## THE UNITED STATES ORGANIC PRODUCTION: TRENDS AND CHALLENGES

O. Chaikin PhD of Economics Zhytomyr National Agroecological University

Agricultural production efficiency improvement at the same time with negative impact on the environment reduce can be achieved through the organic production development as an alternative to a traditional agricultural management model. Organic production allows the realization of the sustainable development concept. Modern tendencies and approaches to agricultural development in developed countries research give reasons to affirm that the issues of production, consumption and product quality are integral to the concept of environmental friendliness of production and ecologically safe products.

Ecologically certified agricultural production management system development was studied by Dankevych Ye. [4]. Moroz J. and Tsal-Tsalko J. determined organizational and management fundamentals of organic production management [7]. The world trends of organic production and consumption were considered by Kyrylov Y., Thompson S. and others [6]. Organic agriculture in the twenty-first century was studied by Reganold J., Wachter J. [8]. Demko I. and Jaenicke E. had analyzed the impact of European Union-U.S. Organic equivalency arrangement on U.S. exports [5]. Despite this, some aspects of organic agricultural production in the US require additional study.

The organic production practice use in the United States dates back to the 40-th of the twentieth century. Since that time the organic production sector grew dynamically from the experimental to traditional agriculture alternative to large farms with surplus products sold under a special organic label with its infrastructure, of supply and products sales sources, sales chain etc. By the late 1980s, in an effort to standardize production and certification, the organic industry petitioned Congress to draft the Organic Foods Production Act (OFPA) defining "organic".

The U.S. organic sales totaled amounted 49.4 billion of US dollars in 2017 that is up 6.4 % from the previous year and reflecting new sales of nearly 3.5 billion of US dollars. The organic food market hit 45.2 billion of US dollars in sales, also breaking through to a new record for 6.4 %. increase. More than 4 million acres of U.S. farmland are now devoted to organic agriculture. The achievement of such results has become possible through the new, organic oriented, practices implementation and spread. According to the USDA research the US farmers use "Maintained buffer strips" (8568 of surveyed farmers), "Used green or animal manures" (8400 of surveyed farmers), "Used water management practices" (6695 of surveyed farmers) and other ecologically oriented farm practices (Fig.1).

Thousands of farms	10000 - 9000 - 8000 - 7000 - 6000 - 5000 - 3000 - 2000 - 1000 -	4600 4200 4189 4361 2245 2245	0400 0650 5962 4881 6695 4881 778 778 778 778 778 778 778 778 778
	0 -		
Practiced biological pest management			Released beneficial organisms
Maintained beneficial insect/vertebrate habitat			Selected planting locations to avoid pests
Chose pest resistant varieties			Planned plantings to avoid cross-contamination
Produced or used organic mulch/composts		or used organic mulch/composts	Used green or animal manures
■Used no-till or minimum till			Maintained buffer strips
Used water management practices			Practieced free-range livestock production
Practiced rational grazing			

*Fig.1.* The US Organic Production Practices \*Source: USDA.

Currently, the territory of the United States operates the National Organic Program (NOP) which is regulatory program housed within the USDA Agricultural Marketing Service. National standards for ecologically certified agricultural production development are included in to this program competence. The main activities that are implemented within the NOP:

• regulations and guidance on organic standards development:

• new farmers and ecologically oriented business beginners informational help;

• the list of certified organic operations and maintains:

• the national list of allowed and prohibited substances development and improvement;

• certifying agents to certify organic producers & handlers accreditation;

• international organic import and export policies establishment;

• training to stakeholders provision etc.

Currently USDA provides organic certification cost share programs for domestic organic producers. As of 2017, domestic producers can visit over 2100 USDA Farm Service Agency (FSA) offices to apply for federal reimbursement to assist with the cost of organic certification receiving and maintaining. New organic producers may receive up to 75 % of their certification costs. There are two support programs: National Organic Certification Cost Share Program (NOCCSP) and Agricultural Management Assistance (AMA) Organic Certification Cost Share Program. The U.S. now occupies nearly half the global market, followed by the EU and China. The United States import organic coffee, olive oil, soybeans and bananas. Talking about exports they provide an external market apples, lettuce, grapes and berries [9]. According to the Organic Trade Association, 93 % of organic sales take place through conventional and natural food supermarkets and chains. Organic products are now available in nearly 20000 natural foods stores. Currently more than 5 % of the food sold in retail channels in the U.S. is organic.

Agricultural Marketing Service (AMS) as a part of NOP had invested in to the AMS Electronic Trade Document Exchange (eTDE) system for export certificate management. NOP has programmed a number of existing export certificates into the eTDE system as an option for organic traders in the U.S. wanting to deliver their products to the external market. Information and document flow of electronic export certificates in eTDE is represented in the Fig.2.

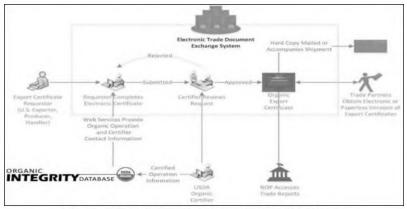


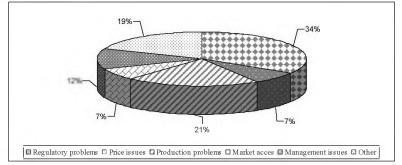
Fig. 2. Information and document flow of electronic export certificates in eTDE

\*Source: USDA.

Among top leaders state on organic product sales we can highlight California, Washington, Pennsylvania, Oregon and Wisconsin. Among the top crops in the US certified organic product sales we should note apples, lettuce, grapes, spinach, strawberries, corn, blueberries, hay, wheat and mushrooms. Milk, eggs and meat are the top certified organic commodities sol around the states [9].

The modern agricultural products market formed under the world economic relations globalization influence, which occur on the one hand in the natural capital extensive use, and on the other - in the society

environmental needs and demands growth [4]. Despite the significant demand increase, both internal and external markets, government and NGO's support efforts the US organic farmers are still influenced by the number of challenges while product growth, operation, production and sale. According to the USDA survey regulatory problems (34 %), production problems (21 %) and management issues (19 %) are the most significant (Fig.3).



**Fig.3.** The US Organic production and sales challenges \*Source: USDA.

To overcome these challenges and increase demand for organic agricultural products a number of measures should be implemented: supportive policy additional activation. organic pest management research and technology transfer, biomass and livestock increase, organic quality seeds provision. storage, transport and logistic organic marketing system development, unified guideline for organic farming design, organic certification costs reduce etc. Organic agricultural products domestic demand increase and export opportunities expansion are possible due to infrastructure investments increase, wider consumers informing, the largest retailers to these products access increase. In addition, individual organic producers can create their own logistic chains to ensure the reliability of the products supply to consumers.

Therefore, despite the organically certified agricultural production advantages agricultural producers require additional motivation and activation of socio-psychological, organizational and legal, financialeconomical and technical-technological factors, which intensify the ecological innovations in production implementation.

## **References:**

1. Chaikin O. Corporate responsibility, ecological certification aspect. Management Theory and Studies for Rural Business and Infrastructure Development. 2014. Vol. 36. No 3. - 463 - 470 p.

2. Chaikin O. Ecologically certified products promotion alternative methods. Management Theory and Studies for Rural Business and Infrastructure Development. 2015. Vol. 37.  $N_{\rm P}$  2. – 179 – 188 p. – DOI: 10.15544/mts.2015.16

3. Chaikin O., Kirieieva E., Slobodeniuk O. Environmental Management Certification: Socio-Economic Monitoring. Management Theory and Studies for Rural Business and Infrastructure Development. 2018. Vol. 40. № 3. – 297 – 306 p.- https://doi.org/10.15544/mts.2018.28

4. Dankevych Ye. Ecologically Certified Agricultural Production Management System Development / Dankevych Ye., Dankevych V., Chaikin O. // Agricultural and Resource Economics: International Scientific E Journal. -2016. -Vol. 2. No 4. -5-15 p.

5. Demko I., Jaenicke E. Impact of European Union-U.S. Organic Equivalency Arrangement on U.S. Exports. *Applied Economic Perspectives and Policy.* 2018. Vol. 40, Issue 3, 482-501 p.- <u>https://doi.org/10.1093/aepp/ppx048</u>

6. Kyrylov Y., Thompson S., Hranovska V., Krykunova V. (2018). The World Trends of Organic Production and Consumption // Management Theory and Studies for Rural Business and Infrastructure Development. 2018. Vol. 40. No 4.-514-530 p. -http://doi.org/10.15544/mts.2018.46

7. Moroz J., Tsal-Tsalko J., Chaikin O. Organizational and management fundamentals of Ukraine organic production. Management Theory and Studies for Rural Business and Infrastructure Development. 2018. Vol. 40.  $N_{2} 2. - 232 - 242 p.- https://doi.org/10.15544/mts.2018.22$ 

8. <u>Reganold</u> J., <u>Wachter</u> J. (2016). Organic agriculture in the twentyfirst century // Nature Plants volume 2, Article number: 15221 (2016). – DOI:<u>10.1038/nplants.2015.221</u>

9. U.S. Department of Agriculture. URL: <u>https://www.usda.gov</u>