5 July 2014. https://adilet.zan.kz/eng/docs/K1400000235

[275] Chapter 49 of the Civil Procedural Code of the Republic of Kazakhstan dated 31 October 2015. https://adilet.zan.kz/eng/docs/K1500000377

[276] Article 392 (Intentional illegal crossing of the State Border of the Republic of Kazakhstan) of the Criminal (Penal) Code of the Republic of Kazakhstan dated 3 July 2014. https://adilet.zan.kz/eng/docs/K1400000226

[277] Resolution of the Government of the Republic of Kazakhstan 'On Approval of the Rules for Reception and Accommodation of Asylum- Seekers in the Event of Mass Influx in Temporary Settlement Points', 12 July 2023, No. 554. https://adilet.zan.kz/rus/docs/P2300000554

[278] Global Compact for Safe, Orderly and Regular Migration https://www.iom.int/global-compact-migration

[279] Resolution of the Government of the Republic of Kazakhstan 'On Approval of the Concept of Migration Policy of the Republic of Kazakhstan for 2023-2027', 30 November 2022, No. 961. https://adilet.zan.kz/rus/docs/P2200000961

[280] Government of Kazakhstan (2021) Kazakhstan — GCM Voluntary National Report (Regional Review: Asia and the Pacific). https://shorturl.at/kfy0z

of 'Qandas'[281]. While governance of ethnic migration is constantly improving, certain issues remain in the implementation of their repatriation. These include difficulties in finding employment; uneven settlement across the country, with a preference for living in southern regions; a low level of integration into the local community due to sociocultural differences; and language barriers.

The role of diasporas and their influence on socioeconomic and political processes in modern society has been steadily increasing. At this stage, diasporas function as a natural bridge, elevating the development and interaction of states to a new level. The Kazakh diaspora, estimated to be between five and seven million people, represents a diverse pool of potential contributors to the country's socioeconomic development. An analysis of Kazakhstan's legislative approach to diaspora engagement reveals a landscape of initiatives and institutions aimed at fostering diaspora involvement in the nation's development. However, the absence of a cohesive, holistic policy for diaspora engagement creates gaps in realizing this potential.

Kazakhstan has been working to enhance labour migration governance by strengthening migration data. Within the third round of the Baseline Mobility Assessment, conducted in 10 regions — including the three major cities of Almaty, Astana, and Shymkent — 2,303 key informants were interviewed during December 2023 and January 2024. Informants were mainly local government representatives (1,542) and migration police (654)[282]. Based on their estimates, 639,799 international migrant workers were hosted in the assessed locations in Kazakhstan from 2020 to 2023 (Figure 24).

The number of migrant workers increased by 47 per cent in 2023, due primarily to an influx of migrants from Russia amid the war in Ukraine, partial mobilization of military reservists in Russia, and sanctions[283]. Migrant workers from Uzbekistan (77 per cent) were the largest group in Kazakhstan, followed by Russians (11 per cent) and Kyrgyzstanis (4 per cent) (Figure 25). Geographically, international migrant workers are mainly concentrated in Mangystau oblast (34 per cent) Almaty city (33.9 per cent), and Astana (13.4 per cent) based on the data collected in 10 regions of the country. The high concentration of migrants in Mangystau is due to oil and gas production.

Figure 24 Annual trends of international migrant workers

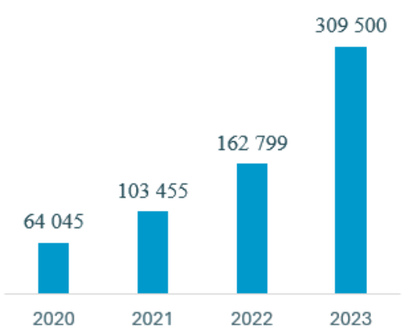
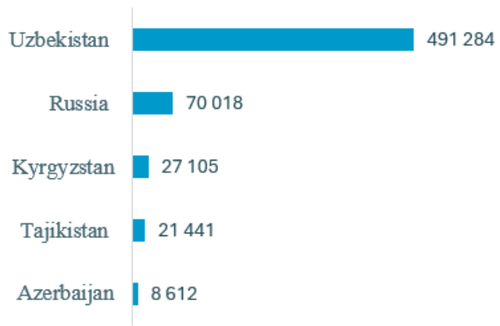


Figure 25 Top 5 nationalities of migrant workers in Kazakhstan



Source: IOM, Baseline Mobility Assessment, Round 3, January 2024

[281] Ministry of Labour and Social Protection of Population of the Republic of Kazakhstan (2024) More than 1.3 thousand ethnic Kazakhs have received the status of Qandas since the beginning of 2024. https://shorturl.at/ERPH0

[282] International Organization For Migration (2024) Kazakhstan — Baseline Mobility Assessment — Round 3 (January 2024). https://shorturl.at/KhWE4

[283] Ibid.

In the first quarter of 2024, the Migration Service Committee of the Ministry of Internal Affairs registered over 104,000 holders of temporary residence permits, with the majority originating from countries in the Commonwealth of Independent States. Migrants from the Central Asia region tend to obtain more permanent residence permits than those from other countries. The second largest group is comprised of migrants from Russia. In total, 100,247 migrants obtained temporary residence permits for labour purposes. The highest concentration of migrant workers can be found in the fields of construction; manufacturing; mining and quarrying; professional, scientific, and technical activities; and agriculture, forestry, and fisheries.

According to the BNS ASPR, in 2023 Russia was the primary destination for Kazakhstani citizens seeking permanent residence, with 11,720 individuals relocating, marking a decrease of 1.6 times compared to 2022. The second most popular destination remains Germany (2,283 people or –9.7 per cent), followed by the United States of America (452 people +32.5 per cent), Poland (334 or –15.2 per cent), Kyrgyzstan (211 or +19.8)[284].

The total volume of 2023 money transfers carried out through international money transfer systems amounted to KZT 1.33 trillion (USD 2.95 billion)[285]. This is 26 per cent lower than in 2022. Seventy-two per cent of the total volume of international money transfers were transfers sent abroad, which in 2023 reached KZT 961.4 billion (USD 2.13 billion). The volume of transfers from abroad to Kazakhstan during this period reached KZT 305.8 billion (USD 678 million)[286].

About 26 per cent of surveyed migrant workers in the first quarter of 2024 stated that they had no access to health services[287]. The main barriers to accessing these services were a lack of financial resources and the absence of identification documents. Additionally, 19 per cent of respondents reported that financial services were unavailable to migrant workers, and 31 per cent indicated they had no access to education.

Furthermore, the focus group discussions with migrants revealed instances where migrants were misled about job conditions and salaries, faced harsh working environments, and had their passports confiscated[288]. Additionally, migrants often encounter cultural insensitivity, language barriers, bureaucratic hurdles, lack of access to healthcare and struggle to navigate the legal system without support.

Migration is not a gender neutral. Women migrants face distinct challenges compared to men, including differences in access to legal migration pathways, the sectors in which they can find work, and the types and consequences of abuse they may encounter. Moreover, migration data is often gender-blind, leaving women migrants in all their diversity largely unrepresented in international and national migration statistics. This gap in gender-specific data impedes a clear understanding and accurate assessment of women's roles and needs within the migration process and throughout the migration cycle. In addition, the low legal literacy about individual rights among migrant women prevents them from accessing state and non-state funded assistance and special social services. It is crucial to ensure that these special social services are inclusive of women, in all their diversity, and delivered per international quality standards. Thus, harmonizing national legislation and policy frameworks with international standards, ensuring they are gender-responsive and based on intersectional gender analysis, is crucial for addressing the needs of women migrants, women and girls as family members of migrants, and undocumented women throughout the migration cycle as well as in climate change and disaster response.

[284] International Organization For Migration (2024) Quarterly Compilation Report on Migration Situation in Kazakhstan, July 2024. https://dtm.iom.int/kazakhstan

[285] National Bank (2024) In 2023, KZT 1.33 trillion will be transferred through international money transfer systems. https://shorturl.at/es9Ld

[286] Ibid.

[287] International Organization For Migration (2024) Quarterly Compilation Report on Migration Situation in Kazakhstan, July 2024. https://dtm.iom.int/kazakhstan

[288] The focus group discussions were held on 17 April 2024, at the Office of the Crisis Centre 'Korgau,' and on 19 May 2024, at the construction site of the 'Europe City' apartment complex. There were seven participants.

In 2024, the average age of women migrants in Kazakhstan is 38[289]. Of these women, 30 per cent hold lower-secondary education, 19 % have completed post-secondary non-tertiary education, 23 per cent have completed upper-secondary education, and 8 per cent hold a bachelor's degree. The majority of surveyed women migrants have qualifications in traditionally female-dominated fields, including education (33 per cent); health, welfare, and social services (14 per cent); social sciences, journalism, administration, and law (12 per cent); and arts and humanities (12 per cent). In contrast, a significant portion of male respondents (49 per cent) have graduated from STEM programs, encompassing fields like engineering, manufacturing, construction, architecture, agriculture, forestry, fisheries, and veterinary sciences. These educational differences influence their access to work sectors, with women often concentrated in lower-paid fields.

According to the survey, 27 per cent of women migrant workers confirmed that they were the primary or sole providers for their households. Almost half of the women migrant workers (46 per cent) indicated having one to three dependents at home. More than half (55 per cent) of surveyed women migrant workers reported that their employers do not pay contributions to pension funds for them, and the majority (79 per cent) reported that they do not benefit from paid annual leave or compensation in lieu of it. Moreover, 21 per cent of surveyed female migrant workers indicated that they did not have access to health services — 8 per cent reported a lack of resources to pay for health services, 5 per cent indicated documentation issues (no ID number), and 4 per cent reported having administrative issues with access to health services. Finally, 18 per cent of surveyed women labour migrants did not have access to education in Kazakhstan, and 18 per cent did not have access to financial services in Kazakhstan[290].

Kazakhstan has opened its doors to foreign university campuses following the President's directive, and now eight university branches are in operation. This presents a great opportunity for the country to strengthen its education system as well as attract more talents from all over the world. At the same time, this requires a legal framework for the recognition of foreign qualifications for the employment and studies, and clear mechanisms are necessary to ensure job and educational opportunities for migrants and inbound students.

Regarding human trafficking, Kazakhstan's territory continues to be used by third-country nationals as a channel for illegal migration to Russia and the EU. In January and February 2024 alone, border guards intercepted 38 cases of foreigners using invalid and counterfeit documents from Greece, France, Portugal, and Spain[291]. To combat transnational organized crime — including migrant smuggling, trafficking, and irregular migration — Kazakhstan joined the Document Examination Support Centre (DESC) initiative in 2023, enhancing the detection of fraudulent travel documents and cooperation among DESC member states.

Since 2016, the Ministry of Labour and Social Protection of Population has implemented a standard on the provision of special social services to victims of trafficking, which defines the legal status of victims of trafficking and determines a range of special social services available to victims. Trafficking victims are entitled to free medical, educational, employment, financial, psychological, and legal assistance.

These services are not conditional upon victim cooperation with law enforcement. Between 2016 and 2022, more than 879 people underwent re-socialisation for a total cost over KZT 567 million. Furthermore, amendments in 2022 to the Law on Migration and the Law on Special Social Services entitled foreign victims of trafficking to state-funded assistance, including access to shelters and temporary residence with permission to work. In 2023, the state-funded shelters assisted 192 victims, including 74 foreign victims of trafficking. According to the Ministry of Internal Affairs, in 2023, 152 criminal cases related to human trafficking were registered. Among these, only 42 victims were officially recognized, with 39 being Kazakh citizens and 3 being Uzbek citizens. Conversely, data from national NGOs for the same year indicate a stark contrast: 175 identified victims of trafficking, including 144 Uzbek citizens, 20 Kazakh citizens, 4 Russian citizens, 2 Kyrgyz citizens, 1 Tajik citizen, 2 Nigerian citizens, and 2 of unknown nationality. Types of exploitation included 141 cases of labour exploitation, 11 cases of sexual exploitation, and 23 cases of exploitation involving vulnerable migrants. The discrepancy in the recognition of non-national victims in official statistics underscores a significant gap in the identification and referral of trafficking victims.

On 22 May 2024, The President adopted the Law on Combating Trafficking in Persons and related amendments[292]. The Law introduces new terminology that, for the first time, includes language such as «victim of trafficking in persons», «potential victim of trafficking in persons», and «actors in combating trafficking in persons».

The new law specifies the rights of victims of trafficking, the protection of the rights of minors, and the basis for international cooperation. For implementation, five normative legal acts will be revised and developed, including new referral procedures for trafficking victims, including minors, and risk assessments.

The accompanying amendments introduce a new category of offences into the Criminal Code — offences related to trafficking in persons. The amendments to the Victims Compensation Fund Act also expand the list of criminal offences related to human trafficking and allow victims of offences related to trafficking in persons to receive compensation. The concept of «exploitation of a person» is aligned with international conventions in expanding the means of coercion. In addition, the draft amendments exclude the possibility of reconciliation between the traffickers and victims of trafficking. However, the law lacks an independent oversight mechanism, such as a national rapporteur, to monitor efforts. The definition of trafficking in persons is partially aligned with the Palermo Protocol[293] but deviates slightly.

[289] International Organization For Migration (2024) Kazakhstan — Baseline Mobility Assessment — Round 4 (April-May 2024). https:// https://dtm.iom.int/reports/kazakhstan-kazakhstan-international-migrant-workers-survey-round-4?close=true

[290] Ibid.

[291] TengriNews.kz (2024) KNB: Foreigners with fake French passports detained at Almaty airport. https://shorturl.at/V2TTT

[292] Law of the Republic of Kazakhstan «On Combating Human Trafficking» dated 5 July 2024, No. 110-VIII ZRK. https://adilet.zan.kz/rus/docs/Z2400000110

[293] A UN protocol to prevent, suppress and punish trafficking in human beings, especially women and children.

5. FINANCIAL LANDSCAPE ANALYSIS

Over the past two decades, the composition of Kazakhstan's development finance has shifted from a reliance on international commercial financial resources — mainly foreign direct investments up until 2010 — to an increasing dependence on domestic public revenue, primarily from taxes. However, public finance requires improvement to effectively support sustainable development. Despite a 3.9 per cent economic growth in the first half of 2024 and a rise in the average oil price (USD 82.1 versus USD 77.8 per barrel), tax revenues to the consolidated budget declined by 3 per cent year-over-year. Meanwhile, expenditures rose by 11.2 per cent to KZT 14.7 trillion, surpassing revenues by 21.6 per cent or KZT 2.6 trillion.

The expenditure increase is mainly attributable to public debt repayments (+ KZT 926 billion) and debt servicing (+ KZT 334 billion), as well as social assistance and social security (KZT 399 billion). Consequently, the share of consolidated budget expenditures devoted to debt repayment and servicing rose to 23.2 per cent from 16.2 per cent in the first half of 2023 of all. As of 1 July 2024, public debt stood at USD 60.9 billion or 23.8 per cent of GDP in 2023, remaining below the established safe limit of 32 per cent[294]. It is worth mentioning that Kazakhstan plans to increase transfers from the National Fund to the republican budget, from KZT 3.6 trillion to 5.3 trillion[295], despite the expansion of production at the Tengiz field, which could contribute substantially to the budget balance. This raises concerns about National Fund's sustainability, given its total assets of around KZT 32 trillion.

As a major source of available finance, maximizing the development impact of domestic public finance is crucial[296]. First, Kazakhstan should enhance spending efficiency to avoid future costs or realign spending as needed. Second, strengthening the buoyancy of the current tax system to ensure that government revenue grows faster than GDP is essential. This requires both improving tax collection efficiency and reviewing fiscal policy. Third, incentivizing domestic commercial investment to align with Kazakhstan's sustainable development priorities and the SDGs is vital, as a robust private sector is fundamental to raising living standards through productive employment and higher wages. Finally, an in-depth analysis is needed to attract more international commercial investments into non-resource sectors to accelerate the structural transformation of the economy.

Mainstreaming nationalized and localized SDG indicators into the State Planning System and its monitoring mechanisms can help the align the planning process with the budgetary processes in Kazakhstan. According to a Rapid Integrated Assessment of budget programmes covering about 81 per cent of the state budget from 2019 to 2021, only 58.6 per cent of SDG targets have been financed through the state budget. The largest allocations went to SDG 1 (No Poverty) (21.7 per cent of the state budget), SDG 4 (Quality Education) (14.1 per cent), SDG 9 (Industry, Innovation and Infrastructure) (11.4 per cent).

The least amount of funding from the state budget (less than 1 per cent) was allocated to the following seven SDGs: SDG 5 (Gender Equality), SDG 6 (Clean water and sanitation), SDG 7 (Affordable and clean energy), SDG 10 (Reduced inequalities), SDG 12 (Responsible consumption and production), SDG 13 (Climate Action) and SDG 15 (Life on Land). Additionally, no budget programme was aligned with SDG 14 «Life below water». Among these goals, SDGs 5, 6, 7, 12, 13 and 15 are of particular concern, as significant and major challenges remain in achieving them. Kazakhstan continues to develop the Integrated National Financing Framework (INFF), an approach to raise and align all financing with sustainable development. A key component of the INFF should be creating a holistic SDG Financing

[294] Satbayeva, A. (2024) The size of Kazakhstan's public debt has been announced. https://shorturl.at/1quD9

[295] LSM (2024) Нацфонд недосчитался $18,5 млрд — депутат. https://lsm.kz/nacfond-ne-doschitalsya-18-5-mlrd — peruashev

[296] The recommendations is based on the report on Kazakhstan Development Finance Assessment by Asian Development Bank (2021) https://shorturl.at/KgEi7

Strategy to increase the efficiency and effectiveness of public spending and mobilise additional financing for the SDGs.

The Public Finance Review on Kazakhstan, published by the World Bank in 2023,provides insight into mainstreaming climate change and the gender agenda within public budgeting[297]. Kazakhstan has made some progress in addressing climate change and promoting green growth, such as incorporating climate change-related actions in its National Development Plan 2029, establishing the AIFC[298] Green Finance Centre to develop green finance policy and instruments, and adopting a taxonomy of green projects for financing through green bonds and loans[299]. However, Kazakhstan lacks tools to identify green budgeting throughout the budget planning process, limiting the ability to measure both green budget allocations and their impact. Integrating the climate agenda into the budget cycle is essential to strengthen climate-responsive and green growth. Similarly, while Kazakhstan has taken steps to promote gender priorities, it lacks an integrated and systematic approach to gender budgeting to achieve gender equality objectives.

As an upper-middle-income country, Kazakhstan receives minimal Official Development Assistance. Although remittances are a minor source of development finance for Kazakhstan but play a crucial role in supporting remote and rural communities across the country. However, as labour migration flows and inward remittances continue to rise in the region, the diaspora could support Kazakhstan's sustainable development by investing in local businesses, sharing expertise and knowledge in key industries, fostering international partnerships, and contributing remittances directed toward community development and social infrastructure. Furthermore, most large domestic commercial companies in Kazakhstan, apart from multinational enterprises, are state-related, making it challenging to distinguish the quasi-state sector's contribution to commercial investment from that of the domestic private sector.

International Financial Institutions (IFIs) provide nonconcessional loans, technical assistance and policy guidance, helping Kazakhstan to crowd-in private sector finance to large-scale projects aligned with SDG priorities, such as improving access to quality education, healthcare, clean energy, resilient infrastructure. IFIs may also offer guarantees to mitigate financial and operational risks, ensuring private sector engagement in development projects and fostering public-private partnerships[300].

Several major IFIs operate in Kazakhstan, including the World Bank, Asian Development Bank, European Bank for Reconstruction and Development, Islamic Development Bank, the International Finance Cooperation, and Eurasian Development Bank. These multilateral development banks prioritise Environmental, Social and Governance (ESG) principles in their operations and financing to promote sustainable development. The role of national Development Bank of Kazakhstan in achieving the SDGs should not be underestimated. It should be encouraged to expand financing in segments underfunded by commercial banks, including sustainable infrastructure, energy, agriculture, industrialization, science, technology, and innovation[301].

Furthermore, Kazakhstan's financial system is relatively small with assets representing 63.5 per cent of GDP in 2022 and dominated by banks[302]. The 21 commercial banks account 67.6 per cent of the total financial system assets, primarily comprising loans and securities, while deposits make up more than 80 per cent of liabilities[303]. Bank credit stands at approximately 20 per cent of GDP, which is low both in absolute terms and compared to peer countries. As the primary providers of loans to business and individuals, commercial banks have a key role in driving the green transition by financing renewable energy projects, prioritising investment in sustainable technologies, managing risks associated with climate change, and developing new financial products. In this regard, the Central Bank can support commercial banks in transitioning toward sustainable finance by offering technical assistance and capacity building, further developing policy and regulatory frameworks, advancing green bond markets, and exploring blue bonds.

[297] World Bank (2023) Kazakhstan: strengthening public finance for inclusive and resilient growth. Public Finance Review.

[298] Kazakhstan launched the Astana International Financial Centre (AIFC) in 2018 to attract foreign investment. Although it represents a small portion of the GDP (0.6 per cent at the end of 2023 Q1), it has ambitious growth plans. There is a separate regulatory and legal framework for the Astana International Financial Centre, and it has its own dedicated regulator, the Astana Financial Services Authority.

[299] Resolution of the Government of the Republic of Kazakhstan. (2021). *On the approval of the classification (taxonomy) of «green» projects to be financed through «green» bonds and «green» loans*. Resolution No. 996. Dated Dec 31, 2021.

[300] Asian Development Bank (2021) Kazakhstan Development Finance Assessment. https://shorturl.at/KgEi7

[301] Main Comitttee 2015. Outcome document of the third international conference on financing for development: Addis Ababa Action Agenda, UN.

[302] International Monetary Fund (2024) Republic of Kazakhstan: Financial System Stability Assessment. https://shorturl.at/W6ENx

[303] ibid

6. STAKEHOLDER/ PARTNERSHIP ANALYSIS

The success of the 2030 Agenda depends on active, meaningful participation from diverse stakeholders. UN assistance to Kazakhstan relies on collaboration with partners. This collective effort includes all residents of Kazakhstan, government institutions at all levels, CSOs, private sector entities, bilateral and multilateral donors, academia, and international financial institutions. Each stakeholder plays a crucial role in advancing rights-based policies, fostering sustainable development, and supporting vulnerable groups at risk of being overlooked or left behind.

The Government of Kazakhstan stands as a pivotal partner for the UN, playing a key role in advancing human development priorities and the 2030 Agenda. National ownership and government-led leadership are indispensable for the success of these initiatives. The robust collaboration between the Government and the UN is reflected not only in the UN support to the Government but also in the significant financial contributions made by the Government, making it one of the largest enablers of UN programming in Kazakhstan. The National Vision on Sustainable Development section of this CCA highlights the country's commitment to the SDGs and initiatives undertaken in collaboration with the UNCT.

The UNCT in Kazakhstan is committed to fostering the active participation of CSOs in policymaking, planning, and SDG implementation. With 23,335 registered CSOs in Kazakhstan — each with unique thematic scopes, geographical coverage, financial standing, and size — the UNCT recognizes the need for inclusive engagement. Collaboration with civil society occurs through four primary avenues: i) contributing to the strategic planning of UN initiatives such as CF and Country Programme Documents; ii) forming policy partnerships; iii) engaging in advocacy efforts, and iv) involving CSOs in programme and project implementation.

This multifaceted engagement underscores the UNCT's commitment to leverage the strengths and perspectives of civil society for a more impactful approach to sustainable development in Kazakhstan. For instance, in 2023 the UNCT held a dynamic dialogue with over 50 CSOs. The objective was to strengthen collaboration and collectively formulate recommendations to accelerate the SDGs through six SDG transitions. In addition, the UNCT adopted the Civil Society Pledge [Plan of Action], a set of joint civil society initiatives and commitments that go beyond the daily engagement of Agencies with civil society. The UNCT also nominated the Partnerships Officer of the Resident Coordinator Office as the focal point for civil society engagement and liaison between the Secretariat and the UNCT.

The UNCT prioritizes collaboration with the private sector to advance the SDGs and recognizes its crucial role in economic growth, innovation, and social impact. This collaboration included joint events with the UN Global Compact (Global Compact) and the establishment of an inter-agency group for private sector cooperation. For example, in 2023 two workshops were hosted in Astana and Almaty to inform the business community about the SDGs and the Global Compact. Cooperation with the Global Compact has been exemplary, with the number of Global Compact members in Kazakhstan increasing from 7 to 58 since 2023. The launch of the Multi-Country Advisory Committee for the Central Asian region and the introduction of the SDG Ambition Accelerator for Central Asia were significant milestones, showcasing strong private sector engagement. More joint initiatives are ongoing, including consultations for the new CF for 2026-2030. The success of such initiatives underscores the commitment and enthusiasm within the private sector to integrate the SDGs into corporate strategies and operations.

Furthermore, the UNCT has prioritized partnerships with academia to advance sustainable development through fostering collaboration in research, joint events, and student engagement. Key initiatives include Model UN programs at universities such as Al-Farabi Kazakh National University, Maqsut Narikbayev University, and Nazarbayev University; events like the Summit of the Future, Women in Diplomacy campaigns;

and supporting the creation of sustainable development centers at Satbayev University and AlmaU. Kazakhstan has a wide UN-Academia network under the UNAI (United Nations Academic Impact) and auspices of the UN in Kazakhstan, comprising over 30 leading institutions that promote the UN's agendas at various levels. The al-Farabi Kazakh National University in Almaty serves as the UNAI Global Hub for Sustainability. Additionally, the UN Discussion Club in Almaty meets weekly to exchange views on UN-related topics. Academia is actively involved in all UN initiatives, including developing the new Cooperation Framework for 2026-2030 and the strategic prioritization retreat.

In 2023, the total expenditures of UN Agencies in Kazakhstan reached nearly USD 33.4 million: 23 per cent represented core-funding and 77 per cent non-core funding. Most non-core funding was mobilized from other sources (45 per cent), including the GEF, Hungary, Japan, Korea, Russia, Finland, Sweden, Italy, Türkiye, the Government of Kazakhstan (25 per cent), the EU (17 per cent), and the United States (13 per cent). While the Government remains the largest contributor to the UN, factors such as the country's upper-middle-income status, declining core resources, and fluctuating government cost-sharing have increased the need for innovative and diversified resource portfolios. Both the UN and the Government emphasize the need to diversify resources and partners, especially from the private sector, to implement current strategic frameworks, including the SDGs and Agenda 2030 priorities in the Cooperation Framework.

Citizens of Kazakhstan actively engage in volunteering to contribute to SDG achievement. According to estimates from the Ministry of Information and Culture of Kazakhstan and the National Volunteer Network, approximately 240,000 people volunteer in various areas[304]. These include providing health and education services, offering humanitarian and social support during emergencies and difficult circumstances, participating in search and rescue operations for missing people, and creating inclusive opportunities for adults and children living with disabilities. Volunteers also collaborate with government entities. For example, the Agency on Corruption Prevention of the Republic of Kazakhstan reported that in 2023, anti-corruption volunteers helped save hundreds of millions of tenge from state budget funds by identifying price increases during the procurement of goods and services by public and government organizations[305].

[304] Karavan (2023) 'Kazakhstan is turning into a nation of volunteers' — Minister of Culture and Information Aida Balayeva. https://shorturl.at/HAOd6

[305] Agency of the Republic of Kazakhstan for Combating Corruption (2023) How do Anticor volunteers help fight corruption? https://shorturl.at/QI7If

7. SPECA REGIONAL CHAPTER

Launched in 1998, the UN Special Programme for the Economics of Central Asia was established to promote subregional cooperation and integration into the world economy. The total population of SPECA-participating States (Afghanistan, Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan) increased from 83 to 132 million between 2000 and 2023, while its GDP grew over tenfold during this period — from USD 46 billion to USD 525 billion[306].

The 2024 SPECA Heads of State and Government Summit called for further deepening of economic cooperation and regional integration, with commitments to improve connectivity, harness digital transformation and support green transition. The establishment of the SPECA Multi-Partner Trust Fund aims to collectively address bottlenecks in trade, energy, cross-border investments, and transport. This chapter explores issues that affect SPECA participating States simultaneously, with a focus on trade and investment, transport connectivity, energy connectivity and transboundary water management and highlights opportunities for greater cooperation to promote sustainable economic transformation.

7.1 Trade and investment

While total trade flows of SPECA participating States stood at approximately USD 269.7 billion in 2022[307], intra-SPECA trade amounted to only USD 24.5 billion, or 9.1 per cent of the total trade volume. Despite a gradual increase from 8.2 per cent in 2018, these figures remain modest compared to other economic regions[308], thus highlighting untapped potential. As below figures show Kazakhstan emerges as a major trade partner, accounting for around 50 per cent of the region's total trade volumes, but its trade integration within SPECA is below the regional average with only 8.3 per cent of its exports and 4.7 per cent of its imports intra-SPECA.

Azerbaijan contributes 25 per cent to regional exports, yet only 0.5 per cent of these exports are directed towards SPECA participating States. In contrast, Tajikistan and Kyrgyzstan, despite very modest trade volumes, show strong reliance on regional partners.

At the commodity level, intra-SPECA trade flows[309] underscore the dominance of natural resources and primary sectors. Cereals are the top traded commodity, while other agricultural products include vegetables, fruits, and animal or vegetable fats and oils. The region's wealth in hydrocarbons and raw materials is reflected in the concentration of trade in petroleum, metalliferous ores, gas, metals and minerals (Figures 28 and 29). With the concentration of trade in natural resources and primary commodities, the potential for developing more complex value chains within SPECA remains largely untapped. By building upon the agricultural sector, there is an opportunity to advance the trade of processed food. Similarly, the textile and garments subsector could lead to the trade of goods along more complex value chains.

[306] The World Bank DataBank — World Development Indicators https://databank.worldbank.org/home.aspx

[307] UN Comtrade Database https://comtradeplus.un.org/TradeFlow Most recent data on Afghanistan (2019) is not included in the analysis. However, SPECA trade with Afghanistan is included. For Turkmenistan, national statistics for the year 2022 are reported.

[308] The intra-EU28 trade accounts for 61 per cent of the total trade, while intra-regional trade in East Asia and ASEAN accounts for 28 per cent and 23 per cent of the total for the region, respectively. Source: UN Comtrade Database https://comtradeplus.un.org/TradeFlow

[309] UN Comtrade Database https://comtradeplus.un.org/TradeFlow. For Turkmenistan, 2022 national statistics are reported, which do not include commodity-level data. This implies the SPECA trade balance does not add up, especially at the commodity level, where for example Petroleum is the 2nd most imported commodity within SPECA (USD 1,192,017,052 or 11 per cent of the TOT M) but only the 8th most exported one (USD 402,623,289 or 3 per cent of TOT X) due to the sizeable imports from Turkmenistan not recorded among the exports.

Figure 26 SPECA Exports, 2022

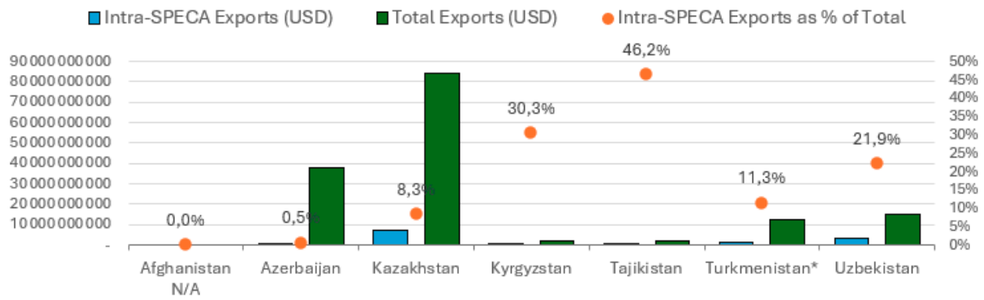
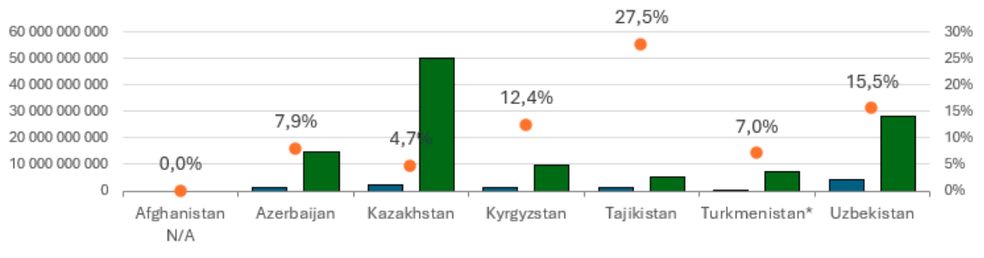
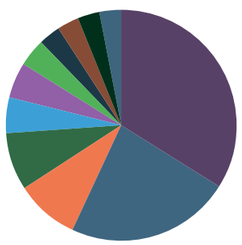


Figure 27 SPECA Imports, 2022



Source: UNCOMTRADE, national statistical agencies

Figure 28 Top-10 Intra-SPECA Exports, 2022



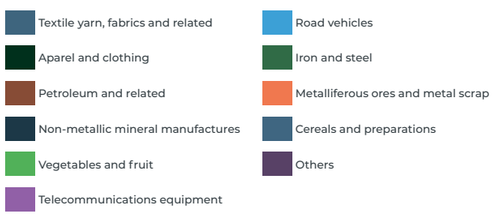
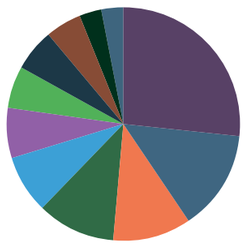
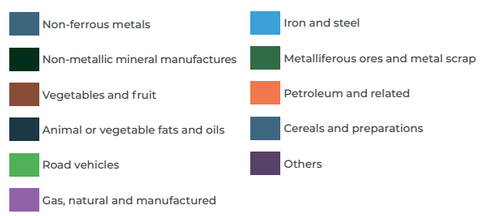


Figure 29 Top-10 Intra-SPECA Imports, 2022





Source: UNCOMTRADE, national statistical agencies

Addressing underlying root causes is essential for economic diversification and to increase the value of intra-SPECA flows. Historically, SPECA participating States opted for competition rather than economic integration, prioritizing trade with large economies. The total manufacturing value added (MVA) as a proportion of GDP in SPECA participating States dropped from 15 per cent in 2000 to 9.5 per cent in 2023, reflecting structural shifts in SPECA economies despite a doubling MVA per capita[310]. This decline in the MVA as percentage of GDP, coupled with insufficient investments in infrastructure and technology, limited the growth of advanced manufacturing and processing industries, crucial for a diversified trade portfolio in the region. Despite these challenges, recent studies indicate a unique trend: Central Asia leads with a 48 per cent infrastructure development rate. It lags, however, in industrial performance and innovation, underscoring the need for SPECA states to prioritize enhancements in technological and creative capacities[311].

While improving trade facilitation continues to be a significant challenge for the primarily landlocked SPECA participating States, new opportunities and challenges have emerged[312]. In response to geographical limitations, countries are prioritizing the digitalization of customs procedures to enable effective integration into global value chains[313]. Existing tariff and non-tariff barriers — such as complex customs procedures, inconsistent documentation, and tariff regimes — create significant delays and high transaction costs.

Countries in the region face considerable problems related to dysfunctional sanitary (animals) and phytosanitary (plants) systems and a lack of coordination between border controls that creates vulnerability to transboundary pests and diseases and constrains the potential of Central Asian nations to expand agri-food trade.

Trade is also hampered by the uneven adoption of digital and sustainable trade facilitation measures[314] and by insufficient implementation of paperless trade[315]– both of which remain below comparable economic regions. Furthermore, restrictions on the movement of people — such as the visa regimes of Turkmenistan, as well as complex import licensing procedures and varying standards and regulatory practices, including health and safety regulations — limit intra-SPECA trade in goods and services.

Migrants play a crucial role in international trade and exports. In the SPECA region there are 5.9 million international migrants while 14.8 million originating from this region live elsewhere. Additionally, 4.1 per cent of all migration movements occur within the SPECA region[316]. Remittances play a fundamental role in SPECA participating States, where 0.05 per cent of total SPECA GDP relies on inward remittances. At the same time, remittances make up 39.1 per cent of GDP in Tajikistan, 22.3 per cent in Kyrgyzstan, and 15.3 per cent in Uzbekistan — making them a significant income source in these countries[317].

[310] UNIDO Statistics Portal. https://shorturl.at/ESzuT

[311] UNIDO Industrial Development Report 2024. https://shorturl.at/EwtpH

[312] Recent limitations regarding the use of land and airspace of the Russian Federation, have necessitated adjustments to regional transport routes.

[313] UNIDO Statistics Portal. https://shorturl.at/S2tea

[314] A UN survey on Digital and Sustainable Trade Facilitation shows that while some countries have made strides in implementing digital customs systems and single window systems, adoption of technology for customs and border procedures is uneven across the region. In 2023, SPECA participating States have an average implementation rate of digital and sustainable trade facilitation measures of 66 per cent, with Azerbaijan and Uzbekistan leading with 87 per cent and 85 per cent, while Afghanistan, Tajikistan, and Turkmenistan lag behind with rates as low as 43 per cent.
See United Nations Global Survey on Digital and Sustainable Trade Facilitation 2023

[315] SPECA regional average has increased from 55 per cent to 60 per cent between 2021-2023 but remains 6 percentage points lower than the Asia-Pacific average, according to the United Nations Global Survey on Digital and Sustainable Trade Facilitation 2023.

[316] The main five destination countries were Russian Federation (38.5 per cent), followed by the Islam Republic of Iran (18.3 per cent), Pakistan (10.8 per cent), Germany (10.7 per cent) and Ukraine (4.2 per cent) (UNDESA 2021: https://www.un.org/development/desa/pd/content/international-migrant-stock)

[317] KNOMAD & World bank (2024) https://www.knomad.org/data/remittances, World bank (2022) Official Development Assistance and (2022) Foreign direct investment https://data.worldbank.org

Concerning the intra-regional investments in Central Asia, mutual Foreign direct and varying standards investment reached around USD 1.1 billion, with Kazakhstan (87 per cent) and Uzbekistan (13 per cent) as the main investors. Kyrgyzstan received 63 per cent of the mutual FDI, mostly in the extractive industry (31.7 per cent). Compared to other economic regions, intra-SPECA investments are limited [318] and mostly channelled into natural resources due to perceived lower risks, thereby hindering diversification into manufacturing and services. Issues like unclear investment protection concepts and risks from inconsistent legislative transparency remain, with states varying in their openness to foreign investment and maintaining monopolies in certain sectors [319].

Through joint ventures SPECA participating States can offer a large market and incentives for mutual FDI. Such investments require harmonizing regulatory and administrative procedures and further improving the business environment, as well as investment promotion strategies addressing barriers related to the size of business. An integrated market with movement of people, goods, services, and capital can mutually benefit SPECA participating States. To approach trade holistically, it is extremely important to incorporate the human mobility aspect to advance sustainable development [320]. For example, by extending trade agreements to include regulations on free movement of people, in turn countering irregular migration and protecting rights [321].

For a shift towards more intra-SPECA trade and investments in value chains, SPECA participating States must capitalize on existing strengths while addressing challenges through comprehensive reforms. Some key steps include improving infrastructure, liberalizing economic policies, and creating an investor-friendly environment. Regional cooperation and integration can open larger markets for manufactured goods, thus supporting complex industrial sectors.

Leveraging greener technologies and financing, sharing expertise and infrastructure costs, and developing regional agreements for sustainable projects can create favourable conditions. It is estimated that implementing Trade Facilitation Agreement measures, as outlined by the World Trade Organization, could reduce trade costs by 7 per cent, while digital trade facilitation measures could cut costs by over 15 per cent [322]. As underlined in the 2024 SPECA Joint Ministerial Statement [323], the promotion of e-commerce, cross-border paperless trade and power trade, the effective use of trade portals, and the establishment of direct contacts between relevant authorities, can boost regional trade turnover.

7.2 Transport connectivity

Transport connectivity is crucial for trade and economic growth in the SPECA region, but significant gaps remain and disparities in transport infrastructure quality and capacity are evident. Relative connectivity ranges from 53 per cent to 70 per cent of the connectivity achieved by the Netherlands, with Azerbaijan leading at 70 per cent followed by Turkmenistan (68 per cent); the lowest rates are in Tajikistan (53 per cent) and Kyrgyzstan (54 per cent) [324]. These gaps result from uneven development focus, with investment decisions influenced by national interests rather than by comprehensive regional strategies.

Road networks are underdeveloped, especially in rugged terrain like Kyrgyzstan and Tajikistan. Even in areas with better infrastructure and extensive networks, such as in Uzbekistan and Kazakhstan, road quality and maintenance are a major obstacle to efficient and safe transport. Outdated design and construction standards inherited from the USSR, inadequate design axle load and severe climatic conditions lead to much faster deterioration of roads than maintenance can be carried out. Urgent changes are also needed to improve the national road safety system to significantly reduce the number of road deaths and injuries. Updates could be done by accession to, and efficient implementation of, core Road Safety UN Legal Instruments.

Kazakhstan and Uzbekistan have relatively extensive rail networks, critical for their connectivity to both Europe and Asia, but face capacity limitations due to insufficient tracks and outdated logistical handling facilities — a situation that leads to bottlenecks, especially at border crossings. Turkmenistan and Tajikistan, on the other hand, struggle with outdated rail technology and insufficient service frequencies.

Seaports in Azerbaijan, Kazakhstan, and Turkmenistan — such as Baku/Alat, Aktau and Turkmenbashi — are crucial for trade along the Caspian Sea but require modernization and better integration with rail and road networks to improve handling capacities. Notably, both Baku/Alat and Aktau have expansion plans in place, and the port of Alat has recently been modernized, including its rail and road connections, to significantly expand capacity. However, most other seaports remain underutilized due to infrastructure gaps, underdeveloped intermodal transport hubs, regulatory barriers, a limited number of vessels and irregular shipment schedules in the Caspian Sea, thus rendering them costly and uncompetitive compared to alternative routes. This is due chiefly to administrative inefficiencies, lack of modernization, and insufficient regional planning.

Enhancing the multimodal interoperability of cargo information exchange along corridors and with neighbouring regions is needed. As envisaged in the SPECA Roadmap for the Digitalization of Multimodal Data and Document Exchange along the Trans-Caspian Transport Corridor, the use of tools for digitalization of transport services (e. g., eTIR, eCMR) and common semantic standards (UN/CEFACT) is recommended to better harmonize the procedures [325].

Despite the advancements, fragmented adoption of digital technology hampers regional efficiency and affects both the speed and costs of cross-border movements [326]. Contributing factors include the absence of advance cargo information systems and customs-to-customs cooperation, a non-unified regulatory regime for cross-border shipments by rail, limited IT infrastructure, lack of technical expertise, absence of integration among national agencies at the border and with their counterparts across the international border, and insufficient governmental support. Indeed, harmonization of transport documents and customs procedures across SPECA participating States remains fragmented, which complicates cross-border transportation and creates barriers to effective regional integration.

[318] Intra-ASEAN investments, for example, account for 17 per cent of total FDI. https://unctad.org/publication/asean-investment-report-2021

[319] BITs in Central Asia: Opportunities and Risks, The American Review of International Arbitration, Columbia Law School. https://shorturl.at/B0aH8

[320] IOM (2023) Quantifying the role of migration in sustainable development. https://shorturl.at/HOvIE

[321] Global Compact for Migration (2018) Objectives 18 and 19

[322] ESCAP & UNECE (2023) Digital and Sustainable Trade Facilitation in the United Nations Special Programme for Economies of Central Asia

[323] Joint Ministerial Statement of Ministers/Heads of Delegations of the United Nations Special Programme for the Economies of Central Asia (SPECA) participating States gathered in Bangkok on 23 April 2024 on the sidelines of the 80th session of the UNESCAP for a high-level dialogue with the heads of the UN regional commissions and heads of international organizations.

[324] ITF (2022) ITF North and Central Asia Transport Outlook, International Transport Forum Policy Papers, No. 105, OECD Publishing, Paris

[325] Common semantic standards and Multimodal Transport Reference Model offered by the UN Centre for Trade Facilitation and Electronic Business (UN/CEFACT) should be used as the basis, as envisaged in the SPECA Roadmap for the Digitalization of Multimodal Data and Document Exchange along the Trans-Caspian Transport Corridor, which was adopted by the Presidents of the SPECA participating States on 24 November 2023, at their summit in Baku. See: https://unece.org/speca/speca-digitalization-roadmap

[326] Azerbaijan is connected with eTIR International and NCTS, Uzbekistan is connected with eTIR and has developed its own system, the etransit, which digitalized fully all customs processes, while Kazakhstan, Kyrgyzstan and Tajikistan are working with the UN to interconnect with eTIR and have their own customs systems and automations. Notably, SPECA customs authorities signed an agreement to develop a common transit system.

These discrepancies are often rooted in differing national legislative priorities and the absence of a common regional framework to oversee and coordinate trade and transport procedural standards, as well as the lack of a unified regional transport policy that leads to unoptimized resource allocation. The existing UN transport infrastructure agreements and regional commissions and committees serve as frameworks for harmonization efforts on rail and road transport and better coordination in operationalization of the Trans-Caspian corridor.

A cohesive strategy is needed, however, to unify these efforts under a regional agenda. There are some efforts to coordinate interoperability of transport corridors, such as the Coordination Committee on the Trans-Caspian and Almaty-Tehran-Istanbul Corridors; however, their effectiveness needs further assessment.

Lastly, the Middle or Trans-Caspian Corridor has the potential to improve connectivity between Europe and Asia through SPECA participating States. While traffic along this corridor has tripled since it started operating in 2017, and increased 2.5-fold in 2023, cargo volumes are still marginal compared with the primary overland route, which is the Northern Corridor via the Trans-Siberian railway[327]. The Trans-Caspian Corridor is considered the second-best overland option but is constrained by the issues listed above. Should it become the preferred new route, the existing Caspian Sea infrastructure may become a bottleneck.

7.3 Energy connectivity and transboundary water management

SPECA participating States have significant energy production capacities due to vast reserves of coal, oil, natural gas, and hydropower resources. Energy resources are unevenly distributed, however, leading to varied power generation structures. Kazakhstan (12th in proven oil reserves)[328], Azerbaijan, Uzbekistan, and Turkmenistan (4th in proven natural gas reserves)[329] rely on hydrocarbons, while Kyrgyzstan (55 TWh/year) and Tajikistan (264 TWh/year) depend heavily on hydropower given their river systems and mountainous terrain. In Soviet times, the power systems of South Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan were part of the United Power System of Central Asia (UES CA), which enhanced operational reliability.

This integrated UES CA system managed energy and water needs collectively[330], minimizing fuel prices and power losses while coordinating irrigation and energy supplies, thus ensuring efficient resource management across borders[331]. After the dissolution of the USSR, centralized funding for UES CA operations stopped, disrupting this regime and causing energy shortages and environmental issues.

To overcome these challenges, the Central Asian states signed the Agreement on Parallel Operation of Power Systems in 1991 and established the jointly financed Unified Dispatch Office of Central Asian Power Systems. Kazakhstan, Kyrgyzstan, and Uzbekistan maintain interconnected electricity grids, supporting mutual electricity trade and enhancing grid stability. Turkmenistan operates its energy system with Iran, having exited the UES in 2003. Tajikistan, after a period of isolation due to non-compliance with operational standards, is anticipated to rejoin the UES CA in 2024.

SPECA participating States increasingly focus on low- and zero-carbon energy sources to reduce emissions and transition to sustainable energy systems. Azerbaijan aims to generate 30 per cent of its electricity from renewable sources by 2030, while Kazakhstan plans to achieve carbon neutrality by 2060. Kyrgyzstan and Tajikistan are expanding their hydropower capacities and exploring other RE sources, such as solar and wind. Uzbekistan is investing in solar energy projects and improving the efficiency of its natural gas-fired power plants.

To meet growing electricity consumption, extensive construction of generating capacities and power grids is required at both national and regional levels. Geographically long transmission distances and uneven load distribution in the UES CA might cause stability issues and equipment overloading.

A Centralised Emergency Control System is needed to manage emergency disturbances and maintain system stability[332]. Additionally, to manage imbalanced capacity due to a rising share of RE and increasing consumption, a centralized system for automatic frequency and power control should be established. Azerbaijan, Kazakhstan and Uzbekistan have signed a Memorandum of Understanding on Merging Energy Systems to catalyse the production and export of green energy to Europe through Azerbaijan, integrate energy systems and effectively utilize renewable resources[333].

Water resources are critical for the economic development of Central Asia, agri-food production, and energy production. Agriculture accounts for 80 per cent of water consumption in Central Asia[334], and often depends on outdated and inefficient irrigation practices that exacerbate water loss. Water use is highly inefficient in all countries of the SPECA region, with water stress exceeding 100 per cent in Turkmenistan and Uzbekistan (Table 4)[335].

Table 4 Water use efficiency and water stress in SPECA participating countries, 2021

Country	SDG 6.4.1 Water Use Efficiency, USD/km2	SDG 6.4.2 Water Stress,%
Azerbaijan	4	57
Kazakhstan	8	34.1
Kyrgyzstan	0.88	50.04
Tajikistan	1	70
Turkmenistan	2	135
Uzbekistan	2	121.5

Source: SDG Indicators Data Portal, FAO

[327] According to the Eurasian Rail Alliance Index, transported volumes between EU hubs and China via the Northern Corridor fell 31.9 per cent in 2022 (from 618,180 TEUs in 2021 to 386,374 in 2022). EBRD (2023), Sustainable Transport Connections between Europe and Central Asia

[328] IEA (2020) Kazakhstan energy profile, IEA, Paris https://www.iea.org/reports/kazakhstan-energy-profile, Licence: CC BY 4.0.

[329] Carpenter, C. (2023) Turkmenistan to develop pipeline to export gas to Europe: president https://shorturl.at/C8xD1

[330] Vinokurov, E., Ahunbaev, A., Usmanov, N., Tsukarev, T., Sarsembekov, T. (2021) Investment in the Water and Energy Complex of Central Asia. Reports and Working Papers 21/3. Almaty, Moscow: Eurasian Development Bank

[331] For instance, during summer irrigation, electricity from the Naryn and Vakhsh HPP Cascades was given to neighbouring republics, while Kyrgyzstan and Tajikistan received fuel and electricity for thermal plants from Soviet reserves in autumn and winter.

[332] Software and hardware complex providing automatic preservation of power system operation Energy Connectivity in Central Asia | UNECE

[333] Report.az (2024) Azerbaijan, Kazakhstan and Uzbekistan sign MoU on merging energy systems. https://shorturl.at/6kpf1

[334] FAO (2024) AQUASTAT — FAO's Global Information System on Water and Agriculture. https://www.fao.org/aquastat/en/

[335] The UN-Water SDG 6 Data Portal. https://www.sdg6data.org/en/node/1

The transboundary nature of water creates dependence and potential for conflict. Upstream countries like Kyrgyzstan and Tajikistan have significant water resources due to their mountainous terrain, and account for almost all water resources in Central Asia. Downstream countries, like Azerbaijan, Kazakhstan, Turkmenistan, and Uzbekistan, depend heavily on these flows. This geographic disparity has been a source of tension, particularly during droughts or water allocation disputes.

The situation is further compounded by the fast population growth in Uzbekistan and Tajikistan, as well as the looming threat of climate change. Rising temperatures and the retreat of glaciers, particularly in the Pamir Mountains, are projected to significantly reduce water availability in the coming decades; average river flows in Central Asia are expected to decrease by 10 to 20 per cent by 2050[336]. Furthermore, in 2022 Afghanistan started the construction of the Qush-Tepa canal. As a result, water availability in the Amu Darya basin in Uzbekistan is expected to decrease by 30 per cent by 2030, and land area under cultivation may decrease by 19 per cent. The estimated impact would be equal to 0.7 per cent of the GDP of Uzbekistan, and about 250,000 jobs could be lost in crop production.

Climate change is expected to worsen the uneven distribution of Central Asia's water resources, making them more seasonal and geographically variable. Regional water models often have uncertainties, resulting in missed opportunities, especially in areas needing coordination with neighbouring countries over shared water resources, and therefore require regional-scale modelling.

Optimal infrastructure investments urgently require enhanced data availability and improved biophysical system modelling capacity. The development of advanced, transparent modelling and monitoring tools will enable more precise infrastructure planning and irrigation development. New technologies, such as enhanced remote sensing, offer opportunities to improve water and meteorological modelling systems, addressing changing availability and competing demands for water.

The institutional framework to manage transboundary water resources is considered inadequate. Agreements like the 1992 Almaty Framework Agreement[337] provide a foundation for cooperation, but progress is hindered by a lack of comprehensive dialogue and a focus on water in isolation from energy and agriculture. The International Fund for Saving the Aral Sea[338] has facilitated regional water management discussions since 1993, but its effectiveness is limited by resources, the non-participation of Kyrgyzstan[339], and a lack of enforcement levers.

Despite these challenges, opportunities for regional collaboration exist, as countries share a recognition of their interdependence on water resources. The Dushanbe Water Process, launched by Tajikistan in 2016, serves as a platform for dialogue on water cooperation. International actors like the UN and the World Bank can promote dialogue, support innovative water management practices, and encourage the integration of a «nexus approach» that acknowledges the interconnectedness of water, energy, and agriculture. Local ownership and participation in water governance, particularly by women who play a central role in water management at the household level, are also crucial for long-term stability.

[336] Intergovernmental Panel on Climate Change (IPCC). https://www.ipcc.ch/

[337] Almaty Framework Agreement on the Use of Water and Energy Resources of Interstate Sources, established by the five Central Asian states. http://www.cawater-info.net/library/eng/l/ca_cooperation.pdf

[338] Agency of IFAS. https://aral.uz/en/about/

[339] NewsCentralAsia (2023) Kyrgyzstan Eyes IFAS Return, But Only If All Countries' Interests Are Considered Equally. https://shorturl.at/VfOfA

CONCLUSION

Kazakhstan demonstrates a high commitment to accelerating progress towards the SDGs and has implemented numerous important and necessary reforms to advance their achievement. However, substantial challenges remain across 13 SDGs, particularly in areas such as environmental resilience, clean energy access, and inclusive and innovative economic development, which highlight the need for further strategic interventions, targeted policies, and stakeholder engagement.

The LNOB analysis highlights the critical challenges faced by various vulnerable groups in Kazakhstan, underscoring the need for targeted interventions to address these systemic inequalities. A key insight from this analysis is that discrimination, geographical isolation, socioeconomic vulnerabilities, and gaps in governance and social protection create multiple levels of deprivation. Vulnerable groups — including GBV and domestic violence survivors, persons with disabilities, vulnerable children and youth, older persons, people living with HIV, refugees, asylum-seekers, stateless persons, and migrants —often experience multiple forms of discrimination and deprivation of basic rights and services, such as limited access to healthcare, education, and employment opportunities, which are exacerbated by insufficient policy frameworks and lack of infrastructure.

It is important to note that all SDGs are deeply interconnected — actions taken to achieve one goal can often advance others. Therefore, an integrated policy approach is essential to achieve the SDGs, one that carefully navigates the synergies and trade-offs involved in any given action. Based on an analysis of Kazakhstan's specific socio-economic challenges and priorities in alignment with the SDGs, the following seven strategic entry points, or key transitions, were identified for their catalytic and multiplier effects across the SDGs.

Inclusive economic diversification

Kazakhstan's reliance on the oil and gas sector poses significant challenges to achieving inclusive economic diversification, a crucial step for sustainable development aligned with the SDGs. Addressing these challenges involves focusing on knowledge-intensive industries like digital technologies, advanced manufacturing, and biotechnology, which require quality education, training, and support for innovation. Small and medium-sized enterprises (SMEs) play a vital role, promoting employment, especially for youth and women, and reducing regional disparities along with strengthening local governance. By engaging with the Kazakh diaspora, Kazakhstan can attract new expertise and investments, thereby furthering its economic diversification goals. Transparent and inclusive budget processes, along with women's active political participation, are essential to reducing corruption and creating equitable and representative policies. Additionally, adopting progressive taxation could help reduce income inequality and support social cohesion.

Agri-food systems

Kazakhstan's transition to a sustainable agri-food system is essential for achieving food security, reducing hunger, improving rural livelihoods, and protecting the environment. The current focus on self-sufficiency in food security limits progress towards internationally recognized pillars of access, availability, and utilization. Significant gaps in data on the environmental impacts and gender dynamics within agriculture restrict the design of inclusive policies that could empower women and smallholder farmers. While Kazakhstan's agriculture sector has seen substantial growth — with agricultural value addition increasing by over 400 per cent since 1988-absolute levels remain low compared to other sectors. Diversifying through agrotourism, aquaculture, geographical indications, and quality assurance could increase resilience, but bottlenecks in logistics, connectivity, market access, modern storage and post-harvest processing must be addressed to unlock this potential. Although Kazakhstan ranks relatively high in global food security, high food prices and rising inflation expose significant affordability issues, with a large portion of household spending directed towards food. Rising obesity rates and nutrient deficiencies — affecting especially women and children — indicate a lack of nutrition awareness and imbalances in diet quality and food consumption patterns. By incentivizing Hazard Analysis and Critical Control Points use, increasing the number of trained inspectors, expanding the network of accredited laboratories, and modernizing food safety regulations, Kazakhstan can strengthen its food safety infrastructure. Training and capacity-building initiatives are also crucial for building skilled human capital and supporting small to medium-sized farms, often overlooked despite their significant contributions to agriculture.

Clean energy access and affordability

Kazakhstan's focus on clean, affordable energy is crucial for sustainable development and achieving goals related to clean energy, climate action, and public health. Coal-based heating and cooking contribute significantly to air pollution, especially affecting low-income and rural households. Women in rural areas face significant disadvantages, with a third of households relying on coal for cooking, which leads to indoor air pollution[340]. While the Kazakhstan 2050 Strategy sets a national goal of 50 per cent renewable and alternative energy by 2050, the green energy transition continues to lack alignment with subnational and sectoral strategies, especially energy pricing policies. Furthermore, reducing the overall energy intensity of the economy, particularly in the industrial and building sectors, is a key task for Kazakhstan. To reach a 12.5 per cent renewable energy share by 2029, Kazakhstan needs to invest in infrastructure for solar, wind, and hydro power, implement competitive auctions to attract investment, and modernize the grid to handle renewable sources. Additionally, updating aging thermal power systems through new technologies and diversified funding sources will enhance energy security, reduce pollution, and advance Kazakhstan's transition toward a sustainable energy system.

Human rights, justice and social cohesion

Kazakhstan's journey toward sustainable development is deeply intertwined with the protection and promotion of human rights, particularly in the areas of justice and rule of law, social cohesion, and equality and non-discrimination as well as economic, social and cultural rights. Currently, limited institutional capacity and accountability for grave crimes, such as torture and ill-treatment, undermines the rule of law, perpetuates human rights abuses and erodes public trust in institutions. Women, refugees, stateless persons, persons living with disabilities, people living with HIV, LGBTIQ+ individuals, and low-income populations — especially in rural areas — are disproportionately affected by these deficiencies, with limited access to justice. The freedoms of expression, opinion, and peaceful assembly have been limited in light of recent legislation restricting the full exercise of these rights, particularly for human rights defenders and independent media professionals. Protection of these freedoms allows individuals to voice their concerns, participate in decision-making processes, and hold the State accountable. Promoting social cohesion is essential for peace and stability in Kazakhstan's diverse society, especially with regard to linguistic divides that impact social unity and youth.

[340] Zoï Environment Network (2020) Women, food and climate change in Central Asia. https://zoinet.org/product/women-food-climate-ca/

Digital transformation

Digital transformation is a critical enabler for advancing SDGs in Kazakhstan, as data and digital technologies able to impact 70 per cent of SDG targets. To harness this potential, Kazakhstan must enhance digital literacy and skills across all population groups, particularly among vulnerable groups by developing and implementing educational programs to ensure inclusive access to digital tools and resources. Collaboration with educational institutions is key to integrating digital skills into curricula, with a strong emphasis on STEM education for women and girls to close the gender gap. Expanding digital infrastructure, particularly high-speed Internet in rural areas, will bridge the urban-rural divide and drive economic development. Public-private partnerships are essential for funding and implementing accessible Internet and cybersecurity projects, supporting a robust digital foundation. Additionally, fostering digital entrepreneurship and innovation through supportive policies and venture financing will drive technological advancements. Finally, strong data governance, privacy protections, and cross-sector collaboration will maximize the benefits of digital transformation.

Quality education

Ensuring universal access to early childhood education is the key to preventing and reversing inter-generational inequalities and it is one of the most important investments for improving educational outcomes. Ensuring access to quality education for children with disabilities is also a top priority. This encompasses developing inclusive education frameworks, providing necessary resources, and creating supportive learning environments. Supporting learners' nutritional, physical, and mental health is also important. Furthermore, efforts should focus on enhancing the capacity and autonomy of teachers to design, interpret and manage the curriculum as well as adapt and prioritize content and pedagogy. Teaching at TVET and higher education institutions should reflect the needs of the market. Addressing the teacher shortage is crucial, requiring attractive working conditions, strengthening the status of teachers, attracting younger generations to the field, and providing continuous professional development. Teachers should be more involved in educational policy formulation, ensuring their voices contribute to curricular and pedagogical transformations. Finally, harnessing the digital revolution is essential for transforming education in Kazakhstan. This requires unlocking three «keys» of digital learning: connectivity, capacities, and content.

Climate change, biodiversity loss and pollution

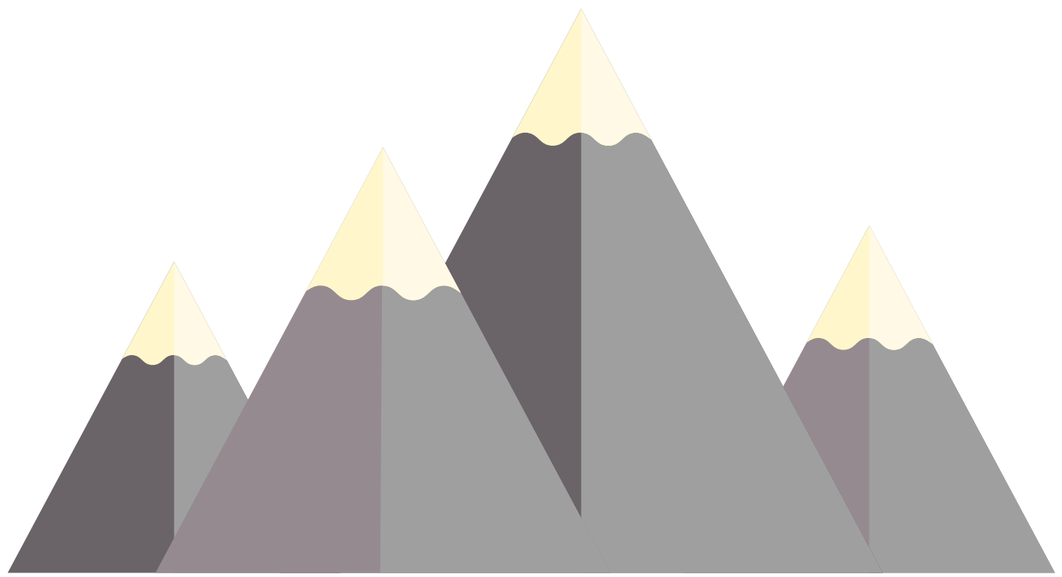
Kazakhstan faces critical challenges from climate change, biodiversity loss, and pollution, which are tightly connected to broader issues of water scarcity, air quality, and waste management. Addressing these issues is essential for sustainable development and achieving key SDGs related to health, clean water, and environmental protection. Climate change increases vulnerabilities, making resilient infrastructure and comprehensive DRR strategies urgent priorities. Strengthening cross-sectorial cooperation and risk-informed policy making are essential for significant progress in building disaster resilience at national and local levels. Embedding DRR principles into national planning and investment strategies should be aligned with internationally recognized frameworks, notably the Sendai Framework for Disaster

Risk Reduction 2015-2030, which advocates for principles «Build Back Better» and «Leave no one behind». Water security, a complex issue due to reliance on transboundary rivers, requires improvements in irrigation, wastewater treatment, and sustainable agricultural practices. Industrial activities contribute significantly to air and water pollution, calling for stricter emissions standards and modernization of thermal power plants. Unsustainable agricultural practices further degrade soil and water resources, requiring more diversified and eco-friendly approaches. Additionally, Kazakhstan's biodiversity is at risk, necessitating ecosystem restoration, expanded protected areas, and biodiversity conservation programs.

These seven entry points are in line with the five policy priorities for Kazakhstan identified by ESCAP (education, economic diversification, climate change and energy, digital transformation, and financing sustainable development) and with findings from the SDG interlinkages exercise (2.4 Sustainable food production systems; 4.4 Skills for employment; 7.2 Renewable energy; and 10.4 Policies for greater equality). These entry points are linked to state priorities as articulated in key documents, including Kazakhstan 2050 Strategy, the National Development Plan of the Republic of Kazakhstan until 2029, and the Strategy for Achieving Carbon Neutrality by 2060.

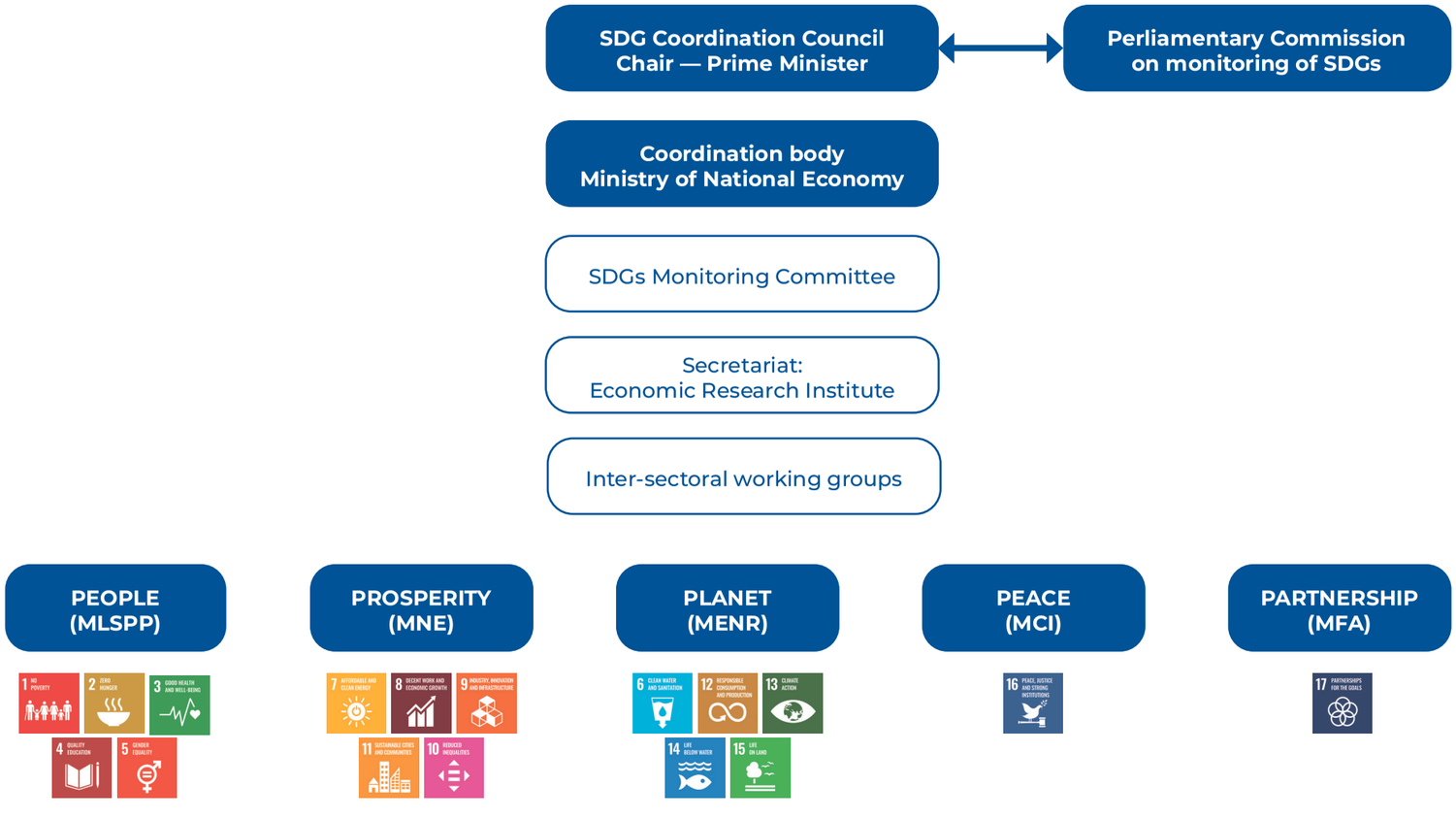
These seven transitions are interconnected. For instance, the competitiveness — and thus the economic contribution — of the agri-food sector depends on the workforce's knowledge and skills, the level of innovation (including digitalisation), and the energy efficiency of its production, processing, and distribution. At the same time, the agri-food sector can enhance green energy efficiency and affordability through biofuels, promote social justice by economically empowering vulnerable groups particularly in rural areas and help reverse biodiversity loss and pollution through regenerative agricultural practices.

The UN Secretary-General emphasizes the necessity of different forms of finance to work together in alignment and has stated that the business-as-usual approach is no longer viable. A major challenge for countries, however, is the lack of reliable data on the costs of achieving the SDGs. This gap hinders effective resource allocation, including aligning national budgets, investments, financial flows, and debt relief to meet the targets. As noted earlier, according to the ESCAP estimate, additional SDG spending needs in Kazakhstan are at nearly 7 per cent of GDP per year on average between 2021 and 2030, including spending needs for education (1.9 per cent), jobs and social protection (1.4 per cent), energy (1.1 per cent), digital and transport infrastructure (1.0 per cent), climate (0.8 per cent) and food systems (0.6 per cent). Therefore, Kazakhstan should seek to further mobilize capital, including private finance, for sustainable development.



ANNEX

Annex 1. National institutional framework for the implementation of the SDGs



Notes: MLSSP- the Ministry of Labor and Social Protection of Population, MNE — the Ministry of National Economy, MENR — the Ministry of Ecology and Natural Resources, MCI-Ministry of Culture and Information, MFA — the Ministry of Foreign Affairs, BNS ASPR — Bureau of National Statistics of the Agency for Strategic Planning and Reforms

Annex 2. Multidimensional Risk Analysis

SDG	Risk Areas	Scope	Likelihood[341]	Impact	Vulnerable Groups
10 16 17	**Democratic Space** Risks to democratic and human rights institutions, and to civil and political rights resulting from shrinking civic space, exclusion, repression, and intimidation	Lack of meaningful participation/ representation	Likely	Significantly	All population groups, but especially, journalists, political activists, opposition. Based on Multidimensional Risk Analysis survey (MDRA) also youth aged 18-35, labour union representatives, persons with disabilities.
		Lack of accountability for violations of human rights	Very likely	Significantly	
		Targeting/threats/ harassment/arbitrary detention of activists, media, and opposition	Very likely	Very Significantly	
		Censorship and unequal access to information	Very likely	Significantly	
		Lack of political will to fully implement the legislation in the area of human rights	Very likely	Very Significantly	
		CSOs forced to work in covert (shadow) mode*	Likely[342]	Significantly	
		Overcrowding civic space by government-organized non-government organizations*	Very likely	Very significantly	
1 2 8 13 16 17	**Displacement and Migration** Risks to the population and to the stability of the territory resulting from pressures associated with displacement and/or migration	Migration caused by the worsening of safety and security in neighbouring countries	Moderately likely	Moderately significantly	Rural population living in poverty, particularly in southern and western regions, especially, youth aged 18-35. Qandas (ethnic Kazakh repatriates) relocated to northern regions. Uighur ethnic migrants. Labour migrants from Uzbekistan, Tajikistan, and Kyrgyzstan. Refugees and asylum-seekers from Afghanistan. Educated professional under 40 emigrating from Kazakhstan due to lack of qualified jobs.
		Brain drain resulting from displacement/ migration	Likely	Significantly	
		Exclusion of migrants from basic services or work	Very likely	Significantly	
		Migration caused by environmental and climate change	Likely	Significantly	
		Migrants exposed to exploitation/violence/ abuse	Moderate	Very significantly	
		Increased migration due to war in Ukraine*	Likely	Significantly	
		Increase in rural migrants due to rural-urban quality of life gap*	Likely	Significantly	

[341] Risk likelihood assessment is based on MDRA survey majority responses on a scale from «not likely,» slightly likely,» «moderately likely,» «likely,» and «very likely». Risk impact severity assessment is also based on MDRA survey majority responses for this risk scope on a scale using «not significantly,» «slightly significantly,» «moderately significantly,» «significantly,» and «very significantly».

[342] Risk scope categories with an * are assessed based on desk literature by the MDRA consultant.

1 2 8 9 10 11 13 16	**Economic Stability** Risks to economic, financial and fiscal stability of the country that could impact governance, social cohesion, or people's ability to satisfy their needs	Possible financial crisis/ economic collapse	Moderately likely	Significantly	All groups, but especially small and medium business owners, self-employed, low-qualified and low-skilled, unemployed and public sector employees. Youth, older persons, persons with disabilities, families with many children.
		Increasing inequalities in income and wealth	Very likely	Significantly	
		Crisis of public finance due to sovereign debt	Likely	Significantly	
		Decreased volumes of oil and gas production	Moderately likely	Very significantly	
		Failure to catch up with global economic trends and innovation, including, for e. g., digitalization	Moderately likely	Moderately significantly	
		Banking sector vulnerabilities*	Moderately likely	Moderately significantly	
		Inflationary and devaluation pressures*	Likely	Significantly	
6 7 11 12 13 14 15	**Environment and Climate** Risks to the ecology, ecosystem and people of Kazakhstan resulting from issues associated with the environment, climate and natural resources	Increased air pollution	Very likely	Very significantly	All population groups, but especially, according to the MDRA survey, the population living in extracting industrial cities of Oskemen, Semei, Karaganda, Temirtau, Shakhtinsk.
		Changed weather and climate patterns resulting in floods, droughts, fires, etc.	Very likely	Very Significantly	
		Loss of biodiversity	Likely	Significantly	
		Earthquake hazard	Moderately likely	Moderately likely	
		Deforestation and land degradation*	Moderately likely	Significantly	

1 2 8 11 12 13 15	**Food Security, Agriculture and Land** Risks to people, agriculture, and/ or food production resulting from crop, food production, livestock, and land-related issues.	Degradation of natural resources	Likely	Significantly	Small farmers and agricultural food producers lacking insurance against crop and livestock losses. Poor population with large percentage of income spent on food.
		Diminished agricultural biodiversity	Likely	Significantly	
		Water scarcity and quality	Very likely	Very significantly	
		Intensified competition with Russian agricultural producers in the domestic market	Very likely	Significantly	
		Decreased resilience of livestock, livestock systems, and rangeland use*	Moderately likely	Significantly	
5 10 16 17	**Internal Security** Risks to the security of people and infrastructure, and to the ability of the international community to operate effectively as a result of security issues.	High levels of violent or organized crime	Moderately likely	Significantly	Unemployed, rural, poor male population at risk of radicalization and extremism in western and southern part of the country. Ethnic minorities, labour migrants, refugees, and women aged 18-35.
		Escalation of interethnic conflicts	Moderately likely	Significantly	
		Religious extremism and radicalization	Likely	Significantly	
		Trafficking of people, drugs, or resources	Moderately likely	Significantly	

16 17	**Political Stability** Risks to the stability of established political and government structures resulting from politically driven factors.	Prolonged or widespread social unrest	Slightly likely	Significantly	
		Political elites operating outside of the state structure	Likely	Very significantly	
		Loss of legitimacy and trust in government	Likely	Very significantly	
		Corruption, which compromises state interests	Very likely	Very significantly	
		Weakening of administrative and regulatory capacity*	Moderately likely	Significantly	
3 6 7 11 16 17	**Public Health** Risks to the population, economy and Leave No One Behind priorities, resulting from actual and emerging health emergencies	Disease outbreak requiring enhanced border controls	Moderately likely	Moderately significantly	All population groups, but especially unvaccinated children, children under 5 in rural remote areas, people living with HIV, who depends on medical supply chain procurement.
		Release of chemical, biological, or radioactive materials	Moderately likely	Significantly	
		Increase in vaccine-preventable diseases	Moderately likely	Significantly	
		Increase in non-communicable diseases	Moderately likely	Moderately significantly	
		Risk of medical supply chain failures*	Likely	Significantly	

4 6 7 9 11	**Infrastructure and Access to Social Services** Risks to society and the population resulting from a lack of availability or limitations on infrastructure and/or basic social services	Degradation of physical infrastructure, such as roads, heating, water transmission	Likely	Significantly	All population groups, but especially persons with disabilities and children in remote rural areas.
		Poor quality of education and unequal access to education	Likely	Very significantly	
		Disruption to power and energy supply	Likely	Very significantly	
		Unequal access to services for vulnerable groups	Very likely	Significantly	All population groups, but especially political activists, journalists, civil activists, the business sector, and CSOs.
5 10 16	**Justice and Rule of Law** Risks to the fair, effective, and comprehensive implementation and application of the principles of justice, the rule of law and accountability from issues.	Lack of impartiality and independence of the judicial system	Very likely	Very significantly	
		Systematic violations of human rights	Very likely	Very significantly	
		The use of torture and ill-treatment by law enforcement and national security units	Very likely	Very significantly	
		Intrusive surveillance and unlawful inspections	Moderate	Very significantly	
		Increase in corruption of public procurement*	Likely	significantly	

1 4 5 8 10 11	**Social cohesion, Equality and Non-Discrimination** Risks to social unity and equality resulting from direct and indirect discrimination, horizontal inequalities and demographic trends.	Prejudice based on sex, race, colour, national origin, religion, and ethnicity	Very likely	Significantly	Older persons and persons with disabilities, women, migrants and refugees, LGBTIQ+, low-income families, and other socially vulnerable population groups.
		Social exclusion/ stigmatization of vulnerable groups	Very likely	Significantly	
		Gender inequality and domestic violence	Very likely	Significantly	
		Unequal access to resources and opportunities for vulnerable groups	Likely	Significantly	
		Rise of ethnic nationalism*	Moderate	Significantly	
All	**Regional and Global Influences** Risks to integrity, stability, safety, and prosperity of the territory and its people as a result of the actions of external actors, or the influence of external events.	National security threats from neighbouring countries	Likely	Very significantly	All populations, but especially those on the border with neighbouring countries.
		Geopolitical instability in neighbouring countries	Very likely	Moderately significantly	
		Extension of secondary sanctions against domestic companies	Likely	Moderately	
		Extended shutdown of the Caspian Pipeline Consortium	Likely	Very significantly	
		Further escalation of Russian-Ukrainian war*	Likely	Very significantly	