# REPORTS OF THE NATIONAL ACADEMY OF SCIENCES OF THE REPUBLIC OF KAZAKHSTAN

ISSN 2224-5227 Volume 3, Number 325 (2019), 214 – 221 https://doi.org/10.32014/2019.2518-1483.95

**UDC 338.45** 

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# ASSESSMENT OF THE CONDITION OF THE PROCESSING INDUSTRY IN THE REPUBLIC OF KAZAKHSTAN

**Abstract.** The manufacturing industry plays the important role in the country's economy, by stimulating innovation and increasing productivity, as well as improving the well-being of the population. Therefore, the creation of an effective structure of the processing industries is a permanent object of the active state-owned industrial Republic of Kazakhstan at the present stage.

The article analyzes the state of development of the most important manufacturing industries in Kazakhstan. It is shown that the level of productivity in the manufacturing industry of Kazakhstan is 2 times lower than the average for the member countries of the Organization for Economic Cooperation and Development. The low level of availability of long-term credit resources, technological backwardness of production, and a shortage of qualified personnel have been identified as factors hindering the development of manufacturing industries. In addition, it was found that, despite the availability of agricultural raw materials, the agricultural raw materials processing sector is not sufficiently developed in Kazakhstan: Kazakhstan is import-dependent by 47% for processed types of food, and domestic enterprises of light industry provide only 20% of domestic consumption. To solve these problems, measures have been proposed to curb commodity exports, by introducing of high fees on the export of products with a low degree of processing and the provision of incentives to stimulate the export of products with high added value.

**Keywords:** manufacturing industry, value added, manufacturability.

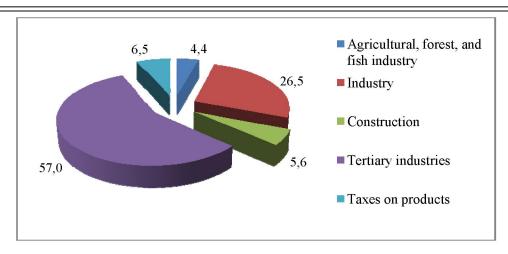
Introduction. The development of industry with high value added is one of the most important conditions of dynamic development of the Republic of Kazakhstan. From the beginning of active industrial policy, the main conditions for the processing industry development were created in the country. The Commercial Code that combined all instruments to support entrepreneurs and specified the functions of the institutes of development was adopted. The establishment of Bayterek Holding and development of specialized institutes of support allowed covering all aspects in the processing industry. In addition, currently the processing industry is supported systematically by development of necessary industrial infrastructure under the State Program on industrial and innovative development – 12 special economic zones were created, 3 of them have complete infrastructure [1].

In the field of the processing industry Kazakhstan has a range of advantages: large-scale, free, inactive manufacture capacity allowing running the production of new types of goods; availability of low-cost labour having quiat high level of qualification; high educational and culture level of population; natural and geographic potential of the country.

Despite the available background for active development of the processing sectors of economy, the processing industry is developed quite slowly. This testifies the availability of serious problems with the national processing industry and actualizes the task of grounding the strategy of its development within which the favorable macroeconomic situation and available competitive advantages can be used.

**Methods.** The following methods were used as methodological and methodical base for the research: dialectical method of cognition; principle of analogy; methods of systematic and structural analysis, analytical grouping; tabular and graphical means to present statistic data.

**Results and discussion.** At the moment the industry takes more than fourth part in the structure of Kazakhstan economy, Figure 1. By data of the Committee for Statistics of the Ministry of National Economy of the Republic of Kazakhstan, in 2018 the index of physical volume of industry to the previous year was 104.1% [2].



Note – the Figure was made basing on source [3]

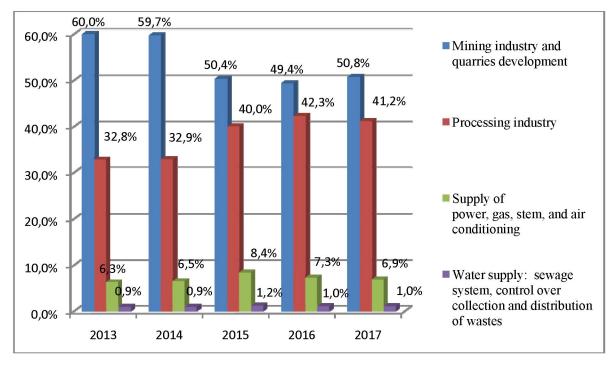
Figure 1 – The structure of economy sectors in GDP for 2017, %

In the structure of industrial production of the Republic of Kazakhstan the processing industry was about 37% from 2013 to 2017.

The leading position in the Republican volume of industrial products belongs to the mining industry (54% at average). In 2017 the output of products for this sector, in terms of money, was 11 568 785 million tenge.

The power supply is ranked third in the share of economic activity of the industrial production volume (7% at average). In 2017, the volume of industrial goods production, in terms of money, was 1 582 299 million tenge.

And the indicator of water supply is about 1% at average for the same period. In 2017 the volume of industrial goods production, in terms of money, was 238 277 million tenge, Figure 2.



Note – the Figure was made basing on source [4]

Figure 2 – Relative share of activity types in the national volume of industrial products, %

According to the long-term priorities of "Kazakhstan-2050" Strategy, and in support of the industry development, the National Program on the industrial and innovative development of the Republic of Kazakhstan was developed for 2015 – 2019.

The Program is aimed at stimulating the diversification and enhancing the competitiveness of the processing industry. The Program pays special attention to satisfaction of internal market demand owing to own production, and then, upon saturation of the internal market, provision of goods for export. Under this approach the task of the national processing industry products development will be solved [5].

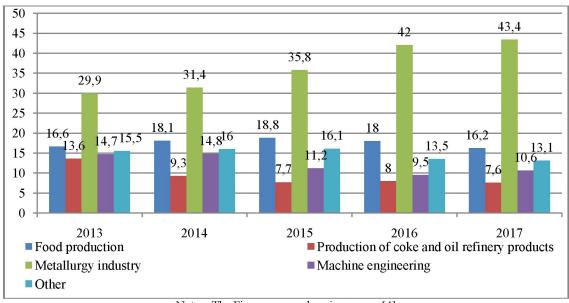
Under the industrialization process the industry focus gradually shifts to the processing industry, although the level of its development remains quite low. The processing industry provides less than 7% of employment, and 11% of gross added value of the country economy. For comparison, the level of output of the processing industry for Kazakhstan is lower twice than, at average, for countries-members of the Organization for Economic Cooperation and Development (OECD).

In 2017, the processing industry output volume, in terms of money, was 9400848 million tenge of the whole volume 22 790 209 million tenge, Table 1.

						Increment volume	
Types of economic activity	2013	2014	2015	2016	2017	2017/	2017/
						2013	2016
Processing industry	5852592	6089645	5978008	8046845	9400848	160,6	116,8
Production of food stuff	970123	1103491	1123041	1448386	1525814	157,3	105,3
Beverage industry	202459	233059	216316	254294	311675	153,9	122,6
Production of tobacco products	111909	104232	93469	105936	106247	94,9	100,3
Production of textiles, clothes, leather goods	64977	63189	71593	82463	98090	151,0	119,0
Production of coke and oil refinery products	797925	565219	462234	640137	716297	89,8	111,9
Chemical industry products	185977	230310	241588	284551	333328	179,2	117,1
Metallurgical industry	1752059	1912427	2140058	3380172	4075747	232,6	120,6
Machine engineering	859201	902541	668265	766781	998176	116,2	130,2
Other	907962	975177	961445	1084125	1235473	136,1	114,0

Table 1 – The volume of processing industry products (goods, services) by types of the economic activity, million tenge





Note – The Figure was made using source [4]

Figure 3 – The relative share of activity types on the volume of processing industry products, %

The structure of the processing industry is mainly presented by metallurgical industry. At average, from 2013 to 2017, the share of the metallurgic industry was 36.5% in the structure of the processing industry of the Republic.

The production of food stuff is on the second place for a good reason – the Republic of Kazakhstan is agricultural country. The average value of food industry share for the same period is 17.5%.

The share of machine engineering is 23.2%, production of coke and oil refinery products -9.2%, Figure 3.

The processing of agricultural raw material, and production and qualitative, affordable and competitive food stuff, at the moment, is one of the main priority tasks of the agricultural sector of the Republic.

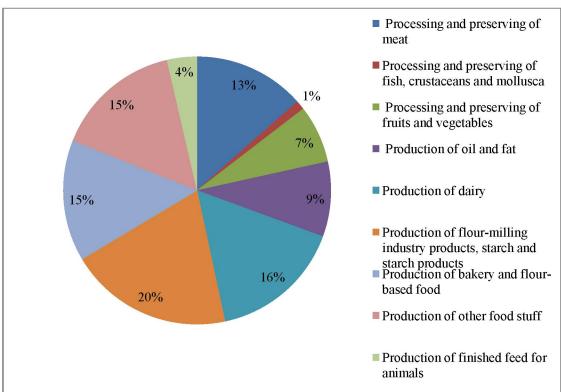
In 2017, the enterprises of the sector produced 6.7% of the Republican volume of industrial production, or 16.2% of the processing industry.

The main share in the structure of food stuff production belongs to cereal-processing industry (20%), dairy (16%), bread and bakery (15%), meat-processing (13%), fat-and-oil (9%), fruits-and-vegetables (7%), other sectors (20%) [4].

Process utilization rate at the enterprises on agriculture products processing was as follows: macaroni – 49.2%, milk – 43.5%, flour – 37.5%, butter – 38.4%, sausage goods – 35.2%, sugar – 76.6%, cheese – 37.3% [4].

In whole, the volume of foods stuff production in 2017 was about 1 525 814 million tenge or 4 676.8 million US dollars. Among them, the products to the amount of 1 241.4 million US dollars was exported. At the same time, the amount of imported foods stuff was 3 012.9 million US dollars. Consequently, the total volume of foods stuff consumption in Kazakhstan is 6448.30 million US dollars [6]. So, the share of import in the total volume of consumption is about 46.7%. Kazakhstan provisions itself only with 53.3% of own agriculture products.

The main volume of import falls on fruit-and-vegetable preserves, dairy products, cheese and quark, poultry meat, confectionary imported mainly from the Customs Union countries and far-abroad countries.



Note – The Figure was made basing on source [4]

Figure 4 – The structure of food stuff production in RK, 2017.

The conducted analysis clearly shows the import dependence of Kazakhstan in the sectors of advanced processing food industry. Despite the relative development of agricultural sector and availability of agricultural raw materials, the raw material processing sector is not developed enough in Kazakhstan. At the moment, Kazakhstan exports corn, vegetables, fruits and other types of agriculture products, and imports confectionary, preserved vegetables etc., i.e. the processed products the cost of which is much higher.

The same situation is for the consumer goods industry. The share of the sector in the industry is not large and is 0.43%, in processing industry – 1%. In 2017, the sector enterprises manufactured the products to the amount of 98 billion tenge or 295 million US dollars [4]. Among them, the product to the amount of 3.8 million US dollars was exported. The amount of imported consumer industry product was 1 161.6 million US dollars that exceed the own volume of production by almost 4 times [6].

Thus, the share of national production in the consumer industry market is about 20%. And this is mainly school uniform, uniform and shoes for arm and force departmental structures. The rest 80% is imported from abroad. Unfortunately, under the availability of significant raw resources, the problems of the sector remain unchangeable. For example, Kazakhstan does not manufacture wool fabric causing the necessity to import faux fur and wool. Despite annual growth of cattle stock, only 14% of them are used in manufacture, and some part of it is exported to China via rogue companies for low prices. In addition, due to low quality of raw cotton, the local enterprises on cotton processing are not loaded to its full extent. Of the total volume of raw cotton grown in Kazakhstan, 90% is exported abroad, and only 2% of cotton is processed to final product [7]. All this causes the increase of import dependence for cotton goods.

At the moment, the government conducts the works on provisioning the textile enterprises with raw cotton, elaborates the issues on determining the limits for thin wool export, temporary prohibition on export of untreated skin. However, the companies of the sector still prefer to be content with government orders and conduct very poor marketing policy. There are several companies that are more or less active in this regard ("Kazakhstan Textiline", "Kaz SPO-N", "Semiramida" South Textiline KZ). Along with this, the garment factories purchase the materials and fabric from Russia, Turkey, Uzbekistan, Italy and other. But Kazakhstan almost does not manufacture yarns, fibers, accessories. This causes high net cost of the national final products and makes it uncompetitive in comparison with imported into the country products.

The technical and technological backwardness of the sector should also be noted – wear and tear of the main funds of the national enterprises is 80% [8]. This was the reason of low labor productivity, high labor intensity, production hold-up etc. To solve this problem it is necessary to free of fees and VAT the technological equipment purchased from abroad and to create leasing companies with governmental share to purchase this equipment on favorable terms.

The consumer goods industry is of high public significance in many countries as it ensures high employment. In India, China, Turkey this sector provides employment for almost 20% of population. The governments of these countries arranged large-scale measures to support the consumer industry: free economic zones, preferential taxation and credits, quotes and fees, governmental investments. Particularly, in Turkey the volume of this sector in the GDP is 10%, the sector ensures 40% of income into the country budget [9]. In Kazakhstan, the consumer industry is the only way to decrease unemployment at the regions with excess population and mono-cities tied to manufacture industry only [10].

With regard to the mentioned above, Kazakhstan needs to take urgent measures to stimulate the development of sectors of processing of agriculture raw materials.

To solve the problems of the sector it is necessary to take measures on limiting the raw materials export assuming the introducing of high fees on export of products with low processing level. In addition, it is reasonable to stimulate the export of goods with high added value by franchise application. This method of export stimulation of final product was successfully undertaken by China.

The sector also suffers from shortage of highly qualified specialists. The education program at all universities of the country is based on obsolete methods of manufacture. Considering the appearance of new methods of products manufacture in consumer industry the requirements to employees and specialists also increase.

The first President of the Republic of Kazakhstan noted several times the importance of development of non-resource-based sectors of economy and its diversification, particularly, the Address "Kazakhstan on the way of accelerated economic, social and political modernization" of 2005 sets the task on creating

innovative economy and developing of non-source-based sector, industrialization of agricultural production through implementation of cluster initiatives in the field of manufacture and processing of agriculture raw materials [11].

To provide financial resources to processing industry enterprises the government used different instruments to support the industrial development: interest rate subsidization, reimbursement of expenses and allocation of grants for innovations and adoption of technologies, partial reimbursement of expenses of industrial-innovative activity subjects, credits cover and other.

The key barrier for this is high loan debt of active enterprises of processing industry and lack of free liquid assets at the latter to ensure loan-based funding.

High cost of credit, in particular, long-term credit of Kazakhstan financial institutes remains a serious barrier. In 2018, the average rate of compensation for long-term credits at second-tier banks was 19.2% annual in the national currency [12].

One of the headwinds of labor productivity growth is technological level of processing industry sectors development. At the moment, more than 80% of the processing industry enterprises still use manual labor or have semi-automated production [13], i.e. are still at the transition stage to full automation.

In this regard, it is necessary to stimulate the enterprises to make investments into the modernization through development of financial support instruments including the increase of volumes and affordability of long-term financing; to tough requirements to projects having the governmental support in the part of advanced equipment and technologies application. In addition, it is necessary to continue the implementation of plans on digitization of industry including the increase of technological requirements and standards to enterprises.

**Conclusion.** The conducted research allows concluding that the growth of processing industry is grounded on the modernization of its sectors. This needs to solve the following key issues of modernization:

- 1. Ensure the access to technologies. Here, the most effective measure is decrease of taxes on the imported foreign technology, provision of exemptions or complete remission of taxes for enterprises that implement large innovation projects.
- 2. Ensure the access to finances. It is necessary change gradually the system of direct grants and subsidies as it is not effective sufficiently. For example, the subsidization of poultry farms in Kazakhstan sis not favor the increase of its competitiveness, the prices remain high comparing to the imported poultry meat. The poultry farms owners are not interested in optimizing the expenditures, increase of their own production potential. There is no end of such examples. Instead of such schemes the government can stimulate the investments into these fields providing good conditions for investors and acting as a guarantor.
- 3. Minimize the barriers facing the national manufacturers on the way to the internal and export sales markets.
- 4. Decrease the intensity of competitive pressure by stimulating the innovative activity, removing the input barriers, and the educational medium meeting the processing industry requirements.

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# ҚАЗАҚСТАН РЕСПУБЛИКАСЫНДАҒЫ ӨҢДЕУ ӨНЕРКӘСІБІНІҢ АХУАЛЫН БАҒАЛАУ

**Аннотация.** Өңдеу өнеркәсібі инновацияларды ынталандырып, өнеркәсіп өнімділігін жоғарылату және тұрғындардың әл-ауқатын көтеру арқылы ел экономикасында маңызды орын алады. Сондықтан өңдеу өнеркәсібі салаларының тиімді құрылымын жасау қазіргі кезеңде Қазақстан Республикасының белсенді мемлекеттік өнеркәсіптік саясатының тұрақты объектісі болып отыр.

Мақалада Қазақстанның өңдеу өнеркәсібінің анағұрлым маңызды салаларының дамуының ахуалына талдау жүргізілген. Қазақстандағы өңдеу өнеркәсібінің өнімділік деңгейі Экономикалық ынтымақтастық және даму ұйымының мүше-мемлекеттерінің орташа көрсеткішінен 2 есе төмен екендігі көрсетілген. Өңдеу

өнеркәсібі салаларының дамуын тежейтін факторлар ретінде ұзақ мерзімді несиелік ресурстардың қол жетімділігінің төмен деңгейі, өндірістердің технологиялық артта қалушылығы, білікті кадрлардың жеткіліксіздігі көрсетілген. Одан басқа, ауыл шаруашылығы өнімдері бола тұра, Қазақстанда оларды өңдеу салаларының төмен дамығандығы белгіленген: Қазақстан өңделген тамақ өнімдері бойынша 47%-ға импортқа тәуелді болса, ал жеңіл өнеркәсіп саласының отандық кәсіпорындары ішкі тұтыну көлемінің небәрі 20%-ын ғана өндіреді. Көрсетілген мәселелерді шешу үшін өңделу деңгейі төмен өнімдерді сыртқа сатуға жоғары алым салу арқылы шикізат экспортын қысқарту, жоғары қосылған құны бар өнімдер экспортын ынталандыру үшін жеңілдіктер жасау сияқты ұсыныстар жасалған.

Түйін сөздер: өңдеу өнеркәсібі, қосылған құн, технологиялылық.

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# ОЦЕНКА СОСТОЯНИЯ ОБРАБАТЫВАЮЩЕЙ ПРОМЫШЛЕННОСТИ В РЕСПУБЛИКЕ КАЗАХСТАН

**Аннотация.** Обрабатывающая промышленность играет важную роль в экономике страны, стимулируя инновации и повышение производительности, а также рост благосостояния населения. Поэтому создание эффективной структуры обрабатывающих отраслей выступает постоянным объектом активной государственной промышленной Республики Казахстан на современном этапе.

В статье проведен анализ состояния развития наиболее важных отраслей обрабатывающий промышленности Казахстана. Показано, что уровень производительности в обрабатывающей промышленности Казахстана в 2 раза ниже, чем в среднем по странам-членам Организации экономического сотрудничества и развития. В качестве факторов, сдерживающих развитие отраслей обрабатывающей промышленности, определены низкий уровень доступности долгосрочных кредитных ресурсов, технологическая отсталость производств, нехватка квалифицированных кадров. Кроме того, установлено, что несмотря на наличие сельскохозяйственного сырья, в Казахстане не достаточно развита отрасль переработки сельхозсырья: по переработанным видам продуктов питания Казахстан импортозависим на 47%, а отечественные предприятия легкой промышленности обеспечивают всего 20% продукции внутреннего потребления. Для решения указанных проблем предложены меры по сдерживанию сырьевого экспорта, предполагающие введение высоких пошлин на вывоз продукции с низкой степенью обработки, предоставления льгот для стимулирования экспорта изделий с высокой добавленной стоимостью.

Ключевые слова: обрабатывающая промышленность, добавленная стоимость, технологичность.

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