С.Сейфуллин атындағы Қазақ агротехникалық зерттеу университетінің экономикалық факультетінің 60 жылдығына арналған «Жаңа болмыс жағдайында экономика және қоғам» Халықаралық ғылыми-практикалық конференциясының материалдары, 25 мамыр 2023 жыл, ІІ бөлім= Материалы Международной научно-практической конференции «Экономика и общество в условиях новой реальности», посвящённой 60-летию экономического факультета Казахского агротехнического исследовательского университета имени С.Сейфуллина, 25 мая 2023 год, ІІ часть = Materials of the International scientific and practical conference «Economy and Society in a new reality» dedicated to the 60th anniversary of the Faculty of Economics of the S. Seifullin Kazakh Agrotechnical Research University, May 25, 2023, II part. – 2023. – Ч.2. – Б.185-188

## WORLD MEAT MARKET: FEATURES OF PRODUCTION AND CONSUMPTION

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In 2021, the world produced 355.5 million tonnes of meat (in carcass weight equivalent) [1], which is 16.9 million tonnes or 5% more than the volume of 2020. In the total volume of meat produced, poultry meat accounted for 38.8%, pork – 34.5%, beef – 20.4%, lamb and sheep meat – 4.6%, other types of meat – 1.8%. In 2021, 42 million tonnes of meat were exported in the world, of which poultry meat accounted for 37.7%, pork – 30.2%, beef – 28.7%, lamb – 2.5%, other types of meat – 0.8%.

The largest producer of meat in the world is China (table 1). In 2021, it produced 25.8% of all meat in the world. Together with the USA and the countries of the European Union, they provided 52.2% of all meat production in the world. The largest exporters in 2021 were the USA, the European Union and Brazil. Together, they exported 60.2% of all exported meat.

Table 1 - Production, consumption and export of meat in 2021

	TOP	Production		Consumption	TOP	Export	
No	producing	thousand	%	per capita,	exporting	thousand	%
	countries	tonnes	/0	kg*	countries	tonnes	/0
1	China	91 818	25.8	62.1	United States	8 603	20.5
					of America		
2	United	48 835	13.7	128.6	European	8 356	19.9
	States of				Union		
	America				Cilion		
3	European	44 948	12.6	78.3	Brazil	8 353	19.9
	Union						
4	Brazil	29 657	8.3	99.1	Canada	2 272	5.4
5	Mexico	7 716	2.2	71.0	Australia	1797	4.3
6	India	7 628	2.1	4.6	Thailand	1372	3.3
7	Argentina	6 106	1.7	110.2	India	1 350	3.2

8	Viet Nam	5 786	1.6	60.6	New Zealand	1 090	2.6
9	Canada	5 325	1.5	90.5	Argentina	1 003	2.4
1 0	Pakistan	4 985	1.4	18.6	China	871	2.1
-	Ukraine	2 455	0.7	49.5	Ukraine	511	1.2
-	Kazakhstan*	1 161	_	71.9	Kazakhstan*	27	-
X	Other countries	102 671	27.1	-	Other countries	6 987	16.6
X	World	355 478	100	42.8	World	42 054	100

Source: formed by the author based on data [1]

The growth of meat production in 2021 is mainly due to the increase in pork production in China, the leader in the production of this type of meat. China managed to quickly recover its pig population after the ASF virus outbreak in 2018, which led to an increase in production. The second fastest growing production rate was poultry meat due to its lower cost compared to other types of meat. The country with the highest growth in meat production in 2021 was China. It also grew in Brazil, India, Türkiye, Myanmar, Pakistan, Indonesia and Viet Nam. Reduction in meat production occurred in the Philippines, Argentina, Australia, and the United Kingdom of Great Britain and Northern Ireland (the United Kingdom) [2]. The leaders in beef production are the USA, Brazil, China and the European Union. In 2021, they produced 49.8% of all beef in the world. The share of the USA reached 17.6%. Pork in 2021 was mostly produced in China, the European Union and the USA. Only these three countries provided 73.6% of the total global volume of production of pork. The share of China was 44%. The largest producers of poultry meat in 2021 were China, the USA, Brazil and the European Union. They produced 55.3% of all poultry meat in the world, of which China -17.8%.

Factors that helped increase meat production were farm consolidation favouring large-scale farms, new feed management and breeding technologies. The growth of meat production in 2021 was hampered by animal diseases, especially ASF, HPAI and foot and mouth disease. In addition, the increase in costs for feed, fertilizers and energy sources also caused a slowdown in the growth of meat production in some countries [3]. The average level of meat consumption per capita in the world in 2020 reached 42.8 kg, which is 1% less than in 2019. In the United States and Argentina in 2020, people consumed 3 and 2.6 times more meat than the world average. At the same time, people in India consumed 9.3 times less meat than the world average level [2]. Such a striking difference in the amount of consumption is explained both by the socio-cultural characteristics of each nation and by objective economic factors, namely: population growth, the level of consumer income, meat prices, the level of urbanization, food traditions and religious beliefs, as well as caring for the environment, ethical issues of animal welfare and caring for one's own health.

According to the forecast of the Organisation for Economic Co-operation and Development, by 2031, the global population will increase by 11%. This will

<sup>\*</sup> Note: data source [2]; information is provided for 2020

lead to a 15% increase in meat consumption by 2031 [4]. Another important driver for increasing meat consumption is rising incomes. Data from the Organisation for Economic Co-operation and Development indicate that the average consumption per capita of meat of all types in 2019-2021 in the world reaches 34.1 kg per year. In developed countries, the average level of meat consumption is 69 kg per year, which is 2.6 times more than in developing countries and 6.2 times more than meat consumption in the least developed countries [4]. That is, consumers in countries with a higher socio-economic level of development have greater access to meat and meat products because of their higher incomes. In their study, Whitton C., Bogueva D., Marinova D., Phillips C.J.C researched the relationship between the level of meat consumption and income, comparing meat consumption per capita and gross domestic product (GDP) per capita for the period from 2000 to 2019. They found that income growth has a greater impact on lower-income consumers and less on more affluent consumers, where consumption is largely saturated and consumers are more sensitive to environmental pollution, ethical issues regarding the humane treatment of animals and care about health [5].

In addition, it was found that the consumption of poultry meat is increasing in the world, while the consumption of beef and lamb, on the contrary, is decreasing. Another reason for these processes is the established opinion about such meat as dietary and more useful for health from the point of view of healthy nutrition, which increases the consumption of poultry meat among people with high incomes who care about their health. Consequently, the world market for meat and meat products is dynamically developing and expanding. It is diverse and complex in its structure, characterized by a critical shortage of meat in some of its parts and its excessive consumption in others, which is closely related to economic inequality in the world. Saturating the world food market with meat is one of the key elements of ensuring food security. Because of this, further study of the peculiarities of its functioning is extremely relevant for modern economic science.

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