RK INNOVATION STRATEGY

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Keywords: innovation, strategy, technology.

Kazakhstan became the first country in CIS, which established a regulatory-legal framework to develop industrial parks networks. Starting point for industrial parks development is approval of the "Strategy of industrial-innovative development of the Republic of Kazakhstan within 2003-2015" by the Decree of the President N. Nazarbaev. Industrial parks in Kazakhstan are created to the benefit of domestic sales market and have clear topical, branch and regional orientation. Industrial parks must solve issues on creation of informational technologies meeting international standards, and shall contribute to fullest utilization of scientific and intellectual potential of the country. Virtually all the industrial parks around the world are established under standard scheme adopted all over the globe, under higher educational institutions. However, the scheme poorly takes into account the peculiarities of native innovative activities, as the basic mass of scientific and technical work was performed rather at the branch institutes than at the universities. The present specific character must be considered fully when creating social and organizational forms of science and production integration.

Innovative development of Kazakhstan

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Japan changed its strategy from the beginning of 70th, by commencing developing own R&D (research and development) intensively, focusing on acceleration in the rates and minimization of expenses on updating of products, modernization of technologies at all stages of products manufacture.

A number of countries' experience (Singapore, South Korea, Finland, China, Israel, India etc.) testifies that accelerated transition to innovative model not only possible, but can be very successful. For example in China there is a program for R&D support and development, which has been functioning since 1991 and provides for concentration of efforts on the set of knowledge-intensive industries (microeconomics and computer science, fiber-optic communication, genetic engineering and biotechnology etc.) and creation of new technologies development zones in industrial parks.

As to the aggregate index of innovations, Finland and Sweden became the leaders. Achievements of these two countries are above average for EC almost by all six groups of particular innovation indicators used to calculate total innovative index (overall, 25 private parameters are applied in the European innovation monitoring system «Trend Chart»). Sweden has been holding the first place since 2003. Sweden and Finland are behind EC only by two criteria: university R&D financing on a part of private companies, besides, Finland is behind by innovative activity of small enterprises, and as for

Sweden–by dynamics of science intensive export.

Awareness of scientific-technological progress meaning in ensuring of economic growth by the political leadership of these two countries enhanced this factor in economic policy, which sequentially expressed in transition from scientific and technical to technological and then to innovative policy.

If the government does not make active stimulating effect on the process, development of innovative technology is inconceivable. Ruling circles of all developed countries realized it fully. More than 2% of GDP (gross domestic product) is spent on R&D in all western countries, and in countries advanced in this field best of all (USA, Germany, France, Great Britain, Switzerland, Japan) the percentage reaches around 4%. Expenses of largest concerns (TNC (transnational corporations)) on R&D, especially in electrotechnical and electronic, chemical and automobile industry, as a rule reach 8-12% of their turnover and 15-20% of their aggregate costs (expenses).

Innovation process needs investments at an early state when only idea itself and experiments are financed. If in developed countries this function is assumed by private enterprises that participate in R&D and introduce innovation into production, then in developing countries an entrepreneurial activity is not so high. Therefore, a state support is specially needed at the initial state to create small innovative infrastructures (research centers, industrial parks, incubators).

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Kazakhstan enters entirely new stage of its development and there is a great challenge – to create new Kazakhstan in new world. We need to create a model of economy that worldwide leaders are approaching to. The experience of developed countries shows that 70 to 85% of GDP growth falls on new and advanced technology. For this reason, there is an issue of our country's transition to the "knowledge-based economy" on the agenda. "It is the only means for Kazakhstan to be far from "gallery", not to get stuck in back rows. We have all the things needed to be bracketed with leading states, achieve high living standards for our people" [1].

High technologies are the powerful instrument thanks to which many countries not only overcome economic recession, but also achieve a competitive strength of the country by filling the market with various upgraded innovative products. That is why manufactures are focusing their main effort rather on proposing new goods to a consumer than seizure of old goods markets and exclusion of competitors out of them. Novelty of goods serves as a determinant factor of struggling for domestic and foreign market. Both new and upgraded, improved variants act as new goods at the market.

A basic engine for industrial-innovative development must become a private sector, a government shall act as an accelerator and initiator in issues concerning economy competitive recovery and contribution to creation

and modernization of small and medium enterprises by involving them into innovation processes.

There is preserved an imbalance between scientific-research and engineering development in Kazakhstan. A portion of the Research Institute among the research structures reach approximately 45% in our country, and only 6.4% fall on design and engineering organizations. As to the quantity of specialists, there are 4 designers and 25 scientists per one pilot-production employee. Everything is vice versa in foreign countries. There are 2 designers and 4 pilot-production employees per one scientist. A portion of financing (up to 70%) is spent on the applied research in our country and only 8% fall on research and development work.

For a while, we have few innovations, we are developing few new finished products.

In the eye of National Innovation Fund a financial support of Development Institutes, transfer of world modern technologies and products of the given branch shall serve as another impulse for further development of food industry. In this respect, a food industry has been defined as one of the priority directions for the Fund's financing [2].

To increase technologic competitive strength of the native production the Innovation Fund makes investments into new and existing companies at the initial stage of innovation commercialization (start financing stage) and into companies that need additional investments to expand volumes of innovative products (works, services) and get to the international markets (stage of initial and/or quick expansion).

Principal conditions for investment are:

• investment project meets the priorities of industrial and innovative policy of the Republic of Kazakhstan;

• a project is focused on creation of a new type of science intensive products (works, serves), or on increasing of engineering level, introduction of new and improvement of used technologies;

• a project is commercially attractive (particularly an innovation has a potential to grow market niche);

• strategic investor existence.

In addition, the Fund provides grants for research and development work (RDW), focused to perform research and development, experimental work, ensuring transfer of applied research scientific work (RSW) results into production and focused at receipt of product (pilot sample) with feature of novelty, inventiveness, originality and commercial application [3].

To improve a public administration system in the sphere of industrial and innovation development and create favorable conditions to ensure economic growth of the state there was established a "Fund of sustainable development "Kazyna" by the Decree of the Republic of Kazakhstan President.

Rather knowledge, intellect, information, innovation that currently is turning into real factors and standalone products of manufacture and services is becoming the most important assets being formed in the world of high technology, informative-network economy than the materials resources that we used to see in former times.

The National Innovation Fund is established to increase general innovative activity in the country and to contribute to development of high technology and science absorbing industry.

The mission is being implemented through creation of venture funds, industrial parks and business – incubators, financing of innovative projects and providing of grants for RDW.

As well, the Fund is investing high-technology start-up companies abroad and organizing measures raising innovative activity in Kazakhstan.

As early as in 2003 there was declared a guideline to transfer from raw stuff-based economy direction to innovation economy with adoption a strategy of industrial-innovative development for the period until 2015. Such directions as scientific potential development, formation of financial instruments

cluster in terms of venture capital, establishment of innovative activities entities in form of industrial parks and business incubators as well as development of innovation entrepreneurship have been determined as four basic elements.

If we talk of the priority investment sectors, then currently up to 60% of Fund total funds is invested into such directions as information technology, technology for food industry, oil and gas sector, biotechnology and pharmaceutics as well as alternative power energy. In this connection, their being in demand at the market and commercial return act as projects selection criteria and such kind of approach has already brought a tangible financial result. So, in 2007 the NIF withdrew from the project focused on manufacture of innovative log recorders "Geoscan", which was implemented by it together with "Well log survey" Company" JSC (WLS) in Aktyube oblast. In spring of last year, the Weatherford International Company purchased 75% portion of WLS (including 25% of shares owned by NIF) due to which the state cleared a profit amounting to 96.4 million tenge [4].

Thus, innovation process is a powerful instrument thanks to which we are to overcome economic recession, ensure its structural reorganization and fill the market with various competitive products with high value added. Innovation process is appealed to ensure increasing of country's gross domestic product due to launching the production of brand new types of products and technologies and development of domestic goods sales market based on the same.

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