



Innovative Development in Kazakhstan: the contribution of the UNECE Innovation Performance Review

Zhumatay Salimov

Director of Analytical and Methodological Center, National Agency for Technological Development of the Republic of Kazakhstan

After 20 years of independence, Kazakhstan has overseen a successful transformation of its economy, and undertaken many economic and political reforms under the leadership of President Nazarbayev. As a result, today Kazakhstan is a dynamic, technologically advanced country in Central Asia, with an open market economy and high innovation potential in the industrial sector.

In recent years, the ongoing large-scale policy of accelerated industrialization has resulted in substantial progress in economic development and the creation of employment opportunities. Good progress is being made on the target set by the President to create half a million jobs by 2020. In addition, hosting the international exhibition EXPO-2017 in the field of alternative energy sources on the theme "Energy for the future" will make a significant contribution to Kazakhstan's economic development, and the strengthening of its position in the world economy.

Kazakhstan, as other fast-growing countries, focuses on the development of knowledge-based industries and more sophisticated technological processing as a way to strengthen its position in the global market. In particular, great attention is being paid to mechanisms for generating innovation and facilitating technological modernization of production facilities through technology transfer.

Some initiatives in these areas include:

- Development of the institutional framework of the innovation system and innovation infrastructure. This included setting up the Council on Technology Policy of the Government of the Republic of Kazakhstan, a specialized institute for innovation, a Special Economic Zone Park of Innovative Technologies, regional technoparks, industrial design offices, offices of commercialization and technology transfer centers.
- Adoption of the Law "On State Support for Industrial and Innovative Activities" in 2012, which introduced new incentive instruments to support innovators (innovation grants, technology business incubation, service design offices, tax incentives).

Kazakhstan conducted a technological forecasting exercise, the Science and Technology Foresight 2020, which drew on the experience of foreign countries (United States, South Korea, Japan, European Union). This wide range of policy measures resulted in positive trends for innovation, which is confirmed by the statistical data available. In 2011, the share of innovation active enterprises reached 7.1%, while the average of recent years was around 4%. The volume of innovative products has increased by more than 1.5 times and domestic expenditure on research and development has jumped by around one third. In addition, Kazakhstan is close to becoming one of the 50 most competitive countries in the world (51st place in 2011), according to the Global Competitiveness Index of the World Economic Forum. Progress in this aggregate level indicator has been accompanied by rapid improvements in almost all sub-indices, in particular regarding technological level and innovative capacity.

Thus, the positive dynamics of the country's innovation and competitiveness indicators show that the current strategy of industrial-innovative development is entirely justified. A further impetus to this strategy will be given by the implementation of the Concept of Innovation Development of Kazakhstan to 2020, which will be approved in the near future.

Development of the Concept involved leading experts of key organizations working on science, technology and innovation in the U.S., Europe, Korea and international organisations such as the UNECE and the OECD. The Concept will take into account international best practices and the latest trends in global innovation.

The Innovation Performance Review of Kazakhstan prepared by the UNECE in 2012 has provided a qualitative methodological basis for the drafting of this strategic document. The Review was prepared at the request of the Government of the Republic of Kazakhstan by a team of international and national experts under the guidance and with the participation of the UNECE Secretariat, with the financial support of the Eurasian Development Bank.

The review involved a team of leading international experts from Austria, France, Germany, Greece, the Netherlands, Finland and the Czech Republic. The team interviewed local experts from more than 40 key government agencies, development institutions, national and private companies and academics. The preliminary results and recommendations were discussed with other independent experts, the national authorities and other innovation stakeholders.

The final result reflected an independent assessment of innovative development in the country, which included constructive recommendations to improve the national innovation system. These were in line with key initiatives developed in the field of innovation. These practical recommendations have been used by the government to strengthen work in particular areas.

Let us give a few examples. One of the recommendations concerned the focus on priority directions of science and technology. The Ministry of Industry and New Technologies of the Republic of Kazakhstan, with the methodological support of the Korea Institute of Planning and Forecasting KISTEP, organised a scientific and technological foresight project in 2010-2011. This study compiled a list of 75 critical technologies for Kazakhstan in 8 priority areas.

In order to develop these critical technologies, an initiative was launched to set up targeted technology programmes (similar to “technology platforms”), which aim to mobilize all stakeholders (government, business and academia) to identify and solve problems preventing the development and introduction of these technologies. This tool provided a new format for interaction between government, business and science.

Another example relates to the creation of a favourable innovation environment. In this area, the Government initiated structural reforms in education and training. Priority is given to encouraging innovative thinking in education, science and training, and promoting a positive image of the innovator.

The Innovation Performance Review of Kazakhstan also covered the construction of regional innovation systems. At present, the Government is working on the development of an appropriate methodology for the operation of regional innovation systems, which will include an innovative infrastructure and its own tools to support innovation. In addition, local agencies will be expected to provide funding for innovation infrastructure and promising innovative projects.

The cooperation between Kazakhstan and the UNECE has continued in order to support the implementation of the recommendations of the Review and other innovation initiatives developed in the country. In the immediate future, this cooperation will concern precisely regional innovation policies. A workshop is being planned in 2013, where UNECE experts together with local representatives of the regional authorities, ministries and development institutions will discuss issues concerning the creation of a common methodology for regional innovation systems. These and many other questions are reflected in the Concept of Innovation Development of Kazakhstan, which will provide the main orientation for innovation policies up to 2020.

More information is available at the following links:

[National Agency for Technological Development](#)

[Innovation Performance Review of Kazakhstan \(English\)](#)

[Innovation Performance Review of Kazakhstan \(Russian\)](#)