

The Mongolian Flour Market

Sector Overview



June 2018



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SUMMARY

The importance of a strong domestic agricultural sector, and within it, a strong flour market sector, has been recognized by the Mongolian people and government for decades. There is an increasing demand amongst Mongolian consumers for flour and flour-based products. At first glance, the country seems well-prepared to meet consumers' needs. Mongolia has a significant installed milling capacity and a government committed to supporting the flour market.

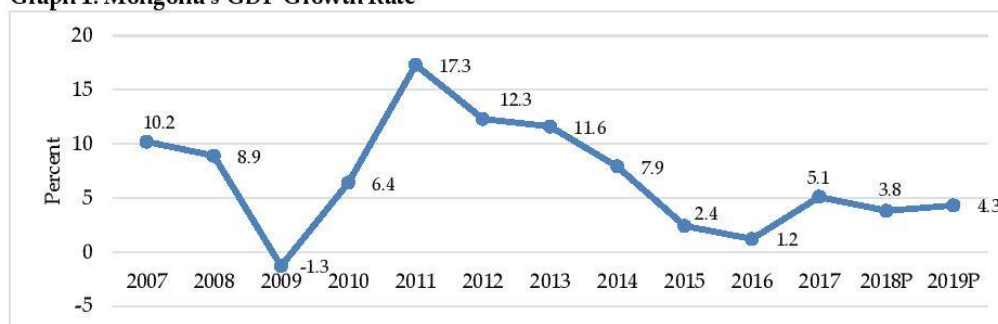
Yet, the country continues to rely on wheat and flour imports from its neighbors to meet domestic demand. An unpredictable wheat harvest precludes the development of a stable domestic flour production pipeline. If Mongolia is to reduce its dependence on wheat and flour imports, steps must be taken to improve the reliability of domestic wheat production through focusing on increasing yields and wheat quality.

DOMESTIC CONSUMER PROFILE

Mongolia is slowly but steadily recovering from a decline in growth that began in 2011, bottoming out only in 2016. The recession initially began with a fall in global commodity prices and was exacerbated by government policies. Economic projections forecast GDP growth and consumer spending has increased in recent years.

In 2017, the Mongolian economy grew 5.1%, up significantly from the 1.2% growth in 2016. The Asian Development Bank (ADB) predicts that the Mongolian economy will grow 3% in 2018. Mongolia's positive medium and long-term economic prospects are due largely in part to the outlook for the mineral sector. The expected growth rates depend heavily on projections of foreign investment in strategic mining projects such as Oyu Tolgoi in 2018.

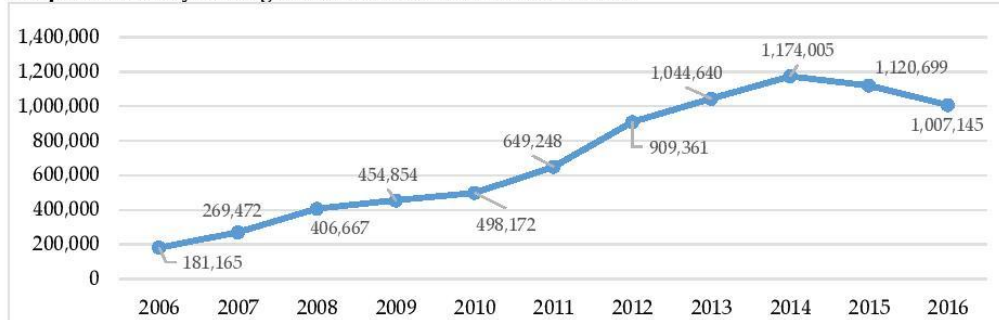
Graph 1. Mongolia's GDP Growth Rate



Source: ADB, NSO

Consumption has grown steadily over the last five years by various measures of consumer spending habits. The increase in consumption can be attributed to increasing average household incomes and the continued rural-to-urban migration trend over the last decade. Ulaanbaatar's population has grown from 947,000 people in 2005 to 1.44 million in 2016, a more than 50 percent increase. The mass migration from rural to urban areas, augmented by improving economic conditions, indicates that consumer spending will increase in the coming years as former herders shift to the urban lifestyle. However, it is important to note that the trend of rural-to-urban migration may be slowly shifting, as 2017 was the first year where there was a net population outflow from the capital city of Ulaanbaatar.

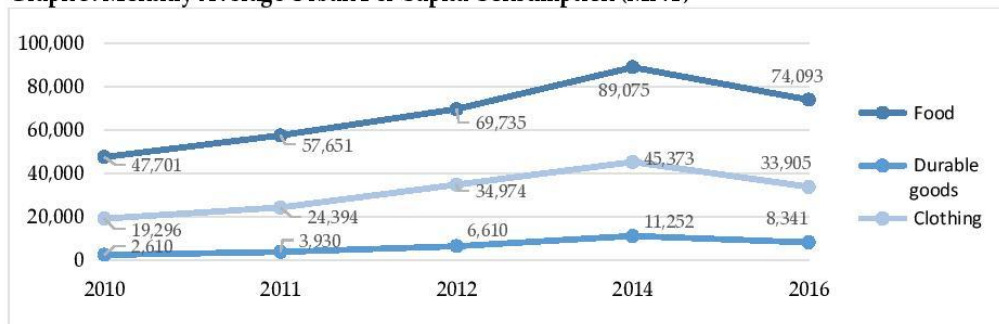
Graph 2. Monthly Average Urban Household Income (MNT)



Source: NSO

Average monthly household income has been steadily trending upwards in urban areas, indicating that Mongolians have more money to spend on retail purchases. The graph below of per capita consumption of food products, durable goods, and clothing in urban areas confirms a theory that as average household income increases, so does consumption.

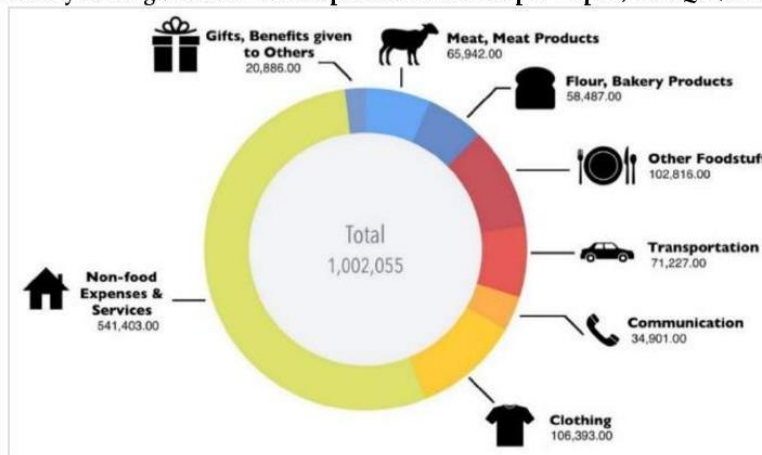
Graph 3. Monthly Average Urban Per Capita Consumption (MNT)



Source: NSO

When examining at the breakdown of food expenses, as shown below, flour and bakery products account for nearly 6% of monthly average urban consumption.

Figure 1. Monthly Average Urban Consumption Breakdown per Capita, 2017Q2 (MNT)



Source: NSO

CLASSIFICATION STANDARDS
WHEAT

Wheat is broadly divided into “soft” and “sturdy” wheat. It is then further classified into categories, ranging from I-IV. These categories are used by the government to determine which wheat qualifies for which subsidy amount.

With regards to quality, domestically-grown wheat generally has a much lower gluten content than that of other countries. According to the Ministry of Food, Agriculture and Light Industry, wheat must generally have no less than 18% gluten levels. According to the chairman of Ulaanbaatar Guril, the gluten content of Mongolian wheat does not exceed 26.5%, and even that is relatively rare. Russian wheat, on the other hand, regularly has a gluten content above 25%. In 2014, 30% of locally-grown wheat did not meet the gluten requirements of wheat. This is a weakness in the Mongolian wheat-producing sector.

Table 1. Soft vs. Sturdy Wheat

Indicator	Wheat Classification	
	Soft	Sturdy
Color	Red, or white wheat	Bright or dark red, White wheat
Scent, taste	Regular taste and scent of wheat, does not have any external oddly taste and scent	
Physical body, shape	Oval round	Linear or oblong round

Table 2. Physical and Chemical Characteristics of Soft Wheat

Indicator	Classification			
	I	II	III	IV
Moisture, shall not exceed %	14.5	14.5	15.0	15.0
Volume, weight not less than	750	740	720	710
Glassy, not less than %	60	60	40-60	No limitation
Gluten, not less than %	28.0	26.0	23.0	18.0
Protein, not less than %	13.5	12.5	11.5	10.5
Other sort of wheat mix, shall not exceed %	10	10	10	10
Foreign body not exceed %	2.0	2.0	2.0	2.0
Mineral component	0.3	0.3	0.3	0.3
Damaged	1.0	1.0	1.0	1.0
Polluted by fusarium	1.0	1.0	1.0	1.0
Component hard to define	1.0	1.0	1.0	1.0
Poisonous component	0.2	0.2	0.2	0.2
	0.05	0.05	0.05	0.05
Wheat mix, shall not exceed %	5.0	5.0	5.0	5.0
Green wheat				
Germ	1.0	1.0	2.0	2.0
Mashed wheat	1.0	1.0	1.0	2.0
Shriveled wheat	1.0	1.0	1.0	2.0
Frosted wheat	1.0	1.0	1.0	1.0
Other plant seed	1.0	1.0	1.0	1.0
	1.0	1.0	1.0	1.0
Drop amount	200	200	200	150
Storage pest	Must not be detected			
Plant insect	Must not be detected			

Mite				
Table 3. Physical and Chemical Characteristics of Sturdy Wheat				
Indicator	Classification			
	I	II	III	IV
Moisture, shall not exceed %	14.5	14.5	15.0	15.0
Volume, weight not less than	770	745	745	710
Glassy, not less than %	85	85	70	No limitation
Gluten, not less than %	28.0	25.0	22.0	18.0
Gluten quality	II 20-100	II 20-100	II 20-100	II 20-100
Protein, not less than %	14.5	13.0	11.5	10.5
Other sort of wheat mix , shall not exceed %	6	6	6	6
Foreign body not exceed %	2.0	2.0	2.0	2.0
Mineral component	0.3	0.3	0.3	0.3
Damaged	0.2	0.2	0.2	0.2
Polluted by fusarium	1.0	1.0	1.0	1.0
Component hard to define	1.0	1.0	1.0	1.0
Poisonous component	0.2	0.2	0.2	0.2
	0.05	0.05	0.05	0.05
Wheat mix , shall not exceed above %	5.0	5.0	5.0	5.0
Green wheat	1.0	1.0	2.0	2.0
Germ	1.0	1.0	1.0	2.0
Mashed wheat	1.0	1.0	1.0	2.0
Shriveled wheat	1.0	1.0	1.0	1.0
Frosted wheat	1.0	1.0	1.0	1.0
Other plant seed	1.0	1.0	1.0	1.0
Drop amount	200	200	200	150
Storage pest	Must not be detected			
Plant insect				
mite				

Source: Ministry of Food, Agriculture and Light Industry

GOVERNMENT POLICY

The agricultural sector has long been one of the largest sectors in terms of employment and percentage of GDP in Mongolia. According to the National Statistics Office (“NSO”), over 300,000 Mongolians have been employed in the agriculture, forestry, fishing, and hunting industry annually since 2007. As of Jan 2018, the flour production industry alone employs 1,623 individuals. In order to counteract the harsh growing climate and promote the production and consumption of domestic wheat, the Government of Mongolia provides a subsidy for wheat producers based on the category of wheat they grow. This subsidy has been offered for over half a decade and is revised periodically.

Over the years, the government has supported the agricultural industry by suspending customs taxes and value-added taxes (VAT). In the 5 years leading up to December 31, 2016, the equipment imports of 17 flour mills and other agriculture companies were exempt of customs tax. Recently, the VAT exemption date has been extended until December 31, 2020. The total tax exemptions from agriculture-related exemptions amounted to MNT 20 billion between 2008 and 2011; and MNT 45.7 billion between 2012 and 2016. These exemptions have led to many technological

upgrades in the agricultural industry, as evidenced by the recent equipment purchases of many flour and bakery companies (discussed further in the “Distribution” section).

For several years, the government has subsidized the production of wheat for farmers who supply wheat to local flour mills, the national reserve, and the crop development support fund. The table below shows the historical wheat subsidies by class.

Table 4. Historical Wheat Subsidies (MNT/ton)

	Class I	Class II	Class III	Class IV
2014	70,000	70,000	70,000	70,000
2015	70,000	70,000	70,000	70,000
2016	50,000	50,000	50,000	50,000
2017	55,000	50,000	50,000	50,000
2018	60,000	60,000	60,000	50,000

Source: legal.mn

As of February 2018, farmers that grow Category I, II, and III wheat will receive MNT 60,000 for every ton of wheat they supply to local organizations. Farmers who grow Category IV wheat will receive 50,000 per ton. In 2017, the Government spent MNT 14.9 billion on wheat subsidies. However, the lower quality of Mongolian wheat relative to that of its neighbors still leads to domestically-produced flour being viewed as slightly lower quality than that of imported goods.

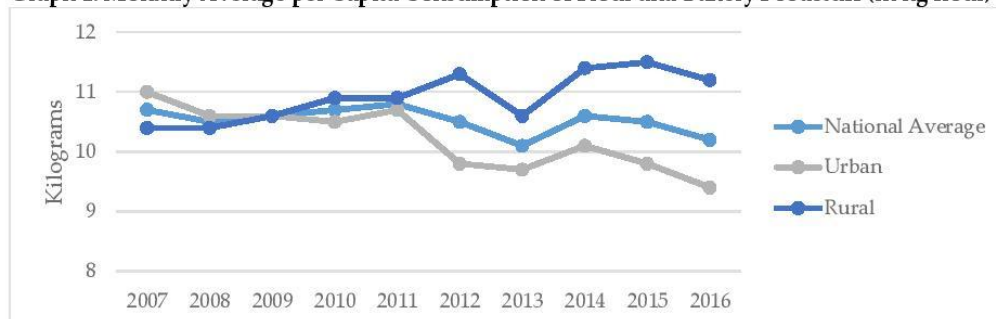
The Government of Mongolia has also implemented the “Third Crop Cultivation Campaign,” which aims to reduce reliance on agricultural imports and increase crop production to meet domestic demand. This program was started in 2008, but has been extended until at least 2020 under the Government of Mongolia’s 2016-2020 Action Program. The program’s goals are varied and far-reaching. The original program included cultivating arable land to increase crop production, supplying farmers with imported agricultural machinery, renovating irrigation systems, and importing wheat seeds suited to Mongolia’s climate conditions (Ministry of Food, Agriculture and Light Industry). The first stage of the program was a success. According to the FAO, this program enabled Mongolia to renew 80% of farming tractors and 65% of harvesting machinery in its first stage. Furthermore, according to the FAO, crop yields increased by 61% between 2007 and 2010.

According to the press release of the State Great Khural regarding the 2016-2020 Action Program, the Third Crop Cultivation Campaign’s goal is to “Improve the cropland usage and determine regions suitable for agriculture and intensified animal husbandry and ensure 100% self-sufficiency in crops, potatoes and other key vegetables and 50% supply of planted fodder by domestic production.” As such, the second stage of the plan (2016-2020) focuses on building upon the foundation laid in the first stage and implementing newer technologies and farming methods. These include updating irrigation systems, examining the viability of green houses, implementing and educating farmers about zero-tillage technology, and improving fertilizers to increase yields and prevent soil erosion. It remains to be seen what the success of this program will be.

DEMAND

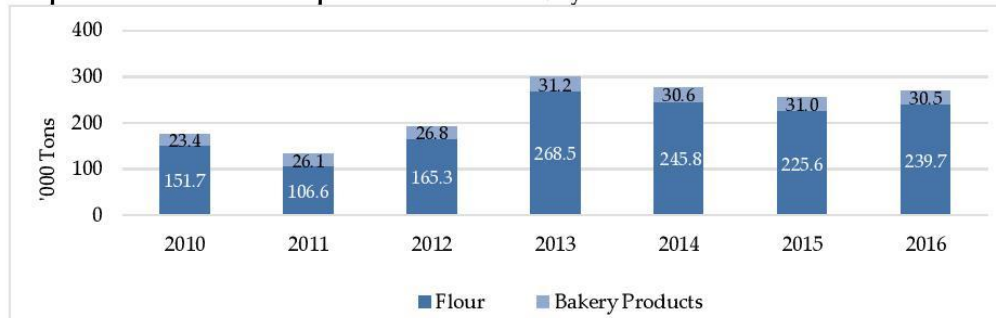
The average per capita quantity of consumption of flour does not vary between urban and rural areas to a large extent. As shown in Graph 4, rural areas actually consume a slightly greater quantity of flour products than urban areas, perhaps because of a lesser variety in foodstuff options in sparsely-populated rural areas.

Graph 4. Monthly Average per Capita Consumption of Flour and Bakery Foodstuff (in kg flour)



Source: NSO

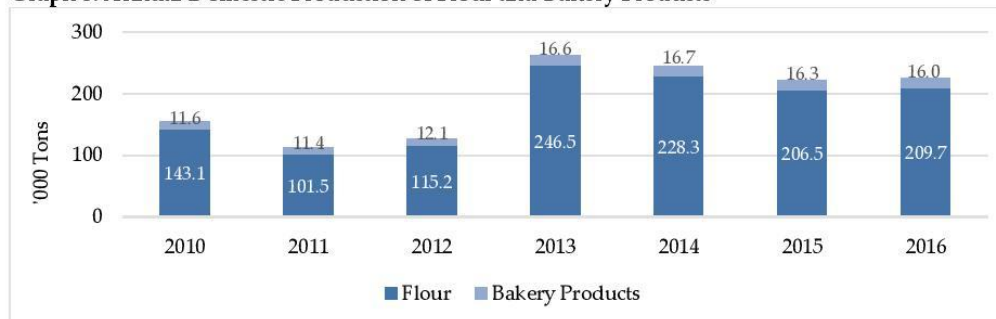
Graph 5. Net Annual Consumption of Flour and Bakery Products



Source: NSO

A comparison of Graph 5 and Graph 6 show that Mongolia’s consumption of flour and bakery products exceeds domestic production of these products. To fill this gap, Mongolia relies on wheat and flour products from neighboring countries. As detailed in the “Imports” section, below, Mongolia imports these products primarily from Russia and Kazakhstan. Wheat and flour product imports have varied dramatically by year, ranging from nearly 241,000 tons in 2016 (~USD 218 million) to 13,500 tons in 2017 (~USD 2.6 million).

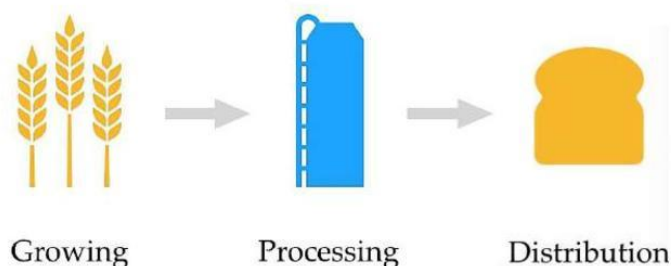
Graph 6. Annual Domestic Production of Flour and Bakery Products



Source: NSO

WHEAT PRODUCTION PIPELINE

Mongolia’s flour production pipeline can be broadly classified into the three stages shown below. The following section outlines the challenges faced at each stage in the pipeline, as well as the import market for flour and flour-based products.



GROWING



According to the Food and Agricultural Organization of the United Nations (FAO), more than two-thirds of domestic wheat is grown in the “provinces of Bulgan in Khangai Region and Selenge and Tuv in Central Region.” It takes a disproportionate amount of wheat to create flour, as waste is created during the milling process. According to the industry expert, in order to produce 315,000 tons of flour, 450,000 tons of wheat inputs are needed.

The biggest challenge to Mongolia’s development of a stable flour production pipeline is the unpredictable domestic wheat harvest. Even the slightest variation in rainfall can be the difference between an abundant harvest and a poor harvest in a land with a climate of prolonged harsh winters and dry summers.

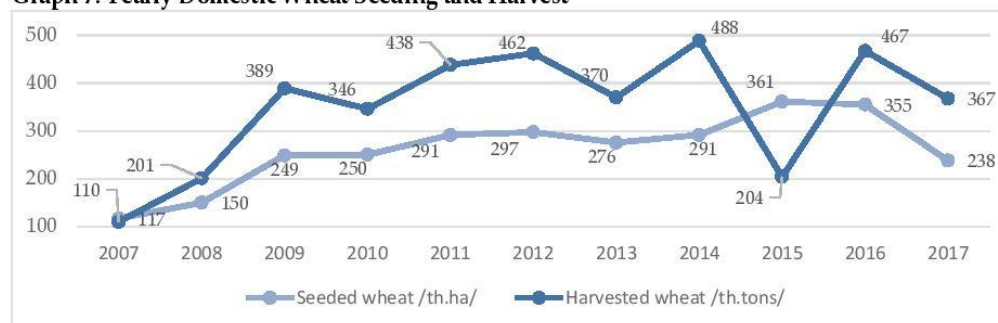
Figure 2. Mongolia’s Wheat Calendar

Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
			Sowing	Growing	Growing	Growing	Growing	Harvest			
			Lean Period								

Source: FAO/GIEWS, FAO/UNICEF/UNDP food security assessment 2007 and Participatory Poverty Analysis, ADB

Unpredictable weather and rainfall makes it difficult to ascertain how much wheat will be harvested until nearly the end of the growing season, which, as shown in the figure above, falls during August. As shown in Graph 7, droughts like the one in the summer of 2015 can reduce flour production by more than 60%.

Graph 7. Yearly Domestic Wheat Seeding and Harvest

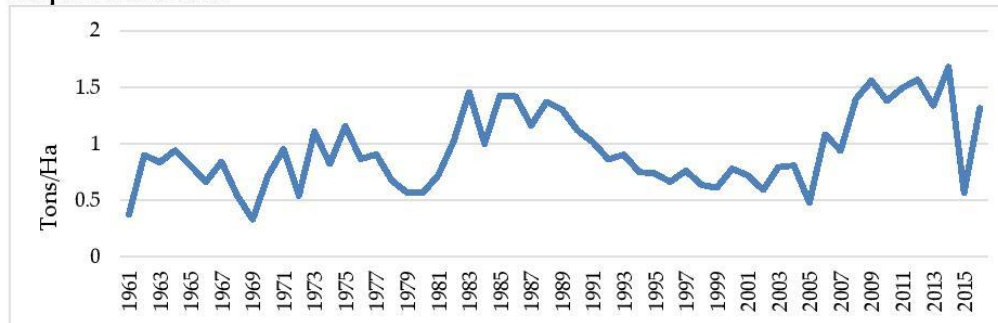


Source: NSO

As shown above, there has been a general upwards trend in the area of seeded wheat. According to initial FAO estimates, approximately 367,000 hectares of wheat were planted in 2017—the highest since 1994. However, a prolonged drought that lasted from the middle of May to the end of July, coupled with unusually high levels of animal damage to fields, resulted in the destruction of 89,000 hectares of planted area. An additional 22,500 hectares were delegated for use as animal feed due to the high levels of damage. The total area of harvest to 256,000 hectares—24% lower than the area harvested in 2016 and 11% below the 5-year average.

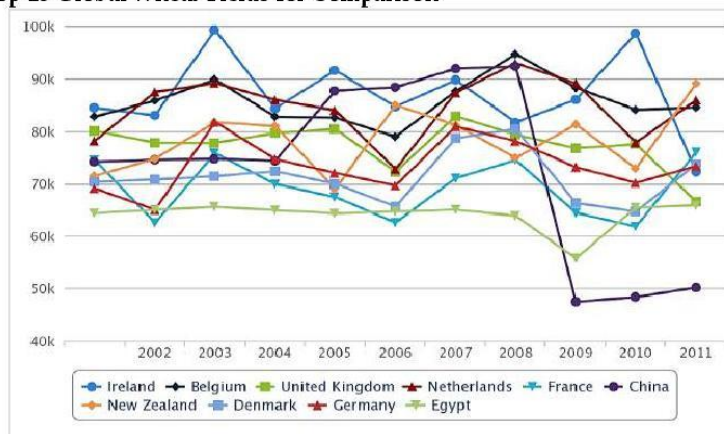
According to the Ministry of Food, Agriculture and Light Industry (the “MoFALI”), 237,000 tons of wheat were harvested in 2017—just over half of 2016’s harvest. The area seeded in a given year does not give a reliable indication of what the wheat harvest will be. Yields vary significantly across years, influenced by factors such as animal damage and rainfall. However, Mongolia’s wheat yields consistently fall below those of other wheat-producing countries.

This year, the MoFALI has set a goal to plant seeds on over 408,000 hectares of land and harvest 518,000 tons of wheat. Last year, Mongolia lost 50% of its crop yields due to natural disasters. Thus, MoFALI has made this year’s preparation a top priority. In pursuit of this goal, the Mongolian farming community requires over 60,000 tonnes of wheat seeds. Various entities have reserved 24,000 tons of seed from their 2017’s harvest, while the Crop Farming Support Fund (“CFSF”) and the state have reserved 25,800 and 3,000 tons of seed respectively. In addition, the state financed the purchase of 48,000 tons of elite seeds and gave permissions to six enterprises to import 2,500 tons of seeds. According to B. Unenbat, executive director of CFSF, the seeds in the fund reserve are sold to farmers at a 30% discount. The fund is also working on to provide 6,500 tons of fuel to farmers for harvesting and 405 thousand tons of fertilizers. Furthermore, it currently allocated MNT 1 billion for supplying farmers with liquid fertilizers for the first time. This spring, 22 thousand tons of fuel is required for the agricultural production and the MoFALI has been working on the proposal to nullify excise tax on 7,800 tons of diesel fuel.

Graph 8. Wheat Yield

Source: NSO

To provide a basis for comparison, the countries' with the top 10 wheat yields have yields above 5 tons/ha (see Graph 9). Russia's wheat yields have regularly been above 2 tons/ha for the last decade.

Graph 9. Top 10 Global Wheat Yields for Comparison¹

Source: FAO

Mongolia is fighting an uphill battle with regards to its climate and low yields. Domestic milling capacity, however, is in a significantly better place, though there is room for improvement in the utilization of full capacity.

MILLING

There are several flour mills in Mongolia owned by various domestic companies, which enable the country to produce a wide variety of flour and flour-based products, should they have the necessary inputs. As with the farms that produce wheat, the majority of flour mills and storage facilities are located in the central region of Mongolia.

¹ The FAO measures yields in hectograms (100 grams) per hectare (hg/ha). 10,000 hectograms is the equivalent of 1 ton.



According to the Ministry of Food, Agriculture and Light Industry, there were 63 flour mills in Mongolia in 2017 with a processing capacity of 942,735 tons of wheat per annum. However, only 24 mills are currently in active operation. The majority of these mills are owned by a handful of companies (discussed in the “Distribution” section), which have crowded out smaller companies that have less bargaining power.

The Ministry of Food, Agriculture and Light Industry estimates that in 2017, only 27% of the installed equipment’s processing capacity is being used. The 24 mills in operation processed 208,700 tons of flour, of which 47,200 was premium grade, 142,250 was Grade I, and 19,050 was Grade II.

Figure 3. Domestic Wheat-Based Product Processing Capacity, Top Companies



Source: MICC research

MICC’s analysis finds that at full operating capacity, the top Mongolian flour companies, alone, have the ability to produce 1,500 tons of flour, 43 tons of noodles, and 520 tons of animal feed a day (see “Distribution” section).

Based on production numbers (see Graph 6), the lack of mill capacity is not the cause of Mongolia’s heavy reliance on flour imports

The issue of producing and distributing flour, locally, therefore, focuses largely on domestic supply of wheat. Options must be explored for stabilizing the input chain to increase the financial viability and independence of the domestic flour production sector.

DISTRIBUTION

When analyzing the key players in the Mongolian flour market, this report breaks the flour into two sections: flour mills and producers of bread and bakery items.

FLOUR MARKET

The flour market in Mongolia can best be classified as an oligopoly with a handful of companies responsible for both the domestic and the international supply chain. 6 companies own the facilities shown in the figure above and dominate the domestic production industry, with a combined production capacity of over 1,500 tons of flour product per day. As of 2018, approximately 1,600 individuals are employed by the flour industry.

Table 5. Production Capacity of Major Players

Company	Flour Mill	Noodle Factory	Animal Feed Mill	Wheat Storage Factory	Total
Altan Taria	2	2	1	2	7
Mill House	1	1	1	--	3
Ulaanbaatar Flour	1	--	--	--	1
Oeg Flour	1	--	--	--	1
Gatsuurt Guril	1	--	--	2	3
Erdenet Guril LLC	2	--	--	1	3
Total	8	3	2	5	18

Source: MICC research

Altan Taria

Altan Taria was established in 1959 as a state-owned flour mill and privatized in 1997. It is currently has the largest daily production capacity out of the market players in Mongolia. Altan Taria produces flour, noodle, pasta, and feed products. It prides itself on meeting European standards of production.

Factory, Location	Product	Production Capacity	Equipment	Notable Features
Flour Mill, Ulaanbaatar	Flour	300 tons/day	Sortex Z, Buhler (Swiss)	<ul style="list-style-type: none"> Supplies 50% of flour needs of UB's population First flour mill to employ airflow cleaning of wheat
Flour Mill, Selenge	Flour	250 tons/day	Buhler (Swiss)	<ul style="list-style-type: none"> Fully-automated central computer system
Noodle Factory	Noodles	15 tons/day	Chinese and Japanese	
Pasta Factory	Pasta	5 tons/day	Sarto (Italian)	
Animal Feed Mill	Feed	15 tons/hour	Buhler (Swiss)	<ul style="list-style-type: none"> Fully automatic

Wheat Storage Facility, Ulaanbaatar & Selenge	Storage	136,000 tons of wheat	Two 80-ton electric scales (SVZ-80); two PPST 50R separators	<ul style="list-style-type: none"> 4 grain elevators in total
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Erdenet Guril

Erdenet Guril was founded in 2011 and operates the first rye flour mill in Mongolia. Its factory prides itself on using eco-friendly equipment.

Factory, Location	Product	Production Capacity	Equipment	Notable Features
Flour Mill, Erdenet City, Orkhon Province	Flour, fodder	117 tons flour/day 33 tons fodder/day	Alapala (Turkish)	<ul style="list-style-type: none"> Computer controlled system
Rye Flour Mill, Erdenet	Wheat	30 tons/day		<ul style="list-style-type: none"> Only factory that produces rye flour in Mongolia
Storage Facility	Product	3,000 tons		<ul style="list-style-type: none"> Silos can store 10,800 tons of wheat seeds

Gatsuurt Guril

Factory, Location	Product	Production Capacity	Equipment	Notable Features
Flour Mill, Selenge	Flour	100 tons/day	Alapala (Turkish)	<ul style="list-style-type: none"> Computer controlled
Wheat Storage Facility, Selenge	Wheat	3,000 tons		
Product Storage Facility	Product	1,000 tons		

Mill House

Factory, Location	Product	Production Capacity	Equipment	Notable Features
Flour Mill, Ulaanbaatar	Flour	220 tons/day		
Noodle Factory, Ulaanbaatar	Semi dry and dry Noodles	Semi dry noodles - 8 tons/day Dry noodles - 15ton/day	Alapala (Turkish)	
Animal Feed Mill, Ulaanbaatar	Feed	160 tons/day		<ul style="list-style-type: none"> Fully automated technology

Oeg Flour

Oeg Flour was established in 2013 and uses organically-grown wheat in its products. Company statements claim that Oeg Flour has captured 30% of the domestic flour market.

Factory, Location	Product	Production Capacity	Equipment	Notable Features
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Flour Mill, Darkhan	Flour	150 tons/day	Alapala (Turkey); Italian	
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Ulaanbaatar Flour

Ulaanbaatar Flour was founded on 2002. It claims to be responsible for 28% of the flour supply in Mongolia and 37% of domestic flour production.

Factory, Location	Product	Production Capacity	Equipment
Flour Mill, Darkhan	Flour	300 tons/day	Alapala (Turkish); United Arab Emirates

It is of interest to note that 5 out of 6 of the flour companies on the domestic market have purchased equipment from Alapala, one of the world's leading manufacturing companies of industrial agricultural equipment including flour mill, silo and storage facility manufacturing companies. Established in 1954, Alapala has found a great deal of success in partnering with Mongolian flour mills.

BREAD AND BAKERY PRODUCERS

There are over 200 producers of bread and bakery products in Mongolia. The sub-section below outlines some of the notable players.

Uguuj Chikher Boov LLC

Established in 1936, Uguuj Chikher Boov is one of the pioneer producers of bread and bakery goods. Today, Uguuj Chikher Boov produces approximately 130 types of bread and bakery goods, accounting for 70% of the market share of bakery goods in Ulaanbaatar, as per Company statement. Although Uguuj Chikher Boov has replaced its equipment periodically in the past, the Company is considering constructing a second factory and moving the existing factory to another location.

Talkh Chikher JSC

In 2017, Talkh Chikher produced 98 types of bread and bakery goods, amounting to a total sales of 37.5 tons of goods and MNT 36.4 Bn sales. In the past Talkh Chikher has bought equipment from Taiwan, Japan, Holland, Ukraine, and Germany. Talkh Chikher has been updating its technology as recently as 2017, including storage and conveyer systems from the Italian company CEPI and bread baking equipment from the Czech Republic. In 2018, Talkh Chikher will continue its efforts to revamp its equipment list. Over 500 people are employed at Talkh Chikher. Talkh Chikher accounts for approximately 60% market share of bread in Ulaanbaatar and over 80% of its sales revenue comes from bread sales. Talkh Chikher holds 20% of the market share for bakery goods.

Atar Urguu JSC

Established in 1941, Atar Urguu is another market leader in the production of bread and bakery goods. A decade ago, the Company updated its equipment with purchases from Sweden, the Czech Republic, Russia, Holland, France, Italy, Russia, and China. Recently, Atar Urguu has bought equipment bread and bakery in addition to commencing the construction refrigerated storage facility. With over 370 employees, Atar Urguu produces approximately 70 types of bread and bakery goods. In 2017, Atar Urguu sold MNT 14.0 Bn worth of goods for a net profit of MNT 313.3 Mn. It holds approximately 30% of the combined market share of bread and bakery goods.

Jur Ur LLC

Founded in 1990, Jur Ur is one of the biggest and most well known bakery chains in Mongolia. Both high quality and affordable, the company's 20 locations earned over MNT 156 Bn annually, selling cakes, sandwiches, pastries and breads.

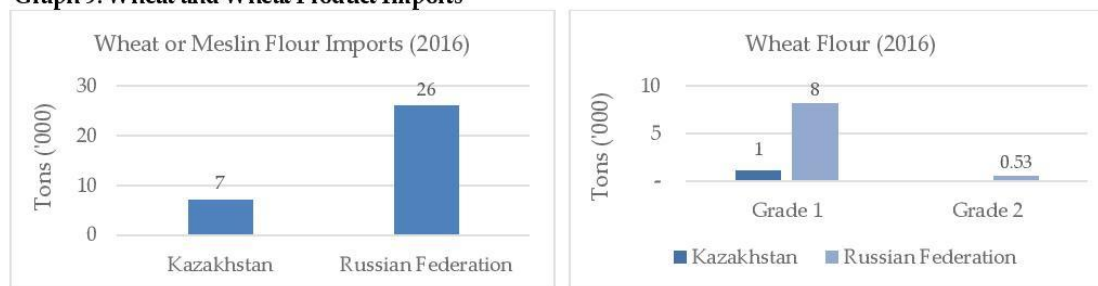
IMPORTS

The Government of Mongolia grants companies approval to import wheat into Mongolia on the basis of production capacity, historical financials, and operations. Therefore, company size is often a good indicator of the import quota size. According to the MoFALI, approximately 65 companies have government approval to import wheat and flour into Mongolia as of 2016. This is a 550% increase from the 10 companies with import approval for 20,000 tons of wheat in 2010.

Due to unpredictable harvests, Mongolia often imports a significant portion of its wheat from surrounding countries. The figures below display the 3 wheat-related products imported into Mongolia in the last 2 years. Mongolia imported USD 49.7 million worth of wheat products in 2016 versus USD 2.6 million worth of wheat products in 2017. This dramatic decrease in imports correlates very closely with the amount of wheat harvested the summer the year before.

At present, Mongolia does not export any wheat or flour products. According to Bloomberg, the wheat harvest shortage in 2017 has led to high demand from flour companies for wheat imports from Russia. 7 companies were granted wheat import permits as of the beginning of 2018. More specifically, Ulaanbaatar Guril was granted 10,000 tons; Altan Taria was granted 5,000 tons; Mill house was granted 3,000 tons; Gatsuurt was granted 1,000 tons; and Dornod Guril was granted 500 tons.

Graph 9. Wheat and Wheat Product Imports²

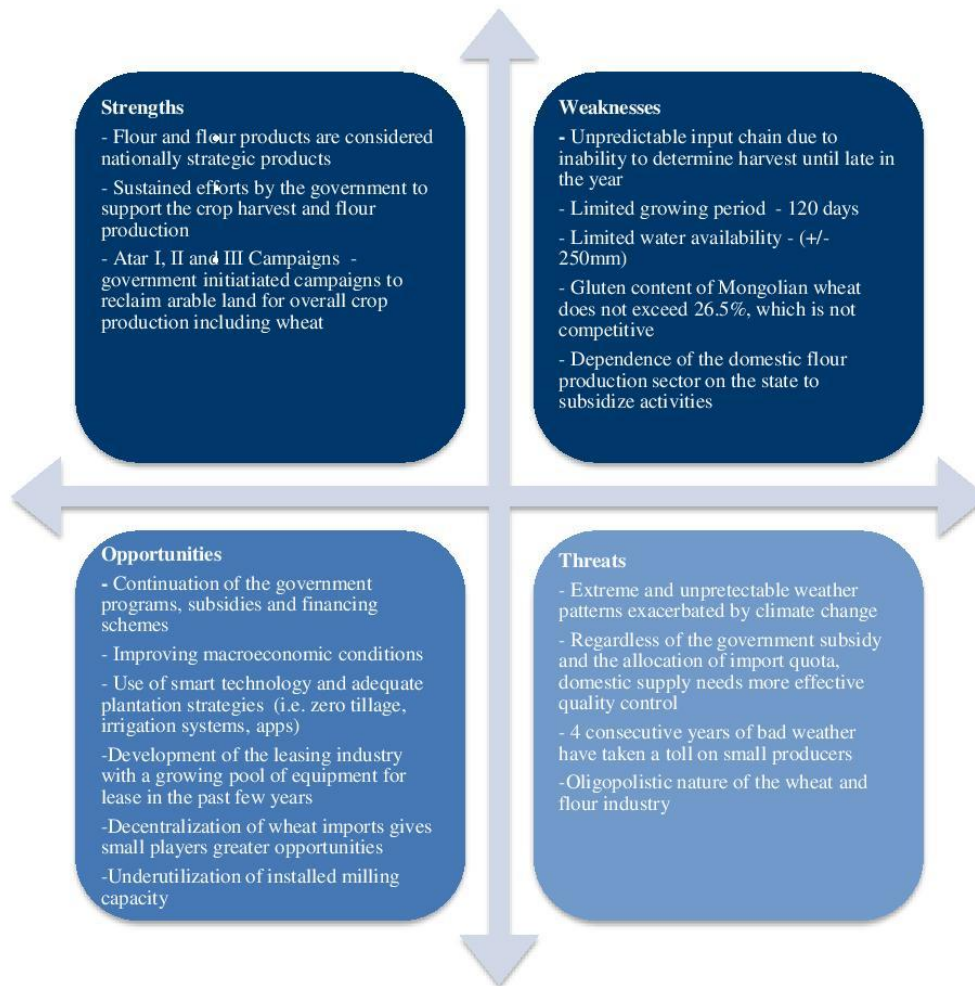


² No wheat flour or wheat or meslin flour products were imported into Mongolia in 2017. Mexico imported 0.02 tons of wheat into Mongolia in 2017—a negligible amount that has been left off of the third graph, below.



Source: Customs Office of Mongolia

SWOT ANALYSIS



CONCLUSION

The largest impediments to developing a strong domestic flour market supply chain in Mongolia are the country's unpredictable wheat harvests and low yields. The milling capacity of the country is not being utilized to its full extent. In the current market conditions, a handful of large players have crowded out smaller companies who are unable to compete due to limited supply of wheat and lack of bargaining power. Should wheat harvests increase, smaller companies would also be able to re-enter the market.

As discussed above, it is nearly impossible to predict how much wheat will be harvested until more than halfway through the year. In order to counteract this, wheat producers have to focus on increasing crop yields through improved technology rather than increasing the quantity of wheat planted. There is little correlation between hectares planted and the wheat harvest in a given year. Instead, it depends largely on the rainfall during the growing season and the weather. Agricultural technology that can mitigate the harmful effects of drought will go a long way in improving the production pipeline.

One example Mongolian growers can follow is that of Canada's Prairie Provinces of Manitoba, Saskatchewan, and Alberta, which have a similar climate, farm size, and crop cycle to Mongolia. Despite the similarities, the yield of Canadian wheat farms are consistently above 2 tons/hectare, versus Mongolia's yields which fall just below 1.5 tons/hectare. Canadian wheat farms are increasingly relying on big data to increase their yields in the form of new agricultural technology and smartphone applications ("apps"). For example, apps such as "Farmers Edge" help Canadian farmers keep track of information such as wind patterns, rainfall, and seeds needed for specific areas of farms that can span nearly a few thousand hectares. This makes it much easier for farmers to keep track of their finances, inventory, and crop cycles. This type of technology could feasibly be implemented in Mongolia with the help of a government subsidy, greatly increasing efficiency and yields.

Implementing a knowledge and seed sharing program between Canada and Mongolia could greatly benefit Mongolian farmers. Furthermore, Canadian farmers could share techniques on how to grow certain varieties of Canadian wheat, such as Canada Western Amber Durum wheat and Canada Prairie Spring Red wheat, which have flourished in environments very similar to that of Mongolia.

Additionally, when exploring solutions to increase yields, one should look towards the milling sector in Mongolia. Domestic flourmills have benefited enormously from government policies that promote the import of equipment from countries such as the Czech Republic and Turkey. Government policies at the wheat growing stage have focused largely on promoting the planting of wheat, but not the maintenance of wheat throughout an unpredictable growing season. Efforts should be redirected towards educating wheat growers about methods such as zero tillage technology and providing farmers equipment that can help prevent animal damage, amongst other solutions. This would, in theory, significantly improve crop yields and mitigate some of the uncertainty surrounding wheat harvests, leading to a more lucrative flour market.



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