



Meat Market Review

World meat market overview 2017

World meat output, comprising bovine, pig, poultry and ovine meat, is estimated at 330 million tonnes in 2017, an increase of 1 percent from 2016. Among the main meat producing countries, total meat output expanded in the United States (+2.8%), Brazil (+2.1%), the Russian Federation (+4%), Argentina (+4.8%), Mexico (+3.5%), India (+2.7%); stagnated in China and the EU; but declined in South Africa (-2.5%). Across the main meat categories, poultry meat output - the most widely produced meat reached 120.5 million tonnes in 2017, up 1.1 percent from 2016; followed by pigmeat (118.7 million tonnes, +0.7%); bovine meat (70.8 million tonnes, +1.5%); and ovine meat (14.9 million tonnes, +1.3%).

World meat exports in 2017 reached 32.7 million tonnes, 2.7 percent higher than in 2016. Meat exports increased especially in the United States (+5.6%), Turkey (+36.3%), Argentina (+22%) and Thailand (+8.8%), but declined in the EU (-3.4%), Chile (-9.5%), South Africa (-8.3%). Meat imports expanded mainly in Japan (+9.4%), the Russian Federation (+10.4%), Viet Nam (+7.7%) and Angola (+25.3%), but declined in China (-6.3%), Saudi Arabia (-11%), the EU (-4.2%) and Canada (-1.8%). Across the main meat categories, in 2017 world trade expanded in bovine, poultry and ovine meat, but pigmeat trade declined. With this development, poultry meat has become the most widely produced and internationally traded meat type in the world.

The average international meat price increased by nearly 9 percent in 2017 over 2016. Meat export prices increased moderately from January to June 2017 but began levelling off afterwards and eased eventually. Strong import demand underpinned moderate price increases in the first half of the year, but between July and December, sluggish import demand and rises in export availabilities weighed on meat prices. Meat price increases in the first half of the year resulted in the average annual price for the whole year to exceed that of 2016. Across the meat categories, the average international price in 2017 for ovine meat rose by 25.6 percent, pigmeat by 9.8 percent, poultry meat by 8.4 percent and bovine meat by 6.3 percent. Ovine meat prices rose due to strong import demand that outpaced export supplies from Oceania. Global markets for bovine, pig and poultry meat were well supplied, especially in the second half of the year.

Bovine meat

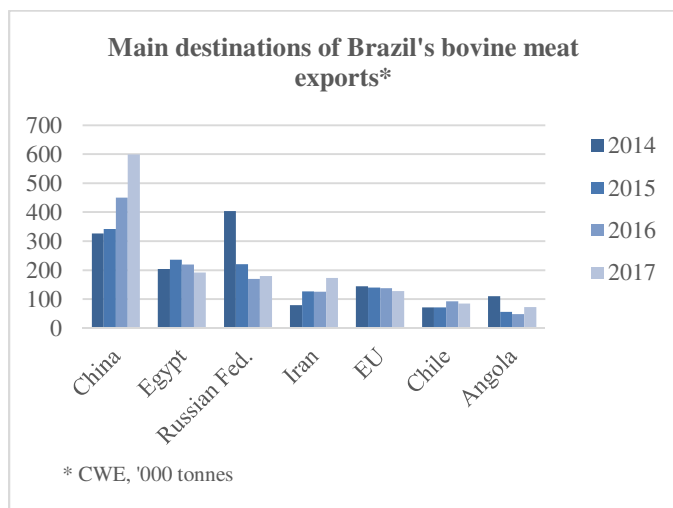
World bovine meat output rose to 70.8 million tonnes in 2017, up 1.5 percent from 2016. This output expansion was principally driven by larger production in the United States (+3.7%), China (+3.7%), Brazil (+2.9%) and Argentina (+6.8%), as well as in Canada (+4%), Mexico (+2.4%), Pakistan (+1.7%), Iran (5.3%), India (+1.2%) and Australia (+1.1%). In contrast, bovine meat output contracted in South Africa (-11.9%), Turkey (-6.9%) and the Russian Federation (-1.5%).

The **United States** expanded its bovine meat output by 3.7 percent in 2017, to 11.9 million tonnes, helped by an increase in domestic demand; a rise in cattle herd by 0.7 percent to an estimated 94.4 million; and competitive feed costs that provided incentives for farmers to place cattle on feedlots and, in the process, minimize the impact of poor moisture and drought in large cattle producing regions. In **China**, meat production is increasingly carried out by large-scale cattle operators; in

contrast, small-scale household animal husbandry was on the decline, unable to adjust to the reforms. Bovine meat output in **India** –the second largest bovine meat producer in Asia– expanded by 1.2 percent in 2017 to 2.55 million tonnes, suggesting the ban on selling cattle for slaughter and the crackdown on illegal meat establishments have not disrupted supply channels. In **Brazil**, bovine meat output expanded to 9.6 million tonnes, underpinned by several factors, including lower cost of production, driven by the availability of feed supplies at competitive prices and improved pastures due to good weather; increased demand for meat as the national economy improves; and increased import demand, despite meat import bans by several countries subsequent to a federal investigation on quality-standards of meat packing operations. In **Argentina**, output is estimated to have expanded to 2.8 million tonnes in 2017, up 6.8 percent from 2016. Higher demand for meat as economic conditions improved was a key factor, but added support came from several years of herd expansions that led to

increased availability of cattle, especially of young, light steers and heifers that are preferred by domestic consumers. In **South Africa** – a main meat producer in Africa - the impact of the droughts in 2015 and 2016 continued to linger. During the drought years, farmers off-took a large number of animals, dwindling livestock herd. With welcome rains in 2017, cattle herd rebuilding began, reducing cattle available for slaughter. This led to a reduction in meat output in 2017 by 11.9 percent to below 1 million tonnes, the lowest seen since 2013. **Turkey's** bovine meat production declined for a second successive year, a sector marred by slow expansion of cattle herd; fluctuation in imports of cattle; and high feed costs that discourage the use of high quality feed.

World bovine meat trade expanded by 5.4 percent in 2017 to 10.2 million tonnes, following two years of contractions. This resulted from export expansions of three of the world's largest bovine meat exporters, Brazil (+10%), the United States (+10.8%), India (+4.3%); and the stability of exports of the fourth largest exporter, Australia (+0.3%). Elsewhere, bovine meat exports increased in Argentina (+32.9%), the EU (+7.3%), Canada (+6.2%) and Mexico (+6.4%). However, exports of few countries with relatively smaller volumes further declined, including in Paraguay, Thailand and South Africa. In **Brazil** and the **United States**, export expansions were supported by abundant domestic supplies, and high import demand from Asian markets. China was a key market for bovine meat for both Brazil and the United States, while Japan and South Korea provided strong export markets for the United States. Reduced export availabilities from Oceania provided an additional impetus for the United States. After two years of downsizing, **India's** bovine meat exports picked up in 2017, reflecting a robust import demand, backed by affordability and preference for buffalo meat by some consumers, especially in India's traditional markets - Viet Nam, Malaysia, Egypt, Iraq and the Philippines. **Australia's** 2017 exports increased marginally, by 0.3 percent, to 1 357 000 tonnes. But, this was still 20 percent lower than in 2015, reflecting continued supply limitations.



Pigmeat

World pigmeat output reached 118.7 million tonnes in 2017, up 0.7 percent from 2016, supported by production expansions in China (+0.7%), the United States (+2.6%), the Russian Federation (+3.1%), Mexico (+4.6%), Canada (+2.9%) and Viet Nam (+1.5%), but offset by reductions in the EU (-0.8%), Ukraine (-15.7%) and Chile (-3.7%).

In **China**, after two years of downscaling, pigmeat output expanded in 2017 by 0.7 percent to 54.3 million tonnes. Relatively large-scale hog farms are becoming commonplace in China, especially in the northeastern and western regions that are being promoted by the government as the main meat producing regions. It is difficult to estimate how much additional pigmeat is coming from the large farms, but it is assumed to be on the rise. The **United States** continued to expand its pigmeat output, which in 2017 rose by 2.6 percent, to 11.6 million tonnes. Rising demand for pigmeat and products from both within and outside the country helped the United States to fortify production gains; higher pig inventories and continued increase in carcass weight too were supportive. In **Canada**, pigmeat output expanded by 2.9 percent to 2.1 million tonnes, aided by increases in carcass weight and slaughter numbers, strong import demand, and integrated production operations with firms across the border in the United States. **Mexico's** pigmeat output expanded to 1.4 million tonnes, up 4.6 percent, bolstered by further integration of its piggery operations with the United States, increased domestic demand, and productivity of large-scale producers. The **Russian Federation** increased its pigmeat output to 3.47 million tonnes in 2017, up 3.1 percent from 2016. The piggery operations are becoming streamlined, with the share of larger firms becoming prominent, which has boosted producer margins. Increased domestic demand provided additional support for the expansion. Meanwhile, the spread of the African swine fever negatively affected output of small-scale farms, but it was not large enough to reduce the overall output. In the **EU**, pigmeat output declined by 0.8 percent in 2017 to 23.4 million tonnes, reflecting import demand declines, especially from China. Despite this, the EU remained the largest pigmeat producer and exporter in the world.

World pigmeat exports declined by 1.1 percent to 8.2 million tonnes, mainly due to a sharp reduction of shipments by the EU (-8.4%), which was amplified by export declines in Brazil (-3.8%) and Viet Nam (-23%). Shipment increases by the United States (+6.5%), Mexico (+18.1%) and the Russian Federation (+18.6%) partially helped to reduce the contraction. **EU's** export contraction was mainly due to a sharp reduction of Chinese imports (-22.5%). However, the EU found additional markets, especially in the United States and the Philippines, partially offsetting the decline. Brazil's pigmeat exports

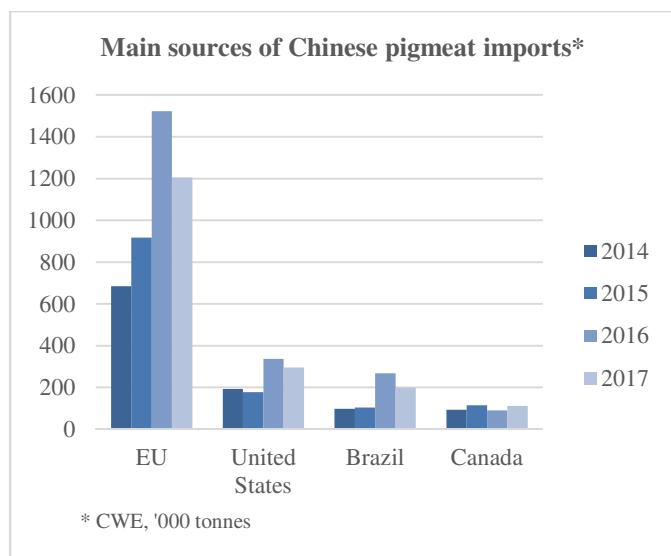
declined by 3.8 percent in 2017 but this was following a 29 percent expansion in 2015 that elevated Brazil's exports to a higher path. In contrast, the **United States** increased its pigmeat shipments in 2017, supported by demand from Asia, especially in Japan, the Republic of Korea and China. Mexico remained the main export destination for US bovine meat exports. Apart from China, several others imported less pigmeat in 2017 than 2016, including Australia (-20.4%) and Viet Nam (-40.3%). Reflecting a combination of higher consumption or reduced production, several others increased their pigmeat imports, including Mexico (+4.7%), the Russian Federation (+8.6) and Chile (+64.5%). estimated 94.4 million; and competitive feed costs that provided incentives for farmers to place cattle on feedlots and, in the process, minimize the impact of poor moisture and drought in large cattle producing regions. In **China**, meat production is increasingly carried out by large-scale cattle operators; in contrast, small-scale household animal husbandry was on the decline, unable to adjust to the reforms. Bovine meat output in **India** –the second largest bovine meat producer in Asia- expanded by 1.2 percent in 2017 to 2.55 million tonnes, suggesting the ban on selling cattle for slaughter and the crackdown on illegal meat establishments have not disrupted supply channels. In **Brazil**, bovine meat output expanded to 9.6 million tonnes, underpinned by several factors, including lower cost of production, driven by the availability of feed supplies at competitive prices and improved pastures due to good weather; increased demand for meat as the national economy improves; and increased import demand, despite meat import bans by several countries subsequent to a federal investigation on quality-standards of meat packing operations. In **Argentina**, output is estimated to have expanded to 2.8 million tonnes in 2017, up 6.8 percent from 2016. Higher demand for meat as economic conditions improved was a key factor, but added support came from several years of herd expansions that led to

Poultry meat

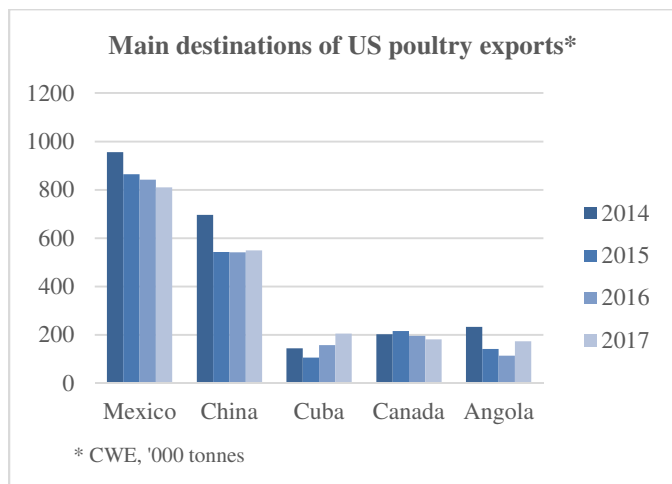
World poultry meat output is estimated at 120.5 million in 2017, up 1.1 percent from 2016. Outputs expanded in almost all major poultry producing regions despite frequent outbreaks of the Highly Pathogenic Avian Influenza (HPAI) in Africa, Asia and Europe. Much of expanded output in 2017 came from the United States (+2.4%), the Russian Federation (+7.2%), Brazil (+1.9%), Turkey (+12.5%), India (+4.8%), Thailand (+6.7%), Mexico (+3.8%) and the EU (+0.8%). Between 2010 and 2017, world poultry meat production has increased by 21.3 million tonnes, but over the years the rate of growth has been decelerating.

In the **United States**, poultry meat output is estimated at 22 million tonnes, up 2.4 percent from 2016, supported by strong domestic and international demand, genetic improvements that favour producing larger birds, and streamlined processing. In the **EU**, output was constrained by HPAI outbreaks, limiting production growth to 0.8 percent as against 4 percent 3 years ago. In the Russian Federation, output expanded by over 7 percent, buoyed by high domestic demand, as consumers substituted poultry for other expensive meat products; and improvements in production facilities. In contrast, **China** was an exception, where the output contracted by an estimated 5.6 percent, shedding over 1 million tonnes from its output. Several factors contributed to the contraction: HPAI outbreaks in the early months in 2017 that led to banning the live-bird market operations and transportation; government's continued policy to limit the importation of breeding stock; the continued reduction of output of small-scale farms as they left the sector due to their inability to adjust to the reforms. In many countries, HPAI outbreaks badly affected output, especially early in 2017, but recovered in the following months, leading to output stability.

World poultry meat exports reached 13 million tonnes in 2017, up 2.8 percent from 2016. While Brazil, the United States, the EU and Thailand continued to be the leading poultry meat exporters, most of the increase in shipments in 2017 originated in the United States (+3.1%), Turkey (+33.6%), Thailand (+10%), China (+15%), the Russian Federation (+40.7%) and the EU (+2.5%). The **United States** benefitted from its HPAI-free status from August 2017 and strong import demand from Mexico, China, Cuba, Canada and Angola. **Thailand** continued to expand its poultry meat exports, driven by demand for value-added ready-to-eat products in world markets, especially in Japan. Despite facing import bans by key trading partners in response to HPAI outbreaks, **EU** poultry exports expanded, showing the resilience of the sector, especially its capacity to contain the spread and to identify new markets. In contrast, **Brazil's** exports slipped by 2 percent in 2017 to 4.3 million tonnes but continued to be the world's



largest poultry meat exporter. On poultry meat imports, most significant reductions were reported by China (-9.8%) and Saudi Arabia (-12.1%) but compensated by increased imports by Japan (+9.5%), Angola (+29%), Ghana (+55.7%), Cuba (+19%) and Iraq (+8.4%).

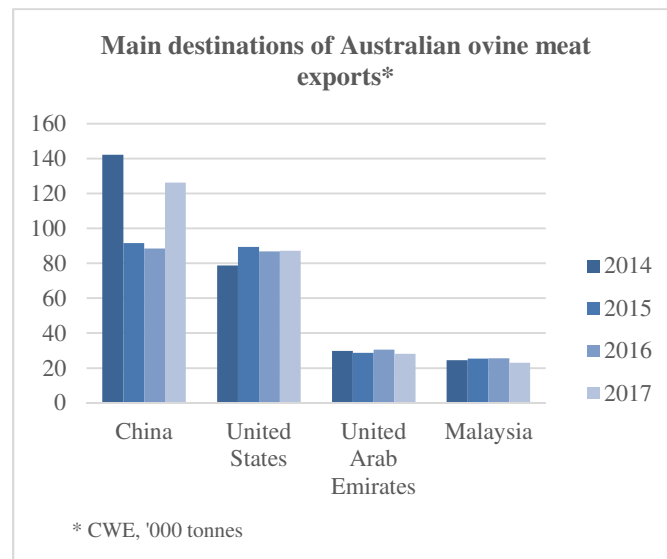


Ovine meat

World ovine meat output is estimated at 14.8 million tonnes in 2017, only 0.6 percent higher than the previous year – marking the lowest rate of expansion since 2013. This small increase was mainly driven by higher outputs in China (+1.6%), the EU (+1.8%) and Australia (+1.8%), more than offsetting a decline in New Zealand (-2.3%). In **China**, sheep and goat farming is becoming large-scale operations that use extensive feeding management systems and technology, but household and small-scale husbandry is on the decline, as in other livestock systems. This transition has enabled China to increase its ovine flock and meat output. In the **EU**, sheep flock expanded, surpassing the number of heads to over 100 million. Competitive prices offered by the EU bolstered its import demand, in turn, providing incentives for expanding output. In **Australia**, farmers were in a re-building phase, but due to drier conditions in the second part of the year, they began off-taking more animals. This along with higher carcass weight raised output by 1.8 percent to 727 000 tonnes. In contrast, **New Zealand's** output declined, particularly reflecting a lamb crop decline, influenced by a reduction of breeding ewes – a lingering effect of a deeper cull in previous years. Elsewhere, ovine meat output is estimated to have increased somewhat in South Africa, Pakistan and Morocco, with possible declines in Mongolia and Sudan. Across main geographical regions, output expanded in Europe (+1.5%), Central America (+0.9), South America (+1.2%) and Asia (+0.7%); stagnated in Africa and Oceania; but declined in North America (-1%).

World ovine meat exports is estimated at 980 000 tonnes in 2017, an increase of 7.7 percent, driven by strong import demand from China (+13.9%), the United States (+17.4%), but

also the Islamic Republic of Iran, Malaysia, Canada and the Republic of Korea. In contrast, imports by the **EU** declined by 13 percent, as domestic production rose. **China's** import expansion is seen as a result of rising consumer demand, especially among the middle class, outpacing output growth. In the **United States**, ovine meat has a niche market, represented by low per capita consumption, estimated at around 0.6 kg per capita. In 2017, output further declined, compelling the United States to import more from Oceania. **Australia** and **New Zealand** increased their shipments by 6.1 percent in 2017 and 6.9 percent, respectively, jointly supplying nearly 87 percent of world imports.



FAO Meat Price Indices

PERIOD	Sub-indices				FAO Meat Price Index
	Bovine meat	Ovine meat	Pig meat	Poultry meat	(2002-2004=100)
Annual					
(January/December)					
2010	165	158	138	179	158
2011	191	232	153	206	183
2012	195	205	153	201	182
2013	197	178	157	206	184
2014	231	202	164	200	198
2015	213	157	126	168	168
2016	191	154	123	156	156
2017	204	194	135	169	170
Monthly					
2017 – January	193	156	125	160	159
2017 – February	197	161	125	163	161
2017 – March	202	161	130	165	165
2017 – April	201	174	137	170	169
2017 – May	205	182	141	171	173
2017 – June	206	203	143	173	176
2017 – July	208	211	142	167	175
2017 – August	202	213	142	172	174
2017 – September	204	221	139	171	174
2017 – October	207	216	132	175	173
2017 – November	210	215	130	172	173
2017 – December	208	211	129	165	170

The FAO Meat Price Indices consist of 2 poultry meat product quotations (the average weighted by assumed fixed trade weights), 3 bovine meat product quotations (average weighted by assumed fixed trade weights), 3 pigmeat product quotations (average weighted by assumed fixed trade weights), 1 ovine meat product quotation (average weighted by assumed fixed trade weights); the four meat group average prices are weighted by world average export trade shares for 2002/2004.

Meat production: World total and in selected countries

('000 tonnes, Carcass weight equivalent)

	2015	2016	2017 <i>prelim.</i>	Change 2017 over 2016 (%)
World	323697	327105	330387	1.0
China	86640	86108	85812	-0.3
EU	47010	47932	47883	-0.1
United States	43252	44606	45842	2.8
Brazil	26733	26529	27079	2.1
Russian Fed.	9130	9432	9812	4.0
India	7033	7153	7348	2.7
Mexico	6371	6573	6801	3.5
Argentina	5418	5327	5582	4.8

Meat imports: World total and in selected countries

('000 tonnes, Carcass weight equivalent)

	2015	2016	2017 <i>prelim.</i>	Change 2017 over 2016 (%)
World	29890	31161	31563	1.3
China	4318	5786	5423	-6.3
Japan	3195	3322	3635	9.4
United States	2333	2170	2195	1.2
Mexico	2029	2100	2167	3.2
Viet Nam	1824	1548	1667	7.7
Korea Rep of	1140	1257	1317	4.7
Russian Fed.	1322	1168	1290	10.4
EU	1319	1341	1286	-4.2
Saudi Arabia	1201	1097	976	-11.1
Canada	823	776	762	-1.8

Meat exports: World total and in selected countries

('000 tonnes, Carcass weight equivalent)

	2015	2016	2017 <i>prelim.</i>	Change 2017 over 2016 (%)
World	30540	31857	32711	2.7
United States	6928	7308	7718	5.6
Brazil	6691	6967	7023	0.8
EU	4352	5161	4983	-3.4
Australia	2217	1861	1905	2.3
Canada	1750	1863	1897	1.8
India	1708	1665	1736	4.2
Thailand	963	1033	1113	7.8
New Zealand	1033	959	991	3.2
China	596	530	590	11.3
Argentina	451	454	554	22.0

Bovine meat production: World total and in selected countries

('000 tonnes, Carcass weight equivalent)

	2015	2016	2017 <i>prelim.</i>	Change 2017 over 2016 (%)
World	68667	69728	70779	1.5
United States	10817	11507	11938	3.7
Brazil	9425	9284	9553	2.9
EU	7668	7881	7889	0.1
China	7016	7366	7638	3.7
Argentina	2727	2644	2824	6.8
India	2518	2522	2553	1.2
Australia	2662	2361	2387	1.1

Bovine meat imports: World total and in selected countries

('000 tonnes in Carcass weight equivalent)

	2015	2016	2017 <i>prelim.</i>	Change 2017 over 2016 (%)
World	9292	9368	9770	4.3
China	1227	1423	1596	12.2
United States	1467	1308	1314	0.4
Viet Nam	918	908	1033	13.8
Japan	739	736	824	12.0
Russian Fed.	598	520	623	19.8
Korea Rep of	382	469	488	3.9
EU	325	329	305	-7.3
Canada	323	300	288	-3.9
Chile	229	278	264	-5.2
Egypt	360	340	250	-26.5
Mexico	231	243	249	2.7

Bovine meat exports: World total and in selected countries

('000 tonnes, Carcass weight equivalent)

	2015	2016	2017 <i>prelim.</i>	Change 2017 over 2016 (%)
World	9907	9674	10195	5.4
Brazil	1701	1688	1858	10.0
India	1677	1638	1708	4.2
United States	1223	1342	1487	10.8
Australia	1697	1353	1357	0.3
New Zealand	584	537	540	0.6
EU	450	456	489	7.3
Canada	383	420	445	6.2
Uruguay	336	378	390	3.2
Paraguay	353	360	350	-2.8
Argentina	201	234	311	32.9

Pigmeat production: World total and in selected countries

(‘000 tonnes, Carcass weight equivalent)

	2015	2016	2017 <i>prelim.</i>	Change 2017 over 2016 (%)
World	118504	117813	118676	0.7
China	55835	53931	54335	0.7
EU	23467	23618	23429	-0.8
United States	11121	11320	11610	2.6
Brazil	3519	3700	3725	0.7
Viet Nam	3492	3665	3720	1.5
Russian Fed.	3099	3368	3473	3.1

Pigmeat imports: World total and in selected countries

(‘000 tonnes, Carcass weight equivalent)

	2015	2016	2017 <i>prelim.</i>	Change 2017 over 2016 (%)
World	7119	8241	8167	-0.9
China	1441	2529	2115	-16.4
Japan	1286	1371	1481	8.1
Mexico	845	875	916	4.7
Korea Rep of	606	623	654	4.9
United States	607	598	613	2.6
Russian Federation	415	369	401	8.6

Pigmeat exports: World total and in selected countries

(‘000 tonnes, Carcass weight equivalent)

000 tonnes (CWE)				
	2015	2016	2017 <i>prelim.</i>	Change 2017 over 2016 (%)
World	7239	8289	8201	-1.1
EU	2415	3107	2845	-8.4
United States	2192	2290	2440	6.5
Canada	1191	1264	1273	0.7
Brazil	691	890	856	-3.8
Mexico	137	150	177	18.1
Chile	169	163	162	-0.4
China	127	102	107	5.0

Poultry meat production: World total and in selected countries

('000 tonnes, Carcass weight equivalent)

	2015	2016	2017 <i>prelim.</i>	Change 2017 over 2016 (%)
World	116342	119239	120516	1.1
United States	21017	21483	21998	2.4
China	17895	18710	17665	-5.6
EU	13925	14514	14630	0.8
Brazil	13636	13391	13645	1.9
Russian Fed.	4088	4141	4440	7.2
India	3292	3426	3591	4.8
Mexico	3002	3116	3234	3.8
Japan	2132	2345	2359	0.6

Poultry meat imports: World total and in selected countries

('000 tonnes, Carcass weight equivalent)

	2015	2016	2017 <i>prelim.</i>	Change 2017 over 2016 (%)
World	12261	12360	12381	0.2
China	1392	1583	1427	-9.8
Japan	1134	1179	1291	9.5
Mexico	928	959	978	2.0
Saudi Arabia	971	903	794	-12.1
EU	715	738	726	-1.7
Viet Nam	793	584	600	2.7
South Africa	479	560	557	-0.5
Iraq	388	437	473	8.4
UAE	428	435	432	-0.8
Cuba	229	238	284	19.2

Poultry meat exports: World total and in selected countries

('000 tonnes, Carcass weight equivalent)

	2015	2016	2017 <i>prelim.</i>	Change 2017 over 2016 (%)
World	12189	12739	13091	2.8
Brazil	4274	4364	4284	-1.8
United States	3491	3654	3769	3.1
EU	1387	1500	1537	2.5
Thailand	874	955	1051	10.0
Turkey	346	327	437	33.6
China	402	371	426	15.0
Ukraine	164	244	274	12.3

Ovine meat production: World total and in selected countries
('000 tonnes, Carcass weight equivalent)

	2015	2016	2017 <i>prelim.</i>	Change 2017 over 2016 (%)
World	14607	14749	14839	0.6
China	4410	4617	4691	1.6
EU	908	877	893	1.8
India	732	740	741	0.2
Australia	755	715	727	1.8

Ovine meat imports: World total and in selected countries
('000 tonnes, Carcass weight equivalent)

	2015	2016	2017 <i>prelim.</i>	Change 2017 over 2016 (%)
World	934	908	962	5.9
China	252	245	279	13.9
EU	166	161	140	-13.1
United States	104	104	122	17.4
UAE	56	57	58	0.6
Saudi Arabia	53	41	43	3.9
Malaysia	34	33	39	17.8

Ovine meat exports: World total and in selected countries
('000 tonnes, Carcass weight equivalent)

	2015	2016	2017 <i>prelim.</i>	Change 2017 over 2016 (%)
World	960	910	980	7.7
Australia	442	428	454	6.1
New Zealand	400	370	396	6.9
EU	18	16	30	82.8
India	22	21	23	7.3

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