

**ЕКОНОМІКА ТА УПРАВЛІННЯ НАЦІОНАЛЬНИМ ГОСПОДАРСТВОМ**

UDC 339.137.2:332.133.6

УДК 339.137.2:332.133.6

**Н. У. Pavlova**, Doctor of Economics,  
Associate Professor,  
**О. В. Honcharenko**, Doctor of Economics,  
Associate Professor,  
**Yu. L. Yakubenko**, Candidate of Economic  
Sciences

**Г. Є. Павлова**, д. е. н.,  
доцент,  
**О. В. Гончаренко**, д. е. н.,  
доцент,  
**Ю. Л. Якубенко**, к. е. н.

**INSTITUTIONALIZATION OF INNOVATION  
TRANSFORMATIONS OF AGRICULTURAL  
PRODUCTION IN THE CONTEXT OF  
PROVIDING ECONOMIC SECURITY**

**ІНСТИТУЦІОНАЛІЗАЦІЯ ІННОВАЦІЙНИХ  
ТРАНСФОРМАЦІЙ АГРОПРОМИСЛОВОГО  
ВИРОБНИЦТВА В КОНТЕКСТІ  
ЗАБЕЗПЕЧЕННЯ ЕКОНОМІЧНОЇ БЕЗПЕКИ**

**Urgency of the research.** Competitive development and ensuring of economic security of the country determine the need for intensification of the innovation process in agricultural and industrial production. The achievement of these imperatives is due to their institutionalization, which determines the relevance of the research topic.

**Target setting.** Due to the lack of a systemic base for the development of agricultural and industrial production, the priorities of the industry are uncoordinated, there are no results of innovative changes. It is the institutionalization of innovation transformations, ensuring of the systematic interaction of institutes can certify the achievement of strategic priorities for the development of agricultural and industrial production.

**Actual scientific researches and issues analysis.** Instrumentation of institutionalism for the formation of the conceptual regulations of innovative development and determination of its determinants were used by A. Balyan, O. Datsiy, L. Kurilo, I. Kostyrko, P. Sabluk, M. Malik, S. Tivonchuk, L. Fedulova, O. Shpykulyak, O. Shubravskaya.

**Uninvestigated parts of general matters defining.** The need to define conceptual regulations for the formation of innovation development leads to further study of the problems related to the methodology of institutional transformations and the peculiarities of the institutional security.

**The research objective.** The purpose of the article is to determine the peculiarities of institutionalization of innovative transformations of agricultural and industrial production, its characteristic features and constituent elements.

**The statement of basic materials.** The article substantiates the importance of developing innovations in the agrarian sector to ensure the country's food security. The purposefulness of innovation development on the basis of implementing innovative policy tools leads to the introduction of regulatory, signalling and stimulating institutions.

**Conclusions.** To ensure the activation of the innovation process, it is necessary to develop an appropriate institutional mechanism that is capable of implementing the priorities of innovation development at the level of the industry and regions and the growth of producers' innovation activity.

**Keywords:** agro-industrial production; innovation; innovation development; innovation priorities; institutionalization.

**DOI:** 10.25140/2410-9576-2018-1-1(13)-83-87

**Актуальність теми дослідження.** Конкурентоспроможний розвиток та забезпечення економічної безпеки країни обумовлюють потребу в активізації інноваційного процесу в агропромисловому виробництві. Досягнення зазначених імперативів пов'язане з їх інституціоналізацією, що зумовлює актуальність теми дослідження.

**Постановка проблеми.** Через відсутність системної основи розвитку агропромислового виробництва неузгодженими постають пріоритети розвитку галузі, відсутні результати інноваційних перетворень. Саме інституціоналізація інноваційних перетворень, забезпечення системної взаємодії інститутів може забезпечити досягнення стратегічних пріоритетів розвитку агропромислового виробництва.

**Аналіз останніх досліджень і публікацій.** Інструментарій інституції-аналізу для формування концептуальних положень інноваційного розвитку та визначення його детермінант використовували А. Балян, О. Дацій, Л. Курило, І. Костирко, П. Саблук, М. Малік, С. Тивончук, Л. Федулова, О. Шпикуляк О. Шубравська.

**Виділення недосліджених частин загальної проблеми.** Необхідність визначення концептуальних положень формування інноваційного розвитку зумовлює подальше вивчення проблем, що стосуються методології інституції-аналізу трансформацій та їх інституціонального забезпечення.

**Постановка завдання.** Метою статті є визначення особливостей інституціоналізації інноваційних трансформацій агропромислового виробництва, її характерних ознак і складових елементів.

**Виклад основного матеріалу.** В статті обґрунтовується важливість розвитку інновацій в аграрній сфері для забезпечення продовольчої безпеки країни. Цілеспрямованість інноваційного розвитку на основі реалізації інструментів інноваційної політики зумовлює запровадження регулюючих, сигнальних і стимулюючих інституцій.

**Висновки.** Для забезпечення активізації інноваційного процесу необхідна розробка відповідного інституціонального механізму, який здатний реалізувати пріоритети інноваційного розвитку на рівні галузі і регіонів та зростання інноваційної активності виробників.

**Ключові слова:** агропромислове виробництво; інновація; інноваційний розвиток; інноваційні пріоритети; інституціоналізація.

---

**ЕКОНОМІКА ТА УПРАВЛІННЯ НАЦІОНАЛЬНИМ ГОСПОДАРСТВОМ**

---

**Urgency of the research.** In recent years, the growth in the agrarian sector, which was the result of concentration of land use, the intensification of production and the expansion of the export potential of agricultural production, is recognized in Ukraine as an unconditionally positive trend, which contributes to the emergence of the economy from a crisis state. However, the contradictions of the achieved indicators, significant deformations and negative tendencies of agricultural development are ignored. An increase in the export share of cereals and oilseeds confirms the image of the country as a supplier of raw materials. Growth of the income of grain traders, agriholdings, processing enterprises and other intermediaries increases the financial exhaustion of agriculture, limits prospects of development, self-development of rural territories and communities, and the degradation of certain segments of the rural economy are threatening the country's economic security.

The changes that have taken place in the economic development of the leading countries have witnessed their transition to an innovative model of development. Innovative improvement of production, the ability to offer the consumer goods and services new, previously unknown type, became the general law of modern competitive practices [1, p. 32-32]. At the same time, the available theoretical approaches, methods and tools for implementing the innovation process in the agrarian sector are not always adequate to the growing needs and expected results of innovation development.

**Target setting.** The current state of development and the weakness of the innovation process in agroindustrial production do not meet the expectations of becoming a potentially competitive sphere. Innovation process is characterized by the limited introduction of modern technologies, the predominance in the practice of agroindustrial production of resource consumption schemes of production activity; insufficient development of progressive directions of innovative development; orientation of innovative activity of domestic agrarians mainly on the introduction of new varieties and hybrids of agricultural crops, breeds of animals, veterinary means, bacterial starter material in food production; limited biotechnology research; the growth of innovation import dependence, the lack of holistic perception of the organizational structure of the development of the innovation process.

There are no effective organizational forms of the innovative activity in the agrarian sector (agricultural research parks, agricultural technology parks, agribusiness incubators, agroindustrial territorial innovation centers, etc.), which narrows or completely eliminates the possibility of introducing domestic innovations created there. Due to the lack of a systemic basis for the development of agro-industrial production, the priorities of the industry are uncertain and uncoordinated; there are no results of innovative and structural changes in the agrarian sphere. It is the institutionalization of innovation transformations, ensuring the systematic interaction of institutes of innovation development can ensure the achievement of strategic priorities for the development of agroindustrial production.

**Actual scientific researches and issues analysis.** In scientific studies, the institutionalization of innovation is considered in various aspects: as a process of creating stable forms of interaction on the basis of formalized norms, laws, customs; as legal and organizational consolidation of interactions, relations, forms of behavior in society; as the process of forming elements and components of the socioeconomic institute; the creation of economic subjects of a favorable environment for the implementation of the broad spectrum of constructive potential development opportunities in the form of legal norms through the economic and legal regulation of the wielder of power [2, p. 34-35]. In the agrarian sphere, I. Kostyrko [3], P. Sabluk, M. Malik, S. Tivonchuk, L. Fedulova, O. Shpikulak [1; 4-5] used the toolkit of institutionalism for the formation of conceptual provisions of innovative development and determination of its determinants. Outstanding domestic scientists such as A. Balyan, O. Datsiy, L. Kurilo, O. Shubravska have dedicated their researches to the innovation development, institutional provision of the activation of the innovation process in agro-industrial production [6-7].

**Uninvestigated parts of the general matter defining.** The low activity of the innovation process in agroindustrial production, the need to determine the conceptual provisions for the formation of innovation development necessitate further study of the problems related to the methodology of institutional transformations and the mechanisms for their implementation and the peculiarities of the institutional provision of innovation development in the agrarian sector of the economy.

**The research objective.** The purpose of this article is to determine the peculiarities of institutionalization of innovative transformations of agroindustrial production, its features and constituent elements.

---

**ЕКОНОМІКА ТА УПРАВЛІННЯ НАЦІОНАЛЬНИМ ГОСПОДАРСТВОМ**

---

**The statement of basic materials.** Agriculture of Ukraine is one of the few branches of the domestic economy, which potentially has undeniable competitive advantages on the foreign market. However, the agro-food sector in many positions is still not competitive. It can be stated that many tendencies of the development of the modern Ukrainian agrarian sphere are controversial, sometimes seemingly mutually exclusive. These contradictions were the result of the not-well-thought-out economic, in particular, agrarian policy of our state in recent years, which often did not contribute to the efficient work of agriculture, as well as the unfavorable institutional environment.

The research of ontological prerequisites for the development of innovations of agroindustrial production proves that obstacles for innovative activity of agrarian enterprises are ineffective legislative, law enforcement, judicial power, their asymmetry; existing economic order, which creates additional expenses of innovation activity and is unfavorable to innovations; high transaction costs of innovation activity; the domination of short-term interests over long-term business entities; lack of infrastructure and personnel; institutional problems of micro and macro levels. There is no proliferation of effective organizational forms of innovation in agro-industrial production, which narrows or completely eliminates the possibility of introducing the created domestic innovations.

Innovative theories developed by modern science differ in categorical characteristics of innovations, argumentation in substantiating the transformational influence of innovations on economic dynamics, the treatment of static and dynamic characteristics of innovations in changes, specification of research in the areas of scientific and technological progress: technical and technological improvements and economics: the essential effectiveness of system organizations, the basis of which is based on the productivity of innovation [8, pp. 18-20].

Institutionalization involves the creation of economic institutions that provide a rational coordination of economic behavior of subjects of the innovation process and various structural entities. According to T. Veblen, the institution by its nature has the properties of "continuity" (imitation), since it is a self-sustaining and self-replicating phenomenon. Biological gene is a structure that transmits hereditary information, such transmission passes through simulation and learning [9, p. 50]. In this context, J. Hodgson argues that the distinctive feature of the new institutional economy is that institutions influence the behavior of individuals mainly as a constraint [10]. Institutional rules do not just form beliefs, they also structure processes by which a special additional meaning of mental processes is established. There is also an alternative approach that belongs to A. Denzau and D. North [11 p. 3-31] According to this approach, the institutions are external mechanisms that individuals create for structuring and ordering the environment. Disclosing the synergistic nature of innovation, researchers emphasize that modern innovations are the most complex and self-organized systems [12, p. 224]. The core of such innovation-systems is recognized as new knowledge, as a substantive process and the result of human cognition. Knowledge acts as a synergetic core of innovation, determines their nature.

Based on the study of the genesis of the innovation theory, the institutional foundations for the development of innovations, the categorical content of the institutionalization of innovations as a process of forming a set of interconnected institutions (signal, regulatory, stimulating) that determine the innovation environment, structure the interaction of the subjects of the innovation process and ensure the purposefulness of innovative development. Signaling institutions coordinate the actions of individual economic entities with formal norms in the innovation sphere and are embodied in innovative priorities, policy statements, expert conclusions, funding of fundamental research, state guarantees and the activities of innovation centers and development institutions. Regulatory institutions are aimed at regulating the innovation process, they function through licensing, patenting, direct financing of research, public procurement, technology transfer. Stimulating institutions form economic incentives for businesses to innovate and are represented by tax incentives, venture financing, concessional lending, infrastructure of technology parks and business incubators.

At the level of the institutional organizational structure, the development of innovation infrastructure is important; organization of the innovation process based on a modern, rather than a linear model; information and staffing, improvement of the regulatory framework of the innovation sphere. In order to function in the institutional environment, it is necessary to introduce measures to minimize the impact and eliminate institutional traps: eliminating of destructive institutions and institutes, the implementation

---

**ЕКОНОМІКА ТА УПРАВЛІННЯ НАЦІОНАЛЬНИМ ГОСПОДАРСТВОМ**

---

of effective incentives for innovation, minimization of innovation risks, streamlining of formal rules that regulate the creation and use of intellectual products, ensuring of the efficiency of budget funds in innovation sphere.

Based on most studies of modern institutionalists, we can distinguish three types of influence of institutions on economic behavior, which can be expressed through the functions of institutions [13, p. 11-12], in particular: the restrictive function (restricts the economic behavior of economic actors) information-cognitive function ensures the perception of information, in the absence of institutions, would not be perceived as relevant), a teleological function: realized as a result of the fact that institutions influence the final results of, sought by economic actors (this function generates a motivation).

A special aspect of the development of the innovation theory is the consideration of the question of the interrelationship of institutions and the innovation resource lies in the plane of the management system. In this context, the interaction of the innovation resource and institutions in the system of management of innovation development (macro-, meso-, microlevel) is directly manifested through organizational innovations and is seen as the end result of the process of creating, disseminating and applying new knowledge on doing business, and institutions as rules and forms of innovative interactions aimed at the implementation of innovative solutions in the socio-economic system of the appropriate type, resulting in innovation the development of economic systems on the basis of a qualitative change in its functioning during the transition to a new technological level [1, p. 31-32].

Existing institutions form framework conditions and incentives that define a certain trajectory where the innovation process is carried out. If incentives are productive, then there is a development of technologies and forms of organization of production, new markets are formed. If such incentives are ineffective, an "institutional trap" arises that acquires a self-sustaining nature and leads to the emergence of pseudo-innovations or quasi-innovations, an imitation form of the innovation process, technological backwardness of the economy.

To realize the potential of agricultural science and commercialize its results, it is important to attract innovation and entrepreneurial structures that will work in agreement with the developers of innovations and combine the interests of different subjects of the innovation process. This process will be facilitated by the formation of a unified research and production network that will unite sectoral and territorial innovation structures and will operate on the basis of public-private partnership. Taking into account the basic principle of innovations development regulation (institutional system), priority is given to the integration of cluster regional structures and their integration with the infrastructure links of a single research and production network (for example, Innovation Park), which consolidates the motives and resources of the participants and mobilizes the potential of the entities. innovation process for the implementation of the strategic goal.

**Conclusions.** The development of innovations in agricultural and industrial production is an important prerequisite for the formation of food security of the country, the economic growth of the national economy and the increase of competitiveness of agriculture and quality of life of the rural population.

Innovations, gaining an important role in economic development, gradually received organizational arrangements, which in the future allowed to predict and direct innovation development. Such changes became possible due to the institutionalization of innovation, which determined the innovation environment, structured the interaction of subjects of the innovation process and ensured the focus of innovation development.

From the point of view of ensuring the systematic institutional regulation of innovation transformations, we consider that it is necessary to define the target development priorities that should be put into the concept and strategy of innovative development of agricultural and industrial production. Implementation of the priorities requires the introduction of regulatory influences at all levels of the institutional organization. The systemic principles of institutional regulation of the innovation development determine the use of a program-targeted approach, which will ensure the implementation of state, sectoral and regional programs for innovation development. Within the framework of state programs, the mechanism of implementing the strategy becomes more detailed, measures and sources of financing are determined. Regional strategies for the innovation

## ЕКОНОМІКА ТА УПРАВЛІННЯ НАЦІОНАЛЬНИМ ГОСПОДАРСТВОМ

development of agricultural and industrial production must conceptually correspond to the program documents belonging to higher statuses.

The implementation of the innovative potential of agricultural science, its integration into the market environment, requires the need for a scientific, technical and innovation partnership, programmatic and targeted support for the development of production of priority innovative products, transfer technology support for innovation within a single research and production network.

### References

1. Fedulova, L. (2013). Innovatsiyni rozvytok: evoliutsiia pohliadiv ta problemy suchasnoho usvidomlennia [Innovative development: the evolution of attitudes and awareness of the problems of modern]. *Ekonomichna teoriia - Economic theory*, 2, 28-45 [in Ukrainian].
2. Katigrobova, O. (2012). Systema instytutsionalizatsii innovatsiynikh protsesiv v umovakh rynkovoi transformatsii [The System of institutionalization of innovative processes in conditions of market transformation]. *Visnik Kyivskoho natsionalnoho universitetu im. T. Shevchenka - Bulletin of Taras Shevchenko National University of Kyiv*, 143, 34-37 [in Ukrainian].
3. Kostirko, I. & Timofiiiv S. (2014). Doskonalist instytutsiinoi infrastruktury ta yii otsinka: teoretychnyi aspekt [Perfection of institutional infrastructure and his estimation: theoretical aspect]. *Ekonomika APK - The Economy of Agro-Industrial Complex*, 2, 81-86 [in Ukrainian].
4. Malik, M. U., Shpikyliak, O. H. & Lyzan, O. Y. (2013). Instytuty y instytutsii u rozvytku intehratsiynikh protsesiv v ahraryi sferi [Institutes and institutions in the development of integration processes in the agrarian sector]. *Ekonomika APK - The Economy of Agro-Industrial Complex*, 4, 86-92 [in Ukrainian].
5. Sabluk, P. T., Shpikyliak, O. H. & Kurilo, L. I. (2010). *Innovatsiyni dielni v ahraryi sferi: instytutsionalni aspekti* [Innovation activities in the agricultural sector: institutional aspects]. Kyiv: NNZ IAE [in Ukrainian].
6. Datsiy, O. I. (2011) Finansove zabezpechennia innovatsii v ahropromyslovomu kompleksii Ukrainy [Financial support of innovations in the agro-industrial complex of Ukraine]. *Problemy investytsiino-innovatsiynoho rozvytku - Problems of investment and innovation development*, 1, 65-76 [in Ukrainian].
7. Shybravska, O. V. & Prokopenko, K. O. (2013). Perspektyvy modernizatsii ahraryoho sektoru Ukrainy [Prospects for the modernization of the agricultural sector of Ukraine]. *Ekonomika Ukrainy - Economy of Ukraine*, 8, 64-76 [in Ukrainian].
8. Melnik, O. (2011). Formuvannia metodolohichnykh pidkhodiv u doslidzhenniakh innovatsii ta innovatsiynoho rozvytku [Formation of methodological approaches in innovation research and innovation]. *Aktualni problemy ekonomiky - Recent economic problems*, 6, 18-25 [in Ukrainian].
9. Nesterenko, A. (1997). Sovremennoe sostoyanie i osnovnye problemy instytutsionalno-evolyutsyonnoy teorii [Current state and main problems of institutional and evolutionary theory]. *Voprosy ekonomyki - Problems of economics*, 3, 42-57 [in Russian].
10. Hodgson, G. M. (1998). The Approach of Institutional Economics. *Journal of Economic Literature*, 36, 1, 166-192 [in English].
11. Denzau, A., North, D. (1994). Shared Mental Models: Ideologies and Institutions? *Kyklos*, 47, 1, 3-31 [in English].
12. Tarasevich, V. (2008). O sinergetike innovatsiy [About the synergy of innovation]. *Biuleten mizhnarodnoho nobelivskoho ekonomichnoho forumu. - Bulletin of the International Nobel Economic Forum*, 1, 224-232 [in Russian].
13. Volchik, V. V. (2011). *Institutsionalnaya i evolyutsionnaya ekonomika* [Institutional and evolutionary economics]. Rostov-on-Don: YFU [in Russian].

### Література

1. Федулова, Л. Інноваційний розвиток: еволюція поглядів та проблеми сучасного усвідомлення / Л. Федулова // Економічна теорія. – 2013. - № 2. – С. 28-45.
2. Катигрובה, О. Система інституціоналізації інноваційних процесів в умовах ринкової трансформації / О. Катигрובה // Вісник Київського національного університету ім. Т. Шевченка. – 2012. – № 143. – С. 34-37.
3. Костирко, І. Г. Досконалість інституційної інфраструктури та її оцінка: теоретичний аспект / І. Г. Костирко, С. В. Тимофіїв // Економіка АПК. – 2014. – № 2. – С. 81-86.
4. Малік, М. Й. Інститути й інституції у розвитку інтеграційних процесів в аграрній сфері / М. Й. Малік, О. Г. Шпикуняк, О. Ю. Лузан // Економіка АПК. - 2013. - № 4. - С.86-92.
5. Саблук, П. Т. Інноваційна діяльність в аграрній сфері: інституціональний аспект: монографія / П. Т. Саблук, О. Г. Шпикуняк, Л. І. Курило. – К. : ННЦ ІАЕ, 2010. – 706 с.
6. Даций, О. І. Фінансове забезпечення інновацій в агропромисловому комплексі України / О. І. Даций// Проблеми інвестиційно-інноваційного розвитку. – 2011. – № 1. – С. 65-76.
7. Шубравська, О. В. Перспективи модернізації аграрного сектору України / О. В. Шубравська, К.О.Прокопенко // Економіка України. – 2013. – № 8 (261). – С.64-76.
8. Мельник, О. Г. Формування методологічних підходів у дослідженнях інновацій та інноваційного розвитку / О. Г. Мельник // Актуальні проблеми економіки. – 2011. – № 6(120). – С.18-25.
9. Нестеренко, А. Современное состояние и основные проблемы институционально-эволюционной теории / А. Нестеренко // Вопросы экономики. – 1997. – № 3. – С. 42-57.
10. Hodgson, G. M. The Approach of Institutional Economics // *Journal of Economic Literature*. 1998. Vol. 36. № 1. – P. 166-192.
11. Denzau, A., North, D. Shared Mental Models: Ideologies and Institutions? // *Kyklos*. 1994. Vol. 47. - № 1. - P. 3-31.
12. Тарасевич, В. Н. О синергетике инноваций / В.Н. Тарасевич // Бюллетень міжнародного нобелівського економічного форуму. – 2008. – № 1. – Д. : Вид-во ДУЕП – С. 224-232.
13. Вольчик, В. В. Институциональная и эволюционная экономика : учебное пособие / В. В. Вольчик. – Ростов н/д: Изд-во ЮФУ, 2011. - 228 с.

Received for publication 25.12.2017

### Бібліографічний опис для цитування:

Pavlova, G. Y. Institutionalization of innovation transformations of agricultural production in the context of providing economic security / G. Y. Pavlova, O. V. Honcharenko, Yu. L. Yakubenko // Науковий вісник Полісся. – 2018. - № 1 (13). Ч. 1. – С. 83-87.