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PUBLIC-PRIVATE PARTNERSHIP IN FINANCING INNOVATIVE PROCESS OF AGRARIAN SECTOR UKRAINE

Abstract. Systematized experience in implementing international development institutions and public-private partnerships to finance innovative processes in agrarian sector of Ukraine. Analyzed the activity of public-private partnerships in different countries and areas of the economy and features of legal security. It is proved that a qualitative and quantitative leap in the development of public-private partnership in the surveyed countries was achieved after the establishment of special institutions and government agencies and an effective cooperation between the state and business. The basic principles of management in the public-private partnership in the context of the effective functioning of an innovative economic model. Data on experience and problems implementing public-private partnership in Ukraine.

Keywords: public-private partnership, financing, innovation process, innovation project, private investor, agrarian sector

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Introduction. Public-private partnerships (PPP), which has long been used in traditional infrastructure sectors (energy, ICT, transport, water and sanitation), only recently began increasingly used in the agricultural sector. Gained recent experience shows that the creation of PPP is also possible to attract significant financial resources to implement innovative projects to increase agricultural production, improve efficiency and cost competitiveness of the industry. Among typical examples of emerging market economies and developing economies are projects to convert agricultural waste into energy, development and operation of irrigation systems and agricultural storage and transshipment facilities.

Historical agricultural potential of Ukraine and the current legal and regulatory framework for PPPs constitute an important basis for expanding and improving agricultural competitiveness countries using PPP. This article evaluated the experience of emerging economies and developing economies, in the creation of PPPs in agriculture in order to finance innovative projects and provides guidelines for its implementation.

The problem statement. The issue of public-private partnership discussed in scientific publications of B. Brewer [Brewer, Hayllar 2005], N.M. El-Gohary [El-Gohary, Osman, El-Diraby 2006], J. Gideon [Gideon, Unterhalter 2017], G. Hodge [Hodge, Greve, Boardman 2017], B. Howell [Howell, Sadowski 2018], Y. Ke [Ke, Wang, Chan, Cheung 2009], R. Osei-Kyei [Osei-Kyei, Chan, Javed, Ameyaw 2017], M. Regan [Regan, Smith, Love 2009], Y. Wang [Wang, Zhao 2018], Y. Yang [Yang, Hou, Wang 2013], Z. Zhang [Zhang, Durango-Cohen 2012] and other. Include such aspects as: actual problems of the theory and practice of public administration and social partnership forms of public-private partnerships and others. Principles of legal regulation of public-private partnership discussed in the A. Nikolaev.

In 2010 the Law of Ukraine «On public-private partnership», which greatly increased the scientific and practical interest in the mechanisms of its implementation in Ukraine [Zakon Ukrainy 2010]. This law is important to consider in the context of the adopted strategy of innovative development of Ukraine for 2010-2020 in terms of globalization challenges. The article is justify the need to implement funding innovative projects by concentrating both public funds and private funds business; the elements of cooperation between the state and private capital in the implementation of innovative projects in the agrarian sector of Ukraine.

Research results. The most striking example of mechanisms of public-private partnership is to develop and implement innovative major projects of national importance. The main economic goal of these projects is to enhance the competitive position of domestic producers on domestic and foreign markets. They have a special mechanism to stimulate innovation, which provides the most significant from an economic point of view, the stage of the innovation cycle - the transformation of scientific and technological activities in a competitive high-tech products with a high market potential implementation. The main mechanisms of interaction between state and private capital in the implementation and financing of innovative projects include:

1. Attracting businesses to the formation demands for applied research and development, full participation in the process of commercializing their results, from the earliest stages of the development of scientific products, directly involved in the preparation and implementation of large innovative projects.

2. Improvement of financial support for innovation, in particular through the development of modern financial instruments and mechanisms to attract high-tech sectors of the economy to private investment. First and foremost - the development of venture investment system. Providing co-financing of applied research, development work, innovation, the creation of innovative infrastructure financing and preferred stage of development and modernization of industrial high-tech products.

3. Development of small business innovation in science and technology, creation and development of special intellectual property exchanges, scientific and technical services, in particular at the private sector, active participation of small innovative structures in the implementation mechanisms of public-private partnership.

4. Balancing the interests of the state and private business. First of all, the interests of the state and business overlap in the development of highly efficient industrial sectors, ensuring the formation of new markets, competitive high-tech products, as well as in terms of technological upgrading of industrial production, directed in particular to reduce costs, conserve resources, preserve the environment and, ultimately, providing competitive advantages of domestic producers on domestic and foreign markets.

5. Implementation of innovative bioenergy projects through participation as a state, local government and private capital. In this case Multilevel effects are achieved for all subjects such projects [Delmon 2010].

As you know, the state acts as a representative of the general interest that is to meet the needs of the population in food, reduce poverty, provision of employment, sustainable development of territories and implementation of other state guarantees before the people. Insufficient consideration of the general interests of the authorities leads to the degradation of society, economic decline, the growth of migration, transformation countries to the raw material appendage of countries with a more developed economy. Interest extension of households is formed at the expense of social and property interests of members families and may be happy

to receive income from the sale of products, social guarantees, social transfers and consumption of own production.

The key issue of public investment is their effectiveness, the government's ability to maintain the same level of public investment. The Ministry of Economic Development and Trade since the end of the study (August 2015) has substantially advanced in solving the problems identified by the experts in the SB, improving the legal regulation of the sphere of state investments, in particular, the approaches to the selection of investment projects already included in the state budget in 2016. Out of the 38 submitted projects are truly qualitative 18 of them turned out. Of these, ten were recommended by the commission, and included in the budget, while eight were proposed to apply other forms of financing. However, this is only the beginning of the necessary structural changes in the field of public investment. It is also necessary to harmonize public-private partnership legislation in order to eliminate the corruption component and unify project selection and control procedures. In general, according to experts, both the preparation of project documentation, and the economic evaluation of projects, and their selection should take place on a single template.

The meaning of a partnership between the state and business is in the social or economic development of the country, or at least in a separate region. Funds should be invested only in really relevant, necessary objects with a long lifetime, of interest to the state, and not to private partners. Subjects of entrepreneurial activity of the agrarian sector of the economy are oriented, first of all, to maximize profits and increase the added value provided most often by minimizing labor costs. On the other hand, each subject management is influenced by the market conditions that determine it opportunities in the competition including at the expense of skilled personnel, and pressure from the state requires minimum guarantees and observance of norms legislation. So the government, such as supports and economic activation of regions where relevant projects implemented. Sucking positive environmental effect, especially in waste disposal or agriculture, both regionally and at the national level. Local authorities get new jobs and revenues to budgets of different levels. All the above subjects, and this is particularly interesting to private business, get receipts and profits [Brusser 2007].

For example, consider the financial and credit mechanisms and results of the innovation of biofuels in the context of public-private partnership, which is shown in Figure 1.

1. Bearers of innovation may be the state; local authorities; corporations (enterprises); individuals; Foreign investors and others.

2. Funding for the implementation of innovative projects can act: the state budget; local budgets (development); financial resources of corporations (enterprises); financial resources of individuals; bank credit; foreign investments; stock market; venture capital and others.

3. Ensuring the implementation of innovative projects is an important element of financial and credit facility consists of the following elements: legal, informational, methodological, human resources, engineering, manufacturing and other support [Hideg 2007].

Therefore, you must create a favorable legal environment of partnership, in particular, to improve the regulatory framework to encourage the creation and implementation of innovations, as well as to the protection of intellectual property rights.

In particular, one of the main tasks of science, technology and innovation in Austria [Public-Private Partnerships Austria 2015]. Is to support new growth strategies, which measure the intensity of research and development higher. This will provide new opportunities for the scientific, technical and economic activity that, in turn, provide high social returns in the fields of ICT and the life sciences.

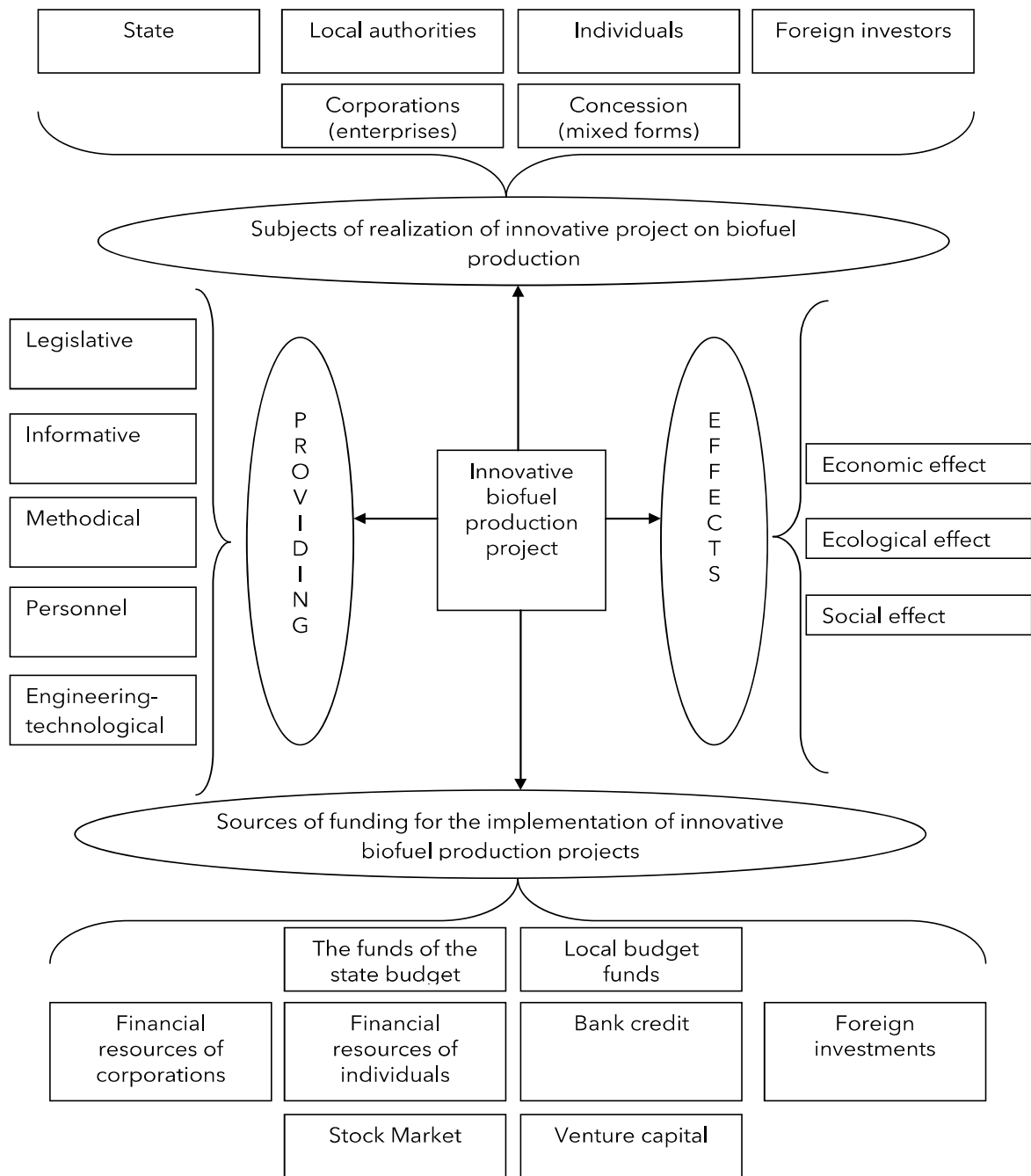


Figure 1 – Financial and credit mechanism and the results of the implementation of innovative bioenergy projects in the context of public-private partnership

Source: own development

The focus of the policy was to strengthen ties in the national innovation system and the PPP is the primary instrument of this policy. An important positive impact on development and program management of science and technology had applications. Kplus, for example, has pioneered the use of assessments at all levels to develop and implement programs and competitive procedures in the selection of proposals. These programs are now at a crossroads, awaiting important government decisions regarding long-term prospects, in particular as regards public finance and general management structure. PPP programs in Austria:

- kplus program. The program aims to establish long-term cooperative initiatives between public research institutions and private companies. Competence centers are selected on a competitive basis according to certain quality criteria and create a certain time (3-4 years). Effective from 1998;

- program Kind / Knet. The program aims to develop and strengthen internationally competitive technology clusters, supporting competence centers and networks for the promotion, development and transfer of technical knowledge, jointly governed by private industry and public research institutions on a long term basis;

- program of Christian Doppler Laboratories. The purpose of this program is to perform applied basic research on topics of interest to member companies. Labs provide access to the latest scientific and technical knowledge. Member companies invest in basic research areas critical to long-term basis and participate in the laboratory [Public-Private Partnerships Austria 2015].

Within the innovation strategy of the government in 2016 has developed some national research priorities: sustainable environmental development in Australia; health; leading technologies for building industry in Australia; Safety Australia [Public-Private Partnerships Australian 2016]. PPP is a key tool to implement new policy directions. In recent years, many financial institutions are pursuing a policy of financing PPP, sometimes within existing schemes, or in other cases through new initiatives such as grants mechanisms. PPP share of about 9% of the total budget for science and technology. The main PPP programs in Australia are:

1. The program of cooperative research centers. The program focuses on long-term joint research in a particular industry and business development through the transfer of knowledge, including through commercialization. Financing is a combination of public and private sources.

2. The fund innovative investment. The Fund was created to provide a small, high-tech companies access to equity capital for improving the results of commercialization of research and development in Australia. Financing is a combination of public and private sources. Of the 61 companies that financed the fund, most of them engaged in the commercialization of Internet technology, information technology and life sciences technologies.

3. Fund investments sown. This program is based on equity to encourage business development from early stage research in universities and public research institutions. Financing is a combination of public and private sources.

4. Grant Program Research Council of Australia. The Australian Research Council allocates funds for research for medium-term strategic cooperation between universities and industry, including in the form of funds to provide scholarships and infrastructure.

5. Corporations agricultural research and development. Corporations are a partnership between the government, including research organizations, public and agriculture, characterized by a combination of long and short term projects to promote and acquisition of knowledge and capacity building. Industry participants are actively involved in projects and short-term projects often involve smaller players in the industry [Public-Private Partnerships Australian 2016].

Since the activities of domestic AIC subjects takes place in conditions of increased globalization, increased competition in international markets agricultural raw materials and related services in the field of agricultural production, government regulation of the synergistic potential of PPP in Ukraine should be based on determining the tasks of monitoring the synergistic potential of PPP factors influencing the its formation and development for a set of strategic resources and their alternative combinations. According to the above objectives are the following monitoring synergistic potential PPP: collection, preparation and processing of exter-

nal and internal information; Forecasting changes in external influences; develop alternatives; comprehensive analysis based on analytical methods and expert decision making. Consistent and steady solve these problems is the basis for effective monitoring of the synergistic potential of PPP. Regarding the objectives of determined, but based on budget possibilities - rationally possible level of government regulation with a choice of priority measures. Therefore, the main objectives of the second phase is to identify regulatory factors influence the synergistic potential of PPP according to their level of priority.

Each component of the synergistic potential factors influencing the system in accordance with the main objective function. Structural factors predict the impact on efficiency potential through synergistic, efficient use of labor resources; specialization and cooperation of production, forming a rational structure; optimization of inputs; optimization of financial resources and working capital. Organizational and economic factors influence through: the organization of work and incentives; progressive system of production in the industry; organizational and economic relations; economic regulation of financial resources and working capital facilities; economic incentives for the development of science and technology. Management factors influence using such mechanisms: improving personnel management system in the implementation of PPP projects; process control; prioritization of investments; management of resources; management of scientific and technical progress. Ukraine also need to create information and staffing transfer to the private sector of scientific and technological activities created with state budget funds for their introduction into the economy through the creation and development of innovative high-tech enterprises [Varnavskiy 2011]. For information support innovation participants from both the state and from the business, including information technology or development perspective, the status and prospects of domestic and international markets prevailing national information-analytical centers on priority areas of science, engineering and technology. In the area of education policy must strengthen the participation of employers in the development of educational standards and curricula of universities. For example, regional and municipal councils of tripartite education policy, consisting of representatives of employers, vocational education and regional administrations.

1. The expected effects and results of the projects are innovative bioenergy.

Environmental effects: waste disposal and agriculture; manufacture of fertilizers.

Social impact: the creation of new jobs; a positive image of local government.

Economic benefit: profits (dividends) subjects; production of biogas and electricity (fertilizers); revenues to state and local budgets [Voros 2003].

The use of public-private partnership in agriculture for the needs of the innovation process has the following advantages:

2. Allows you to improve the quality of public services or manufactured products, as in today's economy the implementation of any project based on its economic feasibility.

3. Helps to successfully implement large investment (infrastructure), as well as because of the prevailing financial condition of most farmers can not implement them for different reasons: limited sources of project financing, the lack of competence of management personnel, lack of support from the government and others., With having the required capabilities - such as land and labor.

4. Promotes efficient use and upgrade infrastructure. Currently there is a significant aging and deterioration of infrastructure facilities in both urban and rural areas, and for AIC this factor plays an important role.

5. Reduces the financial burden on the budget and allows the state to focus on the regulation and control activities.

6. Can successfully use the experience and professionalism of the private sector.

7. Promotes the development of innovative forms of project financing. Access to financial resources for the implementation of PPP projects is essential for the project.

8. The role of farmers, who are often in a particular area to form a single structure [Renda 2005].

Thus, the need for public-private partnership in agriculture dictated by the opportunities that are inherent in PPP mechanism that takes advantage of the private sector as a partner of the state and provides a significant benefit to each member of the partnership.

Conclusion. Consequently, public-private partnership is an important mechanism to stimulate innovation activity, funding innovative scientific research that contributes to the development of the national innovation system through the intensification of network interconnections between its members. The basic principles of management in public-private partnerships in the context of the effective functioning of an innovative economic model, the following: transparency: the degree of clarity and transparency of decision-making; accountability: the extent of responsibility to society for leaders said or done; justice: the extent to which the requirement to comply with the rules apply equally to all members of society; efficiency: the degree of use of scarce human and financial resources without loss, damage or delay or without causing harm to future generations.

Of public-private partnership in the innovation sphere allow to attract additional financial resources to invest in innovative projects; achieve cost reduction and growth stage R & D commercialization effectiveness innovations; provide better quality services to the public sector and create incentives for the development of an innovative economic model.

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