

Medium-Term Prospects for Major Agricultural Commodities 2017-26

United States

Highlights

- The United States is projected to remain a leading exporter of **maize** and **soybeans**, accounting for more than one-third of global maize production and almost 30% of global soybean production in 2026.
- Strong growth is projected in **dairy** production, in particular cheese and butter, fuelled by domestic consumption growth.
- **Meat** is projected to remain an important source of protein and caloric intake. Consumption of **pigmeat** is projected to grow faster than that of poultry or beef and veal.
- Strong growth is projected for **sugar** imports. Consumption will grow more slowly than the global average, but will have started from a higher level. Caloric intake from sugar is projected to be 50% above the global average in 2026.

Overview

The *OECD-FAO Agricultural Outlook* foresees that the United States will continue to be the world's largest agricultural exporter, with production growth exceeding that of consumption over the medium term. Benefitting from abundant arable and pasture land, as well as a varied climate, the country produces a wide range of commodities. Although agriculture has been driven by gains in total factor productivity, its use of primary factors and other inputs has generally declined over time. No major changes in food demand are expected, and meat and dairy will remain key sources of caloric and protein intake in the national diet. These trends are expected to continue over the outlook period.

Macroeconomic assumptions

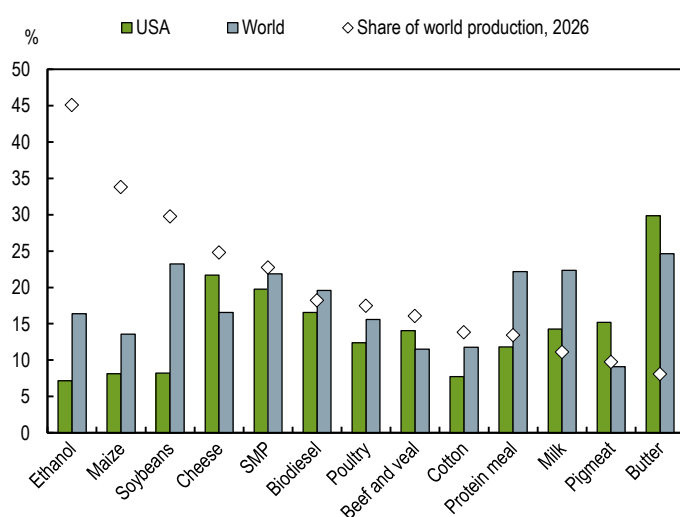
- Population will grow at an annual rate of 0.7%, from 324 million in 2016 to 347 million in 2026.
- Annual inflation is expected to average around 2.3% over the outlook period.
- The dollar is projected to weaken moderately against the currencies of the European Union, Japan, the People's Republic of China and Canada, but strengthen against the currencies of Brazil, Argentina and India, among others.
- Real GDP is projected to grow by 1.9% per year.

Policy assumptions

- Tariffs are assumed to remain at their 2016 levels until 2026.
- NAFTA remains unchanged throughout the outlook period.

Production

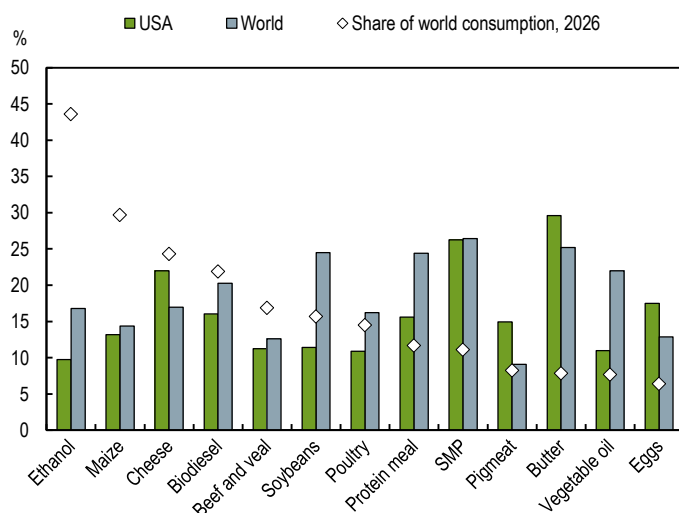
Production: Percentage change 2026 compared to 2014-16 average



- Production growth of **ethanol**, **maize** and **soybeans** are projected to be 7% to 8% over the coming decade, considerably lower than the global average. The production growth for **biodiesel**, however, is projected at 17% over this same period. The United States will remain a major producer of ethanol and maize.
- The production of **cheese** and **skimmed milk powder** is projected to increase by 20%, in line with expected global growth rates, thus maintaining the US share of global production at 25% for both commodities. Production of **butter** is expected to increase by 30% over the outlook period, surpassing global growth.
- **Poultry** production is projected to increase by 12%, **beef and veal** by 14%, and **pigmeat** by 15%, the latter growing at a faster pace than the projected global average.
- **Cotton** production will increase at a projected 8%, which is less than the projected global growth of 12%.

Consumption

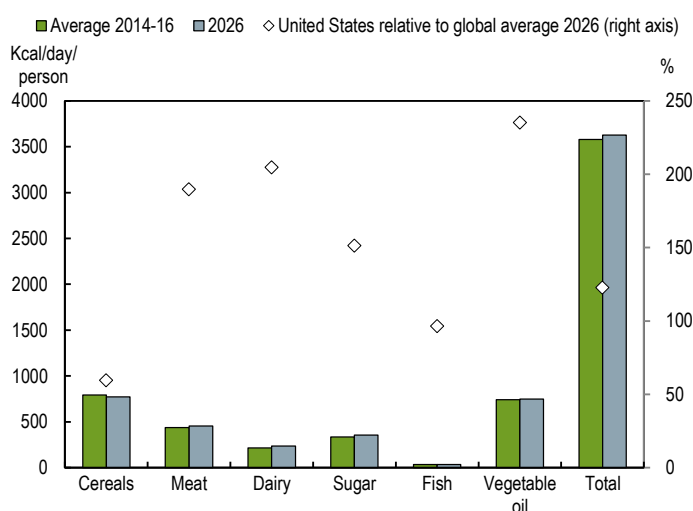
Consumption: Percentage change 2026 compared to 2014-16 average



- The United States is a major consumer of **ethanol** and **biodiesel**. In line with production growth, demand for ethanol will grow more slowly than for biodiesel in the coming decade.
- **Maize** consumption will grow by a projected 13%, slightly below the projected global growth rate. The US share of global consumption (for food, feed and other uses) is expected to be 30% in 2026.
- Growth in the consumption of **cheese** and **butter** in the United States will exceed the global growth rate over the outlook period, but is expected to be in line with the global growth rate for **skimmed milk power (SMP)**.
- Growth rates for **poultry** and **beef and veal** consumption are projected to be 10%, while **pigmeat** consumption is projected to increase by 15%. Despite this strong increase, the US share of global consumption of pigmeat is expected to remain lower than its global share of poultry and beef consumption.
- Demand for **soybeans** is projected to increase by 11%, below the 25% global growth rate. While the United States will account for 30% of global production in 2026, its share of consumption is projected to be 15%.
- Strong growth in **sugar** consumption is expected, despite already high consumption levels.

Caloric and protein intake

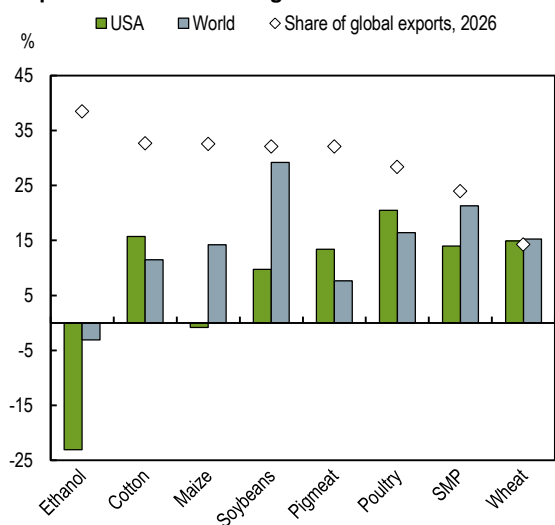
Projections of caloric intake per capita by commodity, 2026 compared to 2014-16 and to global average



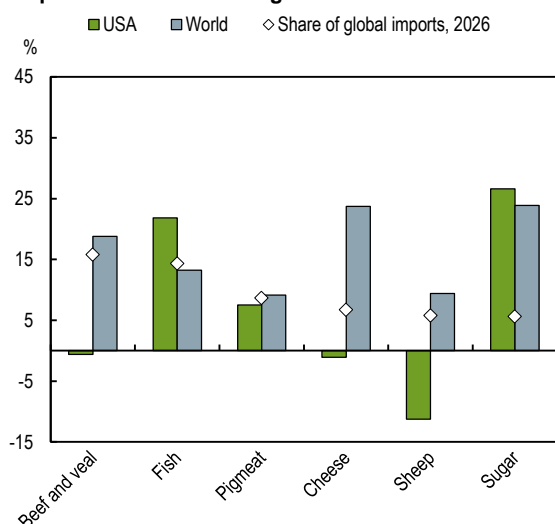
- **Caloric intake** is expected to remain stable over the coming decade at an estimated 3 600 kcal/day /person. No major changes are expected in the composition of caloric intake, although a modest shift from cereals to **meat, dairy** and **sugar** is expected.
- In 2026, US caloric intake is projected to be 23% above the global average. The per capita caloric intake from cereals is only 60% of the global average. However, compared to the global average, the United States consumes considerably more calories from **sugar, meat, dairy** and especially **vegetable oil**.
- **Protein intake** (not shown) is expected to grow by 2% over the outlook period. In 2026, protein intake is expected to be 33% above the global average, indicating that global differences in protein intake remain larger than those in caloric intake.
- **Meat and dairy** remain key sources of protein in the United States. Protein intake from meat is projected to be more than twice the global average, while protein intake from **dairy** is projected to be 80% above the global average.

Trade

Exports: Percentage change 2026 compared to 2014-16 average



Imports: Percentage change 2026 compared to 2014-16 average



- The United States is projected to account for more than 30% of global exports of **cotton, maize, soybeans and pigmeat**.
- **Cotton** exports are projected to increase by 15%, outpacing growth in global trade.
- In contrast, exports for **maize and soybeans** are projected to be below global trade growth, with exports of maize projected to decrease slightly as compared to the high levels of the 2014-16 baseline period.
- **Pigmeat** and **poultry** (+20%) exports are projected to exceed growth in global trade
- The United States is a large importer of **beef and veal**. Although imports are expected to be flat in the coming decade, the United States is projected to account for 15% of global **beef and veal** imports.
- It will account for a similar share of global imports of **fish and seafood products**, for which strong growth is also projected.
- The United States is also a significant importer of **pigmeat**, with imports projected to increase by 7.5% over the next decade.
- Sugar imports are projected to increase by 27%, exceeding average global trade growth.

Policy and market uncertainties

- There is considerable uncertainty around future trade policies since the United States' withdrawal from the Trans-Pacific Partnership (TPP) agreement and its announcement to renegotiate the North American Free Trade Agreement (NAFTA). Similar uncertainty surrounds future environmental policies that affect agriculture, which is a major contributor to global greenhouse gas (GHG) emissions. Although GHG intensity of agriculture in the United States is below the OECD average, the country's withdrawal from the Paris Agreement makes it unclear what efforts will be made by US agriculture in terms of reducing GHG emissions.
- Meeting the US Renewable Fuel Standard 2 (RFS2) mandate is a source of uncertainty. The current low energy prices and the lack of policy signals are not in favour of investments in research and development in "advanced biofuels". In the medium term, to meet the advanced mandate requirements, the United States is expected to import biodiesel (from Argentina) as it qualifies as an "advanced biofuel" under the RFS2.

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.

United States: Selected commodity projections

			Average	Growth ²			
			2014-16 est.	2021	2026	2007-16	2017-26
Wheat	Area harvested	kha	18 562	17 034	17 008	-1.77	0.16
	Production	kt	58 043	55 780	57 150	-0.47	0.84
	Consumption	kt	32 441	33 250	34 160	0.91	0.57
	Per capita consumption ¹	kg/cap	81.1	79.8	79.1	-0.37	-0.18
	Exports	kt	23 714	26 980	27 244	-2.77	0.22
	Imports	kt	3 529	3 516	4 204	1.90	2.92
Maize	Area harvested	kha	33 791	33 785	33 308	0.41	-0.26
	Production	kt	363 807	378 298	393 403	1.67	0.84
	Consumption	kt	304 502	334 934	344 586	1.80	0.73
	Per capita consumption ¹	kg/cap	16.1	15.8	15.7	0.01	-0.11
	Exports	kt	50 691	45 742	50 256	-0.97	0.54
	Imports	kt	1304	1391	1384	19.55	-0.17
Protein meals	Production	kt	46 103	48 566	51557	1.32	1.02
	Consumption	kt	38 792	42 245	44 837	1.45	0.99
	Exports	kt	11250	10 522	11248	3.70	1.14
	Imports	kt	3 927	4 197	4 528	12.27	0.99
Vegetable oils	Production	kt	12 491	13 172	13 945	1.73	0.96
	Consumption	kt	15 181	16 231	16 849	2.96	0.77
	Per capita consumption ¹	kg/cap	38.6	38.5	39.0	0.78	0.36
	Exports	kt	1227	1 124	1332	-4.64	2.04
	Imports	kt	3 961	4 184	4 235	3.88	0.50
Sugar	Production	kt	7 964	8 658	8 799	2.68	0.23
	Consumption	kt	10 726	11634	12 316	2.26	1.20
	Per capita consumption ¹	kg	33.3	34.6	35.5	1.39	0.50
	Exports	kt	41	20	20	-20.36	0.00
	Imports	kt	2 826	3 024	3 578	-0.59	4.14
Beef and veal	Cow inventory	000 hd	29 573	31934	31334	-1.06	0.17
	Production	kt (cwe)	10 735	11876	12 243	-0.93	0.57
	Consumption	kt (cwe)	11532	12 467	12 826	-1.23	0.56
	Per capita consumption ¹	kg/cap	25.1	26.0	25.9	-2.01	-0.13
	Exports	kt (cwe)	1 113	1254	1331	5.07	1.12
	Imports	kt (cwe)	1926	1844	1915	0.16	1.03
Poultry	Production	kt (rtc)	20 467	22 033	22 999	0.99	1.02
	Consumption	kt (rtc)	17 176	18 418	19 047	1.06	0.74
	Per capita consumption ¹	kg/cap	47.0	48.3	48.3	0.27	0.05
	Exports	kt (rtc)	3 349	3 698	4 035	0.63	2.40
	Imports	kt (rtc)	76	82	82	10.10	0.00
Milk	Cow inventory	000 hd	9 301	9 435	9 386	0.15	0.01
	Production	kt	94 836	103 512	108 377	1.49	1.06
Cheese	Production	kt	5 334	5 873	6 492	2.41	1.88
	Consumption	kt	5 187	5 762	6 327	1.82	1.74
	Per capita consumption ¹	kg/cap	16.1	17.2	18.2	1.02	1.04
	Exports	kt	325	285	334	19.56	2.51
	Imports	kt	189	188	187	1.06	-0.58
Fish and seafood	Production	kt	5 456	5 568	5 557	1.38	0.07
	Food consumption	kt	7 210	7 449	7 972	0.99	0.69
	Per capita consumption ¹	kg/cap	22.4	22.2	23.0	0.20	0.00
	Exports	kt	2 042	2 294	2 605	1.82	2.76
	Imports	kt	5 168	5 494	6 295	1.25	1.81
Ethanol	Production	mIn L	57 495	62 640	61607	7.53	-0.03
	Domestic use	mIn L	54 333	60 044	59 631	6.46	0.13
	Fuel use	mIn L	52 650	58 394	57 981	6.57	0.13
	Share in gasoline fuel use	%	9.6	10.6	11.3
	Exports	mIn L	3 961	3 802	3 046	27.53	-3.28
	Imports	mIn L	1021	993	943	-3.69	-1.00
Biodiesel	Production	mIn L	6 316	7 413	7 362	17.47	-0.36
	Fuel use	mIn L	7 660	8 981	8 887	30.54	-0.61
	Share in diesel fuel use	%	3.5	4.2	4.3
	Exports	mIn L	350	397	418	-14.00	0.93
	Imports	mIn L	1856	1964	1943	22.94	-1.21

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.