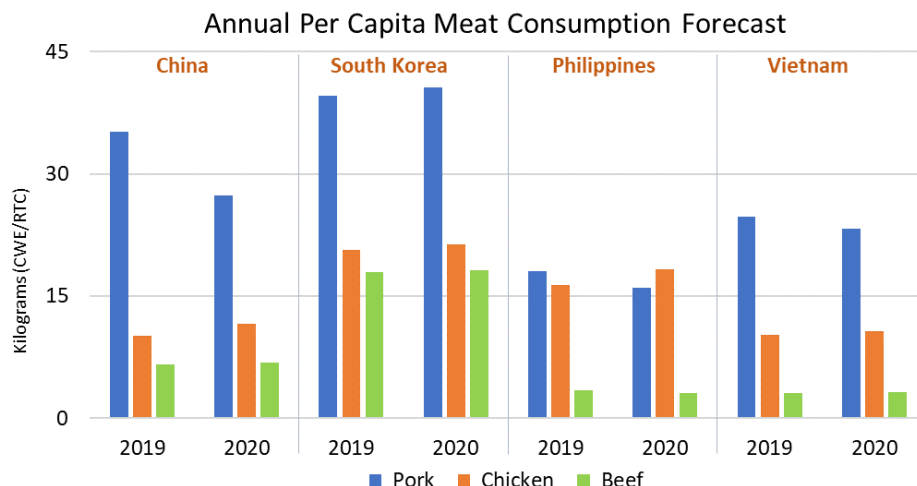


Livestock and Poultry:

World Markets and Trade

African Swine Fever (ASF): Asia Outlook for 2020



Source: Per capita consumption is estimated based on USDA-FAS-PSD "Domestic Consumption" and U.S. Census Bureau, International Data Base (<http://www.census.gov/ipc/www/idb>).

China: A dramatic decline in pork production due to ASF will spur higher prices for animal proteins, driving chicken meat production as well as imports for all three meats (beef, pork, and chicken) to record highs. While beef and chicken meat consumption will rise, they will fail to offset pork's decline. Per capita consumption of the three meats will decline 12 percent.

Philippines: As pork production falls sharply, chicken meat production and imports of both pork and chicken meat will rise. Elevated chicken supplies will spur consumption to exceed that of pork. Strong competition for supplies from China and higher prices will dampen beef imports and consumption. Per capita consumption of the three meats will decline just 1 percent.

South Korea: With strong biosecurity and limited ASF outbreaks, South Korea's pork production will be minimally affected. Greater production and imports for all three meats will spur total per capita consumption 3 percent higher.

Vietnam: A 6-percent decline in pork production will prompt higher chicken and pork imports. Per capita consumption of the three meats will decline 2 percent.

2020 Forecast: Selected ASF-Impacted Asian Countries									
Country	Beef			Pork			Chicken Meat		
	Consumption	Production	Total Imports	Consumption	Production	Total Imports	Consumption	Production	Total Imports
China	↑ 3%	↓ -3%	↑ 21%	↓ -22%	↓ -25%	↑ 35%	↑ 15%	↑ 14%	↑ 20%
Philippines	↓ -7%	↑ 1%	↓ -19%	↓ -10%	↓ -16%	↑ 32%	↑ 13%	↑ 10%	↑ 27%
South Korea	↑ 2%	↑ 2%	↑ 2%	↑ 3%	↑ 1%	↓ 0%	↑ 4%	↑ 2%	↑ 8%
Vietnam	↑ 4%	↑ 3%	↑ 7%	↓ -5%	↓ -6%	↑ 50%	↑ 6%	↑ 5%	↑ 12%

NOTE: FAS will publish *Livestock and Poultry: World Markets and Trade* on a quarterly basis beginning in January 2020. The quarterly updates will include revised beef, pork, and chicken meat forecasts for selected countries (major producers and traders).

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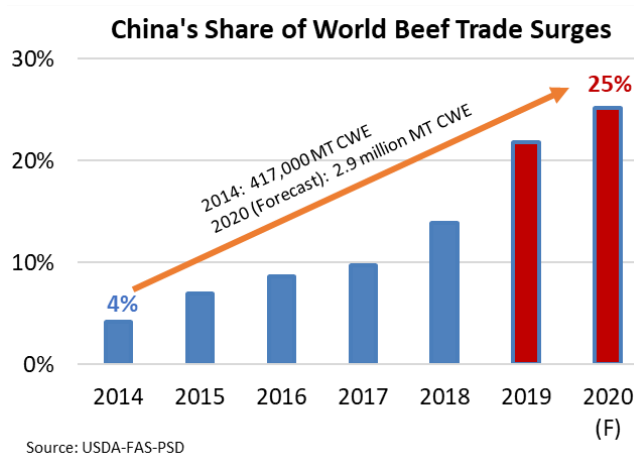
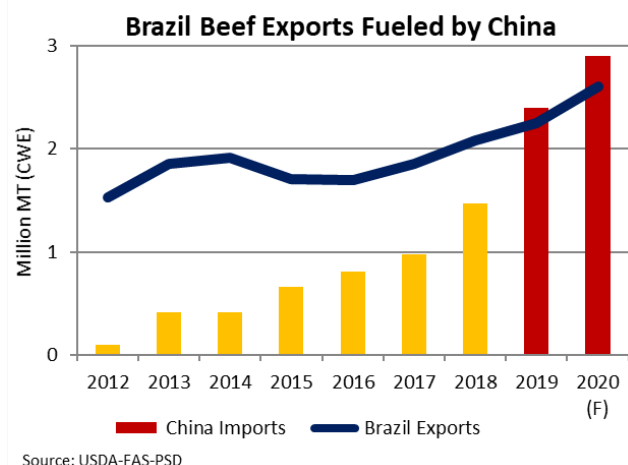
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Beef and Veal

Global production is forecast to grow 1 percent in 2020 to 61.9 million tons, as gains in Brazil, the United States, and Argentina more than offset declines in China, Australia, and the European Union. Brazil rising production will be supported largely by exports, primarily to China, as well as growing domestic demand on an improved economic outlook. Record Argentina production is spurred by an increasing herd. Exports will be robust as domestic consumption remains stagnant. Australia continues to be negatively impacted by drought in key production areas, resulting in a 10 percent decline in production. Likewise, dry weather conditions in the European Union for more than a year have negatively impacted fodder supply, leading to a decline in the cattle herd.

Global exports in 2020 are forecast nearly 4 percent higher to a record 11.5 million tons on rising shipments from Brazil, India, the United States, and Argentina despite lower Australia and unchanged EU and Uruguay exports. Propelled by robust China demand, Brazil will capture the bulk of global trade expansion with exports at a record 2.6 million tons. Argentina and Paraguay are both also well-positioned to benefit from record China imports. Strong Asia demand partnered with constrained Oceania exportable supplies will generate new or expanded opportunities in Asia for other exporters such as the United States, India, and Mexico.

U.S. production and exports: Production is forecast up nearly 3 percent in 2020 to a record 12.6 million tons on higher slaughter and heavier weights. Exports are forecast up 6 percent to a record 1.5 million tons, accounting for 12 percent of U.S. production. The United States is poised to expand market share in top markets Japan, South Korea, and Taiwan as key competitor Australia struggles to maintain its market shares given its reduced exportable supplies and its dominance in filling China demand. U.S. imports will fall 5 percent to 1.3 million tons on tight Oceania supplies.



Beef and Veal Production - Selected Countries Summary
1,000 Metric Tons (Carcass Weight Equivalent)

	2015	2016	2017	2018	2019	2020 Oct
Production						
Brazil	9,425	9,284	9,550	9,900	10,210	10,800
European Union	7,684	7,880	7,869	8,003	7,910	7,780
China	6,169	6,169	6,346	6,440	6,850	6,625
India	4,100	4,200	4,250	4,265	4,287	4,300
Argentina	2,720	2,650	2,840	3,050	3,040	3,125
Australia	2,547	2,125	2,149	2,306	2,300	2,080
Mexico	1,850	1,879	1,925	1,980	2,030	2,070
Pakistan	1,710	1,750	1,780	1,800	1,820	1,840
Russia	1,364	1,339	1,325	1,357	1,367	1,377
Canada	1,047	1,130	1,201	1,265	1,330	1,325
Others	10,023	10,022	9,809	9,855	7,873	7,920
Total Foreign	48,639	48,428	49,044	50,221	49,017	49,242
United States	10,817	11,507	11,943	12,256	12,289	12,619
Total	59,456	59,935	60,987	62,477	61,306	61,861
Total Dom. Consumption						
China	6,808	6,928	7,313	7,910	9,233	9,508
Brazil	7,781	7,652	7,750	7,865	8,003	8,240
European Union	7,742	7,899	7,838	8,025	7,905	7,785
India	2,294	2,436	2,401	2,709	2,687	2,600
Argentina	2,534	2,434	2,547	2,562	2,360	2,365
Mexico	1,797	1,809	1,841	1,872	1,880	1,890
Russia	1,976	1,851	1,828	1,838	1,792	1,791
Pakistan	1,636	1,685	1,722	1,735	1,751	1,766
Japan	1,186	1,215	1,277	1,323	1,345	1,360
South Africa	1,026	1,071	1,028	1,014	1,000	1,015
Others	11,578	11,599	11,453	11,609	9,375	9,310
Total Foreign	46,358	46,579	46,998	48,462	47,331	47,630
United States	11,275	11,676	12,052	12,180	12,240	12,422
Total	57,633	58,255	59,050	60,642	59,571	60,052

Notes: Includes meat of other bovines for certain countries. India includes carabeef (water buffalo). From 2019, the following countries are excluded: Kuwait, Lebanon, Libya, Oman, Peru, Singapore, Turkey, and Venezuela. The notation of a month beneath a year conveys the month in which the forecast for that year was released.

Beef and Veal Trade - Selected Countries Summary
1,000 Metric Tons (Carcass Weight Equivalent)

	2015	2016	2017	2018	2019	2020 Oct
Total Imports						
China	663	812	974	1,467	2,400	2,900
Japan	707	719	817	865	880	890
Korea, South	414	513	531	582	635	645
Russia	622	522	515	495	440	430
Chile	245	298	281	317	380	395
European Union	363	368	338	373	355	355
Hong Kong	339	453	543	541	350	350
Egypt	360	340	250	300	310	320
Mexico	175	188	196	202	205	210
Taiwan	135	154	160	176	190	200
Others	2,143	2,008	2,008	2,045	1,768	1,684
Total Foreign	6,166	6,375	6,613	7,363	7,913	8,379
United States	1,528	1,366	1,358	1,360	1,374	1,302
Total	7,694	7,741	7,971	8,723	9,287	9,681
Total Exports						
Brazil	1,705	1,698	1,856	2,083	2,250	2,600
India	1,806	1,764	1,849	1,556	1,600	1,700
Australia	1,854	1,480	1,485	1,662	1,657	1,442
Argentina	186	216	293	507	700	775
New Zealand	639	587	593	633	650	651
Canada	397	441	461	502	570	590
Uruguay	372	421	436	466	470	468
Mexico	228	258	280	310	355	390
European Union	305	349	369	351	360	350
Paraguay	381	389	378	365	320	350
Others	650	660	672	698	672	692
Total Foreign	8,523	8,263	8,672	9,133	9,604	10,008
United States	1,028	1,160	1,297	1,434	1,418	1,499
Total	9,551	9,423	9,969	10,567	11,022	11,507

Notes: Includes meat of other bovines for certain countries. Indian exports are carabeef (water buffalo). From 2019, the following countries are excluded: Kuwait, Lebanon, Libya, Oman, Peru, Singapore, Turkey, and Venezuela. The notation of a month beneath a year conveys the month in which the forecast for that year was released.

Cattle Stocks - Selected Countries Summary
(in 1,000 head)

	2015	2016	2017	2018	2019	2020 Oct
Total Cattle Beg. Stks						
India	301,100	302,600	303,600	305,000	306,700	308,700
Brazil	213,035	219,180	226,045	232,350	238,158	244,143
China	90,073	90,558	88,345	90,387	90,000	87,500
European Union	88,406	89,152	89,152	88,819	87,407	86,080
Argentina	51,545	52,565	53,515	53,715	53,805	54,085
Australia	29,102	27,413	24,971	26,176	25,734	24,484
Russia	18,920	18,528	18,248	18,195	18,050	17,930
Mexico	17,120	16,615	16,490	16,584	16,699	16,900
Uruguay	12,053	12,016	11,864	11,744	11,396	11,441
Canada	11,640	11,610	11,535	11,565	11,440	11,075
Others	46,890	46,264	46,668	47,129	32,628	32,762
Total Foreign	879,884	886,501	890,433	901,664	892,017	895,100
United States	89,173	91,888	93,625	94,298	94,760	94,950
Total	969,057	978,389	984,058	995,962	986,777	990,050
Production (Calf Crop)						
India	67,000	67,500	68,200	68,600	69,000	69,400
Brazil	48,220	48,250	48,735	49,500	50,490	51,500
China	49,660	48,890	48,800	47,500	48,500	49,500
European Union	29,900	30,100	29,550	28,800	28,350	28,300
Argentina	14,200	14,000	14,200	14,650	14,780	14,900
Australia	9,394	6,600	9,700	9,100	8,700	8,500
Mexico	6,850	7,100	7,485	7,700	7,900	8,105
Russia	6,500	6,560	6,573	6,566	6,590	6,650
New Zealand	5,040	5,060	4,728	4,895	4,915	4,855
Canada	4,198	4,272	4,348	4,292	4,325	4,400
Others	13,686	13,727	14,192	14,306	10,267	10,330
Total Foreign	254,648	252,059	256,511	255,909	253,817	256,440
United States	34,087	35,063	35,758	36,403	36,300	36,200
Total	288,735	287,122	292,269	292,312	290,117	292,640

Notes: May contain other bovines. From 2019, Turkey is excluded. The notation of a month beneath a year conveys the month in which the forecast for that year was released.

Cattle Trade - Selected Countries Summary
(in 1,000 head)

	2015	2016	2017	2018	2019	2020 Oct
Total Imports						
Egypt	170	300	250	250	340	280
Canada	36	32	141	202	210	210
China	129	133	121	168	160	170
Russia	94	63	65	115	110	100
Mexico	23	31	32	24	27	28
Others	217	510	913	1,451	17	17
Total Foreign	669	1,069	1,522	2,210	864	805
United States	1,984	1,708	1,807	1,899	2,050	2,150
Total	2,653	2,777	3,329	4,109	2,914	2,955
Total Exports						
Mexico	1,213	1,130	1,203	1,278	1,350	1,400
European Union	810	997	1,028	1,005	950	920
Australia	1,336	1,154	885	1,151	1,150	900
Canada	860	789	663	650	710	700
Brazil	212	293	407	790	630	650
Others	337	434	482	536	311	334
Total Foreign	4,768	4,797	4,668	5,410	5,101	4,904
United States	73	69	193	244	265	265
Total	4,841	4,866	4,861	5,654	5,366	5,169

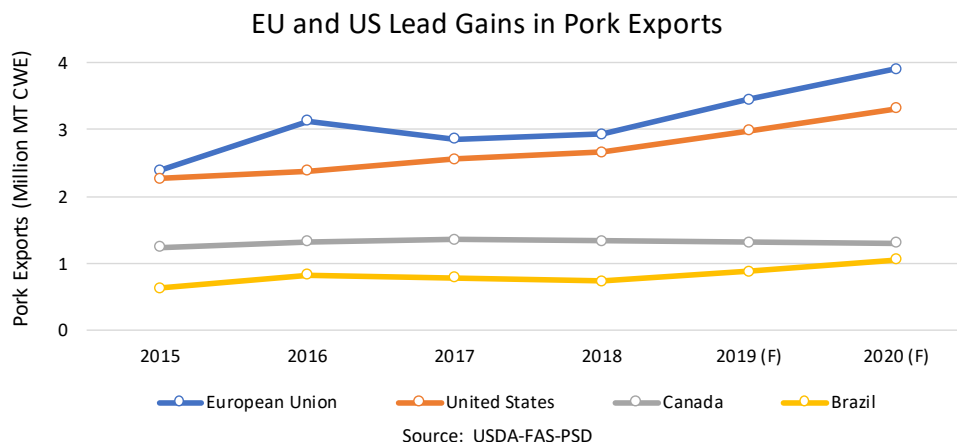
Notes: May contain other bovines. From 2019, Turkey is excluded. The notation of a month beneath a year conveys the month in which the forecast for that year was released.

Pork

Global production is forecast down 10 percent in 2020 due to the impact of African Swine Fever (ASF) on swine herds in several major producing countries. Most of the reduction in global production is due to a 25-percent decline in China pork production. Production is also lower in the Philippines (-16 percent) and Vietnam (-6 percent). South Korea has reported 14 cases of ASF thus far, but outbreaks have been contained and no production impact is expected at present. In Europe, weak domestic demand, ongoing ASF in some Member States, and environmental regulations are limiting expansion, but production is forecast 1 percent higher on strengthening exports. Most major pork exporters will boost production in 2020 due to rising global import demand. Production is up robustly in the United States (4 percent) and Brazil (5 percent).

Global exports are forecast 10 percent higher to 10.4 million tons. China imports are forecast 35 percent higher and account for 35 percent of global pork imports. The Philippines imports are also forecast 32 percent higher due to disease impact on domestic supplies. Outside of ASF-affected countries, demand is expected to be muted by higher global prices. Many price-sensitive markets are expected to reduce imports of pork on strong competition from ASF-affected buyers. EU exports are up 13 percent and Brazil up 20 percent mostly on growth in exports to Asia. In contrast, Canada's exports are down slightly as restrictions from China limit opportunities for growth.

U.S. production and exports: Production is forecast 4 percent higher in 2020 on increased slaughter and heavier carcass weights. Exports are up 11 percent due to robust demand from China, improved sales to Mexico, and steady demand from Japan and Korea. Although retaliatory tariffs remain in place on U.S. pork in China, tariff exemptions and high Chinese pork prices are expected to boost sales in the second half of 2019 and 2020. Shipments are expected to accelerate to Mexico due to the repeal of retaliatory tariffs in May 2019.



Pork Production - Selected Countries Summary
1,000 Metric Tons (Carcass Weight Equivalent)

	2015	2016	2017	2018	2019	2020 Oct
Production						
China	56,454	54,255	54,518	54,040	46,500	34,750
European Union	23,249	23,866	23,660	24,082	24,120	24,400
Brazil	3,519	3,700	3,725	3,763	3,975	4,155
Russia	2,589	2,820	2,959	3,155	3,240	3,330
Vietnam	2,548	2,701	2,741	2,811	2,400	2,250
Canada	1,899	1,914	1,958	1,955	2,000	2,050
Mexico	1,164	1,211	1,267	1,321	1,390	1,450
Philippines	1,463	1,540	1,563	1,601	1,675	1,400
Korea, South	1,217	1,266	1,280	1,329	1,365	1,375
Japan	1,254	1,279	1,272	1,284	1,295	1,300
Others	5,505	5,473	5,511	5,654	5,655	5,748
Total Foreign	100,861	100,025	100,454	100,995	93,615	82,208
United States	11,121	11,320	11,611	11,943	12,516	13,015
Total	111,982	111,345	112,065	112,938	106,131	95,223
Total Dom. Consumption						
China	57,252	56,245	55,930	55,398	48,970	38,150
European Union	20,871	20,748	20,816	21,162	20,685	20,515
Russia	2,990	3,142	3,296	3,197	3,310	3,330
Brazil	2,893	2,870	2,941	3,035	3,102	3,107
Japan	2,568	2,626	2,731	2,775	2,790	2,805
Mexico	2,017	2,091	2,180	2,331	2,405	2,485
Vietnam	2,526	2,647	2,713	2,796	2,435	2,315
Korea, South	1,813	1,894	1,926	2,001	2,044	2,104
Philippines	1,637	1,735	1,803	1,886	1,939	1,750
Canada	884	806	816	864	939	955
Others	6,716	6,731	6,916	7,147	7,093	7,172
Total Foreign	102,167	101,535	102,068	102,592	95,712	84,688
United States	9,341	9,476	9,541	9,748	9,951	10,101
Total	111,508	111,011	111,609	112,340	105,663	94,789

Note: From 2015, the following countries are excluded: Albania, Armenia, Congo (Brazzaville), Gabon, Georgia, Ghana, Jamaica, North Korea, Kyrgyzstan, Moldova, Switzerland and Trinidad and Tobago. From 2016, Venezuela is excluded. The notation of a month beneath a year conveys the month in which the forecast for that year was released.

Pork Trade - Selected Countries Summary
1,000 Metric Tons (Carcass Weight Equivalent)

	2015	2016	2017	2018	2019	2020 Oct
Total Imports						
China	1,029	2,181	1,620	1,561	2,600	3,500
Japan	1,270	1,361	1,475	1,481	1,510	1,515
Mexico	981	1,021	1,083	1,188	1,225	1,275
Korea, South	599	615	645	753	700	700
Hong Kong	397	429	463	423	350	375
Philippines	175	196	241	286	265	350
Australia	220	210	215	216	260	240
Canada	216	215	222	233	250	225
Colombia	64	66	99	129	155	175
Chile	47	73	96	98	130	150
Others	1,214	1,120	1,218	1,069	1,095	1,042
Total Foreign	6,212	7,487	7,377	7,437	8,540	9,547
United States	506	495	506	473	434	415
Total	6,718	7,982	7,883	7,910	8,974	9,962
Total Exports						
European Union	2,390	3,130	2,858	2,934	3,450	3,900
Canada	1,239	1,329	1,351	1,331	1,315	1,300
Brazil	627	832	786	730	875	1,050
Chile	178	173	171	200	240	270
Mexico	128	141	170	178	210	240
China	231	191	208	203	130	100
Russia	7	25	37	45	60	80
Australia	36	38	43	47	40	42
Serbia	19	11	16	14	18	20
South Africa	17	14	16	17	17	17
Others	93	103	86	82	62	53
Total Foreign	4,965	5,987	5,742	5,781	6,417	7,072
United States	2,272	2,376	2,555	2,665	2,985	3,311
Total	7,237	8,363	8,297	8,446	9,402	10,383

Note: From 2015, the following countries are excluded: Albania, Armenia, Congo (Brazzaville), Gabon, Georgia, Ghana, Jamaica, North Korea, Kyrgyzstan, Moldova, Switzerland and Trinidad and Tobago. From 2016, Venezuela is excluded. The notation of a month beneath a year conveys the month in which the forecast for that year was released.

Swine Stocks - Selected Countries Summary
(in 1,000 head)

	2015	2016	2017	2018	2019	2020 Oct
Total Beginning Stocks						
China	471,602	458,029	442,092	441,589	428,070	310,000
European Union	148,341	148,716	147,188	150,257	148,223	148,500
Brazil	39,395	39,422	39,215	38,829	38,427	37,725
Russia	19,308	21,239	21,782	22,945	23,600	24,600
Canada	13,180	13,630	13,935	14,170	13,975	14,180
Korea, South	10,090	10,187	11,487	11,273	11,333	11,500
Mexico	9,788	10,043	10,229	10,410	10,700	11,000
Japan	9,440	9,313	9,346	9,280	9,156	9,242
Ukraine	7,492	7,240	6,816	6,236	6,153	6,100
Belarus	2,925	3,205	3,145	3,156	2,841	2,725
Others	2,308	2,272	nr	nr	nr	nr
Total Foreign	733,869	723,296	705,235	708,145	692,478	575,572
United States	67,626	69,019	71,345	73,145	74,915	77,050
Total	801,495	792,315	776,580	781,290	767,393	652,622
Production (Pig Crop)						
China	698,000	672,500	705,000	685,000	490,000	410,000
European Union	265,287	266,000	267,250	267,000	267,500	271,000
Russia	39,830	42,595	45,700	49,500	50,915	52,600
Brazil	39,050	39,635	40,230	40,954	42,500	44,000
Canada	28,983	28,812	29,026	28,027	28,300	28,550
Mexico	17,300	17,700	18,100	18,650	19,400	19,950
Korea, South	17,600	19,504	18,191	19,118	19,700	19,825
Japan	16,700	16,900	16,785	16,690	17,000	17,030
Ukraine	9,624	9,296	8,767	8,816	8,740	8,750
Belarus	5,200	5,200	5,325	5,050	4,825	4,725
Others	4,921	5,028	nr	nr	nr	nr
Total Foreign	1,142,495	1,123,170	1,154,374	1,138,805	948,880	876,430
United States	121,441	125,907	129,429	133,518	138,145	143,255
Total	1,263,936	1,249,077	1,283,803	1,272,323	1,087,025	1,019,685

Notes: The notation of a month beneath a year conveys the month in which the forecast for that year was released. nr - represents "no reporting" countries (data sets excluded beginning in 2017). From 2017, the following country is excluded: Australia.

Swine Trade - Selected Countries Summary

(in 1,000 head)

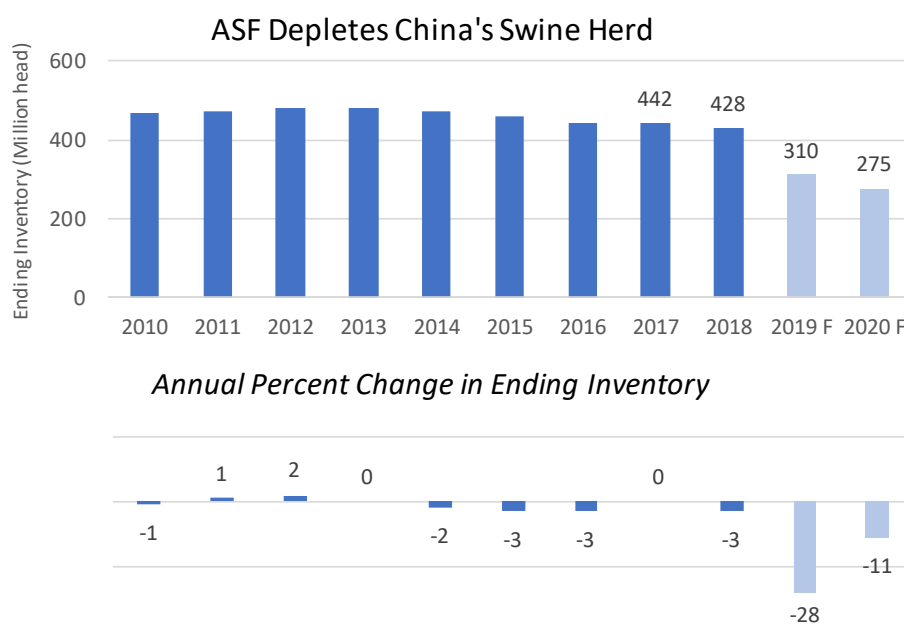
	2015	2016	2017	2018	2019	2020 Oct
Total Imports						
Mexico	42	20	42	33	36	39
China	4	8	6	10	6	25
Ukraine	22	4	8	30	20	20
Russia	2	8	6	8	10	10
Canada	6	3	3	3	5	3
European Union	3	3	6	3	3	3
Belarus	8	9	6	3	4	2
Brazil	1	0	1	1	1	1
Japan	0	1	1	1	1	1
Korea, South	2	3	5	2	3	1
Others	0	0	nr	nr	nr	nr
Total Foreign	90	59	84	94	89	105
United States	5,740	5,657	5,597	5,250	4,974	4,900
Total	5,830	5,716	5,681	5,344	5,063	5,005
Total Exports						
Canada	5,776	5,672	5,614	5,264	4,950	4,900
China	1,696	1,552	1,566	1,567	950	600
European Union	436	288	339	509	480	470
Brazil	4	2	5	8	10	8
Russia	2	7	6	7	3	5
Ukraine	1	27	33	9	2	2
Belarus	1	5	2	0	0	0
Japan	0	0	0	0	0	0
Korea, South	0	0	0	0	0	0
Mexico	0	0	7	0	0	0
Others	0	0	nr	nr	nr	nr
Total Foreign	7,916	7,553	7,572	7,364	6,395	5,985
United States	41	48	59	64	65	75
Total	7,957	7,601	7,631	7,428	6,460	6,060

Notes: The notation of a month beneath a year conveys the month in which the forecast for that year was released. From 2017, the following country is excluded: Australia.

ASF Devastates China's Hog Industry, Recovery Unlikely in 2020

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One year after emerging in China, African Swine Fever (ASF) is driving Chinese pork prices to record highs and causing an extensive reduction in pork supply. By the end of 2020, China's total swine herd is forecast to decline to 275 million head, down nearly 40 percent since the beginning of 2018, before the crisis began. Many producers have exited the industry and others are reluctant to restock due to ongoing disease risk. Pork production is forecast 25 percent lower in 2020 due to a sharply lower swine herd. Lower domestic supplies will boost demand for foreign pork, resulting in record imports. However, consumers will feel the pinch of lower pork supplies, with a 32-percent decline in per capita pork consumption over two years.



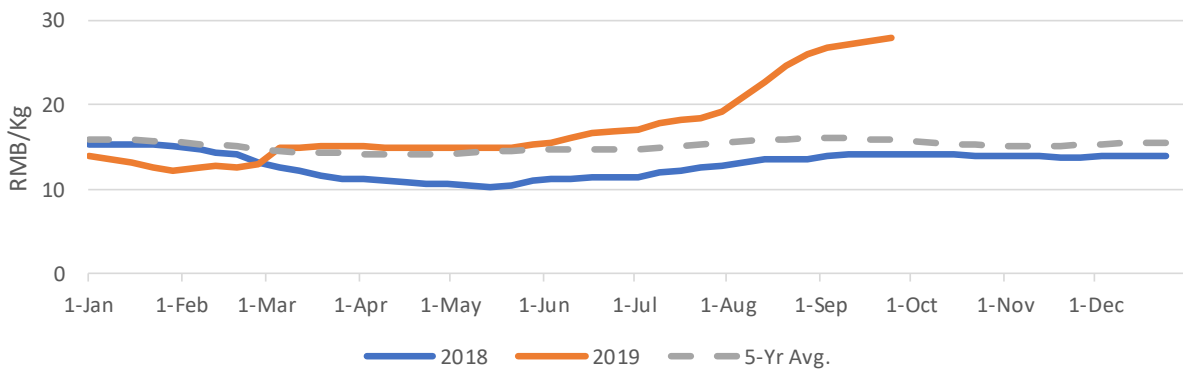
Source: USDA-FAS-PSD

Prices on the Rise as Hog Stocks Fall

ASF has likely had a greater impact in China than in any country or previous outbreak and the disease is now considered endemic. The swine herd has plummeted, registering 39 percent lower in August than one year earlier according to data released by the Ministry of Agriculture and Rural Affairs (MARA). Lower hog supplies will have a major impact on pork supplies through at least 2020.

China's sow herd has fallen to a similar degree; a key question moving forward is how quickly producers can begin restocking. Since ASF emerged, producers have liquidated their breeding herds, and many have exited the industry. During the first half of 2019, market hog prices hovered around the 5-year average, profits were weak and risk of infection high. Prices began to accelerate in June, rising from an average of 15 RMB to over 20 RMB in August as hog supplies withered. Prices peaked during the first week of October at nearly 28 RMB, generating record average profits of over 1,500 RMB/head.

China's Hog Price Doubles Since Spring



Source: Ministry of Agriculture and Rural Affairs

The possibility of record profits for both breeders and finishers is a strong motivation to restock and increase production. Yet despite profits, the continued presence of ASF and high level of liquidation assure a long road to recovery for the industry. In response to the recent spike in prices, the national government has made production expansion a priority, encouraging provinces to set production targets and facilitate sector expansion. Some of the measures introduced by provincial governments include insurance subsidies, higher indemnity payments, subsidized interest rates, and other forms of production assistance. Local governments have been ordered to shorten the start-up time for new farms and facilities by making land available and speeding up permitting. Local authorities have also been instructed to ease up on environmental regulations that limit where farms can be built, a reversal of policy over the last 4 years that had made building new hog farms difficult or impossible in many regions. However, pollution concerns remain a limiting factor on expansion.

Production growth is likely to be uneven among farm-size. Large integrated producers have already announced ambitious expansion plans and are generally well-capitalized. The central government announced subsidies and earmarked loans that can cover up to 30 percent of construction costs and equipment purchases by large hog farms through 2020. Efforts to restore production are focused on large-scale producers; however, prior to ASF, about half of all hogs were produced by farms of less than 500 head. Expansion in this sector is likely to be offset in the near-term by continued declines among smaller-scale farms. Crackdowns on swill-feeding, rising costs for biosecurity and manure-handling investments, and worries about disease will be barriers to return of individually-operated farms. Medium-sized commercial farms (1,000-5,000 head) are particularly constrained by high debt and lack of financing.

Pork in Short Supply in 2020

Lower hog supplies will drive a substantial decline in China's pork production – down 14 percent in 2019 and down 25 percent in 2020. Despite the sharp annual decline in pork production, supplies were relatively abundant during the first half of 2019. Heavy slaughter prompted by ASF and reduced consumer demand for pork caused stocks to accumulate to a record level by mid-2019. Pork supplies have plunged since the summer and most of these stocks are expected to be drawn-down before the end of the year.

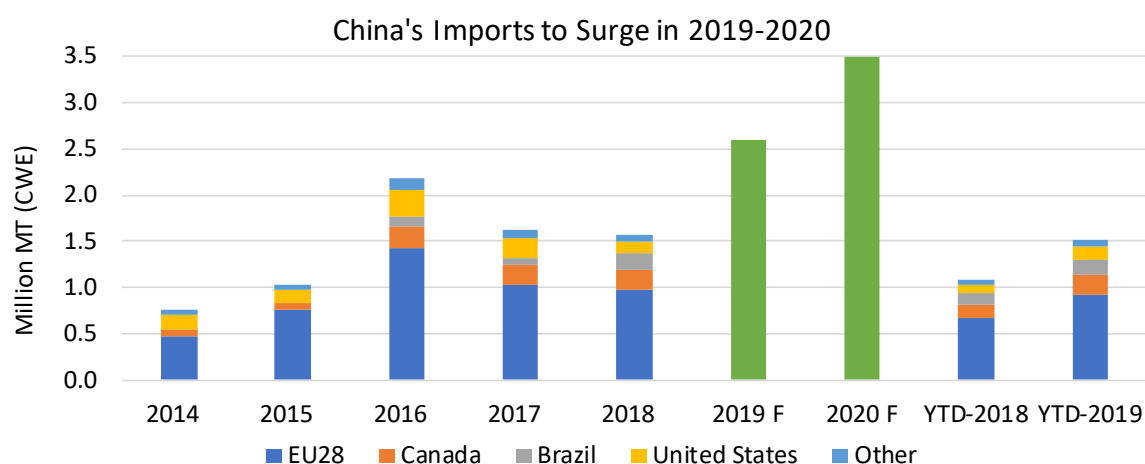
Pork consumption is expected to plunge during 2019 and 2020. Since the initial outbreak, demand for pork has fallen. Many consumers began to shift away from pork even though ASF poses no risk to human health. In Beijing, industry contacts observed a roughly 15-percent decline in consumption during the first half of the year. They attributed much of the decline to voluntary shifts from pork to other proteins out of disease concern. In addition, food service operators sought to minimize exposure to pork price inflation by substituting other proteins like poultry meat.

Plentiful pork supplies and lower demand kept prices in abeyance for the first half of 2019, but with supplies rapidly declining, pork prices have spiked. The national average pork price published by MARA reached 43.4 RMB during the first week of October, 84 percent higher than the same week last year. While consumer concerns about the disease risk may have impacted pork demand earlier in the year, steeper prices are likely to be the key factor going forward. Consumers have reacted to high pork prices by cutting back purchases and pork prices are expected to reach record levels through the peak demand season – autumn holidays and Chinese New Year. Supplies are expected to be released from the national pork reserve during this period to offset prices. In some areas, retail subsidies may also cushion the impact for consumers. Initiatives to lower pork prices will help some consumers but are expected to have limited impact overall.

Higher pork prices will encourage consumers and food service operators to purchase more poultry, beef, lamb, seafood and other proteins, offsetting some but not all of the drop in pork supply. Retail prices for competing proteins are rising as a result, with chicken meat up 24 percent and beef up 20 percent year-over-year during the first week of October. Chicken meat is expected to benefit from the biggest boost in demand, given prices remain well below the cost of pork. Substitution to beef and lamb will be more limited as prices are close to double that of pork.

Imports at Record Levels

Pork imports are forecast to reach 2.6 million tons in 2019 and 3.5 million tons in 2020. If realized, imports would account for 9 percent of consumption in 2020, the highest percentage on record. Due to the size of the Chinese market, imports will only partially offset the decline in domestic supplies. The boost in import demand will increase global exports to a record high of 10.4 million tons in 2020. The gain in demand will lift global prices of pork and crowd-out demand from price-sensitive markets.



Source: USDA-FAS-PSD and TDM, LLC

Through August 2019, China's imports have risen 40 percent and are forecast 67 percent higher for the year. Although most suppliers are expected to ramp up shipments, China maintains tariff or other barriers on two of the top three global exporters.

- The United States is well-positioned to boost shipments to China given robust growth in domestic production. China's imports from the United States are up 47 percent this year, but retaliatory tariffs are limiting demand from many buyers in China. On September 1, tariffs on U.S. pork were raised to 60 percent plus a 12.5-percent most-favored nation tariff. Pork prices in China have risen enough that some U.S. products are competitive with domestic pork with tariffs, yet at a steep premium to other suppliers. Recent announcements on tariff exemptions suggest that China will allow significant volumes of pork to be imported without retaliatory tariffs which should drive substantial growth in U.S. shipments.
- During the first half of the year, China's imports from Canada were up 51 percent and Canada's market share of 15 percent was the highest of any exporter after the EU. However, trade has collapsed since China placed a restriction on imports of Canadian beef and pork in early June. Imports from Canada are expected to fall to zero through the duration of the ban, limiting supplies from the third largest pork exporter.
- Brazil's exports to China are up over 30 percent through August. Despite strong demand, exports are constrained by facility approvals that limit eligible product. China approved 25 new Brazilian meat plants in September, but just one plant for pork. The approved plant has a slaughter capacity of 5,000 hogs per day, only moderately increasing potential export supplies. Beyond efforts to increase approved plants, already eligible plants in Brazil are increasing plant capacity to boost exports.
- The European Union has expanded shipments to China by 39 percent and is expected to remain the top supplier with 61 percent market share year-to-date. The EU is the least encumbered exporter, second only to China in pork production. Weak domestic demand in Europe and high stocks increase supplies available for export markets. However, production is relatively flat due to a combination of factors: weak domestic demand, ongoing ASF in several member states, and environmental regulations which have constrained growth in some countries. ASF remains a wild card for the EU: while most major exporting member states remain ASF-free, its spread to western Europe could critically damage export potential.

ASF Impacts to Persist through 2020

Effects from ASF are likely to dampen production in China through 2020. Both direct losses from the disease and indirect losses from herd liquidation have decimated China's hog herd. Pork supplies remained ample through mid-2019, but the effect of lower pork production will be keenly felt during the remainder of this year and next. The timing and speed of recovery is highly contingent on the ability of producers to protect themselves, but abilities to control the disease will likely be hampered by the lack of an effective vaccine. With hog prices on the rise, record profits are likely to spur many producers to re-enter the market later this year, but further outbreaks are likely. The national government has announced several initiatives to increase pork production. While many of these may help to spur expansion, efforts remain anecdotal and will likely have little impact on industry recovery until late-2020 at the earliest.

Summary Table of China Hog and Pork Forecasts

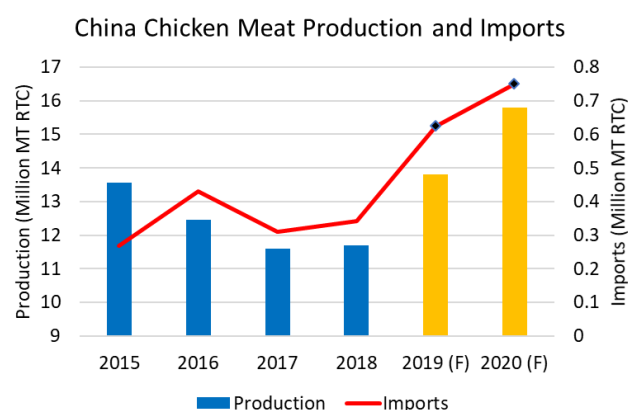
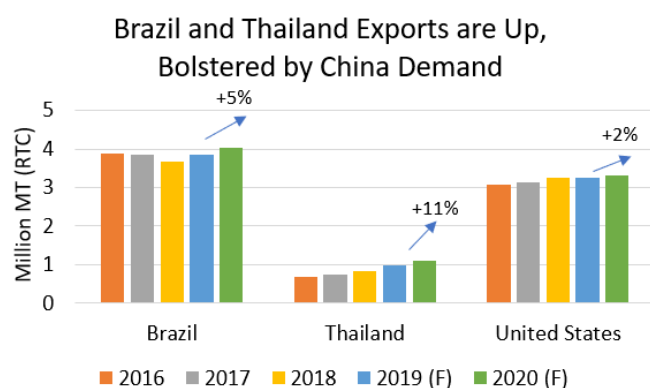
China Hogs and Pork	2017	2018	2019 F	2020 F	2019 % chg.	2020 % chg.	Unit
Hog Beginning Stocks	442,092	441,589	428,070	310,000	-3%	-28%	(1000 HEAD)
Sow Beginning Stocks	44,950	43,610	37,000	26,000	-15%	-30%	(1000 HEAD)
Total Hog Slaughter	702,021	693,820	600,000	438,000	-14%	-27%	(1000 HEAD)
Pork production	54,518	54,040	46,500	34,750	-14%	-25%	(1000 MT CWE)
Pork Imports	1,620	1,561	2,600	3,500	67%	35%	(1000 MT CWE)
Pork Consumption	55,930	55,398	48,970	38,150	-12%	-22%	(1000 MT CWE)

Chicken Meat

Global production is forecast 4 percent higher in 2020 to a record 103.5 million tons, surpassing pork production. China will account for more than half of the global production increase, driven by improved access to imported genetics and rising meat prices as African Swine Fever (ASF) outbreaks slash domestic pork supplies. Elevated Chinese protein import demand will boost production in Brazil and Thailand, which will set record production levels in 2020. Brazil's expansion will also be driven by rising domestic consumption on an improved economic outlook. Rising Mexico demand due to growing incomes will spur production whereas EU and Russia production will only see minimal changes due to market saturation.

Global exports are forecast 4 percent higher in 2020 to a record 12.5 million tons. Expansion is largely due to increased China demand which will propel Chinese imports up by 20 percent in 2020. Brazil and Thailand will make the greatest export gains in China as highly pathogenic avian influenza (HPAI)-related restrictions keep other major suppliers such as the United States out of that market. The Philippines imports are forecast up 27 percent as consumers transition from pork to increasingly price-competitive chicken.

U.S. production and exports: U.S. production is expected to rise 2 percent to 20.2 million tons in 2020 matching demand growth of 2 percent. Exports are forecast 2 percent higher to 3.3 million tons nearing levels prior to the outbreak of HPAI in 2014. U.S. export growth will center on markets such as Mexico and the Philippines.



Chicken Meat Production - Selected Countries Summary
1,000 Metric Tons (Ready to Cook Equivalent)

	2015	2016	2017	2018	2019	2020 Oct
Production						
China	13,561	12,448	11,600	11,700	13,800	15,800
Brazil	13,547	13,523	13,612	13,355	13,635	13,975
European Union	10,890	11,560	11,912	12,260	12,460	12,600
India	4,115	4,427	4,640	4,855	4,902	4,902
Russia	4,222	4,328	4,680	4,684	4,740	4,760
Mexico	3,175	3,275	3,400	3,485	3,600	3,710
Thailand	2,692	2,813	2,990	3,170	3,300	3,490
Turkey	1,961	1,925	2,188	2,225	2,300	2,400
Argentina	2,085	2,119	2,150	2,068	2,171	2,215
Colombia	1,481	1,538	1,626	1,695	1,730	1,790
Others	15,422	15,945	16,121	16,710	17,111	17,691
Total Foreign	73,151	73,901	74,919	76,207	79,749	83,333
United States	18,208	18,510	18,938	19,361	19,823	20,165
Total	91,359	92,411	93,857	95,568	99,572	103,498
Total Dom. Consumption						
China	13,428	12,492	11,475	11,595	13,980	16,110
European Union	10,441	11,047	11,279	11,553	11,660	11,750
Brazil	9,710	9,637	9,768	9,671	9,789	9,938
India	4,108	4,424	4,638	4,852	4,900	4,900
Russia	4,427	4,451	4,786	4,785	4,785	4,785
Mexico	3,960	4,061	4,198	4,301	4,443	4,573
Japan	2,510	2,587	2,688	2,761	2,810	2,825
Thailand	2,072	2,129	2,226	2,345	2,350	2,370
Argentina	1,899	1,969	1,978	1,955	2,025	2,066
Philippines	1,479	1,529	1,607	1,699	1,763	1,998
Others	20,243	21,221	21,478	21,910	22,407	23,051
Total Foreign	74,277	75,547	76,121	77,427	80,912	84,366
United States	15,265	15,510	15,826	16,184	16,598	16,912
Total	89,542	91,057	91,947	93,611	97,510	101,278

Notes: Chicken paws are excluded. The notation of a month beneath a year conveys the month in which the forecast for that year was released.

Chicken Meat Trade - Selected Countries Summary
1,000 Metric Tons (Ready to Cook Equivalent)

	2015	2016	2017	2018	2019	2020 Oct
Total Imports						
Japan	936	973	1,056	1,074	1,090	1,100
Mexico	790	791	804	820	845	865
European Union	730	763	693	704	780	760
China	268	430	311	342	625	750
Saudi Arabia	863	939	750	618	620	625
Iraq	467	563	444	526	555	580
South Africa	436	504	508	520	545	555
United Arab Emirates	398	422	408	408	441	465
Philippines	205	244	266	320	315	400
Hong Kong	312	344	291	215	332	360
Others	3,126	3,339	3,604	3,695	3,702	3,760
Total Foreign	8,531	9,312	9,135	9,242	9,850	10,220
United States	60	61	59	64	60	61
Total	8,591	9,373	9,194	9,306	9,910	10,281
Total Exports						
Brazil	3,841	3,889	3,847	3,687	3,850	4,040
European Union	1,179	1,276	1,326	1,411	1,580	1,610
Thailand	622	690	757	835	990	1,100
Ukraine	158	236	264	317	400	450
China	401	386	436	447	445	440
Turkey	292	263	357	418	425	430
Belarus	135	145	150	168	174	185
Russia	71	104	124	130	148	170
Chile	88	97	88	109	135	160
Argentina	187	158	178	124	155	158
Others	419	413	388	392	412	429
Total Foreign	7,393	7,657	7,915	8,038	8,714	9,172
United States	2,932	3,086	3,137	3,245	3,262	3,325
Total	10,325	10,743	11,052	11,283	11,976	12,497

Notes: Chicken paws are excluded. From 2019, Yemen is excluded. The notation of a month beneath a year conveys the month in which the forecast for that year was released.

Notes to Readers

The *Livestock and Poultry: World Markets and Trade* circular is designed to give a snapshot of the current situation among the major players in world beef, pork, and chicken meat trade.

Data Revisions in PSDs for Years Prior to 2018:

Revisions are made based on new and/or additional information.

Commodity/Attribute	Years	Countries
Cattle		
<i>Various Attributes</i>	2007-2016	Canada, Russia
Beef		
<i>Production</i>	2007-2017	Angola, Congo, Costa Rica, Honduras, Iran, and Russia
<i>Trade</i>	2009-2016	Angola and Gabon
Swine		
<i>Various Attributes</i>	2007-2017	China, Mexico, Russia
Pork		
<i>Production</i>	2007-2017	Canada, Russia, South Africa, Uruguay
<i>Trade</i>	2007-2017	Brazil, Philippines, South Africa
Chicken Meat		
<i>Production</i>	2012-2017	Belarus, Malaysia, Russia
<i>Trade</i>	2015-2017	Congo (Kinshasa), Cuba, Iraq, UAE, Kuwait, Vietnam

Discontinued Series

Cattle: Turkey is discontinued as of 2019.

Beef: Kuwait, Lebanon, Libya, Oman, Peru, Singapore, Turkey and Venezuela are discontinued as of 2019.

Chicken Meat: Yemen is discontinued as of 2019.

Assumptions

Diseases: Forecast reflects disease (African Swine Fever, Avian Influenza, Bovine Spongiform Encephalopathy, etc.) policies/restrictions in place as of October 10, 2019 and assumes their continuation.

Conversion Rates and HS Codes

	Beef & Veal	Pork	Chicken Meat
Conversion Rate	1.4	1.3	None
HS Codes	Fresh/Chilled: 0201 Frozen: 0202 Processed: 021020 & 160250	Fresh/Chilled: 020311, 020312, 020319 Frozen: 020321, 020322, 020329 Processed: 021011, 021012, 021019, 160241, 160242, 160249	Fresh/Chilled: 020711, 020713 Frozen: 020712, 020714 Processed: 160232

Note: There are several exceptions by country/product. In general, chicken paws are excluded. Also, beef and veal estimates include meat of other bovines for certain countries. In particular, India estimates include carabeef (water buffalo).

Technical Notes

CWE/PWE: All quantities (beef and pork) noted are in Carcass Weight Equivalent (CWE) unless otherwise noted as Product Weight Equivalent (PWE). CWE is the weight of an animal after slaughter and removal of most internal organs, head, and skin. PWE is the actual weight of the meat product exported.

RTC (Ready-to-Cook): RTC means any slaughtered poultry free from protruding pinfeathers and vestigial feathers (hair or down), from which the head, feet, crop, oil gland, trachea, esophagus, entrails, and lungs have been removed, and from which the mature reproductive organs and kidneys may have been removed, and with or without the giblets, and which is suitable for cooking without need of further processing. Ready-to-cook poultry also means any cut-up or disjointed portion of poultry or other parts of poultry, such as reproductive organs, head, or feet that are suitable for cooking without need of further processing.

FAS Reports from Overseas Offices

The *Livestock and Poultry: World Markets and Trade* circular is based on post reports submitted since June 2019 and on available secondary information. The individual country reports can be obtained on FAS Online at: <http://gain.fas.usda.gov/Pages/Default.aspx>.

PSD Online

The entire USDA PSD database is available online at: <http://www.fas.usda.gov/psdonline>.

Additional Resources

Please refer to the USDA-FAS Dairy, Livestock and Poultry website at: <http://www.fas.usda.gov/commodities/livestock-and-meats> for additional data and analysis.

Situation and outlook information on U.S. livestock and poultry can be obtained from the USDA-Economic Research Service at: <https://www.ers.usda.gov/topics/animal-products/>.

Future Releases and Contact Information

Please visit <http://www.fas.usda.gov/data/livestock-and-poultry-world-markets-and-trade> to view archived and future releases.

The next release of this circular will be in January 2020. FAS will publish *Livestock and Poultry: World Markets and Trade* on a quarterly basis beginning in January 2020. The quarterly updates will include revised beef, pork, and chicken meat forecasts for selected countries (major producers and traders).

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