Zakhovalko T.V. Ph.D., assistant professor, associate professor, Department of Economic Cybernetics SHEE "Zaporizhzhya National University"

ANALYSIS OF TRENDS IN AGRICULTURAL PRODUCTION IN UKRAINE

According to the experts, Ukraine is among the countries with the highest rated on potential opportunities in agriculture. A key component of this potential is the concentration of fertile black soil in the world (more than 65% of the soil cover of the country).

However, the combination of ever increasing usage potential agricultural areas is also an opposite trend. During the years of rapid economic development of transition of considerable achievements of agricultural crops has been lost – broken interbranch relations, reduced production capacity, especially in livestock, lost agricultural use in crop production system that immediately tends to the potential environmental component.

Thus the study of the dynamics and structure of agricultural production is imperative to identify trends and changes in ways of improving the situation. The aim is to identify the main trends of agricultural production in Ukraine, study its dynamics and structure.

Agricultural production in the years of independence Ukraine has passed several stages. In particular, the early years were characterized by a constant decline in output. But in the first years of the XXI century begins to trend growth in gross output. On the same show and dynamic growth of profitability of agricultural production takes place in general and by sector. It should be noted this characteristic feature, as the presence of a linear trend for increasing output households Y = 1290.6t: coefficient of determination is quite high $R^2 = 0.72$.

Changes in the socio-political structure of the state in the 90's of last century and led to the need for transformation of agricultural practices. First of all, the main problem was the loss of established relationships agricultural producers, processors and interim sectors. Unsurprisingly therefore is significant as noted above shortfall. At present, structural adjustment lead to a stronger differentiation of agricultural producers. On the one hand a large proportion of private households for aggregation in some cases ahead of other forms of entities. But to ensure sustainable growth in production, the use of all available ecological capacity -economic possible only in the presence of a close connection between various branches of industry. That is why more and more produced various structural groups - cooperatives, consortia holdings. Thus arises the problem of management not only economic performance of agricultural enterprises, also ecological but its potential. For further research it makes sense to set the predictive power of time series of crop production. To calculate this indicator Hirst for some time series of agricultural production.

The application of discrete methods of nonlinear dynamics, including RSanalysis, it can be argued that sufficient trending time series, the presence of memory, and therefore their good predictability.

Thus we can conclude the existence of significant economic potential of Ukraine in agricultural production. That agriculture is the most promising strategic sector of the country. Existing trends confirm the structural changes in the choice of areas of agricultural activity, the transition to the most requested on the world market crops. This direction is justified, because according to the UN the problem of the near future will be the same problem of lack of food.

However, there are problems. Primarily due to imperfect legislation, with the loss of farming, aiming at short-term profit. This leads to soil depletion, loss of arable land ecological potential. So, promising further research to develop management practices in agriculture that combine economic and environmental goals direction.

References

The official website of the Ministry of Agrarian Policy and Food of Ukraine, available at: <u>http://minagro.gov.ua/news/?pg=12359</u>
Vaynshteyn, S.Yu. and Ilyushonok, S. E. (1985), *Modelirovanie i optimizatsiya razvitiya agropromyshlennykh*

obrazovaniy [Simulation and optimization of agro-formations], Nauka, Novosibirsk, Russia, 245 p.

3. Liashenko, I.M. (1999), *Ekonomiko-matematychni metody ta modeli staloho rozvytku* [Economic-mathematical methods and models for sustainable development], Vyshha shkola, Kyiv, Ukraine, 236 p.

4. Lupenko, Yu.O. and Mesel-Veseliak, V.Ya. (2012), *Stratehichni napriamy rozvytku silskoho hospodarstva Ukrainy na period do 2020 roku* [Strategic Direction of Agriculture of Ukraine for the period 2020], NNC «IAE», Kyiv, Ukraine, 182 p.

5. Yurchyshyn, V.V. (2011), "The village and the peasants of Ukraine in the historically and socially conditioned by domestic national values", *Ekonomika APK*, no. 3, pp. 10-13.

6. Pokrovskaia, S.F. (2010), Informatsionnyye tekhnologii v selskom khozyaystve: Obzornaya informatsiya [Information Technology in Agriculture: Overview], Tsentr informatsii i tekhniko-ekonomicheskikh issledovanii APK, Moscow, Russia, 78 p.

7. Hataulin, A.M., Havrylov, H.V. and Kharytonova, L.A. (2000), *Ekonomiko-matematychni metody v planuvanni silskohospodarskoho vyrobnytstva* [Economic-mathematical methods in planning agricultural production], Vyshha shkola, Kyiv, Ukraine, 260 p.

8. Kardash, V.A. (1981), *Modeli upravleniya proizvodstvenno-ekonomicheskimi protsessami v selskom khozyaystve* [Management model production and economic processes in agriculture], Ekonomika, Moscow, Russia, 184 p.

9. Batishchev, A.F., Grishin, A.A. and Perepelitsa, V.A. (1970), "On the problem of finding an optimal crop rotation", *Matematicheskie metody planirovaniya selskogo khozyaistva*, 103-119 pp.

10. Zakhovalko, T.V., Maksishko, N.K. and Perepelitsa, V.A. (2006), "Modeling of land use on hypergraphs", Systemni doslidzhennia ta informatsiini tekhnolohii, no. 3, pp. 99-109

11. State Statistics Service of Ukraine, available at: http://ukrstat.gov.ua/

12. Ramazanov, S.K. (2004), *Modeli ekologo-ekonomicheskogo upravleniya proizvodstvennoy sistemoy v nestabilnoy vneshney srede* [Model of ecological and economic management of production systems in an unstable external environment], Izd-vo VNU im. V. Dalya, Lugansk, Ukraine, 384 p.