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# Kharkiv Petro Vasylenko National Technical University of Agriculture PUBLIC-SOCIAL-PRIVATE PARTNERSHIP AND RISK MANAGEMENT IN AGRICULTURE

The paper reveals the essence of public-social-private partnership (PSPP) and provides evidence of its great potential in the formation of effective risk management in agriculture in the frameworks of contemporary development of social institutions and current economic trends in agricultural production and agricultural product markets. The foreign experience of joining public, social and private endeavors to reduce risks for agricultural producers is analyzed. A suggestion is made to use PSPP in agricultural risk management in Ukraine.

**Keywords**: public-social-private partnership, risk management, agriculture, insurance, agrarian policy.

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## ДЕРЖАВНО-СУСПІЛЬНО-ПРИВАТНЕ ПАРТНЕРСТВО ТА РИЗИК МЕНЕДЖМЕНТ У СІЛЬСЬКОМУ ГОСПОДАРСТВІ

У статті розкрито сутність державно-суспільно-приватного партнерства (ДСПП). Доведено значний потенціал ДСПП для формування ефективного управління ризиками в сільському господарстві в сучасних умовах розвитку соціальних інститутів, економічних тенденцій в сільськогосподарському виробництві і сільськогосподарських ринків продукції. Проведено аналіз зарубіжного досвіду поєднання державних, суспільних та приватних зусиль щодо зниження ризиків сільгоспвиробників. Запропоновано використання інституту ДСПП в управлінні ризиками в сільському господарстві України.

**Ключові слова:** державно-суспільно-приватне партнерство, управління ризиками, сільське господарство, страхування, аграрна політика.

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# ГОСУДАРСТВЕННО-ОБЩЕСТВЕННО-ЧАСТНОЕ ПАРТНЕРСТВО И РИСК МЕНЕДЖМЕНТ В СЕЛЬСКОМ ХОЗЯЙСТВЕ

В статье раскрыта сущность государственно-общественно-частного партнерства (ГОЧП). Доказан значительный потенциал ГОЧП для формирования эффективного управления рисками в сельском хозяйстве в современных условиях развития социальных институтов, экономических тенденций в сельскохозяйственном производстве и рынков сельскохозяйственной продукции. Проведен анализ зарубежного опыта объединения государственных, общественных и частных усилий по снижению рисков сельхозпроизводителей. Предложено использование института ДСПП в управлении рисками в сельском хозяйстве Украины.

**Ключевые слова:** государственно-общественно-частное партнерство, управление рисками, сельское хозяйство, страхование, аграрная политика.

**Introduction.** Public social private partnership (PSPP) is a component of the economic institution environment of modern developed society based on the democratic principles. We

consider PSPP as an economic institute aimed to serve social welfare and justice when private and public actions separately do not provide the achievement of these goals.

Agriculture plays vital important role in Ukrainian economy. It created 14.0% of gross added value (2015), one third of Ukrainian export is agricultural and food products, 8.3% of employees were working in agriculture in 2015 [1]. One third of population of Ukraine is living in rural area and get income from agriculture production. Sustainable development of agriculture is a base of the food safety and development of rural communities. But the results of production in agriculture depend on weather conditions, price mechanism does not extinguish the production and resources market fluctuation at the income level, incomes of agricultural producers are low and unstable. Such tendencies are the threats for sustainable development of agriculture and food safety. PSPP is possible institute that might be used for risk management in agriculture.

Analysis of resent research and publication. The problems of public private partnerships and social partnerships were investigates in the works of A. Bilous, C. Greve, J. Koppenjan, E. Korovin, A. Kredisov, V. Varnavskiy, O. Petrovskiy. H. Van Ham [4, 8, 10, 11, 13-16]. The different aspects of risk management in agriculture were considered by many economists: K. Coble, N. Gerasymenko, J. Glauber, O. Gudz, R. Heifner, M. Miranda, M. Zuniga and others [2, 7, 12].

**Unsolved parts of problem.** The tendencies of world economy, changes in the social institutions give chance for Ukraine to open up the new methods of risk management for sustainable development and social welfare growth. But the possibilities of PSPP for creation of efficient risk management in agriculture, the forms of combination of public, social and private actions were not investigated deeply with practical approaches for Ukraine economy.

The aim of the article is to work out the conceptual framework of PSPP as a foundation of modern risk management in agriculture. The main tasks related to this aim are to clarify the essence, role and possible forms (on the base of world experience) for PSSP institute formation and use for risk management in agriculture in Ukraine.

Statement of the main result of study with elements of novelty. In scientific publications there are more often used the categories "social partnership" and "public (state) private partnership", than PSPP, in economic sciences.

Social partnership is considered as a system of institutions and mechanisms for coordination of interests of participants of the production process: employers and employees, based on equal partnership [13]. The development of social partnership in its various forms is an important part of the process of strengthening of the social orientation of the modern market economy, its socialization. The social partnership is a form of elaboration of consensus of interest of employees, whose interests are represented, as a rule, trade unions, the employers, and their business associations and state, which is also a guarantor of the agreements adopted. In the center of the negotiation process in the social partnership there are working conditions, wages and salaries, social guarantees for workers and their role in the enterprise. Development of social partnership system creates the possibility of achieving a relative balance of interests of workers and employers on the basis of cooperation, compromise, leading to social consensus. It serves as an effective tool for combining economic efficiency and social justice.

Another institute of modern market economy and democratic society is public (state)-private partnership. Public-Private Partnership (PPP) was defined in Wikipedia as a set of forms of medium- and long-term cooperation between the state and business to solve socially significant problems on the base of mutually beneficial terms. E. Korovin defines PPP as a "medium-term or long-term cooperation between the public and private sector, in which there is political problem solving by combining the experience and expertise of several sectors and the separation of financial risks and benefits" [10]. Varnavskiy V. considers that, in the modern sense the PPP - is "institutional and organizational alliance between government and business in order to implement national and international, large-scale and local, but always socially significant projects in a wide

range of areas: from the development of strategic industries and R & D to provision of public service". Broad interpretation of PPP implies that PPP is a constructive interaction (all its mutual benefit forms) between business and government [15].

A. Kredisov, A. Bilous stress that the scientific platform of PPP has become the institutional theory [11], especially works of J. Commons [4], his ideas concern collective actions and their role for the control and corrections of private actions.

Among the basic features of public-private partnerships in an economic meaning there are defined following [11, 16]: PPP parties are the state and private business; interaction between the parties based on legal ground and has organizational integration forms; PPP has primarily social orientation; in the process of implementation of PPP projects there are consolidation of resources of the parties; financial risks and costs, as well as the results are distributed among the parties.

The Concept of Development of public-private partnership in Ukraine for 2013-2018 was approved by Order of Cabinet of Ministries of Ukraine #739-p in 2013 [5], but this Concept does not include the legal foundation for Public social private partnership

Public social private partnership is considered as more complicated form of PPP. But PSPP is not merely an extension of the PPP idea, but PSPP:

- assures and implements the public goals, agendas and tasks in the sense of community benefit, welfare, etc.;
- adheres to and sustains the agendas and aims of cooperation in the mid- and long-term;
  - plans and combines the resources (including financing) for sustainable results.

In the case of public social private partnership these are not only agencies of the state and private enterprises (as in PPP) but also social enterprises and organizations are involved.

The studying of the experience of risk management system formation in developed countries reveals the possible roles of participants of PSPP, schemes of PSPP in risk management in agriculture.

The legal foundation of agrarian policy in the USA is Agricultural Act. Important part of this act – the government commodity programs for producers and crop insurance programs. A new farm law, the Agricultural Act of 2014 in USA (2014 Farm Act), was signed on February 7, 2014, and will remain in force through 2018—and in the case of some provisions, beyond 2018. The 2014 Farm Act makes major changes in commodity programs, adds new crop insurance options, streamlines conservation programs, modifies some provisions of the Supplemental Nutrition Assistance Program (SNAP), and expands programs for specialty crops, organic farmers, bioenergy, rural development, and beginning farmers and ranchers [6].

The Agricultural Act of 2014 creates two new programs – Price Loss Coverage (PLC) and Agriculture Risk Coverage (ARC). Producers of covered commodities can choose to enroll in one of the two programs. Price Loss Coverage (PLC) – payments are provided to producers with base acres of wheat, feed grains, rice, oilseeds, peanuts, and pulses (covered commodities) on a commodity-by-commodity basis when market prices fall below the reference price (see table below). The payment rate is the difference between the reference price (Table) and the annual national-average market price (or marketing assistance loan rate, if higher). For each covered commodity enrolled on the farm, the payment amount is the payment rate, times 85 percent of base acres of the commodity, times payment yield. Producers may also receive payments on former cotton base acres (termed "generic base acres") that are planted to a covered commodity. A one-time opportunity is offered to reallocate a farm's base acres (except generic acres) based on 2009-12 plantings and to update the farm's payment yields for covered commodities to their 2008-12 average yields. Producers may choose which of their covered commodities to enroll in PLC, but once the election is made, it remains in place for the life of the 2014 Farm Act. Payments will be

reduced on an acre-by-acre basis for producers who plant fruits, vegetables, or wild rice on payment acres [6].

Reference prices, \$ per bushel

**Table** 

Crop	Reference prices, \$ per bushel
Wheat	5.50
Corn	3.70
Barley	4.95
Oats	2.40
Soybeans	8.40

Source: [6]

Price Loss Coverage Program works like insurance for farmers in the case of prices reduction, and government takes some market risks of farmers. But the market price mechanism works such way that reduction of prices often is a consequence the growth of supply. It is more fair for public institute to take private risk due to market failure in the provision of fair income for producers.

Producers participating in Agriculture Risk Coverage (ARC) Program may choose countybased or individual coverage. For producers choosing county-based ARC, payments are provided to producers with base acres of covered commodities on a commodity-by-commodity basis when county crop revenue (actual average county yield times national farm price) drops below 86 percent of the county benchmark revenue (5-year Olympic average county yield times 5-year Olympic average of national price or the reference price - whichever is higher for each year), calculated separately for irrigated and nonirrigated crops. For each covered commodity enrolled on the farm, the county ARC payment amount is the difference between the per-acre guarantee (as calculated above) and actual per-acre revenue (but no greater than 10 percent of the commodity's benchmark revenue), times 85 percent of base acres of the commodity. Producers may choose to participate in ARC using individual farm revenue instead of county revenue. In the individual ARC case, payments are issued when the actual individual crop revenues, summed across all covered commodities on the farm, are less than the ARC individual guarantee. The farm's individual ARC guarantee equals 86 percent of the farm's individual benchmark guarantee, defined as the sum across all covered commodities, weighted by plantings, of each commodity's average revenue – the ARC guarantee price (the 5-year Olympic average of national price or the reference price – whichever is higher for each year) times the 5-year Olympic average individual yield. The payment amount is the individual farm payment rate (the difference between the individual farm guarantee and actual individual farm revenue, but no greater than 10 percent of the farm's benchmark revenue) times 65 percent of base acres for all covered commodities for the individual farm [6].

The state programs to reduce farmers' risks were developed in the US state agricultural policy not only for crop producers but also for dairy producers. The Margin Protection Program (MPP) for dairy producers offers producers insurance based on the average actual dairy production margin (difference between the all-milk price and average feed cost), with payments beginning when the margin falls below \$4.00 per hundredweight (cwt) for a 2-month period. Benefits apply to a participating operation's production history, adjusted annually to reflect national average milk production increases. All dairy operations are eligible to participate, and pay only the administrative fee (\$100) if they select protection at the minimum margin level (\$4.00 per cwt of milk). Higher levels of protection are available, for which producers must pay both the administrative fee and a premium. Premiums are lower for coverage below 4 million pounds of milk production (equivalent

to a herd of about 185 cows). These lower premiums are also reduced by 25 percent during both 2014 and 2015 [6].

Special part of the US Agricultural Acts is "Crop insurance".

Grain production is one of the areas of specialization of agriculture in Canada. The institutional provision of regulation of the grain market in Canada is unique. Canadian Wheat Board (CWB) was created in 1935. By definition, the CWB is an organization is controlled by farmers; it markets wheat and barley grown in Western provinces. The objective of the CWB – to ensure the most profitable for farmers grain prices and competitiveness of Canadian wheat and barley. CWB exports more than 20 million tons grain in 70 countries.

So, CWB in the example of social private partnerships in reduction of market risks of farmers. This institute is added by state-private partnerships in the many state insurance programs. Canadian experience gives examples of a large package of programs aimed to reduce the risk of fluctuations in farmers' income, (Net Income Stabilization Account, NISA), Canadian stabilization program of agricultural income (Canadian Agriculture Income Stabilization Program, CAIS).

For insurance program insurance funds are derived from the contributions of farmers and the federal and provincial governments. The federal government establishes uniform national insurance standards, controls the payments. Additionally, there are programs of reinsurance in case of insufficient major insurance funds to cover losses from natural disasters.

Consequently, insurance and farm income stabilization programs designed to cover the systematic production risks associated with the uncertainty of weather conditions, and - risks of fluctuations of farmers' income.

The general course of agricultural policy of Canada to its market orientation includes the establishment of an integrated social system of risk management in the agricultural sector, where efforts are divided between farmers and the state.

As there was announced, the Common Agricultural Policy of European Union (CAP) 2014-2020 includes two pillars. The first pillar defines financial measures to support farmers, including the single payment scheme and the single regional payment. The second pillar of the CAP provides the measures for rural development. The big part of first pillar of CAP deals with the PSSP in risk management in agriculture [3].

In Ukraine in 2005 there was introduced program of state support of insurance in agriculture, but it was low efficient and low demanded. The budget crises lead to the suspending of this program.

International experience gives examples of different schemes of PSPP in risk management in agriculture. On the base of analysis of theoretical principles of PSPP and its implementation in the developed countries we include to the circle of main participants of PSPP in risk management in agriculture agricultural producers, state, insurance and loss adjusters agencies, professional organizations, educational, scientific and research institutes. The combination of their endeavors has to provide sustainability of agricultural production development, food safety, prosperity of rural communities.

Conclusions and prospects for further research in the field. The formation of PSPP in risk management in agriculture is real way for maturity of Ukrainian democratic society, its institutional readiness to consolidate for solution of social important problems. It may potentially have significant theoretical and practical implications for agriculture and rural development, as well for whole Ukrainian society. It is reasonable that the risks of agricultural production is take by all society on the base of PSPP, whose main participants are agricultural producers, state, insurance and loss adjusters agencies, professional organizations, educational, scientific and research institutes.

Further research have to investigate the market failure to provide fair incomes for agricultural producers and to elaborate scientific foundation for PSSP creation for risk management

in agriculture, including creation of insurance funds on the base of mutual participation of producers, government, insurance companies, producers organizations, the programs and institutional provisions of PSPP formation for risk management in Ukrainian economy.

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