

ҚАЗАҚСТАН РЕСПУБЛИКАСЫ БІЛІМ ЖӘНЕ ҒЫЛЫМ МИНИСТРЛІГІ
Л.Н. ГУМИЛЕВ АТЫНДАҒЫ ЕУАЗИЯ ҰЛТТЫҚ УНИВЕРСИТЕТІ



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СБОРНИК МАТЕРИАЛОВ
XI Международной научной конференции
студентов и молодых ученых
«НАУКА И ОБРАЗОВАНИЕ - 2016»

PROCEEDINGS
of the XI International Scientific Conference
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«SCIENCE AND EDUCATION - 2016»

2016 жыл 14 сәуір
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В сборник вошли доклады студентов, магистрантов, докторантов и молодых ученых по актуальным вопросам естественно-технических и гуманитарных наук.

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GDP and labor productivity in the manufacturing sector of the economy Kazakhstan lags behind the industrialized countries more than 7-10 times. One of the main reasons for the low level of competitiveness of small and medium-sized businesses is a strong depreciation of fixed assets. Physically worn out and obsolete equipment is not only unable to produce a competitive product, but also leads to a decrease in productivity. In recent years this problem has become particularly important since there is a low level of quality of goods produced by small and medium-sized enterprises. The lack of competitiveness of domestic goods leads to an increase in the share of imports in domestic consumption, which is a serious problem in terms of Kazakhstan's joining to the WTO.

To sum up, there is an absolute growth of SME in recent years (nominal number of registered, active SME, the number of the employed population, the volume of output by SME). Also, there are disparities in the structure of SMEs by industry and organizational-legal forms: increasing number of entities providing trading and brokerage services, a growth in the number of individual entrepreneurs in comparison with enterprises and farms. As a result of the decrease of the deposits in national currency tenge, which is a major funding for STB lack of credit of SME appeared. Thus, there is a need for further regulation of the state of SMEs in order to maintain the achieved level of development and leveling of the negative trends in SME development using both financial and non-financial instruments.

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PUBLIC-PRIVATE PARTNERSHIP AS A MECHANISM OF INNOVATIVE DEVELOPMENT OF NATIONAL ECONOMY

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Public-private partnership acts as one of the main organizational and economic mechanisms of development national economy and attraction of long-term investments.

Usually public-private partnership (PPP) explains as a set of forms of average and long-term interaction of the state and business for the solution of socially significant tasks on mutually advantageous conditions. The choice of concrete option of partnership depends on economic efficiency of implementation of the project [1].

The instrument is actively used by developed countries and it has proved an efficiency in practice. The analysis of 48 projects realized according to schemes PPP, which is carried out by the Economic Commission for Europe of the UN has shown that 80% of such projects have been realized below the estimated budget and 60% of projects have been complete earlier than have been planned, at improvement of service and reduction of a payment for use. On the other hand, 64% of the projects executed by government bodies have been complete after the planned term [2].

PPP represents rather difficult process demanding involvement of a number of participants, each of which plays an important role in risk management of the project. Participants of PPP of the project are state, credit institutions, operator, suppliers, and buyer of production or services. The list of participants can change depending on specifics of a project.

The buyer of production undertakes to buy products (services) which will be made within the project with the purpose of an exception of market risks for the project company and credit institutions. The role of suppliers consists in deliveries of raw materials and materials for implementation of the project. Thus, the project company is protected from risk that the project will not provide the planned outputs in connection with shortage of raw materials or fuel.

Risks on operation and maintenance of the project are taken by the operator. Responsibility of the operator arises from the moment of construction until the end of the project period. The operator operates deliveries of raw materials, monitoring of carrying out test and effective operation of object [3]. The main idea of PPP consists in granting to private business an opportunity to render services on the basis of the infrastructure created by the state. Also private business can be engaged in creation of infrastructure independently, with calculation of providing the services to the state in the future. At implementation of the approved projects the risks connected with the project are distributed between the state and private business. As a rule, economic and financial risks are assumed by private business, and political and legal risks are assumed by the state or private insurance companies [4].

Low and high extent of participation represent the simple contract relations (contracts for works and services) with full preservation by each partner of all competences of property, and full privatization, i.e. transfer of the property rights from the state to the business owner. Between extreme degrees the set of possible options and forms of the public-private partnership which is based on various degree assignments of competences of the owner from the state to the business owner for term and on the conditions provided by the relevant partner agreement is located.

Table 1 - Schemes of implementation PPP projects

Scheme	Right and responsibility of concessionaire
BOT (Build, Operate, Transfer)	Building of object at own expense and on the risk, operation, transfer of object to the state
BTO (Build, Transfer, Operate)	Building of object, transfer into the ownership to the state, operation of object
BOOT (Build, Own, Operate, Transfer)	Building of object, use and possession during term, transfer to the state
BOMT (Build, Operate, Maintain, Transfer)	Construction, operation of object, service (maintenance), transfer
DBOOT (Design, Build, Own, Operate, Transfer)	Design of object, construction, possession, management, transfer to the state
BBO (Buy, Build, Operate)	Purchase, construction (restoration or expansion of the existing object), management
<i>Source: made by the author on the basis of literature [5]</i>	

The great popularity in the world was received by the BOOT mechanism within the state compensates investment expenses and undertakes direct security obligations. Now distribution is gained by concession mechanisms when the concessionaire can assume separate risks, including guarantee profitability level, or make payments depending on operational readiness and/or other compensation payments.

Public-private partnership is based on use of leasing and concession mechanisms, financing with attraction of private investments of the social programs and investment projects having a strategic importance. Forms of the state support of the enterprises within PPP are subdivided on direct and indirect. Refer financing of scientific researches, new technological developments to straight lines. Indirect include tax, credit and other benefits, creation of technical standards and regulations [5].

From the declared projects the state selects only those technologies and products in which it is interested. As a rule, these projects have significant role for the state, allow solving social and

economic problems. After selection of the project by the state the scientific component is financed and the circle of performers is defined. At the same time from business there is a financing of all other expenses connected with the project, the basis for commercialization of idea is prepared. Thus, results from such partnership are not only implementation of significant project, also involvement in process of research and development of research teams, academic institutes.

From the moment of independence Kazakhstan has developed the public-private partnership. Development of concession mechanisms became a new stage in development of PPP in Kazakhstan.

On July 7, 2006 the Law of the Republic of Kazakhstan "About concessions" has laid a foundation of concession institute in Kazakhstan. In 2008 changes in the concession legislation directed to improvement of legislative and institutional base have been made on the basis of the best international practices. In general, changes in the concession legislation in 2008 have allowed to expand scopes of concession schemes and to provide more flexible mechanisms for involvement of the private sector to national economy.

Now in Kazakhstan several concession projects are realized:

- a railway line "Shar — Ust-Kamenogorsk";
- an electricity line "Northern Kazakhstan — the Aktyubinsk region",
- the international airport in Aktau [6].

In the list of the objects offered to transfer to concession are construction and operation of lands "Almaty-Kapshagay", "Astana-Karaganda", "Tashkent-Shymkent". At a stage of preparation are projects on construction and reconstruction of the highway "Almaty-Horgos", and also Big Almaty ring highway.

Main spheres of the PPP mechanism in foreign practice are education, health care, ICT, recycling, etc. (tab. 2).

Table 2 - Scopes of PPP in the different countries

Countries	Scope of PPP
the USA	Transport infrastructure, waste/sewage, city construction, utilities, education, health care
Germany	Education, sport, correctional facilities, health care, logistic centers, ICT
Poland	Transport infrastructure, health care, rent of housing, recycling, power industry, ICT infrastructure, public transport
France	Administrative infrastructure, health care, ICT, correctional facilities, transport infrastructure, education, sport
Great Britain	Airports, construction of housing, transport infrastructure, health care, recycling, ICT, correctional facilities, education, sport
Kazakhstan	Transport infrastructure
<i>Source: made by the author on the basis of literature [7]</i>	

In Kazakhstan now the majority of projects is realized in the sphere of construction of transport infrastructure. Involvement of the private sector to financing of projects in the sphere of building of social objects is planned. So, in Karaganda construction of 15 kindergartens on 320 places is planned. Work on creation of projects in the sphere of social construction in the East Kazakhstan region is also begun.

In structure of the PPP projects of the developed countries education and health care act as the main spheres of partnership.

In the scheme of public-private partnership the big part is assigned to the businessman. He has to be interested in development and deployment of innovations at the enterprise. Innovative activity of the domestic enterprises for the present remains at a low level. The state needs to accept system of measures for increase in motivation of private business and its involvement in innovative process. It is necessary to accept measures for stimulation of inflow of private investments, creation

of tax benefits as for the investors who finance research and development and for the companies that introduce domestic technologies; to legislatively fix system of tax benefits for customers investors. Now in the country certain tax benefits for the scientific organizations are created. But today it is important to stimulate not only the offer of research services, but also demand for them from the private sector. Today there are practically no tax incentives for increase of demand for science — those privileges that are declared in the Tax code, do not work due to the lack of the mechanism of tax administration.

The privileges which are available in the Tax code assume compensation only on a corporate tax of 7,5% of costs of research and development and actually do not work due to the lack of accurate procedures of tax administration. In foreign countries effective practice of tax incentives is created. For example, deductions of costs of researches and developments make of the taxable income in the USA 16%, in Canada, in Singapore this indicator can reach 100% [7].

In Kazakhstan statistically science funding by the private sector does not exceed 10%. The scientific and technical programs financed by the state with great difficulties find practical application. For comparison: in the developed countries over 60% of scientific developments are financed by the private companies.

In the innovative sphere purposeful implementation of measures for involvement in innovative process of the academic universities and business in a formulation of priorities of public financing of basic and applied researches has to become the most important direction of public-private partnership.

Strengthening of potential in the field of PPP, as a rule, includes the training and other measures expanding possibilities of the governments to realize in the effective and clear way already developed and working PPP program. The PPP mechanism is rather new concept for Kazakhstan, the number of the working projects is still insignificant. The main projects are realized in the sphere of construction of transport infrastructure, there are no projects in social spheres — the scopes of PPP which are most developed in foreign countries.

Realization of priorities of innovative development requires large-scale involvement of business in development of priority branches. The role of the state consists in balancing interests of business with national priorities, and short-term tactical priorities — with strategic long-term prospects.

Development of innovative projects within PPP is impossible without involvement a science into this process. Development of science within mechanisms of public-private partnership can be expanded at the following directions:

- a) implementation of joint research innovative projects, the organization joint scientific publications, and also participation in competitions on receiving republican and international grants;
- b) carrying out trainings for managers, creation of the centers of the advanced researches, the joint test centers;
- c) activation of interrelations with business, participation in processes of commercialization of new ideas and technologies, introduction of technologies in production.

Transformation of science sector in an effective component of national innovative system of the country should be a final reached result. And ensuring concentration of resources (including resources of private investors) on the priority directions of innovative development has to become the main objective of scientific and technical policy of the state.

Now Kazakhstan has saved up the huge, a little used so far public-private partnership potential in a number of capital-intensive branches of economy, in regional economy, in the sphere of small and medium business. At the solution of a number of important problems of innovative and economic development of the country the variety of the conceptual approaches, forms, methods and mechanisms of public-private partnership existing in world practice can be used. Development of effective institutes of interaction of the state, business, the scientific and research organizations, higher educational institutions is one of the most important conditions of formation of effective economic policy, increase of investment and innovative activity, development of economic and social infrastructure, ensuring breakthrough in the knowledge-intensive branches of economy.

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ANALYSIS OF PERSONNEL POLICY AND HUMAN RESOURCES IN COMPANIES

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Interviews of the personnel in certain Kazakhstan companies, including JSC “Anaco,” “Karachaganak Petroleum,” and LLP “Ah-danmunay”, showed they see no difference between the functions of personnel departments and human resource management departments. Moreover, some line managers of small companies and service stations engaged in oil mining fail to understand why they need a specialized personnel department. They believe that 2 – 3 company employees suffice for filling in documents. As a result, in Kazakhstan, a new pattern has appeared with the labor results of employees in no way related to the companies’ activity. Almost everywhere, the employees disengage in the management of productivity. They receive no information about the financial results of the operation of their businesses. The oil and gas companies of Kazakhstan display an authoritarian style of management that becomes stronger and stronger, and the object of paying wage increases and premiums is not always clear.

Furthermore, the respondents pointed out that the social assistance of the company is usually a small one-off cost, not comparable to the revenues of the companies in terms of their production and marketing activities. The result clearly revealed a low level of transference of authority from one level of management to another. It also showed that the budget allocated for this purpose was insufficient, and that the personnel services are not at capacity. However, those oil companies with foreign participation have many of these problems solved.