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FORECASTING AND WAYS OF EFFICIENT DEVELOPMENT OF THE VEGETABLE PRODUCTION INDUSTRY IN THE SOUTHERN REGION

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Abstract. Vegetable production is one of the important crop production industries of agriculture in Ukraine. The paper examines priority trends of the industry development in the southern region. It presents a forecast of the volume of vegetable production in general and tomatoes in particular. Such forecasts will allow identifying prospects for creating organizational economic conditions to increase efficiency and competitiveness of the vegetable production industry and will serve as a basis for developing the strategy of the region.

Keywords: vegetable production industry, vegetables, tomatoes, gross yield, pattern, forecast, net increase.

Currently Ukraine enters the top ten world leaders by the gross production of vegetable and melon products and takes the 9th place in the world in calculation per capita. However, Ukraine takes the 18th place by the productivity level among the 20 leading countries in the world. The genetic potential of the domestic varieties and hybrids is used only by 30%.

In the agrarian sector of economy, when developing strategic and current plans and making managerial decisions, we always face the tasks related to the evaluation of the future, therefore there is an increasing need of mastering practical methods for identifying prospects for the development by means of forecasting.

The purpose of the study is to create a forecast of the volume of vegetable production and examine the prospects for the industry development in the southern region of Ukraine. Currently it is necessary to identify clearly the list of tasks for strategic development in vegetable production, on which the level of vegeta-

ble supply for the population and the possibility of increasing the nation's export potential depend.

The following general scientific and special methods were used in the research: abstract-logical (for identifying the main tendencies and trends of the vegetable production industry), statistical (for analyzing the information concerning vegetable production), forecast extrapolation (for predicting the volumes of vegetable production), abstract-theoretical (for theoretical generalization and drawing conclusions).

Using economic and mathematical methods, we created a forecast of the volumes of vegetable production by agricultural producers in Kherson region. According to the data of our forecast, there is a clear tendency of increasing volumes of tomato production as a brand crop of Kherson region.

Thus, the correlation of the results of the forecast and the actual data obtained further will allow evaluating the value of the arguments and predicting the index values on a variant basis. The forecast can be used for other practical and scientific research in the area of creating forecasts of production, consumption, import (export) and prices of agricultural products.

References

- 1. Promyslova tekhnolohiia vyroshchuvannia tomata na kraplynnomu zroshenni [Production technology of growing tomatoes under drip irrigation]. vladam-seeds.com.ua. Retrieved from: http://vladam-seeds.com.ua/ua/agronomiya/promyshlenna-tekhnologiyavyrashchivaniya-tomata/[in Ukrainian].
- 2. Khareba, V. V. (2012). Stan i stratehiia rozvytku haluzi ovochivnytstva v Ukraini [The state and strategy of the development of the vegetable production industry in Ukraine]. *Tezy naukovo-praktychnoi konferentsii "Suchasne ovochivnytstvo: osvita, nauka ta innovatsii"- The theses of the scientific practical conference "Modern vegetable production: education, science and innovations".* (pp. 32–34). Kyiv [in Ukrainian].
- 3. Lohosha, R.V. (2016). Transformatsii rynku ovochiv v Ukraini [Transformations of the vegetable market in Ukraine]. *Ekonomika. Finansy. Menedzhment: aktualni pytannia nauky i praktyky Economics. Finance, Management: topical issues of science and practice,* 3/8, 55–67 [in Ukrainian].
- 4. Leshchenko, L.O. (2016). Prohnozuvannia spozhyvannia ovochiv v Kharkivskii oblasti [Predicting the consumption of vegetables in Kharkiv region]. *Molodyi vchenyi Young scientist*, 4/31, 110-113 [in Ukrainian].
- 5. Krykunova, V.M. & Avercheva, N.O. (2020). Prioritety ta osoblyvosti formuvannia propozytsii na rynku produktsii ovochivnytstva v Ukraini [Priorities and specifics of the supply formation at the market of vegetable products in Ukraine].

- Naukovyi visnyk Uzhhorodskoho natsionalnoho universytetu. Seriia: Mizhnarodni ekonomichni vidnosyny ta svitove hospodarstvo Scientific bulletin of Uzhorod National University. Series: International economic relations and the global economy, 29, 84-93 [in Ukrainian].
- 6. Galat, L. (2019). Faktory ta tendentsii rozvytku ovochivnytstva u khersonskii oblasti [Factors and tendenshis of development of vegetable production in kherson region]. *Ahrosvit Agrosvit*, 22, 9–18. doi: 10.32702/2306-6792.2019.22.9. [in Ukrainian].
- 7. Boiko, L. (2020). Suchasni tendentsii rozvytku ovochevoi haluzi v umovakh yevrointehratsii Ukrainy [Modern tendencies in the development of vegetable industry under conditions of Ukraine's euro-integration]. *Ahrosvit Agrosvit*, 6, 69–76. doi: 10.32702/2306-6792.2020.6.69. [in Ukrainian].
- 8. Boiko, L. (2020). Priorytety rozvytku pidpryiemnytstva zi stvorenniam innovatsiinykh produktiv [Priorities of entrepreneurial development with the creation of innovative products]. *Ahrosvit Agrosvit*, 15, 41–47. doi: 10.32702/2306-6792.2020.15.41. [in Ukrainian].
- 9. Boiko, V., Kwilinski, A., Misiuk, M., & Boiko, L. (2019). Competitive advantages of wholesale markets of agricultural products as a type of entrepreneurial activity: the experience of Ukraine and Poland. *Economic Annals-XXI*, 175(1-2), 68-72. doi: https://doi.org/10.21003/ea.V175-12
- 10. Boiko, V. (2016). Algorithm of developing competitive strategies and the trends of realizing them for agricultural enterprises. *ScienceRise*. T. 2, N 1 (19), 30-34. doi: 10.15587/2313-8416.2016.60349. [in Ukrainian]
- 11. Boiko, V.O. (2014). Diahnostyka biznes-seredovyshcha ta stratehii pidvyshchennia konkurentospromozhnosti ahrarnykh pidpryiemstv [Diagnostics of a business-environment and strategies of increasing competitiveness of agrarian enterprises]. PhD thesis. Mykolaiv [in Ukrainian].
- 12. Tanklevska, N., Petrenko, V., Karnaushenko, A. & Melnykova, K. (2020). World corn market: analysis, trends and prospects of its deep processing. *Agricultural and Resource Economics*, 6(3), 96–111. Retrieved from: https://arejournal.com/index.php/are/article/view/339/253
- 13. General Board of Statistics in Kherson Region. ks.ukrstat.gov.ua. Retrieved from: http://www.ks.ukrstat.gov.ua [in Ukrainian]
- 14. Statystychne modeliuvannia ta prohnozuvannia: navch. posibnyk [Statistical modeling and forecasting: textbook] (2001). Kyiv: KNEU [in Ukrainian]