

Medium-term prospects for major agricultural commodities 2017-2026

Korea

Highlights

- Strong growth in demand is projected for dairy products, which is expected to be met partly by an increase in imports.
- The Korean diet is characterised by high fish consumption. Over the outlook period, dairy will be the fastest growing source of calories.
- Exceptionally strong growth is projected for imports of cheese as domestic production will not be able meet demand. Korea will remain a major agro-food net importer.

Overview

The *OECD-FAO Agricultural Outlook* foresees that overall production growth in Korea will lead to higher imports of agricultural commodities, in particular of livestock products. Food demand will continue to grow, particularly for sugar and protein from dairy products. Fish will continue to be a significant element of the national diet. Korea will remain a major importer of grains and livestock products, with strong growth projected for cheese imports over the outlook period. The *Outlook* assumes that the current policy framework will not change over the next decade.

Macroeconomic assumptions

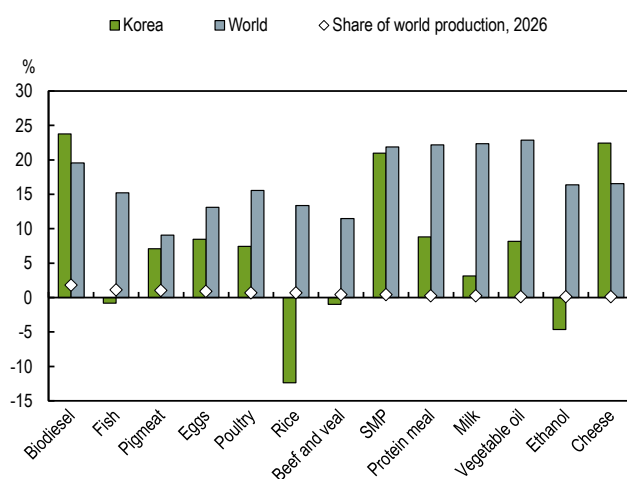
- Population is projected to grow by 0.3% per year, from 51 million in 2016 to 52 million in 2026.
- Annual inflation is expected to average around 2% in the coming decade.
- The Korean won is projected to depreciate by 4% in nominal terms compared to the USD, to KRW/USD 1203 in 2026.
- GDP is projected to grow by 3% per year.

Policy assumptions

- Tariffs are assumed to remain at their 2016 levels until 2026.

Production

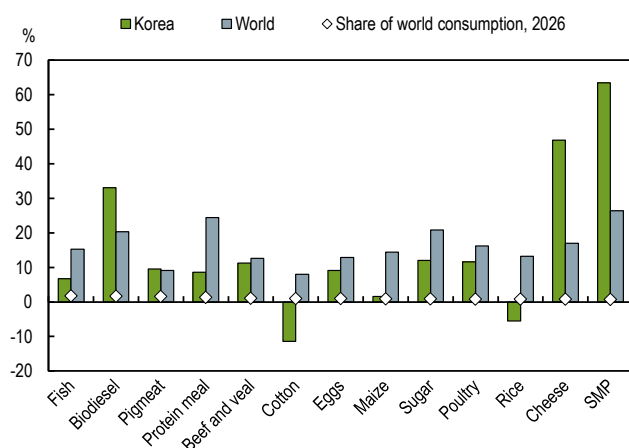
Production: Percentage change 2026 compared to 2014-16 average



- **Biodiesel, fish, meats and rice** have the highest levels of agricultural production.
- Negative production growth is projected for **rice** (-12.4%), **ethanol** (-5%) **fish** (-1%) and **beef and veal** (-1%) over the outlook period.
- **Vegetable oil** production will increase by close to 7%, as compared to the average global growth of 23%. **Protein meal**, mostly from **soybeans**, is projected to increase by 9%.
- Growth in **biodiesel** production is projected to be 24%, compared to the global growth rate of 20%.
- **Milk** production is projected to increase by 3%, and that of **cheese** and **skim milk powder** (SMP) by 22%.
- Production of **pigmeat** and **poultry** is expected to increase by 7%, which is below the expected global average rate.

Consumption

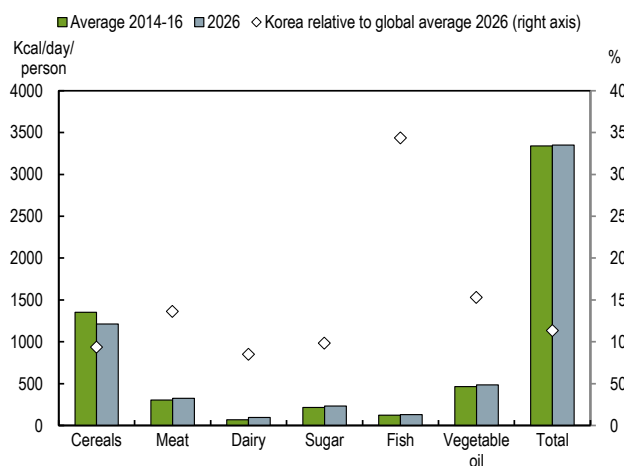
Consumption: Percentage change 2026 compared to 2014-16 average



- The consumption of **cheese** and **SMP** is expected to increase by 47% and 63% respectively, albeit from a low base. This is in line with the increased domestic production noted above. The growth in consumption of these two products would be more than twice the projected average global rate.
- Strong growth is expected for **biodiesel** (+33%). The use of cotton is projected to decrease over the outlook period (-11%).
- Strong growth in meat consumption will continue, with the highest projected increases for **poultry** (+12%), followed by **beef and veal** (+11%), and **pigmeat** (+10%). Consumption of fish is projected to increase by 7%, or half the average global growth rate.
- Increases in the consumption of **protein meal and maize** will be modest at an expected 9% and 2% respectively. Slightly stronger growth is projected in the consumption of **sugar**, although below the projected global growth rate of 12%.

Caloric and protein intake

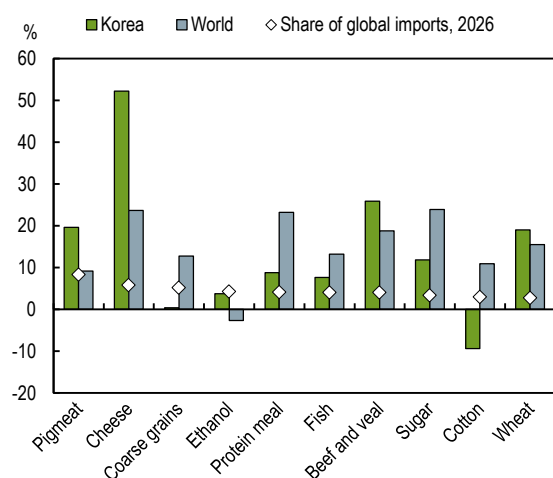
Projections of caloric intake per capita by commodity, 2026 compared to 2014-16 average



- Overall **calorie intake** in Korea is projected to remain stable at 3 352 kcal/day/person in 2026, 13% above the projected global average.
- **Cereals** will dominate as a source of calories, but the expected contribution of 1 213 kcal in 2026 will be -10% lower than the 2017 level.
- Calorie intake through **dairy** consumption is expected to increase at 41%. The contribution of **fish** is high at more than three times the global average and is projected to increase by 5% over the outlook period.
- The second fastest-growing source of calories is **sugar**, projected to increase by 8%. In 2026, it is expected that calorie intake from sugar in Korea will be the same as the global average.
- Protein intake (not shown) is expected to remain constant at 104 grams/day/person, 7% above the expected global average rate in 2026. Calories from protein intake will continue to be characterised by a high contribution from **fish** and **meat**, and an increasing contribution from **dairy**.

Trade

Imports: Percentage change 2026 compared to 2014-16 average



- Korea is a major world net agro-food importer. Imports of ethanol are expected to record a slight positive growth, whereas the average global trade growth will be negative.
- The development of ethanol as a source of energy is one measure of Korea's commitment to reduce the country's greenhouse gas (GHG) emissions.
- It is projected that import growth, spurred by domestic demand, will outpace global trade growth rates for **cheese** (+52%), **beef and veal** (+26%), and **pigmeat** and **wheat** by 20%.
- Other major agricultural products imports are projected to decrease by 2026 as compared to the 2014-16 base period as consumption is expected to decrease.
- Cotton imports are projected to be below the 2014-2016 period.

Policy and market uncertainties

- Korea is currently engaged in four Foreign Trade Agreements (FTA) negotiations. These include two bilateral FTA negotiations with Ecuador and Israel, and two multilateral negotiations, the Regional Comprehensive Economic Partnership Agreement (RCEP) and the Korea-China-Japan FTA. The implementation of these agreements would change the current projections of agri-food products over the outlook period.

Further reading

OECD/FAO (2017), *OECD-FAO Agricultural Outlook 2017-2026*, OECD Publishing, Paris.

http://dx.doi.org/10.1787/agr_outlook-2017-en.

OECD-FAO Agricultural Outlook: www.agri-outlook.org

Methodology of the Aglink-Cosimo Model: www.agri-outlook.org/abouttheoutlook/Aglink-Cosimo-model-documentation-2015.pdf

Policy information for these country notes is drawn from the *OECD Agricultural Policy Monitoring and Evaluation*: <http://oe.cd/pse>

For more information about the Agricultural Outlook, contact us at TAD.contact@oecd.org.

Korea: Selected commodity projections

			Average	Growth ²			
			2014-16est.	2021	2026	2007-16	2017-26
Wheat	Area harvested	kha	9	12	12	16.27	151
	Production	kt	29	41	45	12.74	2.14
	Consumption	kt	4 259	4 811	5 160	2.66	140
	Per capita consumption ¹	kg/cap	48.1	47.9	48.0	0.00	-0.02
	Exports	kt	50	52	54	-2.04	0.68
	Imports	kt	4 347	4 829	5 173	2.06	152
Maize	Area harvested	kha	16	16	16	-1.11	0.09
	Production	kt	78	85	88	-0.88	0.74
	Consumption	kt	10 091	10 152	10 247	2.83	0.09
	Per capita consumption ¹	kg/cap	19	19	19	-0.70	-0.13
	Exports	kt	0	0	0	0.00	0.00
	Imports	kt	10 103	10 074	10 156	2.94	0.08
Soybean	Area harvested	kha	67	70	70	-1.24	-0.02
	Production	kt	117	131	134	-0.63	0.48
	Consumption	kt	1480	1567	1611	1.25	0.51
	Exports	kt	0	0	0	..	..
	Imports	kt	1350	1436	1477	1.67	0.61
Other oilseeds	Area harvested	kha	6	6	6	3.70	0.00
	Production	kt	14	13	13	4.96	0.00
	Consumption	kt	42	42	42	0.12	-0.14
	Exports	kt	0	0	0	..	..
	Imports	kt	28	29	28	-1.39	-0.21
Protein meals	Production	kt	920	975	1001	2.05	0.50
	Consumption	kt	4 603	4 810	4 999	1.70	0.76
	Exports	kt	173	200	200	37.16	0.00
	Imports	kt	3 857	4 035	4 198	2.45	0.85
Vegetable oils	Production	kt	241	255	261	2.11	0.46
	Consumption	kt	1 168	1336	1346	3.95	0.60
	Per capita consumption ¹	kg/cap	12.8	13.0	13.4	-2.32	0.55
	Exports	kt	3	5	5	-7.16	0.00
	Imports	kt	932	1086	1090	4.35	0.63
Sugar	Production	kt	0	0	0	..	..
	Consumption	kt	1568	1679	1756	2.89	0.94
	Per capita consumption ¹	kg	312	32.7	33.7	2.36	0.64
	Exports	kt	330	363	386	1.44	1.53
	Imports	kt	1924	2 052	2 152	2.51	1.04
Beef and veal	Cow inventory	000 hd	1091	1055	1062	1.03	0.13
	Production	kt (cwe)	322	314	319	4.28	0.30
	Consumption	kt (cwe)	719	768	799	4.41	0.75
	Per capita consumption ¹	kg/cap	10.0	10.5	10.7	3.88	0.45
	Exports	kt (cwe)	7	6	4	19.03	-4.81
	Imports	kt (cwe)	385	459	485	3.53	0.99
Poultry	Production	kt (rtc)	835	865	897	5.07	0.76
	Consumption	kt (rtc)	950	1007	1060	5.27	1.07
	Per capita consumption ¹	kg/cap	16.6	17.2	17.9	4.73	0.77
	Exports	kt (rtc)	28	33	33	17.73	0.00
	Imports	kt (rtc)	143	174	196	8.44	2.44
Whole milk powder	Production	kt	3	4	5	-3.72	5.37
	Consumption	kt	4	7	9	-1.99	8.17
	Per capita consumption ¹	kg/cap	0.1	0.1	0.2	-2.50	7.85
	Exports	kt	0	0	0	30.92	0.00
	Imports	kt	3	4	4	10.46	1.22
Ethanol	Production	mIn L	163	155	155	-0.54	0.01
	Domestic use	mIn L	482	495	495	2.00	-0.01
	Fuel use	mIn L	5	5	5	..	-0.80
	Share in gasoline fuel use	%	0.0	0.0	0.0	..	..
	Exports	mIn L	0	0	0	..	..
	Imports	mIn L	327	340	340	3.91	-0.01
Biodiesel	Production	mIn L	580	738	718	18.86	0.33
	Fuel use	mIn L	494	677	657	18.98	0.38
	Share in diesel fuel use	%	0.0	0.0	0.0	..	..
	Exports	mIn L	86	61	60	18.61	-0.19
	Imports	mIn L	0	0	0	..	..

1 Per capita consumption expressed in retail weight. Carcass weight to retail weight conversion factor of 0.7 for beef and veal, 0.78 for pigmeat and 0.88 for both sheep meat and poultry meat.

2. Least squares growth rate.