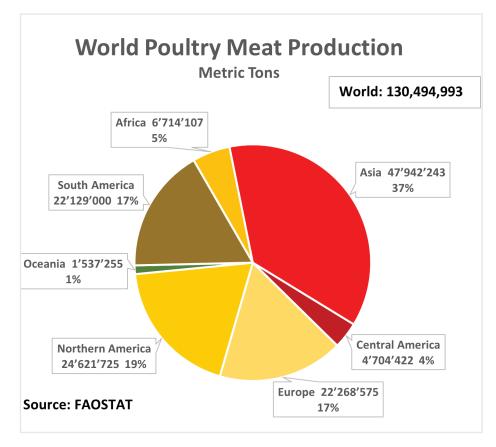
# INTERNATIONAL POULTRY COUNCIL Global Macroeconomic Indicators for the Poultry Meat Industry September 2022





# **1. Executive Summary**

The global poultry industry consists of a combination of large corporate entities with more than 1.9 million large broiler, turkey and duck farms and nearly 91 million household and micro-producer farms that produce chickens. In addition, there are 7.6 million duck farms and 376 thousand turkey farms. Together these farms produce more than 130 million tons of poultry meats annually with a value of more than \$221 billion. The global poultry industry has grown more than 35% since 2010.



There are an estimated 890,694 commercial chicken farms in the 27 countries represented by the International Poultry Council (IPC) membership included in this report and these farms carry an inventory of 11.6 billion chickens.

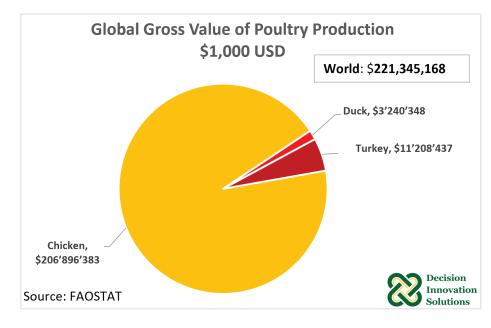
There are an estimated 36.3 million households in IPC member countries that hold an estimated 1.2 billion chickens.

IPC members are estimated to have 65,622 turkey farms with 276 million head of inventory and 3.77 million duck farms with 827.3 million head of inventory.

Producers in the 27 IPC member countries covered in this report produced 95.7 million metric tons of chicken, duck and turkey meat with a value of \$152.1 billion.

In 2020, poultry trade data is available for 123 countries. Net reported poultry exports were 15.97 million metric tons with a net export value of \$24.62 billion.

Of the 26.7 billion chickens, ducks, and turkeys on farms around the world, Asia has 16.4 billion of them, South America 2.8 billion birds, Europe 2.5 billion birds, Africa 2.1 billion birds, North America 2.0 billion birds, Central America 782 million birds, and Oceania 142 million birds.



Of the 130.5 million metric tons of poultry meat produced, Asia produces 37%, Europe 17%, North America 19%, South America 17%, Africa 5%, Central America 4%, and Oceania 1%.

The poultry production of IPC members is a significant part of world production and value. IPC members have 41% of world chicken meat farms, carry 51% of world chicken meat stocks, produce 72% of world chicken meat and account for 67% of the value of world chicken meat production.

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 ${}^{\checkmark}$  global macroeconomic indicators for the poultry meat industry

IPC members have 50% of world duck farms, 71% of world duck stocks, produce 83% of world duck meat and account for 88% of the value of world duck meat production.

IPC members have 17% of world turkey farms, carry 85% of world turkey stocks, produce 96% of world turkey meat and account for 94% of the value of world turkey meat production.

IPC members account for 69% of the value of world poultry meat production.

World GDP in 2020 was \$85.5 trillion with \$61.4 trillion (72%) in the 27 IPC member countries. The total economic contribution of agricultural in the IPC countries was \$5.3 trillion with \$1.8 trillion of economic contribution coming from livestock (34% of agriculture).

IPC MEMBER CONTRIBUTIONS TO WORLD POULTRY INDUSTRY						
category	% of world					
chicken meat farms	40.7%					
chicken meat stocks	50.6%					
chicken meat production	71.9%					
chicken meat value of production	67.0%					
duck farms	49.6%					
duck stocks	70.9%					
duck production	82.9%					
duck meat value of production	88.0%					
turkey farms	17.4%					
turkey stocks	84.9%					
turkey production	95.9%					
turkey meat value of production	93.6%					
poultry meat total value of production	68.7%					
Source: FAO STAT, DIS estimates						

The economic contribution of the poultry industry was \$388 billion and that accounts for 22% of the economic contribution of the livestock industry, 7% of the economic contribution of agriculture.

IPC members account for 41% of world poultry farms, 52% of world poultry (broilers, ducks, and turkeys) stocks, 73% of world poultry meat production, 86% of world poultry meat exports, and 40% of world poultry meat imports.

Country	GDP	Ag Total	Livestock Total	Poultry Tota
U.S.	\$20'936'000	\$765'076	\$347'092	\$94'970
China	\$14'722'731	\$2'110'277	\$483'637	\$82'768
Brazil	\$1'444'733	\$304'635	\$119'600	\$39'923
India	\$2'622'984	\$679'988	\$189'828	\$27'092
Russia	\$1'483'498	\$158'119	\$79'410	\$20'44
Mexico	\$1'076'163	\$94'913	\$42'977	\$11'559
Poland	\$594'165	\$56'272	\$31'413	\$10'190
Turkey	\$720'101	\$107'452	\$39'458	\$9'99(
South Africa	\$301'924	\$53'905	\$27'065	\$9'643
France	\$2'603'004	\$163'713	\$59'382	\$8'45
Thailand	\$501'795	\$58'424	\$15'791	\$8'31
United Kingdom	\$2'707'744	\$63'063	\$39'138	\$7'67
Canada	\$1'643'408	\$99'855	\$42'511	\$7'28
Italy	\$1'886'445	\$112'120	\$41'496	\$7'19
Colombia	\$271'347	\$49'506	\$27'257	\$7'03
Germany	\$3'806'060	\$110'769	\$68'333	\$6'16
Argentina	\$383'067	\$44'564	\$26'163	\$5'71
Australia	\$1'330'901	\$86'258	\$35'221	\$5'05
Egypt	\$363'069	\$31'245	\$13'391	\$4'54
Netherlands	\$912'242	\$40'284	\$26'315	\$3'80
Morocco	\$112'871	\$22'754	\$9'948	\$2'97
Chile	\$252'940	\$38'100	\$10'090	\$2'92'
Panama	\$52'938	\$3'896	\$2'682	\$2'25
New Zealand	\$212'482	\$38'867	\$31'673	\$1'01
Honduras	\$23'828	\$4'527	\$1'560	\$65
Nicaragua	\$12'261	\$2'818	\$1'133	\$53
Nigeria	\$432'294	\$25'510	\$2'049	\$293

Sources: GDP, World Bank 2020 | DIS Estimates of Total Economic Contribution | OECD and some country-specific multipliers | Nigeria Ag, Livestock and Poultry Totals are Value of Production | Note: Countries Sorted by Poultry Contribution to their country's GDP

# 8

CO GLOBAL MACROECONOMIC INDICATORS FOR THE POULTRY MEAT INDUSTRY

MEMBER CONTRIBUT						
	Poultry farms	Poultry stocks	Poultry production	Poultry meat exports	Poultry mean imports	
IPC MEMBERS	41.31%	51.92%	73.44%	86.07%	40.31%	
Argentina	0.07%	0.46%	1.74%	1.00%	0.03%	
Australia	0.01%	0.39%	0.98%	0.22%	0.01%	
Brazil	2.90%	5.66%	11.02%	22.17%	0.03%	
Canada	0.02%	0.67%	1.13%	0.85%	1.07%	
Chile	0.01%	0.55%	0.59%	0.95%	0.04%	
China	25.27%	18.15%	14.82%	2.85%	11.63%	
Colombia	0.47%	0.80%	1.24%	0.00%	0.53%	
Egypt	3.89%	0.77%	1.10%	0.00%	0.24%	
France	0.03%	0.64%	1.26%	2.09%	2.83%	
Germany	0.01%	0.33%	1.20%	3.36%	4.40%	
Honduras	0.60%	0.31%	0.15%	0.01%	0.11%	
India	0.13%	3.01%	2.76%	0.02%	0.00%	
Italy	0.01%	0.40%	1.06%	0.99%	0.46%	
Mexico	0.38%	2.25%	2.77%	0.02%	5.34%	
Morocco	0.01%	0.82%	0.68%	0.01%	0.03%	
Netherlands	0.00%	0.18%	0.90%	8.60%	3.79%	
New Zealand	0.00%	0.09%	0.17%	0.07%	0.00%	
Nicaragua	0.22%	0.09%	0.11%	0.00%	0.05%	
Nigeria	6.69%	0.62%	0.18%	0.00%	0.00%	
Panama	0.02%	0.18%	0.16%	0.00%	0.16%	
Poland	0.20%	0.80%	2.05%	8.99%	0.42%	
Russia	0.11%	1.86%	3.61%	1.70%	1.29%	
South Africa	0.01%	0.72%	1.44%	0.30%	2.67%	
Thailand	0.19%	1.09%	1.41%	4.93%	0.01%	
Turkey	0.01%	1.44%	1.68%	3.08%	0.24%	
United Kingdom	0.01%	0.81%	1.49%	2.65%	4.22%	
United States	0.05%	8.83%	17.74%	21.23%	0.71%	

Sources: FAOStat, Comtrade, DIS estimates & other sources. Note: China trade percentages include Mainland China & China, Hong Kong SAR

# 2. Introduction

# 2.1 Goal of this Study

The International Poultry Council (IPC) is the recognized voice of the global poultry meat industry. In that capacity it represents the sector on a wide range of subjects from polity to communications on the economic impact and contribution of the sector. The goal of this study is to provide a overview of the global poultry meat industry (chickens, ducks and turkeys) with an emphasis on the contributions of the poultry meat output of IPC members to regional and global economies. The report focuses on three major areas: demographics, economics and market analytics.

# 2.2 Objective

The objective of this study is to provide economic analysis and market analytics focused on the global poultry meat industry sector. We have organized the report into logical groupings as follows:

### **Demographics**:

- » Number of poultry meat farms / holdings (global, by region, and to extent available, by country)
- » Average farm size
- » Workforce

#### Economics:

- » Gross Domestic Production (GDP) from agriculture (global), breakout by food animals and other
- » GDP Contribution (global and by region total poultry meat sector)
- » Direct Economic Impact: employment, taxes, GDP (global)

#### Market analytics:

- Poultry meat production value and volume (total per species broiler, turkey, and duck)
- Poultry meat export (total and top 20 exporters and top 20 importers)
- On a "percent of total" basis, cost of poultry production (by region, percentage among feed, primary production, slaughtering, transformation, transport)

# 2.3 Report Structure

This report is structured in three major geographic areas: global, regional and country-specific subsections. Each of these geographic areas contains information on poultry industry demographics, market analytics, and economics.

## **2.4 General Comments and Notes**

- » The data for this report comes from a number of sources and from a variety of time periods. In general, the most recent data available was used. For value of production, the most recent data was 2018 whereas the most recent data for GDP was 2020. Information on the number of farms and categories of farms, in most cases, was obtained from the most recent country-specific census of agriculture, with these dating from 2007 to 2020 depending on the country. If no census of agriculture data was available, then a variety of sources was used to estimate the number of farms based on the best data available.
- » Due to the multiplicity of data sources used for similar variables across the countries, there may be data discrepancies. For example, the data on chicken and turkey stocks reported for the U.S. by FAOSTAT differ from the data reported by USDA. In this report, we used the data reported by USDA for chicken and turkey stocks and doing so resulted in U.S., North American, and World stocks for chickens and turkeys differing from the numbers reported by FAOSTAT.
- » Trade data in this report was primarily drawn from the UN Comtrade database and subject to the limitations of data being reported (or not reported) by the exporting and importing countries. Total exports and imports should

be equal, but in the reported data exported quantities and values exceed reported imported quantities and values.

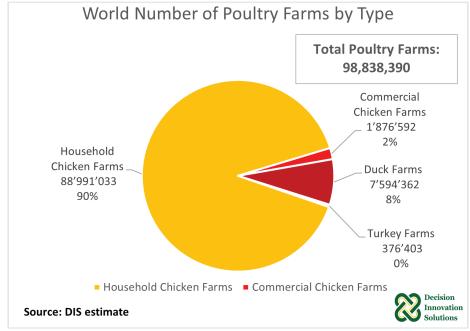
- » The maps included in this report were either from published, refereed journal articles and from "resourcetrade. earth." The country boundaries in these maps may differ from currently recognized boundaries and labeling convention in these maps was determined by the creators of the maps.
- » Country labels and definitions: With the historical aspect of the data incorporated into this report, from various data sources such as FAOSTAT and others, the specific country labels and definitions are derived from the information source and how they referenced the data. The People's Republic of China and special administrative regions (SARs) are labeled per the information source label. However, normal labeling for the People's Republic of China is inclusive of the various SARS.

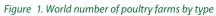
# 3. Global Poultry Industry

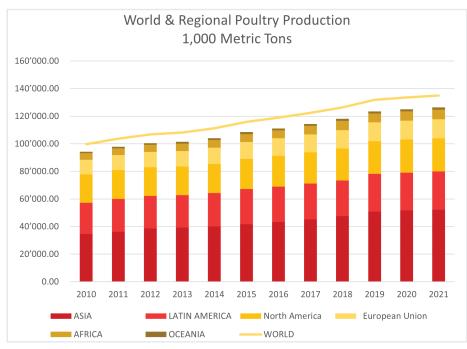
The global poultry sector (poultry meat and egg production), which has a market value of \$310.7 billion in 2020, is expected to grow to \$322.55 billion in 2021 and see a compound annual growth rate (CAGR) of 3.8 in 2021. The market is expected to hit \$422.97 billion in 2025 with a CAGR of 7%<sup>1</sup> from 2020 through 2025. Among poultry species, chicken is the primary species of production throughout the world representing more than 90% of the poultry sector. Other major species include duck, especially in Asian countries, and turkey in North American countries.

Historically, small farms and family businesses have been responsible for much of the production in the developing world but in recent years, much of the growth in the developing world is coming from large-scale operations. Large-scale poultry production systems have been the dominant farm structure in the United States and Canada for decades and now account for significant shares of production in South America, Europe, Asia and Oceania.

# **3.1 Production and Demographics**







While the exact number of farms that produce poultry is unknown, DIS estimates that in 2020 there were 98.8 million poultry farms across the world. DIS estimates that there are 89.0 million household chicken farms, 1.9 million commercial chicken farms, 7.6 million duck farms, and 376,403 turkey farms (Figure 1).

World poultry production is increasing, having grown every year since 2010 and having increased 35% since 2010 (Figure 2). In 2021, world poultry production exceeded 135 million metric tons. Asia is the leading producer of poultry meat, followed by Latin America, North America, European Union, Africa, and Oceania.

In 2020, the 100 million poultry farms across the world that produced an estimated 70.7 billion chickens, 617.9 million turkeys, and 3.0 billion ducks from an overall inventory of 27.3 billion birds.

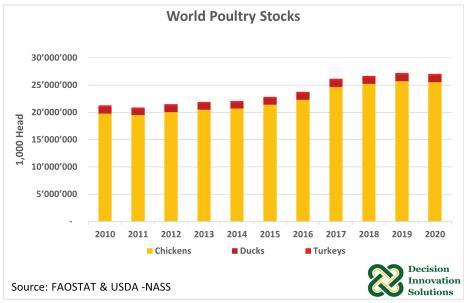
There are an estimated 1.9 million commercial chicken producers who hold an inventory of 23.1 billion chickens (Figure 3). There are an estimated 90.6 million household producers of chicken with an estimated global inventory of 2.1 billion chickens.

#### Figure 2. World & regional poultry production

## DECISION INNOVATION SOLUTIONS

 $rac{1}{2}$  global macroeconomic indicators for the poultry meat industry

<sup>1</sup> Global Poultry Industry and Trends, Feed Additive, March 11, 2021



There are an estimated 7.6 million duck farms carrying an inventory of 1.15 billion ducks, and 376,403 turkey farms carrying an inventory of 325.1 million turkeys.

For IPC member countries, where large, modern, integrated poultry production systems have become primary producers of chicken meat, average inventory on commercial broiler farms is 13,022 head per farm. In 18 of the 27 IPC countries covered in this report, the average inventory per commercial broiler farm is greater than 40,000 head per farm.

#### Figure 3. World poultry stocks

Individually, at the farm level, poultry inventory numbers run from less than 100 head for most of the household and micro producers to more than a million birds at some of very large commercial farms. There are 7 large vertically-integrated poultry production firms that run more than a billion birds through their facilities on an annual basis with the largest producer estimated to process more than 4.4 billion birds per year.

There are an estimated 890,694 commercial chicken farms<sup>2</sup> in the 27 countries represented by International Poultry Council (IPC) membership included in this report and these farms carry an inventory of 11.6 billion chickens. There are an estimated 36.3 million households in IPC member countries that hold an estimated 1.2 billion chickens. IPC member countries are estimated to have 65,622 turkey farms with 276 million head of inventory and 3.77 million duck farms with 827.3 million head of inventory.

Total global poultry meat production (chicken, duck and turkey) in 2020 was 130.5 million metric tons with a value of \$221 billion, growing by 35 percent since 2010. Producers in the 27 IPC member countries covered in this report produced 95.7 million metric tons of chicken, duck and turkey meat with a value of \$152.1 billion.

<sup>2</sup> The term "Commercial Chicken Farm" varies country to country. In China and the U.S., the two largest chicken meat producers, commercial producers are categorized as producers who producer more than 2,000 chickens per year.

#### 3.1.1 Chicken

There are an estimated 1.9 million commercial chicken producers who hold an inventory of 23.1 billion chickens. There are an estimated 101.6 million household producers of chicken with an estimated global inventory of 2.1 billion chickens.

The number of chickens on world farms in 2020 was 25.2 billion birds (Figure 4). This is a 29.3% increase since 2010. farms with an average inventory of about 450 birds.

On an annual basis, global chicken production has grown from 56.6 billion head in 2010 to 70.8 billion head in 2020 (Figure 5). This is a 25 percent increase in the number of chickens produced since 2010.

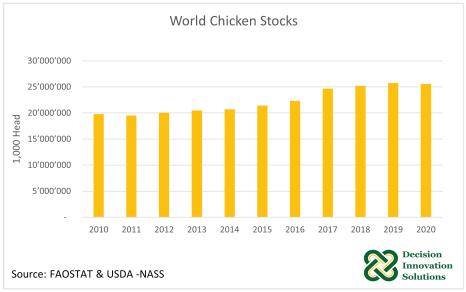


Figure 4. World chicken stocks 2010-2020

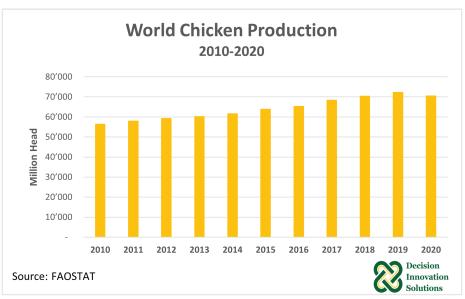


Figure 5. World chicken production 2010-2020

**World Chicken Meat Production** 2010-2020 140'000 Metric Tons Thousands 120'000 100'000 80'000 60'000 40'000 20'000 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 Decision Source: FAOSTAT Innovation Solutions

Figure 6. World chicken meat production 2010-2020

Global chicken meat production grew 37 percent from 2010 through 2020, rising from 87 million metric tons in 2010 to 120 million metric tons in 2020 (Figure 6). The 27 IPC member countries highlighted in this study account for 72 percent of global chicken meat production.

#### 3.1.2 Duck

World production of ducks for meat has increased 12.6% since 2010. In 2020, 3.02 billion ducks were processed for meat (Figure 7). Data on duck production was available for 18 of the 27 IPC member countries highlighted in this study and account for 85% of world duck production. Census data for the 7 IPC member countries that report farm data on duck production indicate that there are 3.8 million duck farms<sup>3</sup>. Across all the duck farms reporting, the average inventory of ducks on a farm was 13 head, but the range was from 7 head in Panama to 10,989 head in France.

Duck meat production has increased 23% since 2010. Total production of duck meat was 5 million metric tons in 2020 and IPC member countries produced 87% of world duck meat (Figure 8).

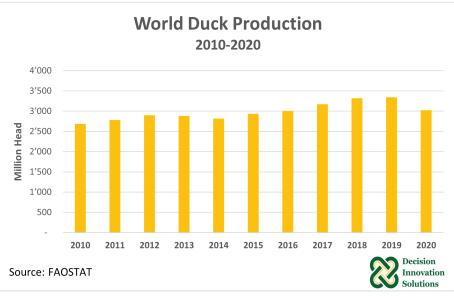


Figure 7. World duck production 2010-2020

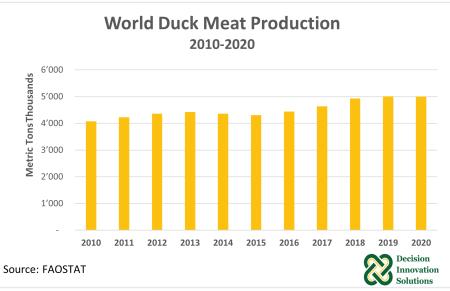


Figure 8. World duck meat production 2010-2020

<sup>3</sup> No data on the number of duck farms in China was reported. DIS estimated that there are 3.5 million duck farms in China. Duck farms in China account for 60% of the ducks raised for duck meat in the world.

#### 3.1.3 Turkey

World production of turkeys has declined in recent years (Figure 9). In 2016, production of turkeys reached 660 million head, but by 2020 had declined to 618 million head, down 6.4% from the peak. The United States of America is the dominant producer of turkeys in the world accounting for 44% of world production. IPC member countries have 84.9% of world turkey inventory.

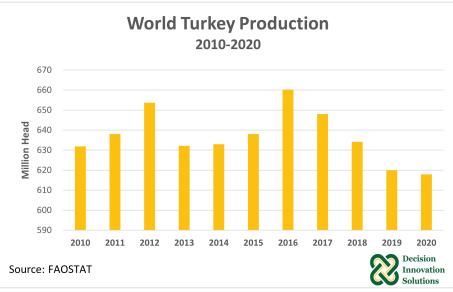


Figure 9. World turkey production 2010-2020

World turkey meat production has increased 9% since 2010 and has remained relatively stable despite the drop in the number of turkeys produced. This would suggest that the average dressed weight of turkeys being produced has increased from 9.1 kgs per head to 9.7 kgs per head in the past 5 years. IPC member countries account for 91.3% of world turkey meat production (Figure 10).

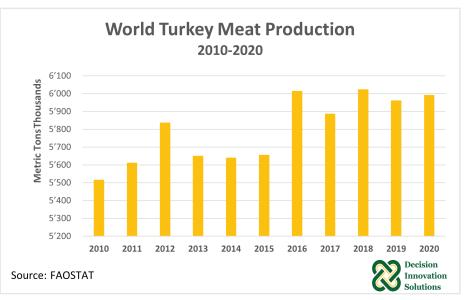


Figure 10. World turkey meat production 2010-2020

# **3.2 Global Economics**

The gross value of production of the world poultry industry (chicken, ducks, and turkey) was \$221 billion in 2018 with chicken meat accounting for 93% of the value, turkey meat 5%, and duck meat 1% (Figure 11).

The gross value of production of the ag sector in 2018 was \$3.5 trillion, with crops accounting for \$2.3 trillion, red meat \$984 billion, and poultry \$221 billion. In 2018, Asia produced 42% of the \$221.3 billion in global gross value of poultry production. It is followed by North America with 18%, Europe with 16%, South America with 13%, Africa with 6%, Central America with 4%, and Oceania with 1%. The GDP of the 27 IPC countries in 2020 was \$61 trillion. Agriculture contributed \$2.5 trillion of that with poultry meat contributing \$150 billion in value of production (Table 1).

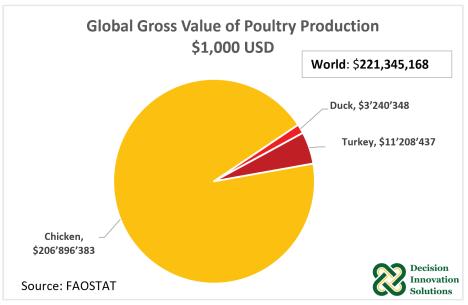


Figure 11. Global gross value of production

COUNTRIES	GDP	AGRICULTURE	LIVESTOCK	RED MEAT	POULTRY MEAT	CHICKEN MEAT	DUCK MEAT	TURKEY MEA
Argentina	383'067	\$23'442	\$13'763	\$7'343	\$2'556	\$2'548	\$2	\$5
Australia	1'330'901	\$37'129	\$15'160	\$7'888	\$1'882	\$1'830	\$24	\$27
Brazil	1'444'733	\$142'681	\$56'017	\$25'908	\$15'918	\$14'847	\$8	\$1'064
Canada	1'643'408	\$46'056	\$19'607	\$10'234	\$2'944	\$2'545	\$30	\$370
Chile	252'940	\$18'246	\$4'832	\$2'216	\$1'240	\$1'075		\$165
China	14'722'731	\$883'658	\$202'518	\$116'106	\$27'793	\$27'789	\$4	
Colombia	271'347	\$25'650	\$14'123	\$2'666	\$3'014	\$3'014		
Egypt	363'069	\$19'954	\$8'896	\$2'189	\$2'133	\$1'927	\$172	\$34
France	2'603'004	\$74'010	\$26'845	\$10'435	\$3'374	\$2'011	\$761	\$602
Germany	3'806'060	\$48'593	\$29'977	\$13'707	\$2'472	\$1'408	\$234	\$83
Honduras	23'828	\$3'065	\$870	\$231	\$304	\$304		
India	2'622'984	\$418'541	\$116'841	\$2'393	\$11'583	\$11'447	\$136	
Italy	1'886'445	\$49'308	\$18'249	\$10'209	\$2'620	\$2'154	\$0	\$460
Mexico	1'076'163	\$52'171	\$23'623	\$10'711	\$5'652	\$5'569	\$32	\$52
Morocco	112'871	\$13'142	\$5'745	\$2'731	\$1'369	\$1'200		\$169
Netherlands	912'242	\$17'415	\$11'376	\$4'306	\$1'437	\$1'348		\$89
New Zealand	212'482	\$17'126	\$13'956	\$4'395	\$391	\$387	\$2	\$2
Nicaragua	12'621	\$1'854	\$745	\$286	\$256	\$256		
Nigeria	432'294	\$25'510	\$2'049	\$824	\$293	\$293		
Panama	52'938	\$2'469	\$1'700	\$252	\$1'272	\$1'272		
Poland	594'165	\$24'0501	\$13'426	\$5'350	\$3'813	\$2'904	\$154	\$75
Russia	1'483'498	\$76'242	\$38'290	\$16'840	\$7'075	\$7'075		
South Africa	301'924	\$21'677	\$10'884	\$4'716	\$3'659	\$3'653	\$1	\$!
Thailand	501'795	\$29'146	\$1'636	\$3'125	\$3'376	\$3"130	\$242	\$4
Turkey	720'101	\$54'094	\$19'864	\$8'394	\$3'999	\$3'790	\$2	\$208
ted Kingdom	2'707'744	\$29'309	\$18'190	\$8'343	\$3'217	\$2'785	\$113	\$319
Jnited States	20'936'600	\$341'538	\$154'946	\$73'143	\$37'156	\$32'156	\$94	4'90
PC Countries	61'411'955	\$2'496'079	\$844'129	\$354'941	\$150'797	\$138'716	\$2'009	\$10'07

Sources: 2020 & 2018 World Bank GDP estimates / 2018 FAOSTAT value of agricultural produ

Table 1. Comparison of GDP and value of agricultural sectors

### **3.3 Global Cost of Production**

Across the world, the cost of feed is the largest component of broilers/ poultry production. Countries shown in Figure 12 include similar inputs, same year, and common activity (broiler production), allowing for an opportunity to compare countries across regions. In 2017, feed share of total production cost hovered around 64%, ranging from 69% in Brazil to 57% in France. The share of day-old chick cost varied from 14% in Argentina and Brazil to 22% in the United Kingdom. The share of labor cost relative to total cost averaged 3% across these regions.

Figure 13 includes countries around the world with limited cost of production information poultry (except for the South Africa). As the figure indicates the share of feed cost relative to total cost of poultry production for these countries largest fraction represents the despite differences in years of data presented. In China the cost of feed for broilers production in 2018 had a share of total cost equal to 75%, while for Turkey in 2021, 80% of total cost of poultry production was due to feed cost. In Morocco (2012), India (2016), and Panama (2020) the cost of feed represented 70% of total production cost. For South Africa (2021), the cost of feed accounted for 68% of production cost.

#### **3.4 Global Poultry Trade**



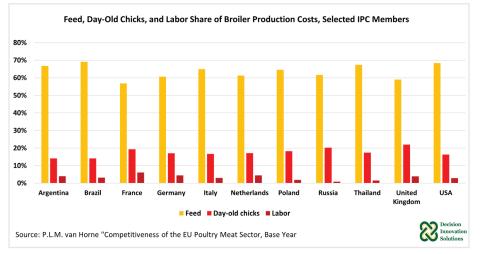


Figure 12. Feed, day-old chicks, and labor share of broiler production cost, selected IPC members

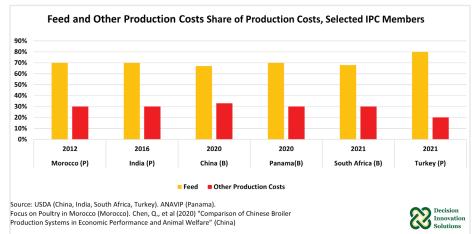


Figure 13. Feed & other production costs share of production costs, selected IPC members

		Exports			Impor
Country	Export qty	Export value	Country	Import qty	Import val
	Metric Tons	\$1,000 USD		Metric Tons	\$1,000 U
Brazil	4'036'458	\$5'817'681	China	1'553'941	\$3'501'2
USA	3'865'985	\$4'106'311	Japan	1'012'428	\$3'369'0
Thailand	896'927	\$3'356'696	United Kingdom	768'903	\$2'678'8
Poland	1'636'962	\$3'140'133	Germany	801'853	\$2'117'4
Netherlands	1'565'569	\$3'081'569	France	515'177	\$1'543'7
Germany	612'331	\$1'705'424	Netherlands	690'112	\$1'460'2
China	428'401	\$1'470'360	China, Hong Kong SAR	563'797	\$1'155'7
Belgium	534'062	\$1'124'369	United Arab Emirates	496'303	\$750'8
France	380'774	\$1'032'592	Belgium	36'353	\$687'2
Hungary	46'204	\$634'058	United States	129'691	\$573'7
Turkey	560'011	\$588'374	Ireland	117'140	\$435'0
Ukraine	435'561	\$563'940	Canada	194'998	\$426'8
United Kingdom	481'961	\$516'682	Rep. of Korea	171'475	\$406'C
ussian Federation	310'165	\$451'566	Singapore	195'078	\$397'4
Italy	179'867	\$435'066	Spain	153'818	\$391'1
Canada	155'311	\$428'941	Austria	121'029	\$377'9
Spain	224'860	\$428'932	Denmark	118'140	\$351'4
Chile	172'879	\$382'373	Philippines	342'646	\$336'2
Denmark	64'666	\$378'537	Russian Federation	234'654	\$335'7
Austria	89'085	\$322'187	Kuwait	141'816	\$315'2

Table 2. Top 20 poultry exporters & importers

Country	Export qty	Export value	Import qty	Import value	Re-export qty	Re-export value
	Qty (MT)	\$1,000 USD	Qty (MT)	\$1,000 USD	Qty (MT)	\$1,000 USD
Argentina	181'968	\$254'009	6'225	\$7'890		\$0
Australia	39'491	\$58'383	1'639	\$7'370		\$0
Brazil	4'036'458	\$5'817'681	5'171	\$10'378		\$0
Canada	155'311	\$428'941	194'998	\$426'828	128	\$119
Chile	172'879	\$382'373	6'685	\$171'746		\$O
China	428'401	\$1'470'360	1'553'941	\$3'501'247		\$0
China Hong Kong SAR	90'696	\$149'121	563'797	\$1'155'799		\$O
Colombia	5	\$23	95'875	\$97'857		\$O
Egypt	557	\$2'621	42'819	\$67'010		\$O
France	380'774	\$1'032'592	515'177	\$1'543'701		\$0
Germany	612'331	\$1'705'424	801'853	\$2'117'439		\$O
Honduras	1'433	\$2'161	19'970	\$36'091		\$0
India	3'662	\$5'367	203	\$262		\$0
Italy	179'867	\$435'066	83'285	\$208'401		\$0
Mexico	3'921	\$16'232	972'925	\$1'057'276		\$O
Morocco	991	\$1'234	4'625	\$12'883		\$0
Netherlands	1'565'569	\$3'081'569	690'112	\$1'460'227		\$O
New Zealand	12'142	\$26'485	583	\$2'775		\$0
Nicaragua	99	\$79	9'511	\$13'613		\$O
Nigeria	597	\$794	629	\$421		\$0
Panama	23	\$17	29'082	\$22'822		\$O
Poland	1'636'962	\$3'140'133	75'861	\$140'835		\$0
Russian Federation	310'165	\$451'566	234'654	\$335'762		\$0
South Africa	54'317	\$77'158	485'426	\$314'528	284	\$358
Thailand	896'927	\$3'356'696	1'963	\$7'105		\$0
Turkey	560'011	\$588'374	44'589	\$37'421		\$0
UK	481'961	\$516'682	768'903	\$2'678'802		\$0
USA	3'865'985	\$4'106'311	129'691	\$573'785	36949	\$35'828
IPC members	15'673'503	\$27'107'453	7'340'195	\$16'010'273	37'361	\$36'305
World	18'210'000	\$32'830'000	18'210'000	\$32'830'00		

Sources: UNFAO Comtrade for 2020, Codes: 0207, 160231, 160232

Table 3. IPC poultry exporters & importers

**DECISION INNOVATION SOLUTIONS** GLOBAL MACROECONOMIC INDICATORS FOR THE POULTRY MEAT INDUSTRY

A map of the major trade flows (poultry flows shown indicate poultry global trade represents 19% of meat global trade) is in Figure 14.

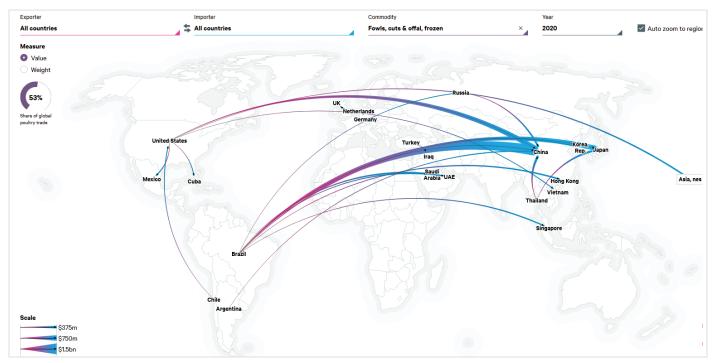


Figure 14. Major global poultry trade flows, 2020

A note about trade data for all Countries:

Data for all export and import figures (for example, Table 3) for all countries included in this report was sourced from the UN Comtrade Database. The Harmonized System (HS) commodity codes included in these figures were code numbers: 0207<sup>4</sup>, 160231<sup>5</sup>, and 160232<sup>6</sup>. In contrast, all the trade flow charts (for example, Figure 14) for all countries, which were sourced from Resource Trade Earth, use a different description of commodities<sup>7</sup>.

<sup>4</sup> HS code 0207= Meat and edible offal of poultry; of the poultry of heading no. 0105, (i.e., fowls of the species Gallus domesticus), fresh, chilled or frozen.

<sup>5</sup> HS code 160231= Meat preparations; of turkeys, prepared or preserved meat or meat offal (excluding livers and homogenised preparations).

<sup>6</sup> HS code 160232= Meat preparations; of the poultry of heading no. 0105, (i.e., of fowls of the species Gallus domesticus).

<sup>7</sup> Commodities used in the trade flows graphics, which were sourced from "Resource Trade Earth" include the following: Ducks geese, not cut fresh; ducks geese, not cut frozen; fatty livers of ducks, geese or guinea fowls, fresh or chilled; fowls cuts & offal, fresh; fowls cuts & offal, frozen; fowls, domestic, not cut in pieces, fresh or chilled; fowls, domestic, not cut in pieces, fresh or chilled; fowls, domestic, not cut in pieces, frozen; turkey cuts & offal, frozen; turkey cuts & offal, frozen; turkey cuts & offal, frozen; turkey, not cut, fresh; turkeys, not cut, frozen.

# 4. Regional and Country Data

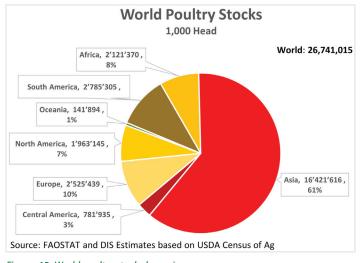


Figure 15. World poultry stocks by region

Of the 26.7 billion<sup>8</sup> chickens, ducks, and turkeys on farms around the world, Asia has 16.4 billion of them, South America 2.8 billion, Europe 2.5 billion, Africa 2.1 billion, North America 2.0 billion, Central America 782 million, and Oceania 142 million (Figure 15).

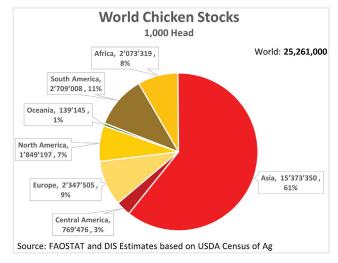
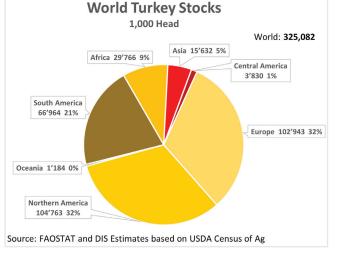


Figure 16. World chicken stocks by region

Of the 25.3 billion chickens on farms around the world, Asia has 15.4 billion of them, South America 2.7 billion, Europe 2.3 billion, Africa 2.1 billion, North America 1.8 billion, Central America 769 million, and Oceania 139 million (Figure 16).





Of the 325 million turkeys on farms, Asia has 15.6 million of them, South America 67 million, Europe 103 million, Africa 29.8 million, North America 104.8 million, Central America 3.8 million, and Oceania 1.2 million (Figure 17).

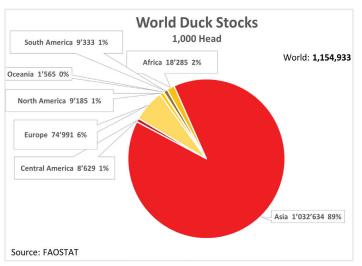


Figure 18. World duck stocks by region

Of the 1.2 billion ducks on farms, Asia has 1.0 billion of them, South America 9.3 million, Europe 75 million, Africa 18.3 million, North America 9.2 million, Central America 8.6 million, and Oceania 1.6 million (Figure 18).

<sup>8</sup> This number is based on the FAOSTAT data for stocks except for U.S. chickens and turkeys for which the USDA 2017 Census of Agriculture stocks numbers were adjusted to 2020 levels. The FAOSTAT stocks numbers for U.S. chickens and turkeys are production numbers and overstate U.S., North American and world stocks chicken levels by 7.544 billion birds and turkey stocks by 128.697 million birds.

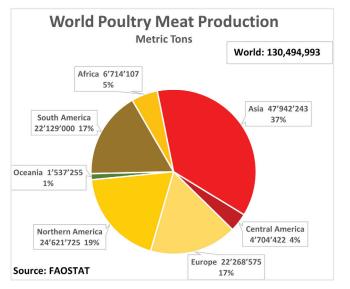


Figure 19. World poultry meat production by region

Of the 130.5 million metric tons of poultry meat produced, Asia produces 37%, Europe 17%, North America 19%, South America 17%, Africa 5%, Central America 4%, and Oceania 1% (Figure 19).

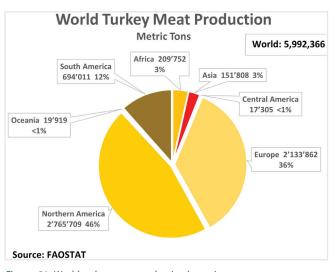


Figure 21. World turkey meat production by region

Of the 6 million metric tons of turkey meat produced, Asia produces 3%, Europe 36%, North America 46%, South America 12%, Africa 3%, and Central American and Oceania less than 1% (Figure 21).

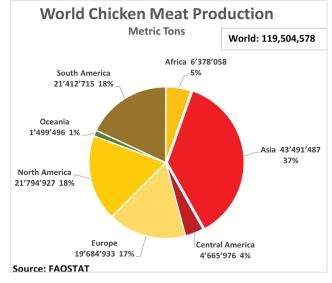
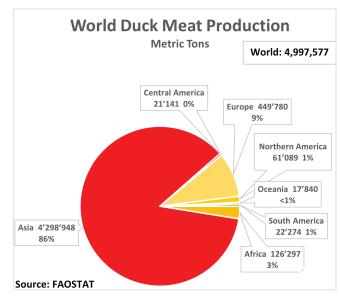


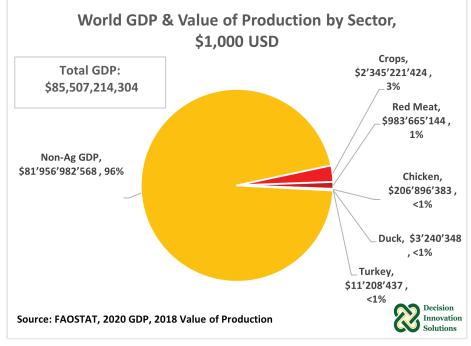
Figure 20. World chicken meat production by region

Of the 119.5 million metric tons of chicken meat produced, Asia produces 37%, Europe 17%, North America 18%, South America 18%, Africa 5%, Central America 4%, and Oceania 1% (Figure 20).



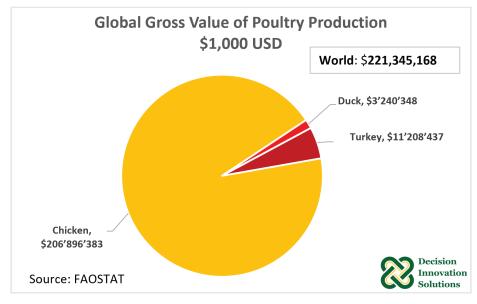


Of the 5.0 million metric tons of duck meat produced, Asia produces 86%, Europe 9%, North America 1%, South America 1%, Africa 3%, and Oceania less than 1% (Figure 22).



As shown in Figure 23, world GDP was \$85.5 trillion. The gross value of production of the ag sector was \$3.5 trillion, with crops accounting for \$2.3 trillion, red meat \$984 billion, and poultry \$221 billion.

Figure 23. World GDP value of production by sector



Asia produces 42% of the\$221.3 billion in global gross value of poultry production. Asia is followed by North America with 18%, Europe with 16%, South America with 13%, Central America with 4%, and Oceania with 1% (Figure 24).

Figure 24. Global gross value of poultry production