

Towards Higher Education Excellence in Central Asia: A Roadmap for Improving the Quality of Education and Research through Regional Integration



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Outline

- **Macro context**
- **HE development trajectories and challenges in CA**
- **Roadmap for improvement**
- **Sampling of potential interventions**

Macro context

Central Asia witnessed significant growth over the last years

| Increase between 2000 and 2021 | | 2000 | 2010 | 2021 | Growth over the period |
|---|--|------|-------|-------|------------------------|
|  | Population, millions | 55.3 | 63.2 | 76.7 | x 1.4 |
|  | GDP, USD billions | 37.3 | 230.8 | 345.7 | x 9.2 |
|  | Share in global GDP (PPP), in % | 0.4 | 0.6 | 0.7 | x 1.8 |
|  | FDI stock, USD billions | 12.3 | 101.6 | 211.4 | x 17.2 |
|  | Turnover of foreign trade in goods, USD billions | 27.4 | 149.4 | 165.5 | x 6.0 |

Yet, challenges remain for continued development



Low economic diversification and limited innovation across industries



Skills gap and lack of alignment with the demands of the evolving job market



Infrastructure bottlenecks, including in transportation, water, and energy

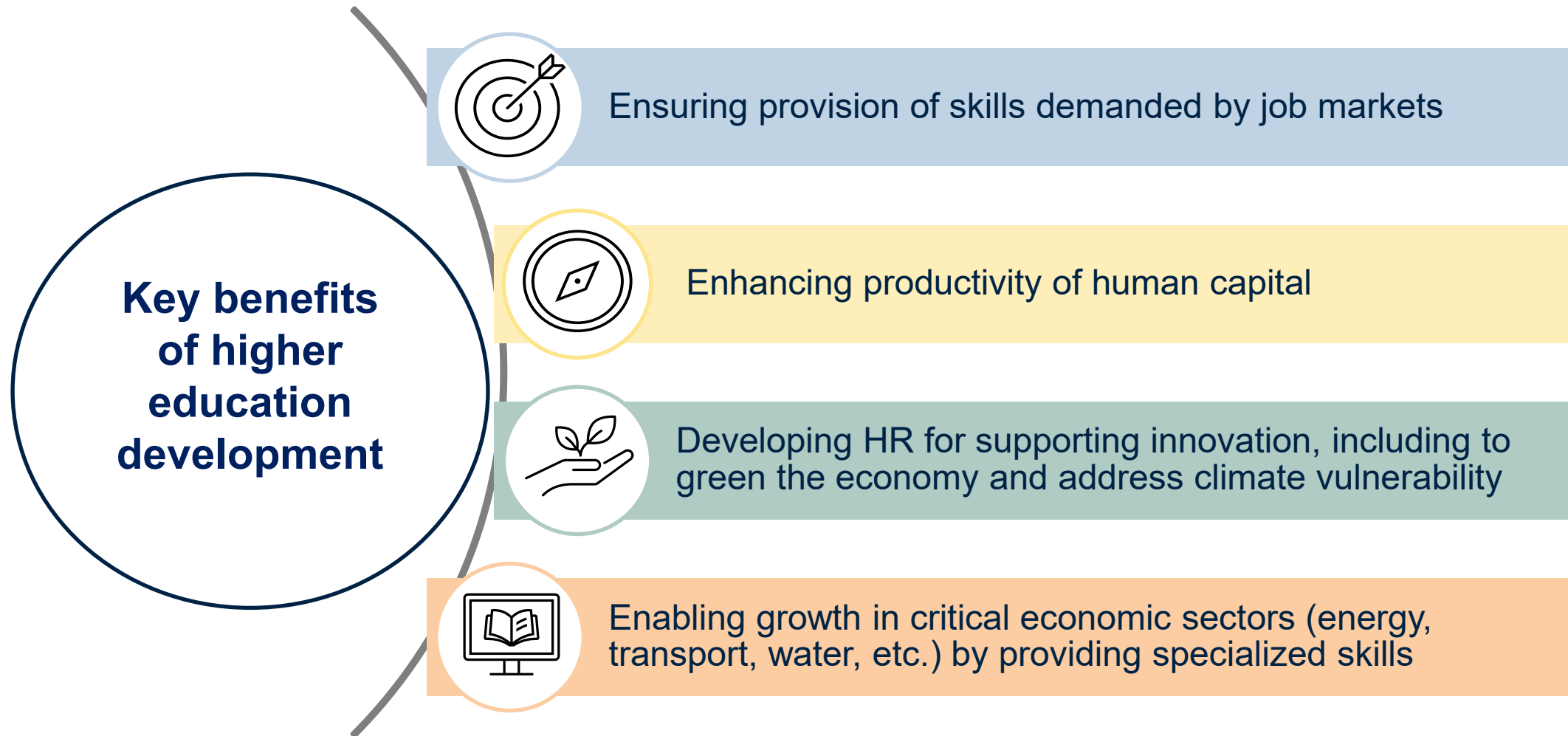


Climate vulnerability and high environmental risks

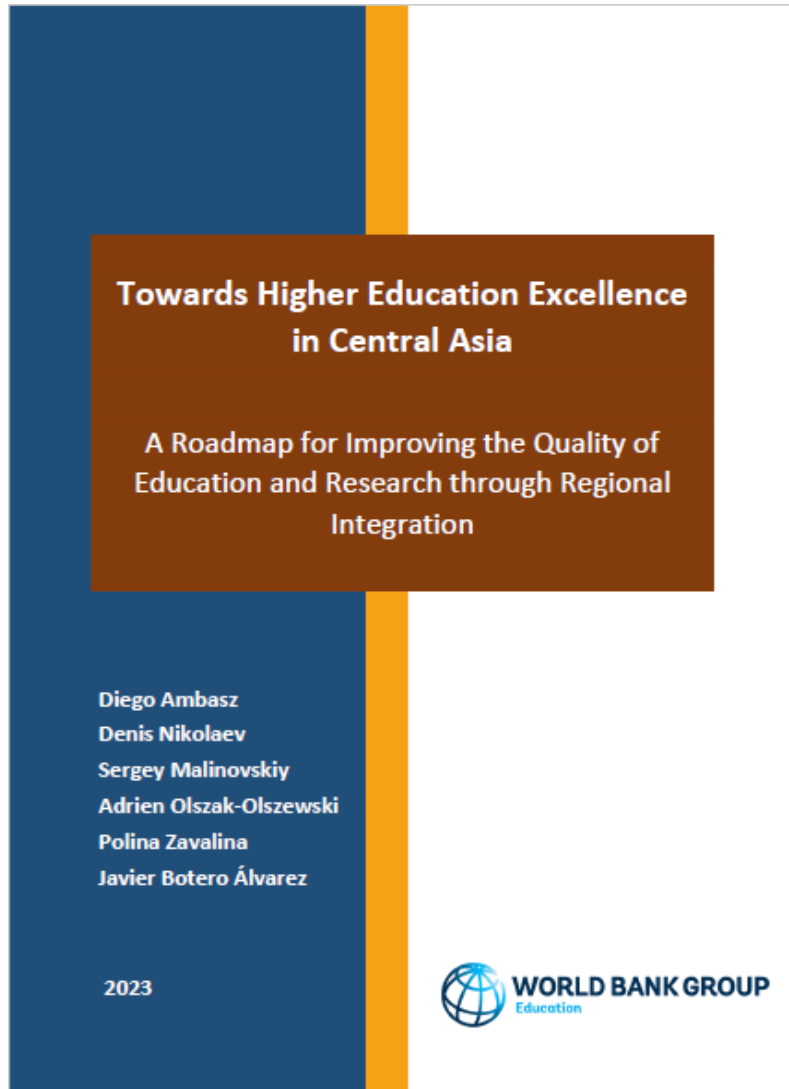


Demographic growth offers opportunities but also challenges to development

Higher education could play a key role in accelerating the region's development



WB study “Towards Higher Education Excellence in Central Asia...”



- Central Asian countries face **common challenges** in their higher education systems.
- At the same time, they also share **common opportunities** for development through greater collaboration.
- Study report proposes a **menu of recommendations** organized in a roadmap to address shared obstacles at the national level through both national and regional interventions.

<https://documents1.worldbank.org/curated/en/099101023140578441/pdf/P1790811f2f765ea101eb142301abf0100a90db82451.pdf>

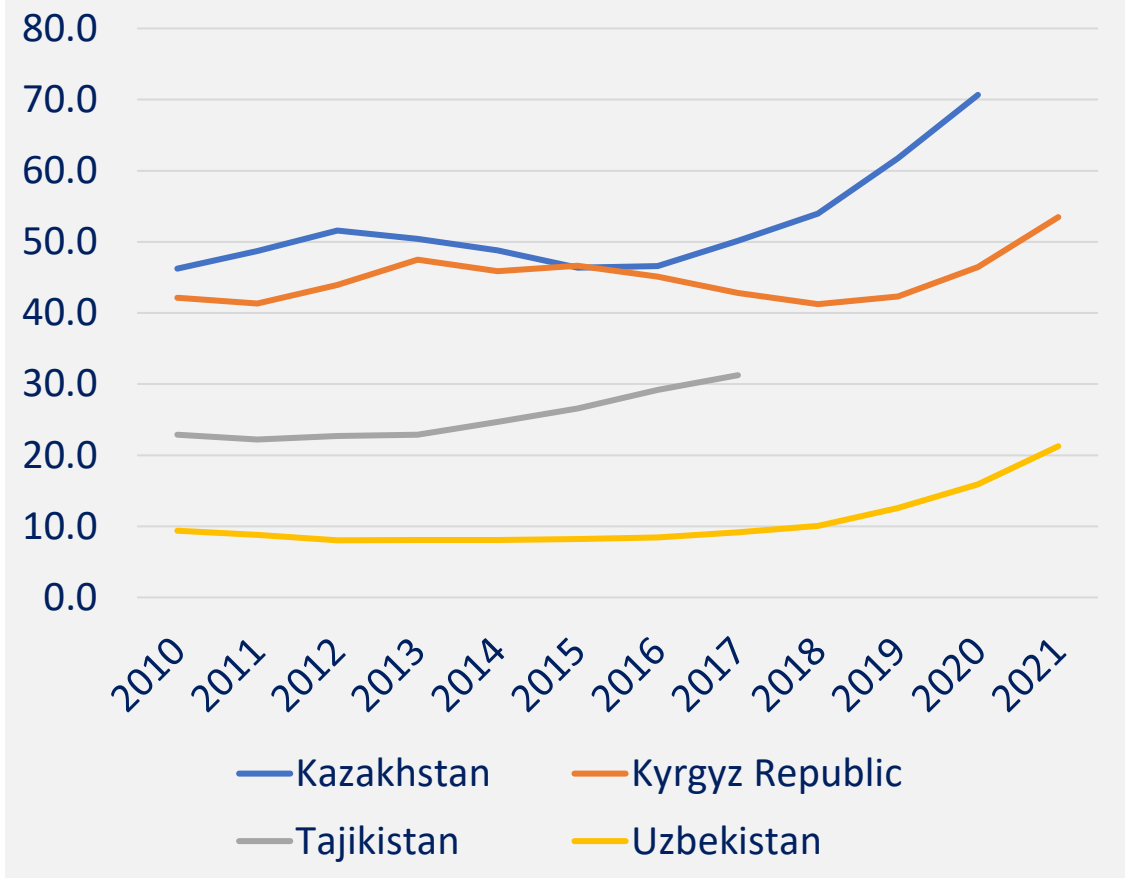
HE development trajectories and challenges in CA

Central Asian countries have shared trajectories of higher education development

Central Asian higher education systems have experienced significant changes:

- More than 430 universities, including close to 200 private institutions, with 1.8 million students.
- Introduction of internal and external quality assurance mechanisms.
- Dynamic realignment of university science to market dynamics.
- Turkestan Declaration (2021) to increase collaboration in higher education and create the Central Asian Higher Education Area.

Higher education enrollments (in %) in Central Asia are on the rise



Each country demonstrates specific strengths in its higher education sector– pt.1



Kazakhstan

- Leading university administrative and financial autonomy reforms.
- Development of modern research infrastructure in universities.
- Reforms to encourage private investment in research and development.
- Successful example of harmonization with the Bologna principles.



Kyrgyz Republic

- Development of a successful internationalization model attracting 40,000 international students.
- A vibrant private sector plays a key role in the provision of high-quality academic programs.
- Actively promoting research and international collaboration in the science sector.
- High share of master students (25% of total number) in different disciplines

Each country demonstrates specific strengths in its higher education sector – pt.2



Tajikistan

- Several reforms to amplify staff capacity.
- Hosting the University of Central Asia, a successful example of international cooperation with the private sector.
- Strengthening accreditation processes and compliance with ESG principles.
- Reforms to develop universities' research mission and improve their research capacity.



Uzbekistan

- Development of an attractive model for the remuneration of teaching and research staff.
- Tertiary enrollment quadrupled over the last years, including through the private sector.
- Reform to enhance the quality of researcher and faculty training.
- Integration of universities in a blooming national innovation ecosystem.

But some challenges remain common to all Central Asian countries

Quality & Access

- Aging infrastructure and learning equipment.
- Limited capacity of external and internal quality assurance systems.
- Inadequate qualifications and low remuneration of a large share of teachers.
- Limited access to university for disadvantaged students.

Relevance & Skills

- Limited engagement of employers in developing and modernizing curricula.
- Limited Work-based learning opportunities.
- Employers report that university graduates have inadequate training – especially for STEM and soft skills.

Research & Development

- Weak research capacity (av. 530 researchers per million inhabitants compared to 812 in middle-income countries).
- Interaction between universities and industry rated as poor in business surveys.
- Central Asia spends on average 0.12% of GDP on R&D (2.63% globally).

Limited transparency and efficiency of higher education investments, and inadequate autonomy at the institutional-level.

Furthermore, regional integration in higher education is limited

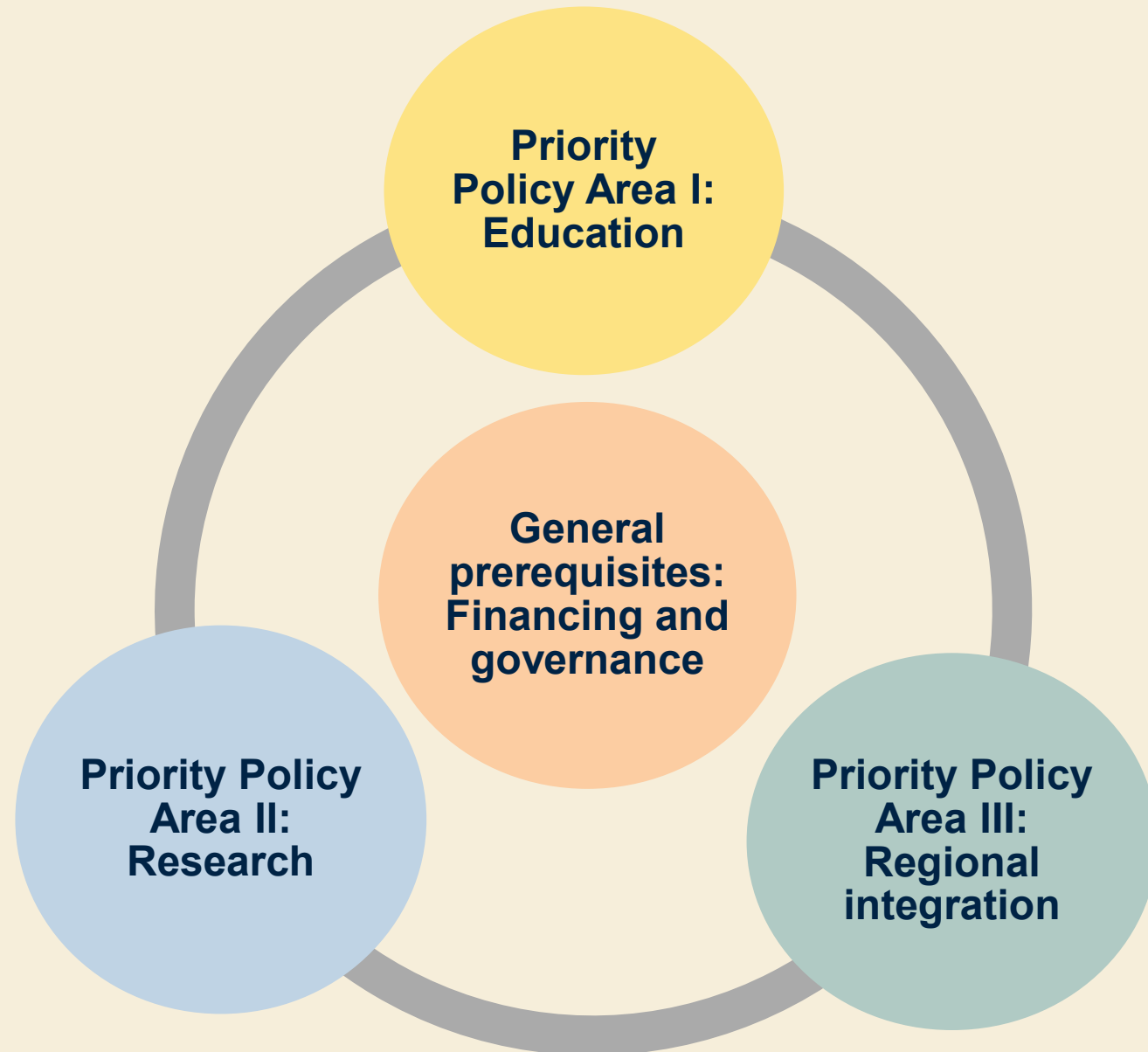
- **No common framework on the recognition qualifications:** Qualifications earned at institutions in one country may not be recognized in another.
- **Limited cooperation in research and development:** Minimal cooperation in research and scientific projects between Central Asian universities.
- **Many obstacles to intraregional mobility:** no functional systematic mechanisms or framework to support mobility of students and faculty at the regional level.

Roadmap for improvements

Structure of the roadmap

The roadmap is built on four components:

1. **General prerequisites:** financing and governance
2. **Priority Policy Area I:** improving quality, relevance, and accessibility of HE
3. **Priority Policy Area II:** strengthening research and innovation systems
4. **Priority Policy Area III:** enhancing regional integration and collaboration



1. How to improve the financing and governance of higher education?

Progress across the region on university autonomy reforms

- Important progress in Kazakhstan since 2017.
- Creation of “Special status” universities in the Kyrgyz Republic in 2022.
- “Self-financing” higher education institutions in Tajikistan and Uzbekistan.

But total public financing remains low
– between US\$585 and US\$3,340 annually per student.

High-impact interventions for Central Asia:

- Increasing the **efficiency and amount** of higher education financing and research funding.
- Reinforcing **university management capacity** to ensure effective governance and a strong orientation towards results.
- Granting more **autonomy** to universities on administrative, managerial, and financial matters.

2. How to improve quality, relevance and accessibility of higher education?

High-impact interventions for Central Asia:

- Adopting **regional accreditation standards** and strengthening external and internal quality assurance mechanisms.
- Developing specialized **joint curricula/dual degree programs** in selected priority areas.
- Supporting **access to higher education for disadvantaged students** with financial and non-financial incentives.
- Improving **cooperation with employers** for the development of relevant skills.

Central Asia is on a promising trajectory

- The European Higher Education Area sets a positive benchmark for Central Asia, with Kazakhstan already participating in the Bologna Process.
- Adoption of EHEA principles in the Central Asian Higher Education Area offers strong potential.



3. How to improve innovation, research, and development?

Cooperation in research can have a far-reaching impact

- Intensive cooperation between EU universities: existing and inspiring models in ASEAN and in Africa.
- Establishment of networks of centers of excellence under Horizon Europe (EU financed) and Africa Centers of Excellence (WB financed).

**HORIZON
EUROPE**



**Africa
Centres of
Excellence**

High-impact interventions for Central Asia:

- Establishing a network of **centers of excellence** in key sectors.
- Launching **competitive funds** to support research and development transparent investment in science.
- Expanding technology transfer and integrating universities in **national innovation ecosystems** in cooperation with the industry.

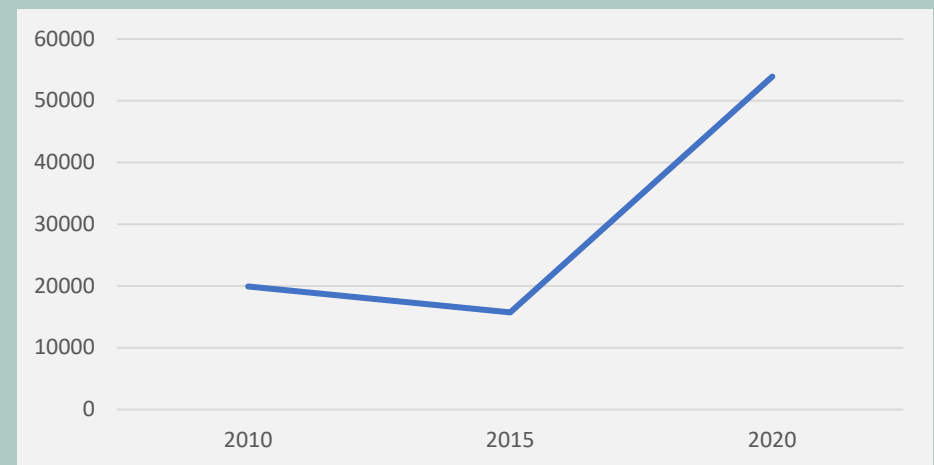
4. How to improve regional integration and collaboration across countries?

High-impact interventions for Central Asia:

- Aligning strategic priorities among Central Asian countries and establishing **relevant collaboration platforms**.
- Developing **mobility programs** at the regional level.
- Supporting **strategic university partnerships**
- Developing mechanisms for the **recognition** of academic credentials, degrees, and learning outcomes.

Immense opportunities

- Central Asian students represent 50% of international students in the region.
- The number of Central Asian international students studying in the region increased from 15,700 in 2015 to 53,900 in 2020.



What are the benefits of higher education integration for CA universities?



Improved academic quality through stronger quality assurance standards



Enhanced research collaboration opportunities



Greater access to shared resources and cost efficiency



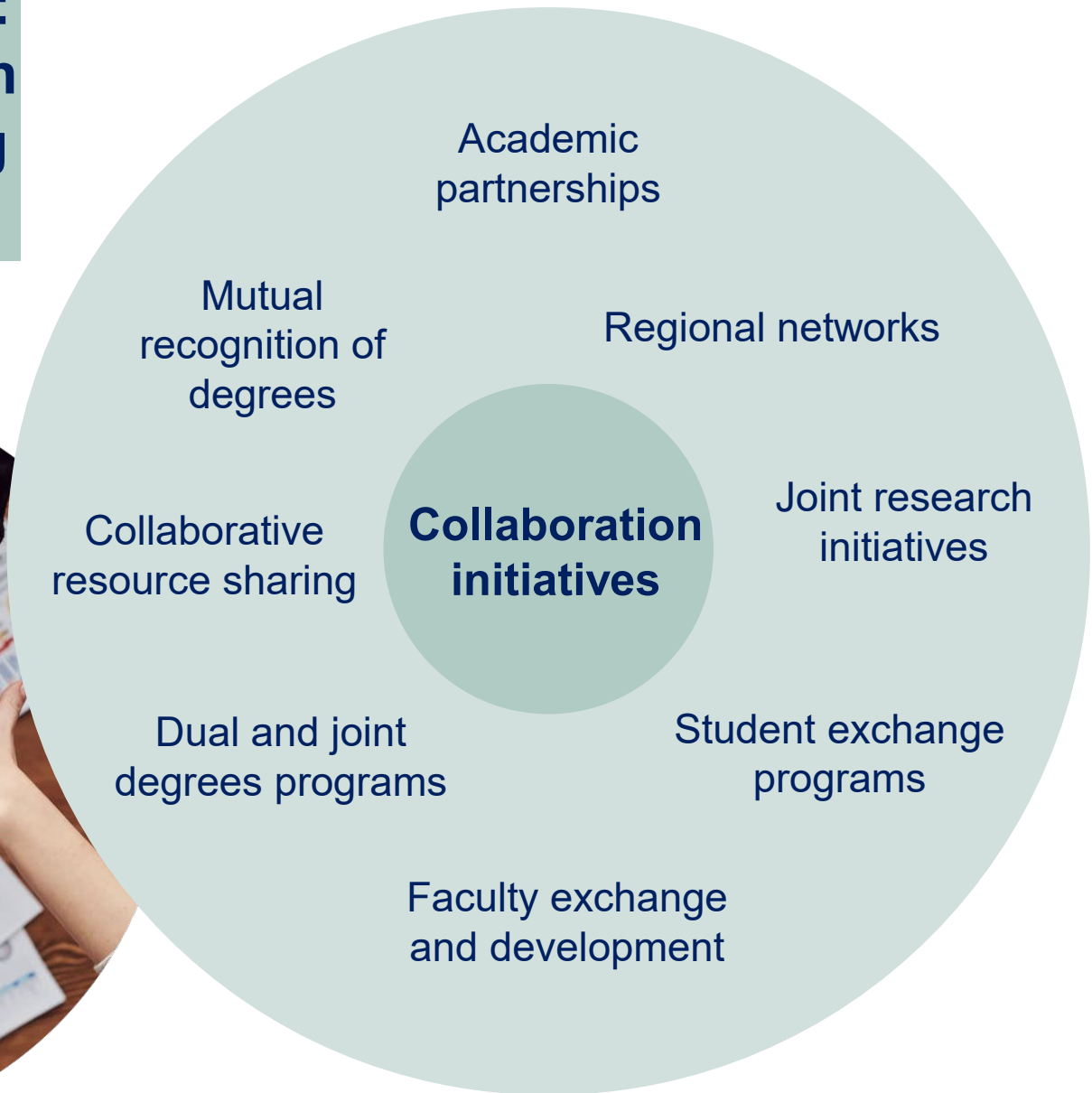
Increased mobility opportunities for students, faculty and researchers



International recognition and global engagement

Sampling of potential interventions

**Potential regional interventions:
inter-university collaborations in
Central Asia (many low hanging
fruit)**



Other potential areas of intervention identified in discussions among HE officials in the region

- Improving quality of teaching through enhanced regional training capacity of higher education institutions.
- Enhancing quality of education by establishing a regional quality assurance system based on international standards, that all the Central Asian countries would recognize.
- Creating joint centers of excellence to develop research and innovation projects in areas of common interest such as Water, Energy, and Artificial Intelligence (AI).

The Role of Higher Education Cooperation in Central Asia's Future

- Greater investment and regional collaboration in HE can help foster growth and prosperity at both the national and regional levels in Central Asia
 - Building sectoral expertise to address national and regional priorities
 - Improving employability of higher education graduates across the region
 - Developing the necessary HR for supporting innovation and research
- The Bank sees a lot of potential to enhance cooperation in the HE sector in Central Asia, and will continue to facilitate the regional dialog on improving the quality of education and research through greater regional integration