UDC 658.5:338.432

O. O. Krasnorutskyi, Doctor of Economic Sciences, Professor, S. V. Rudenko, Assistant at the Department of Accounting and Auditing

## METHODOLOGICAL FOUNDATIONS OF ECONOMIC ESTIMATION OF AGRICULTURAL ENTERPRISES PRODUCTION CAPACITY

**Abstract.** The methodological approaches to the economic estimation of the production potential of the agricultural enterprises have been systematized in the article. Based on the studies of the economic essence of the production potential and its place in the activities of agricultural enterprises, methodical approach to its assessments proposed, which comprises three stages: assessment of resource security (land, human, material and technical, financial and information resources), evaluation of generation production capacity (technology and organization of production of agricultural enterprises) and the final stage - an integrated assessment of the productive capacity of the agricultural enterprises.

**Keywords:** agricultural enterprises potential; production capacity; evaluation of industrial potential; assessment of production capacity; the integrated assessment of the productive capacity of agricultural enterprises.

О. О. Красноруцький, д. е. н., професор, С. В. Руденко, асистент кафедри обліку та аудиту

## МЕТОДИЧНІ ОСНОВИ ЕКОНОМІЧНОЇ ОЦІНКИ ВИРОБНИЧОГО ПОТЕНЦІАЛУ АГРАРНИХ ПІДПРИЄМСТВ

**Анотація.** У статті систематизовані методичні підходи щодо здійснення економічної оцінки виробничого потенціалу аграрних підприємств. Виходячи із дослідження економічної сутності виробничого потенціалу та його місця в діяльності аграрних підприємств, запропоновано методичний підхід до його оцінки, який включає три етапи: оцінку ресурсного забезпечення (земельних, кадрових, матеріально-технічних, фінансових та інформаційних ресурсів), оцінку генерування виробничих можливостей (технологій та організації виробництва аграрного підприємства) та заключний етап — інтегральну оцінку розвитку виробничого потенціалу аграрного підприємства.

**Ключові слова:** потенціал аграрних підприємств; виробничий потенціал; оцінка виробничого потенціалу; оцінка виробничих можливостей; інтегральна оцінка розвитку виробничого потенціалу аграрних підприємств.

**А. А. Красноруцкий,** д. э. н., профессор, **С. В. Руденко**, ассистент кафедры учета и аудита

# МЕТОДИЧЕСКИЕ ОСНОВЫ ЭКОНОМИЧЕСКОЙ ОЦЕНКИ ПРОИЗВОДСТВЕННОГО ПОТЕНЦИАЛА АГРАРНЫХ ПРЕДПРИЯТИЙ

Аннотация. В статье систематизированы методологические подходы осуществления экономической оценки производственного потенциала аграрных предприятий. Основываясь на исследованиях экономической сущности производственного потенциала и его места в деятельности аграрных предприятий, предложен методический подход к его оценке, который включает три этапа: оценку ресурсного обеспечения (земельных, кадровых, материально-технических, финансовых и информационных ресурсов), оценку генерирования производственных возможностей (технологий и организации производства аграрного предприятия) и заключительный этап — интегральную оценку развития производственного потенциала



аграрного предприятия.

**Ключевые слова:** потенциал аграрных предприятий; производственный потенциал; оценка производственного потенциала; оценка производственных возможностей; интегральная оценка развития производственного потенциала аграрных предприятий.

Relevance of the research topic. The problem of identifying opportunities for the development of economic activity is the key to successful implementation of the sustainable development model of agribusiness, primarily agricultural enterprises. Considering the peculiarities of the reproductive process in the agricultural production, the distinctiveness of the core activities of agricultural enterprises, the inertia of the socio-economic systems of agricultural areas, situational and indeterminate in the information aspect, nature of management decisions on development strategy and tactics, it is relevant to review and study the possible solutions to the mentioned issues in the light of the management of its economic potential and constituents, primarily production potential. And in its turn the implementation of management actions on components of the socio-economic system of the subject micro-level, that is, agricultural enterprises, requires reliable information about existing potential to ensure efficiency, competitiveness, the volume and quality of products and the like. At the same time the methodical approaches and ways of evaluation the production potential of agricultural enterprises, universal and relevant to the modern challenges, do not yet exist, but the available methodological tools mark contradictions of conceptual, methodological, methodical, analytical and applied nature, making it difficult to employ. The need to streamline the existing methodical techniques and ways, as well as the elimination of the corresponding contradictions determines the relevance of the study, the results of which are presented in this paper.

**Problem statement.** The current state of the agricultural sector, which is characterized by dynamic structural transformation processes and turbulence needs deeper economic research of sector economic activity, which will enable them to achieve sustainable competitive market position and increase the economic efficiency of core activities. In this context, the primary characteristic of systemic economic activity of agricultural enterprises is the production capacity, which reflects the opportunities and resources for timely adequate reaction under conditions and changes in the existing and projected environment of its activities. Managing the development of production potential is impossible without the transfer of this category from the abstract plane to the particular index plane, which can be evaluated primarily using economic-statistical methods.

Review of recent papers and research. Today the problems and tasks of scientific researches on production potential of agricultural enterprises are in sight of a wide range of agricultural economists, in particular a significant contribution to the development of productive capacity assessment was done by the following researchers: V. H. Andriichuk, I. Yu. Hryshova, O. I. Hutorov, S. O. Zaika, O. V. Mytiai, S. I. Plotnytska, O. D. Shafronov, I. O. Sharko, Ya. R. Yarema [1-7]. It should also be noted that the assessment of production potential is studied by scientists who deal other areas of the economy as well: engineering, food industry, services. However these developments possess very limited possibility of being introduced in the agricultural sector, since there it is unacceptable to replace lands with agricultural enterprises as the main means of production neither by labor nor by capital, that can be applied in other business areas and the assessment of their production potential considering the substitution of resources is taken into account in the studies. The study of the existing national and international research on methodological grounds of economic evaluation of the production potential of agricultural enterprises makes it possible to state the absence of a clear systematic approach to assessing the production potential at the stage of its formation, mobilization and implementation in the economic activity of agricultural enterprises, which is the essence of a particular complex scientific problem of identification of the corresponding methodic approaches.

**Objective setting.** The major objectives of the paper are systemation of the methodological foundations of performing economic evaluation of the production potential of agricultural enterprises, searching for unity and differences in the methods of evaluation and justification of rational methodological approaches that take into account the complexity and characteristics of the formation and use



of the information base for the management of opportunities and combinations of resources in a particular subject of economic relations in the agricultural sector.

Basic material presentation. Before proceeding to the study of methodological foundations of economic evaluation of the production potential of agricultural enterprises it is rational to justify the nature of the category of "agricultural production potential of the enterprise," to determine the structure of this indicator and its place in the economic activity of agricultural enterprises. This need arises from the lack of sustainability of scientific positions on this issue, and as a result, the significant amount of research approaches to assess the production potential under different understanding of the economic entity. Nowadays, we can count a lot of approaches to understanding the essence of the production potential of agricultural enterprises, whose analysis was carried out earlier. This has enabled us to maintain that the production potential of the agricultural enterprises is complex, multifaceted and multisystemic characteristic of the company, which identifies its ability to obtain certain results of its activity in certain areas due to certain organizational and administrative actions in the combination of components of the resource potential of the technology, organization and production management in the company [8, c. 221]. Describing the place of production capacity in the system of economic activities of agricultural enterprises, it is also important to note that the transformation of productive capacity in the economy is to attract tools such as marketing and sales activities of the company and management, through which the company receives and implements the commercial activities with the produced production and completes the production and commercial cycle, turning back advances in the production of capital in cash.

The characteristic of the productive potential of agricultural enterprises underlie the methodological approaches to its economic assessment. Undoubtedly, production potential inherent somewhat abstract and complex structure that affects the application of methods and techniques for its evaluation. We agree with the point of L. O. Luhova, who while investigating the economic potential of agricultural enterprises, notes the multidimensionality, lack of comparability, specificity of individual components, interactions of their economic content and functional focus, the large number of quantitative and qualitative indicators characterizing economic potential, many possible options, combination of various elements complicating the construction of one integrated measuring and determining the overall size of the economic potential [9, p. 26]. Although this statement of the scientist concerned the economic potential, nevertheless it certainly is relevant to productive potential of agricultural enterprises.

We believe that the production potential of the company is formed as opening opportunities which remain unused or sold depending on the development and effectiveness of the control mechanism. Thus clearly distinguishes two stages - formation and realization of the productive potential of agricultural enterprises, and as a result, there is the possibility of evaluation of production potential at each of these stages.

Studies have shown that the existing methodological approaches to assess the production potential of agricultural enterprises can be grouped into three groups (Table. 1).

The most common and universal is the combination of methods used within cost. In addition, it is suitable to use both in the planning stages of various projects of companies that provide the generation of new opportunities, that is at the stage of production potential, and at the stage of implementation of the current evaluation capacity in the implementation of strategic and tactical solutions to the main activities and economic growth producers. Methodical basis of the mentioned approach is a set of methods for determining the costs concerning the implementation of development projects and ongoing activities, and probabilistic methods for assessing outcomes of implementation of these projects. Subject to relevant and comprehensive information base of this approach can make reliable results for usage in making appropriate management decisions.

Comparative and effective methodic approaches suitable for employing only in the stage of potential realization, since they suppose the availability of certain selected strategic alternatives of development and implementation of appropriate strategies. Particular statistical and probabilistic methods for assessing the market value of the company, scenario methods of strategic planning are at the basis of these approaches. The use of these methods in various combinations requires less detailed and



broad information base compared with the methods of the cost approach, however, the reliability of the results to management decisions are usually lower.

Table 1
Classification of methodological approaches to the economic evaluation of the production potential of agricultural enterprises \*

Methodological approaches to economic as- sessment	Characteristics of the methodological approach	The possibility of using assessment methods on the stage:	
		Capacity build- ing	The implemen- tation of the potential
1. The Cost Approach	The Cost Approach is based on the postulate that a potential owner-user will not agree with the costs of development and implementation of their internal or external capacity greater than the value of the expected financial and property results. The methods of this group include resource assessment of all components of integrated land and the property, social and organizational complex of enterprises on the basis of accounting for all expenses necessary for its reproduction (substitution) a specific date in working condition.	+	+
A Comparative     Approach	The Comparative Approach is based on information about recent market transactions of similar objects and its use as a basis for determining the value of the assessment. The method of the group charged with the assumption that the subjects of market relations enter into agreements similar to the customary traditions or previous experience.	-	+
3. The Results- Based Approach	The Results-Based Approach is based on dependence of the value of assessment object on the capabilities of its effective use, that is, possible results. This statement arises from the considerations that a potential owner-user does not pay for the facility more than he/she expects to receive from his/her economic use. Capacity assessment according to the Results-Based Approach concept comes from the position of the usefulness of certain features of the object.	-	+

<sup>\*</sup> Developed by the author based on reference [10]

The unity of the approaches is caused by the complexity of the object as the possibility of development or growth of the company, which necessitates widespread use of scenario and probabilistic methods. In our view, the combination should be the basis of any methodological approach to assess the production potential of agricultural enterprises, because any opportunity is its main component, and the implementation or non implementation of enterprise opportunity now depends on a number of subjective and objective, external and internal factors, and thus is probabilistic in nature. Moreover, the final choice of the direction of the company, and thus its potential, carried by the owner and management of company, which also makes subjective and therefore also the probabilistic nature, selection of scenario. Last updates use scenario methods.

An important issue in the evaluation of company's production potential, in this case, there may be a situation when, for example, the company has significant opportunities, but at the same time, they may remain unfulfilled that loads the methodology for assessing potential during forming, in particular, makes it necessary to consider its risks. Given the peculiarities of modern business environment the main problem of methodologies for evaluating economic potential lies not so much in creating a new combination of methods within a particular approach, not in identifying the additional new hybrid, inte-



grated and comprehensive approach, but the justification of selection procedures within the existing approaches most rational combination of methods based on critical analysis of the availability of the information base and situational planning scenarios. Eliminating these differences may be on account of introduction of methodical approach that clearly delineates the definition of "ensuring productive activities" primarily resource and "productive capacity". This analytical research of resource provision enables the use of general scientific and specific methods that give reliable results in determination of the availability of resources, their changes in dynamics and more. In turn, the assessment of production technology, its organization by using less accurate methods of prevalence of peer reviews, comparisons and contrasts, the method of scenarios and more. The use of the combination and sequence of evaluation of the production potential proposed in (Fig. 1) is the most rational in view of the availability of the information base of such studies.

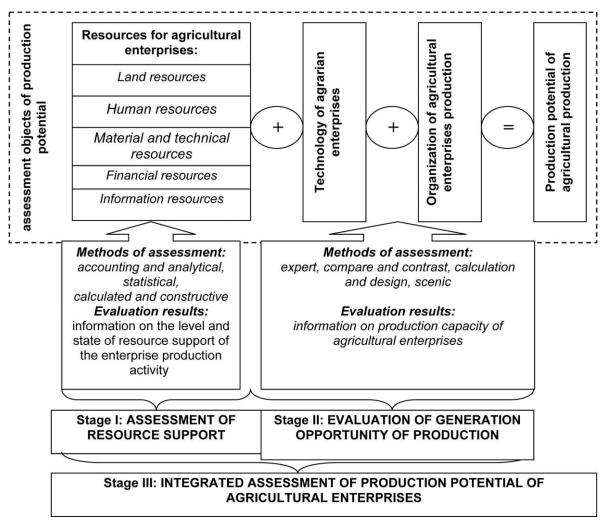


Fig. 1. The methodical approach to the economic evaluation of the production potential of agricultural enterprises

It should be noted that the estimated features of the production potential is the ability to now manufacture certain products in certain quantities and at a certain level of quality. Thus, it is important to understand that the economic evaluation of any phenomenon or process being implemented enterprise-level only if there is an adequate method of information base.

**Conclusion.** In the paper the methodological foundations of performing the economic evaluation of production potential of agricultural enterprises are systematized. The worked out methodical approach allows to avoid most of the identified methodological contradictions using decomposition of estimates of resource support, technology and the organization of production that determines the sequence of evaluation of production potential and enables to obtain reliable data on the possibilities of production of agricultural enterprises.

#### References

- 1. Andriychuk, V. H. (2005). Efektyvnist diialnosti ahrarnykh pidpryiemstv: teoriia, metodyka, analiz [The effectiveness of the agricultural sectors and enterprises: the theory, methodology, analysis]; KNEU, Kyiv (in Ukrainian).
- 2. Gryshova, I. lu., Mytiai, O. V., Kuzhel, V. V. (2015). Otsiniuvannia chynnykiv formuvannia finansovoho potentsialu ahrarnoho vyrobnytstva [Evaluation of financial potential development factors in agricultural production]. Aktualni problem ekonomiky Actual problems of economics, 10 (172), 169-172 (in Ukrainian).
- 3. Gutorov, O. I., Sharko, I. O. (2012). Otsinka zemel i resursnoho potentsialu v silskomu hospodarstvi: teoretychni ta praktychni pidkhody [Estimation of lands and resource potential in agriculture: theoretical and practical approaches]. Khark. nats. ahrar. un-tim. V. V. Dokuchaieva. Kharkiv: KhNAU; Vyd-vo «Tochka» (in Ukrainian).
- 4. Zaika, S. O. (2015). Investytsiinyi potentsial pidpryiemstva ta varianty yohoformuvannia [Enterprise investment potential options and its formation]. *Naukovyi visnyk Khersonskoho derzhavnoho universytetu. «Ekonomichni nauky» Scientific Bulletin of Kherson State University. Avg.: Economics*, 13, 84-87 (in Ukrainian).
- 5. Plotnytska, S. I. (2015). Instrumentarii efektyvnoho upravlinnia vnutrishnimy resursamy ahrarnykh pidpryiemstv [Toolkit of efficient control internal resources of the agrarian enterprises]. Kharkiv : Vydavnytstvo TOV «Shchedra sadyba plius» (in Ukrainian).
- 6. Shafronov, A. (2006). Otsenkaefektyvnosti i potentsialaselskokhoziaistvennogopredpriiatyiia [Estimate of efficiency and potential of an agricultural enterprise]. APK: ekonomika, upravlenie AIC: economy, management, 2, 62-86 (in Russian).
- 7. Yarema, Ya. R. (2015). Rozvytokpotentsialupidpryiemstvahropromyslovohovyrobnytstva [Development of potential of the enterprises of agro industrial manufacture]. Kharkiv: Vydavnytstvo TOV «Shchedrasadybaplius» (in Ukrainian).
- 8. Rudenko, S. V. (2015). Arkhitektura orhanizatsiino-ekonomichnoho mekhanizmu upravlinnia rozvytkom vyrobnychoho potentsialu ahrarnykh pidpryjemstv [Organizational and economic mechanism architecture of the producing potential development management of the agricultural enterprises. *Visnyk KhNAU KHNAU Bulletin*, 5, 220-227 (in Ukrainian).
- 9. Luhova, O. I. (2014). Formuvannia rezultatyvnoi systemy upravlinnia ekonomichnym potentsialom pidpryiemstv haluzisvynarstva [Forming the effective system of economic potential of the swine industry]. *Biznes-navihator Business-navigator*, 1, 210-214 (in Ukrainian).
- 10. Kasianova, N. V., Solokha, D. V., Moreva, V. V., Bieliakova, O. V., Balakai, O. B. (2012). Potentsial pidpryiemstva: formuvannia ta vykorystannia [Enterprise Potential: development and using]. Donetsk: Vyd-voTsyfrova typohrafiia (in Ukrainian).

#### Література

- 1. Андрійчук, В. Г. Ефективність діяльності аграрних підприємств: теорія, методика, аналіз : монографія / В. Г. Андрійчук. К.: КНЕУ, 2005. 292 с.
- 2. Гришова, І. Ю. Оцінювання чинників формування фінансового потенціалу аграрного виробництва / І. Ю. Гришова, О. В. Митяй, В. В. Кужель // Актуальні проблеми економіки. 2015. № 10 (172). С. 169-172.
- 3. Гуторов О. І. Оцінка земель і ресурсного потенціалу в сільському господарстві: теоретичні та практичні підходи : монографія / О. І. Гуторов, І. О. Шарко ; Харк. нац. аграр. ун-т ім. В. В. Докучаєва. Х.: ХНАУ : Точка, 2012. 254 с
- 4. Заїка, С. О. Інвестиційний потенціал підприємства та варіанти його формування / С. О. Заїка // Науковий вісник Херсонського державного університету. Серія «Економічні науки». 2015. Вип. 13. Ч. 1. С. 84-87.
- 5. Плотницька, С .І. Інструментарій ефективного управління внутрішніми ресурсами аграрних підприємств : монографія / С. І. Плотницька. Харків : Щедра садиба плюс, 2015. 330 с.
- 6. Шафронов, А. Оценка эффективности и потенциала сельскохозяйственного предприятия / А. Шафронов // АПК: экономика, управление. 2006. № 2. С. 62-86.
- 7. Ярема, Я. Р. Розвиток потенціалу підприємств агропромислового виробництва : монографія / Я. Р. Ярема. Харків : Щедра садиба плюс, 2015. 265 с.
- 8. Руденко, С. В. Архітектура організаційно-економічного механізму управління розвитком виробничого потенціалу аграрних підприємств / С. В. Руденко // Вісник ХНАУ. 2015. № 5. С. 220-227.
- 9. Лугова, О. І. Формування результативної системи управління економічним потенціалом підприємств галузі свинарства / О. І. Лугова // Бізнес-навігатор. 2014. № 1. С. 210-214.
- 10. Касьянова, Н. В. Потенціал підприємства: формування та використання: підручник / Н. В. Касьянова, Д. В. Солоха, В. В. Морева, О. В. Бєлякова, О. Б. Балакай. Донецьк : Цифрова типографія, 2012. 257 с.

Received for publication 16.05.2016

