Market Analysis of Organic Agricultural Products in Kazakhstan based on Consumer Behaviour Research Tools

Dilara Samenbetova[1][a] and Oleg Patlasov[2][b]
[1]*Omsk Humanitarian Academy, Omsk, Russia*
[2]*Pushchino State Natural Science Institute, Pushchino, Russia*

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Abstract: The article is devoted to the study of trends in the market capacity of organic agricultural products by analysing the consumer behaviour of the population of the Republic of Kazakhstan based on sociological research. In recent years, the demand for organic products has been steadily growing both in the domestic and foreign markets. Therefore, it becomes relevant to identify specific factors that will influence consumer behaviour in the future, using the local market as an example. The purpose of the study is to use the tools of social research to determine the factors for promoting environmentally friendly products and to identify patterns in consumer demand. The conducted sociological surveys made it possible to identify the characteristics of consumers of organic products and form proposals for producers on the further development of organic agriculture. Thus, in the course of the study, the authors concluded about the need to conduct an information policy among producers and buyers, improve the model of state support for organic agriculture in Kazakhstan.

1 INTRODUCTION

Kazakhstan gained new opportunities in the development of the market for organic products in 2013, following the approval of the Concept for the Transition of the Republic of Kazakhstan to Green Economy for 2013-2020 (State Program for the Development of the Agro-Industrial Complex of the Republic of Kazakhstan, 2017). In the shortest possible time, the Government developed standards for agricultural produce. In accordance with the Concept and based on international standards, in 2015 the Parliament of the Republic of Kazakhstan adopted the law "On the Production of Organic Foods". The law governs production of organic output, which in turn will enable Kazakhstan to join the international market for organic products; thus, the state will be able to regulate the import and export of domestic products. Kazakhstan has huge lands that are still traditionally cultivated without the use of synthetic fertilizers and pesticides (Law of the Republic of Kazakhstan, 2015). This aspect means the CIS country has a huge priority.

The production and sale of organic farm produce is an objective national competitive advantage offered by the agro-industrial complex of Kazakhstan. The law meets the rules and regulations of the international law of the IFOAM, and, hence, complies with international quality and control standards for organic products (The Food and Agriculture Organization, 2019). The adoption of this law enables Kazakhstan to join the world organic trade market and provides positive trends for the development of farming in Kazakhstan. Thus, the Government is interested in the development of this segment in the agro-industrial complex and is ready to support the initiatives of agricultural producers that switch from traditional farming to organic farming. Accordingly, a constructive analysis is needed into whether consumers are willing to buy organic products at a higher price.

The purpose of the study was to gauge the capacity of the consumer market for organic products in Kazakhstan. In order to identify the factors driving consumer behavior, sociological studies were done based on a survey of Internet users focused on the

[a] https://orcid.org/0000-0002-2748-2359
[b] https://orcid.org/0000-0003-2015-1474

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consumption of organic food, as well as polling of customers of specialized stores of organic products in Nur-Sultan

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2 MATERIALS AND METHODS

Sociological methodologies have been utilized in a number of studies dealing with organic agriculture. Studies in 2013 - 2018 show that the main driver for consuming organics is health concerns. As research by TNS and Yandex-Market for Russia shows, it is mostly homemakers who buy organic food for their households and relatives – and mothers for their children – making up 40%. Regular advocates of a healthy lifestyle among buyers make up about a third. Only one tenth of such buyers are told by a doctor to do so, with the so-called luxury segment making up the same number. The remaining 5% of organic food buyers do it as a tribute to fashion. Well, in 2007-2008 the luxury segment was the main purchasing audience, accounting for more than 90% of buyers. It can be concluded that the target segment took shape in this variant, and, in the future, it will continue to develop. Tired of marketing tricks, up to 80% of staunch adherents of organic food today in the Russian Federation buy it only from trusted producers (which also hinders the development of the market).

In 2014, the Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan delivered a one-off large-scale social study – "Quality of Life" – which surveyed (interviewed) 12 thousand households, aimed to identify the correlation between the commitment to organic food and income of households as divided into 5 conditional social groups: low-income; not poor, but not the middle class either; middle class; upper middle class; well-off (wealthy). In the survey, 42% of households who consider themselves to be in the upper middle class replied that they steadily consume environmentally friendly products, and 46.8% partially consume them, in contrast to low-income families, of which only 18% consume environmentally friendly products (Life Quality Bulletin, 2014).

The authors did an online survey of food consumers in Kazakhstan to assess the capacity of the market for organic products. The survey was conducted using Google Drive - the respondents filled in questionnaires in Google Drive. This ensured complete anonymity of the study and the objectivity of statistical results. This survey can be repeated, because all data is stored on the Google Drive, therefore, in the future, new data can also be analyzed. A survey was conducted among buyers of specialized stores focused exclusively on the sale of organic products in order to draw up a more accurate profile of a consumer of eco-friendly products and to identify factors of consumer behavior.

3 RESULTS AND DISCUSSION

There is no official statistics on the production of organic food in Kazakhstan, with no public register of organic producers available. According to the National Accreditation Center, in 2019 Kazakhstan ranked ninth in the export of organic food products to the EU, having increased supplies to 85,675 tons, although in 2018 exports amounted to 50,250 tons.

This being said, Kazakhstan ranks sixth in Asia in terms of the total area of organically certified land, but in the future the country may rank third in Asia after China (3,135,000 ha) and India (1,938,221 ha). The following countries became the main exporters: Great Britain, Italy, Germany, France, Belgium, the Netherlands, Poland, Russia, Ukraine and other countries (State Program for the Development of the Agro-Industrial Complex of the Republic of Kazakhstan, 2017).

According to the annual statistics of FiBL & IFOAM - Organic International (2020) - FiBL survey 2021, Kazakhstan joined top 10 countries at year-end 2019 with a high increase in the use of organic lands (Fig. 1).

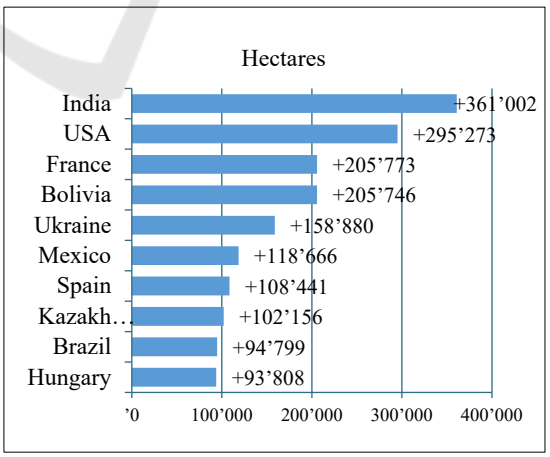

Figure 1: Top 10 countries with the highest increase in organic lands in 2019.

In addition, according to year-end statistics of 2018, Kazakhstan uses 192,134 hectares of land for

organic food production. This is roughly 0.1% of the share of the total organic land. If we analyze this indicator for 2017, we can see that the amount of organic lands has decreased. In 2017, the size of organic land was 256,741 hectares, which is 64,607 hectares less than in 2018. In 2019, arable organic land increased by almost 102,156 hectares. In the context of 10 years, of course, Kazakhstan has achieved an increase of almost 42.5%. There is no official statistics on producers nationwide, but according to the source presented above, 63 producers make organic food in Kazakhstan, which includes 22 businesses engaged in the storage and processing of organic food products, 7 in imports, and 14 in exports.

According to the annual statistics of FiBL&IFOAM - Organic International (2020) - FiBL survey 2021, at year-end 2019, Kazakhstan joined countries from the DAC (Development Assistance Committee) list with the largest areas of organic agricultural land in 2019 (Fig. 2).

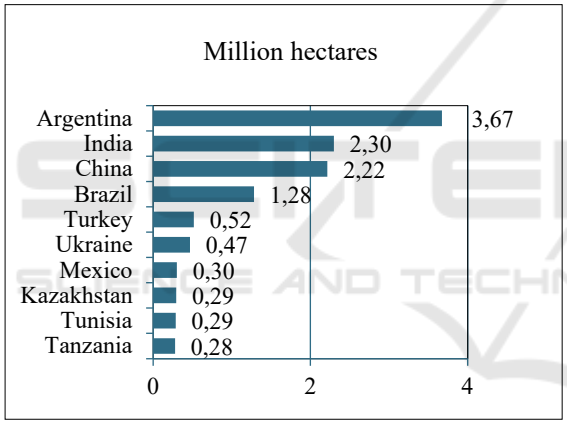

Figure 2: Top 10 countries with the largest areas of organic farming lands in 2019.

FAO defines it the following way: organic refers to a product that has been produced in accordance with certain standards throughout the production, handling, processing and marketing stages. Once confirmed by a certification authority that a product complies with organic standards, the product receives a label (The Food and Agriculture Organization, 2019).

As part of the study, a social survey "Analysis of the Organic Market of Products in Kazakhstan" was conducted among online users. The polling comprised around 500 respondents over the age of 20 as part of the working population from government and business structures. Using sociological study as a basis, the authors made conclusions about the attitude of Internet users to the organic food market.

The survey revealed a category of people who consume organic products and know about them. In our survey, less than 10% of respondents completely trust the food labels. Further, the authors tried to find out how often local consumers consume organic products. In Kazakhstan, the largest share of respondents (49%) buy these products quite often and 4.9% - almost every day.

It should be noted that organic food has a short shelf life and must be transported in a special way, which makes added value for these products higher.

We would like to note the relationship between consumers of organic products and monthly income. Around 26% of respondents said their monthly salary was about 100 thousand tenge (rough rate of 1 Kazakhstan tenge (KZT) is 0.0023 Dollar (USD) as of May 10, 2022). Only 12% have a monthly income of more than 350 thousand tenge per person. Fifteen percent of respondents have an income of 400 thousand tenge and 17% have an income of 450 thousand tenge.

The sociological survey has revealed a certain group of consumers in Kazakhstan who know about organic food (11.8%) and are ready to pay more than 5 thousand tenge per day for them per person (27%). More than 60% of respondents follow proper nutrition habits and consume organic products from time to time. Nineteen percent of respondents said that they do not have the financial ability to buy these products.

Almost 65% of Internet users said that the main factor in the consumption of organic products was its health value. Seventeen percent of respondents noted concern for the health of children as the main factor in consumer behavior. Nine percent consume organic products due to health problems (gastrointestinal problems and the likelihood of allergies).

The main segment for consuming natural produce – as the polling has revealed – is Nur-Sultan (55% respondents) and Almaty (30%).

The observations have established that the main consumers of organic products are, first, people with a high level of income and families with children under the age of seven.

Based on the analysis of the respondents' replies, we can present the main factors influencing consumer behavior (Table 1).

Table 1: Factors that put together the profile of a potential retail buyer in an organic market.

Factor	Profile	Degree of influence
Purchasing power	People with an income above average find themselves increasingly reflecting about the quality attributes of products rather than their quantitative attributes.	Crucial
Family status, parental status	Families with children under the age of 7	High
Health condition	People with health problems, especially with GIT disorders, consume organic foods in accordance with their diet	High
Place of residence	Cities with population of over 1 million residents, in part – regional centers	High
Awareness	Active users of Internet and social networks know organic products better.	Medium
Education	People with higher education are more informed and concerned about the green economy, so they are more deliberate in their choice of products	Medium
Food preferences	When picking food products, they scan through the packaging, specifically the producer, composition, GOST and compliance with certification standards	Medium
Age	Young people find it fashionable, older people do it out of health concerns	Medium
Gender	There is a slight dependence relating to the fact that women give consideration to organic products	Low

The study revealed the following point. The percentage of the population that understand the idea respondents. As there is no regulatory framework and no clear understanding of how producers are classified (pseudo-labels, "spontaneous producers", "certified products"), consumers do not yet understand what products are considered organic. Completely distrustful of "organic products" labels are 18.6% of respondents in Kazakhstan, with 31% characterizing organic products as a sales pitch to increase value.

In order to determine the market capacity in the course of the study, we tried to find out where consumers of the country under analysis buy natural bioproducts available in retail outlets in a particular region.

The country and reputation of the producer have a great influence on the consumer choice, and this is especially important for food products. The majority of respondents in Kazakhstan carefully read who is a food producer and give preference to those who are well known to this market. Eighty four percent of consumers pay attention to the label, reading the composition and looking at who the producer is. Only 11% of respondents in Kazakhstan, when they buy food, do not pay attention to who the producer is and do not read the labels, with 4.9% looking only at the price of the product. Thus, not all respondents agreed with the phrase “expensive means good quality”. Around 50% said that they match information about the product, which is its benefits, to price.

The following figures characterize this fact. Thirty percent of respondents purchase organic products at markets and fairs (i.e. in places where products do not have special certificates, etc.). Thirty nine percent of respondents trust specialized shelves in regular supermarkets (therefore, this group buys pseudo-natural products with BIO labels more often). I would also like to note that there is no mandatory certification system for national products in the Republic of Kazakhstan, which results in consumers associating eco-friendly products with products free of chemicals and GMOs. Sixteen percent of interviewees trust organic products grown by friends or special farms. Only 11% trust specialized stores with certified products.

The study helped identify the following point. Out of general variety of food products available in the market, including products from foreign countries, majority of respondents give preference to domestically produced products, considering them to be of the highest quality and at affordable price. Sixty-five percent of the respondents prefer "Made in KZ" products, and 8% said that they would buy what is cheaper, with 22% failing to notice the difference between imported and domestic products.

When the respondents were asked to note the main factors affecting what product they would choose, almost 64% said that they look at benefits and safety of consumption when choosing food. Only 8% do not think about it. Thus, majority of consumers pay attention to information about the health benefits of a particular product, and this information should be

available to consumers at the time of purchase, which means it is necessary to deliver information and marketing campaigns in such a way that a potential buyer knows everything about the benefits of an organic product.

4 CONCLUSIONS

Thus, the organic products industry in Kazakhstan has been evolving almost since 2012, but has not yet achieved big results. The industry is quite new and specific, so the mechanism of interacting with both potential producers and consumers has not yet been clearly developed.

Product awareness has not yet been shaped. Residents of Kazakhstan learn about most of the benefits of organic products from the Internet, with the consumer failing to understand the difference between "organic", "organic products", "BIO", "GMO-free", "eco-products", "natural product", unaware of strict requirements for the production and labeling of organic products. For some, all organic products are just a sales pitch.

Hence, the issue of certification and labeling becomes relevant. After all, only the “organic” label and a conformity mark give 100% confidence to the consumer about the natural origin of raw materials, and the high quality of the product without the use of any chemicals, preservatives, GMOs, etc. (Blagoyev, 2020). Moreover, a large proportion of consumers in Kazakhstan are unaware of the labels of organic products incorporating a special conformity mark. In most cases, consumers will read the information on the packaging that this food product complies with the established GOST.

Kazakhstan does not have a unified certification system in accordance with an international certificate, while it is expensive to undergo certification with an international certification authority. This is why it will be unrealistic for a local producer to enter the international marker without state support.

Therefore, without the support of the state, it is simply unrealistic for a commodity producer to enter the international market. Crop rotation, purchasing certified seeds, getting certified, storing and transporting organic products properly according to standards are all costly aspects of organic farming. Therefore, at the initial stage, small farmers who begin to engage in organic farming cannot do without the help of the state. Measures of state support for agricultural entrepreneurship in the field of organic agriculture have not yet been formed. In fact, the state does not provide financial, informational or investment support for organic agriculture. There is no system for collecting information on the number of producers, certified land, market size and other components, on the basis of which further forecasts for its development are built. Roles are not distributed between public authorities, ministries and market entities in the form of manufacturers, consumers, suppliers, traders. Thus, it is necessary to create a functioning institutional structure that implements the policy of organic agriculture development.

REFERENCES

FiBL& IFOAM -The World of Organic Agriculture - Statistics and Emerging Trends 2019. https://ciaorganico.net/documypublic/486_2020-organic-world-2019.pdf.

FiBL& IFOAM – Organic International (2020) - FiBL survey 2021 "The World of Organic Agriculture, 2021 edition published". https://www.organic-world.net/yearbook/yearbook-2021.html.

The Food and Agriculture Organization (FAO). http://www.fao.org/organicag/oa-faq/oa-faq2/en/.

Life Quality Bulletin, March 2014 / Statistics Committee of the Ministry of National Economy. https://www.unicef.org/kazakhstan/media/671/file/%D0%9F%D1%83%D0%B1%D0%BB%D0%B8%D0%BA%D0%B0%D1%86%D0%B8%D1%8F%20.pdf.

State Program for the Development of the Agro-Industrial Complex of the Republic of Kazakhstan for 2017-2021. http://extwprlegs1.fao.org/docs/pdf/kaz200797.pdf.

Law of the Republic of Kazakhstan No. 423-V dated NOV, 27, 2015 "On Production of Organic Products”. http://adilet.zan.kz/rus/docs/Z1500000423/info.

Prospects of Development of Organic Farming: research by SBS CONSULTING. 2019. p. 30. https://www.sbs-consulting.ru/upload/iblock/c6e/c6ef149756246940a3c6992984e25c4e.pdf.

Basha, M., Mason, C., Shamsudin, M., Hussain, H., Salem, M., 2015, Consumers attitude towards organic food. *Procedia Econ. Finance*. 31. pp. 444–452.

Costa, J., Morgado, C., Fernandes, A., Guerra, M., Brandão, C., 2020. Profile and Motivations of Consumers of Organic Products. *INCREaSE*.

Illukpitiya, P., Khanal, P., 2016. Consumer Perception of Organic Food and Product Marketing. Organic Farming for Sustainable Agriculture. *Sustainable Development and Biodiversity*. 9. pp. 15-23.

Shafi, F. A., Rennie D., 2012. *Consumer Perceptions towards Organic Food*, Procedia Social and Behavioral Sciences. 49. pp. 360–367.

Mann, S., 2018. Agricultural Markets, *Socioeconomics of Agriculture.* pp. 41-64.

Wilier, H., Lernoud, J., 2016. The World of Organic Agriculture. Statistics and Emerging Trends, *Research Institute of Organic Agriculture (FiBL)*, Frick, and IFOAM. pp. 45-54.

Blagoyev, V., Shustova, Y., Mishchenko, I., 2020. Comparative analysis of the influence of key factors on the consumer behavior in relation to organic bioproducts in the regional markets, *Economics Profession Business*. 2. pp. 14-24.

Varavin, Ye., Kozlova, M., 2018. Evaluation of the Green Economy Development in the Region. Via an example of the Republic of Kazakhstan, *Economy of the region*, 14. 4. pp. 1282–1297.2.

Grigoruk, V., Klimov, Y., 2016. *Development of Organic Farming in the World and Kazakhstan"*. p. 153.

Morgera, E., Bullón Caro, C., 2016. *Organic farming and law*, FAO. p. 237.

Prospects of Development of Organic Farming: research by SBS CONSULTING. 2019. 30. p. 3.