4.5 Africa

4.5.1 Regional Demographics and Poultry Stocks

The African broiler industry has 30.3 million farms with 115,872 (<1%) of those being commercial farms and 30 million (99.8%) being household or micro-producer farms (Figure 173). African broiler farms have stocks of 2.1 billion chickens with 83.0% being on commercial farms and 17.0% being on household or micro-producer farms. The average size of commercial broiler farms is 28,646 head. The average size of the household or micro-producer farms is 10 head. There are 99,046 duck farms in Africa with an inventory of 18.2 million head. The average size duck farm is 185 head. There are 22,266 turkey farms in Africa with 29.8 million head of inventory. The average turkey farm has an inventory of 1,337 head.

Chicken stocks have increased 28%, duck stocks have increased 2%, and turkey stocks are up 38.5% (Figure 174).

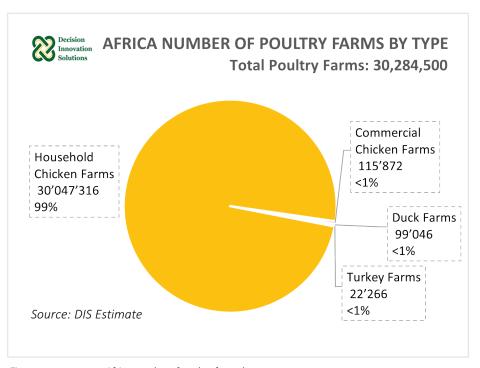


Figure 173. Africa number of poultry farms by type

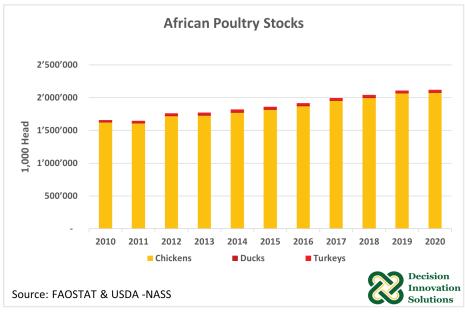


Figure 174. Africa poultry stocks

4.5.2 Regional Economics

Africa's total GDP was an estimated \$2.37 trillion in 2020. Agricultural sectors contributed an estimated 11 percent of GDP, with the crop sector valued at \$196.6 billion. Red meat was the second highest valued agricultural sector at \$55 billion. Chicken production was the largest contributor to poultry production and valued at \$12.1 billion (Figure 175).

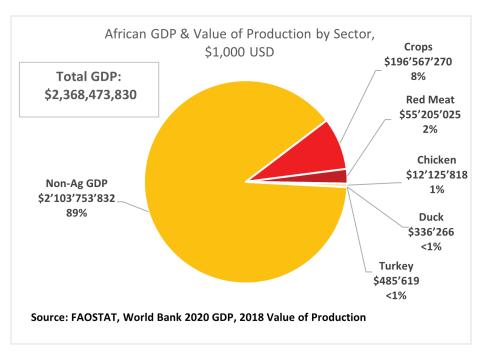


Figure 175. Africa GDP & value of production by sector

4.5.3 Regional Poultry Production Volume and Value

African poultry production has increased 27.4% since 2010. Africa produced 6.7 million metric tons of poultry meat in 2020 with 95% being chicken meat, 2% being duck meat, and 3% being turkey meat (Figure 176).

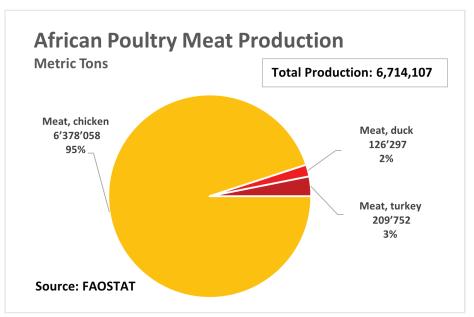


Figure 176. Africa poultry meat production

African value of poultry production in 2020 was \$12.9 billion with 94% due to chicken production, 4% due to turkey production and 2% due to duck production (Figure 177).

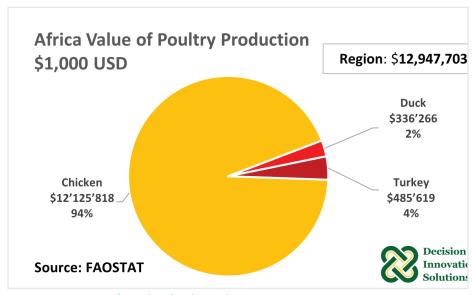


Figure 177. Africa value of poultry production

4.5.4 Regional Cost of Production

Cost of production data from 2012 for Morocco, Nigeria 2020, and 2021 for South Africa indicates that similarly to the rest of the countries included in this study, feed is the largest cost in poultry production. This input accounted for 68% of total cost in these countries, on average (see Figure 178).

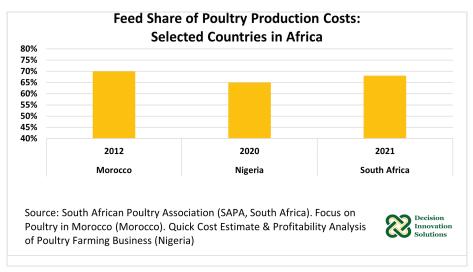


Figure 178. Feed share of poultry production costs: Africa

4.5.4.1 Egypt

4.5.4.2 Demographics

Egypt has about 3,845,557 poultry farms. Most of these poultry farms are household or micro-producer farms accounting for 99.6% or 3,829,769 of the total. Approximately 0.19%, or 14,698 poultry farms, were commercial chicken farms. Duck farms accounted for 0.01% or 814. The remaining 277 poultry farms were turkey farms (Figure 179). The average number of turkeys per farm was 12,355 head. Duck farms had an average 9,563 head. Commercial farms had an average 7,162 head. Household chicken farms had an average 16 head.

Egypt's poultry consumption and production have more than doubled since 2010. In 2021, poultry production totaled 1.5 million metric tons, approximately 81% higher than Egypt's poultry production in 2010 (see Figure 180). In 2021, Egypt consumed nearly 1.6 million metric tons of poultry, an estimated 61% increase compared to 2010.

The total number of poultry stocks was 178.2 million head. About 94% or 167 million head of Egypt's poultry stocks were chickens. Ducks accounted for 4% or 7.8 million head of the total poultry stocks in Egypt. Turkeys represented the remaining 2% (3.4 million head) of poultry stocks in Egypt. Since 2010, chicken

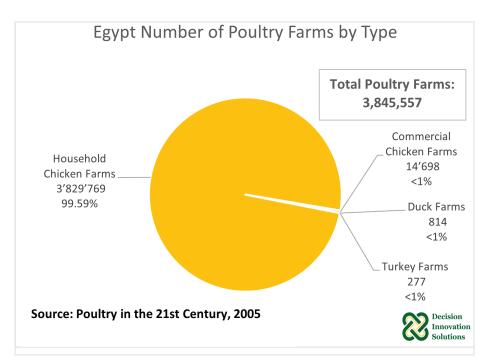


Figure 179. Egypt number of poultry farms by type

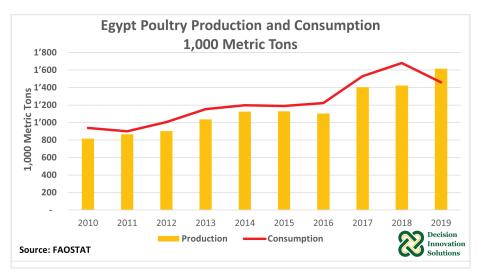


Figure 180. Egypt poultry production & consumption

stocks increased 61%, duck stocks decreased 11%, and turkey stocks increased 109% since 2010.

| EGYPT POULTRY STOCKS, SLAUGHTE | | | | |
|--------------------------------|-----------|--------|---------|-----------|
| 1,000 head | Chickens | Ducks | Turkeys | Total |
| Stocks | 167'039 | 7'781 | 3'417 | 178'237 |
| Producing Animals/Slaughtered | 1'007'352 | 28'990 | 2'748 | 1'039'090 |
| Production (1,000 MT) | 1'339 | 71 | 24 | 1'434 |
| Sources: FAO, 2020 | | | | |

Table 52. Egypt poultry stocks, slaughter & production

Poultry slaughter in Egypt totaled 1.03 billion in 2020 (see Table 52). An estimated 97% or 1.01 billion head of poultry slaughter was chickens. Duck slaughter outnumbered turkey slaughter and represented nearly 29 million head of poultry slaughter. Approximately, 2.7 million turkeys were slaughtered in 2020. Poultry slaughter in all sectors increased compared to 2010. Chicken slaughter increased 86%, duck slaughter increased 10%, and turkey slaughter increased 121%.

Poultry production included 1.3 million metric tons of chicken, 71,000 metric tons of duck, and 24,000 metric tons of turkey. Compared to 2010, chicken production was 80% higher in 2020, duck production was 7% higher, and turkey production was 243% higher in 2020.

4.5.4.3 GDP and Value of Production

The total value of GDP in Egypt was estimated at \$363.1 billion in 2020. Approximately 6% of the total GDP was represented by agricultural production. Crop production was valued at \$11.1 billion or 3% of the total GDP. Red meat production was the next largest share of agricultural production representing 2% or \$6.8 billion. Representing about 1% or \$1.9 billion of the total GDP was chicken production. Duck production was valued at \$172.0 million or less than 1% of the total GDP. Turkey production also represented less than 1% of the total GDP. Turkey production was valued at \$33.7 million (Figure 181).

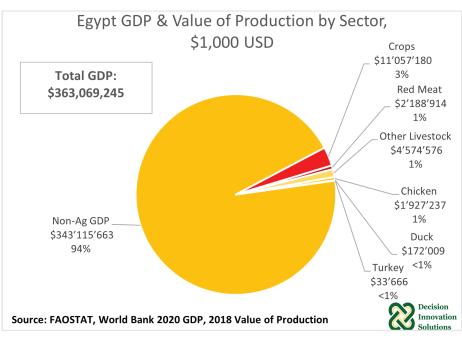


Figure 181. Egypt GDP & value of production by sector

The combined (direct and indirect) effects of agricultural production in Egypt are estimated to be \$31.2 billion. Of this amount, \$4.5 billion comes from the poultry industry, with \$4.1 billion from chicken meat production, \$366 million from duck production, and \$72 million from turkey production. Agriculture pays a net value of \$61 million in taxes, \$7 million of which is estimated to be from the poultry industry (Table 53).

| | Direct | Indirect | Total | Taxes paid* |
|-----------------|--------------|--------------|--------------|-------------|
| | Direct | mairect | IUtai | laxes paid |
| All agriculture | \$19'953'582 | \$11'291'521 | \$31'245'103 | \$61'248 |
| Livestock | \$8'896'402 | \$5'034'380 | \$13'930'782 | \$27'308 |
| Poultry | \$2'132'912 | \$2'408'176 | \$4'541'088 | \$6'776 |
| Chicken | \$1'927'237 | \$2'175'958 | \$4'103'195 | \$6'123 |
| Duck | \$172'009 | \$194'208 | \$366'217 | \$546 |
| Turkey | \$33'666 | \$38'011 | \$71'677 | \$107 |

Table 53. Economic effects - Egypt

4.5.4.4 Labor

The estimated total number of people in Egypt's labor force was 27.9 million in 2020 (Table 54). About 81%, or 22.7 million of the labor force were male, compared to only 5.2 million females. The non-agricultural sectors included nearly 22.1 million individuals.

Labor in the agricultural sector totaled to 5.7 million. Approximately 626,345 people were employed in the poultry production industry. Within this industry, chicken production dominated with approximately 565,947 workers.

| AGRICULTURAL LABOR FORCE CHARACTERISTICS - EGYPT | | | | |
|--|------------|-----------|------------|--|
| | Total | Female | Male | |
| Total Country Labor | 27'870'211 | 5'211'134 | 22'659'077 | |
| Non-Agricultural Labor | 22'144'441 | 4'066'718 | 18'077'723 | |
| Agricultural Labor | 5'725'770 | 1'144'416 | 4'581'354 | |
| Total Non-Poultry Agricultural Labor | 5'099'425 | | | |
| Total Poultry Labor | 626'345 | | | |
| Chicken Labor | 565'947 | | | |
| Turkey Labor | 9'886 | | | |
| Other Poultry Labor | 50'512 | | | |
| | | Wages (\$ | 1,000 USD) | |
| Total Meat Processing Labor | 9'007 | \$31 | 1'970 | |
| Livestock Processing Labor | 4'562 | \$16 | 5'192 | |
| Poultry Processing Labor | 4'445 | \$15 | 5'778 | |
| Source: ILO 2020, World Bank 2020, UNIDO Database, INDSTAT 4 2021, ISIC Revision 3 | | | | |

Table 54. Agricultural labor force characteristics - Egypt

The next largest share of the poultry production industry was "other" poultry labor with 50.512 individuals. Turkey production was the smallest within the poultry production industry with only 9,886 workers.

The total number of meat processing jobs in Egypt was 9,007 during 2020. Wages earned in meat processing totaled nearly \$32.0 billion. Livestock meat processing accounted 51% or 4,562 meat processing jobs and \$16.2 million in wages earned. Poultry meat processing accounted for 4,445 jobs and \$15.8 million in wages earned.

4.5.4.5 Trade

Kuwait, United Arab Emirates, and China, Hong Kong SAR were the largest three markets for Egypt's poultry exports in 2020. Egypt exported \$1.9 in poultry meat to Kuwait. At the same time, Egypt's value of poultry exported to United Arab Emirates and China, Hong Kong SAR was estimated at \$425,760 and \$60,973, correspondingly (see Figure 182 and Figure 183).

Egypt Top-10 Poultry Exports Trade Value (\$1,000 USD)

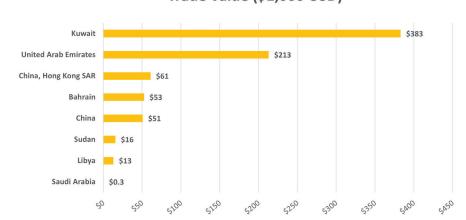


Figure 182. Egypt top 10 poultry exports, trade value

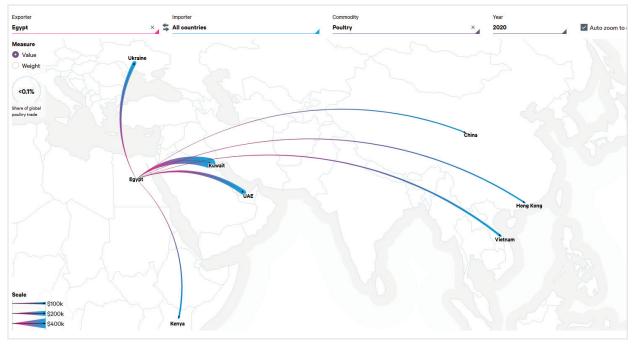
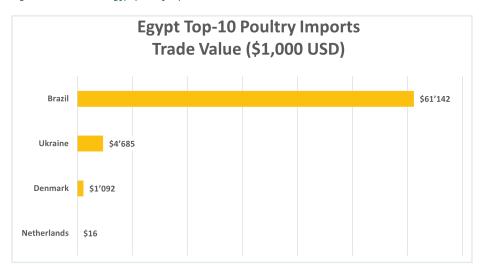


Figure 183. Egypt poultry export flows



The main supplier of poultry meat to Egypt was Brazil (\$61.1 million). At a distant second and third place were Ukraine (\$4.7 million) and Denmark (\$1.1 million). France supplied an estimated \$53,257 of poultry meat to Egypt in 2020 (see Figure 184 and Figure 185).





4.5.4.6 Morocco

4.5.4.7 Demographics

The total number of poultry farms in Morocco were estimated at 8,513. Approximately, 90% of the poultry farms were commercial chicken farms, totaling to 7,627 commercial chicken operations. The average number of chickens on commercial chicken farms were 27,232 head. The remaining 10% or 885 of poultry farms were turkey farms. The average size of a turkey farm was 11,893 head.

Morocco's poultry production and consumption have both increased since 2010. In 2019, poultry production totaled 841,562 metric tons, representing a 37% increase compared to 2010. Consumption of poultry has 19% from 626,066 metric tons in 2010, to 747,367 metric tons in 2019.

The total number of poultry stocks in Morocco were 218.2 million head in 2020. Chickens represented 95% (207.7 million head) of Morocco's poultry stocks. Turkeys accounted for the remaining 5% (10.5 million head) of poultry stocks in Morocco. Since 2010, chicken stocks increased 22%, and turkey stocks increased 17% in Morocco.

In 2020, poultry slaughter totaled 641.9 million head and was comprised of chickens and turkeys.

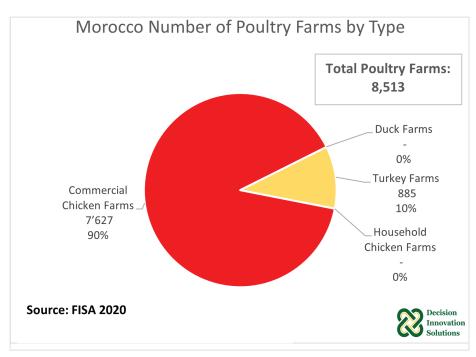


Figure 186. Morocco number of poultry farms by type

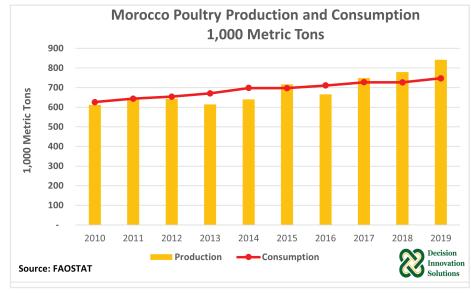


Figure 187. Morocco poultry production & consumption

An estimated 98% (630.2 million head) of poultry slaughter was chickens. The remaining 2% (11.7 million head) of Morocco's poultry slaughter was turkeys. Compared to 2010, Morocco's chicken and turkey slaughter increased by 33% and 11%, respectively. Morocco's poultry production in 2020 included 822,000 metric tons of chicken and 60,000 metric tons of turkey. Compared to 2010, Morocco's chicken and turkey production increased 47% and 15%, respectively.

| 1,000 head | Chickens | Ducks | Turkeys | Total |
|-------------------------------|----------|-------|---------|---------|
| Stocks | 207'696 | | 10'525 | 218'221 |
| Producing Animals/Slaughtered | 630'217 | | 11'706 | 641'923 |
| Production (1,000 MT) | 822 | | 60 | 882 |

Table 55. Morocco poultry stocks, slaughter & production

4.5.4.8 GDP and Value of Production

In 2020, the total value of GDP for Morocco was \$112.9 billion. Nonproduction agricultural sectors represented an estimated 88% or \$99.7 billion of the total GDP. Crop production represented 7% or \$7.4 billion. An estimated 4%, or \$4.4 million, was derived from red meat production in Morocco. Representing about 1% or \$1.2 million, chicken production was the largest contributor from the poultry production sector. Turkey production was less than 1%, or \$168.7 million of the total GDP (Figure 188).

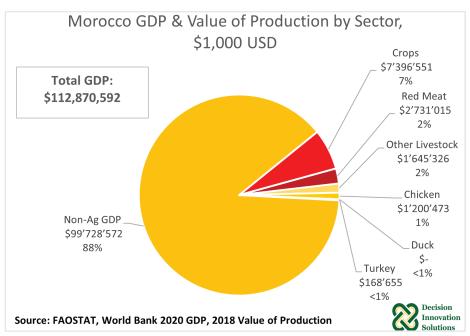


Figure 188. Morocco GDP & value of production by sector

| ECONOMIC EFFECTS - MOROCCO | Direct | Indirect | Total | Taxes paid* |
|--|--------------------------------|------------------|--------------|-----------------|
| | Direct | manect | IOLai | raxes paid |
| All agriculture | \$13'142'000 | \$9'612'098 | \$22'754'118 | \$89'180 |
| Livestock | \$5'745'469 | \$4'202'247 | \$9'947'716 | \$38'988 |
| Poultry | \$1'369'128 | \$1'605'987 | \$2'975'115 | \$11'453 |
| Chicken | \$1'200'473 | \$1'408'155 | \$2'608'628 | \$10'042 |
| Duck | | | | |
| Turkey | \$168'655 | \$197'832 | \$366'487 | \$1'411 |
| Source: FAOSTAT, OECD Input-Output Tables .*To | ıxes is equal to total taxes r | net of subsidies | | |

Table 56. Economic effects - Morocco

The combined (direct and indirect) effects of agricultural production in Morocco are estimated to be \$22.8 billion. Of this amount, \$3.0 billion comes from the poultry industry, with \$2.6 billion from chicken meat production and \$366 million from turkey production. Agriculture pays a net value of \$89 million in taxes, \$11 million of which is estimated to be from the poultry industry (Table 56).

4.5.4.9 Labor

The total number of people working in the labor force for Morocco was estimated at 11.7 million in 2020 (Table 57). Of that total, nearly 8.7 million (74%) of the labor force participants were male and 3.0 million (26%) were female. Nonagricultural labor accounted for an estimated 8.0 million jobs.

| AGRICULTURAL LABOR FORCE CHARACTERISTICS - MOROCCO | | | | | |
|--|------------|----------------|------------|--|--|
| | Total | Female | Male | | |
| Total Country Labor | 11'665'214 | 2'997'499 | 8'667'715 | | |
| Non-Agricultural Labor | 7'985'135 | 1'577'998 | 6'407'137 | | |
| Agricultural Labor | 3'680'079 | 1'419'501 | 2'260'578 | | |
| Total Non-Poultry Agricultural Labor | 3'294'844 | | | | |
| Total Poultry Labor | 385'235 | | | | |
| Chicken Labor | 337'780 | | | | |
| Turkey Labor | 47'455 | | | | |
| Other Poultry Labor | - | | | | |
| | | Wages (\$´ | 1,000 USD) | | |
| Total Meat Processing Labor | 5'004 | 5'004 \$22'426 | | | |
| Livestock Processing Labor | 3'333 | \$14'938 | | | |
| Poultry Processing Labor | 1'671 | 1'671 \$7'489 | | | |
| Source: ILO 2020, World Bank 2020, UNIDO Database, INDSTAT 4 2021, ISIC Revision 3 | | | | | |

Table 57. Agricultural labor force characteristics - Morocco

The remaining 3.7 million jobs were in agricultural sectors. The total number of people employed in the poultry production sector totaled 385,235 in 2020.

In 2020, an estimated 5,004 people were employed in Morocco's meat processing sector. The total wages earned from meat processing was \$22.4 million. Livestock meat processing was the largest share of meat processing with 3,333 jobs and \$15 million in wages earned. Poultry meat processing accounted for 1,671 jobs and \$7.5 million in wages earned.

4.5.4.10 Trade

Senegal, Guinea, and Liberia were the three largest markets for Morocco's poultry meat exports in 2020. Morocco's total poultry meat exports to these three markets reached over \$834,357 (see Figure 189 and Figure 190).

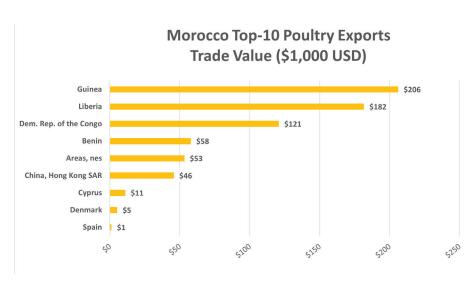
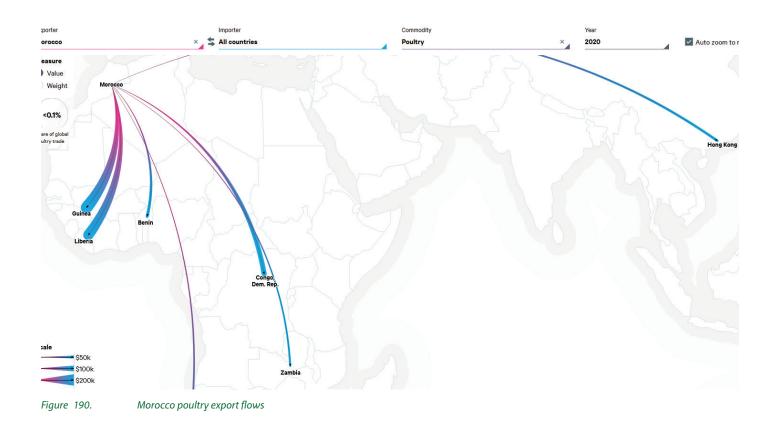
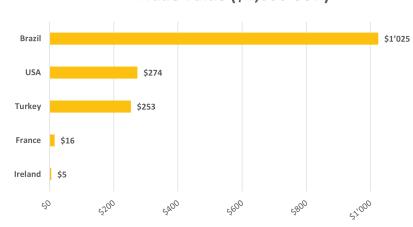


Figure 189. Morocco top 10 poultry exports, trade value



Morocco Top-10 Poultry Imports Trade Value (\$1,000 USD)



Most of Morocco's poultry imports were shipped from Brazil (\$6.2 million). At a smaller scale, Morocco also imported poultry meat from the Germany (\$2.8) and France (\$980,145) in 2020 (see Figure 191 and Figure 192).

53

Figure 191. Morocco top 10 poultry imports, trade value

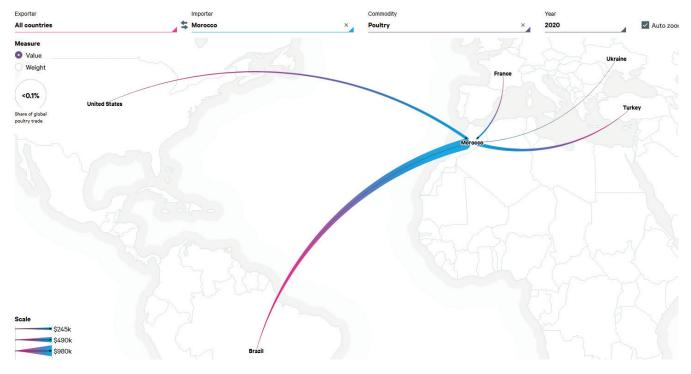


Figure 192. Morocco poultry import flows

4.5.5 Nigeria

4.5.5.1 Demographics

The total number of poultry farms in Nigeria was estimated at 6,617,000. Nearly all poultry farms were household or micro-producer chicken farms, totaling to 6,600,000 (see Figure 193). These household or micro-producer farms had an average 12 head. About 0.3% or 17,000 farms were commercial chicken farms. The average number of chickens per commercial farm was 5,184 head.

Nigeria's poultry production and consumption have decreased in comparison to 2010 volumes. Poultry production was 244,990 metric tons in 2010 and peaked at 260,130 metric tons in 2018 (Figure 194). In 2021, poultry production was 233,000 metric tons. Nigeria's poultry consumption increased between 2013 and 2018 but has fallen since. In 2021, consumption was 238,943 metric tons.

Chickens accounted for 100% of Nigeria's poultry stocks, slaughter, and production in 2020 (Table 58). Approximately, 166.1 million head of chickens comprised Nigeria's poultry stocks. Chicken production totaled an estimated 238,000 metric tons. An estimated 238.3 million head of chickens were slaughtered in 2020. Since 2010, chicken stocks in Nigeria decreased 14%, chicken slaughter declined 3%, and chicken production declined 3%.

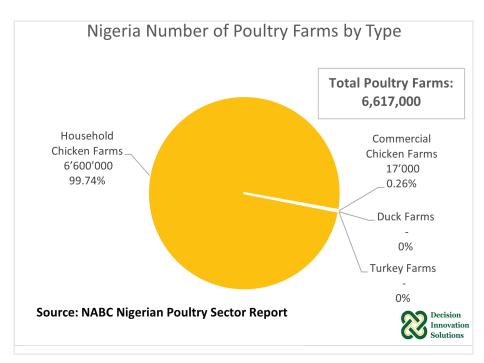


Figure 193. Nigeria number of poultry farms by type

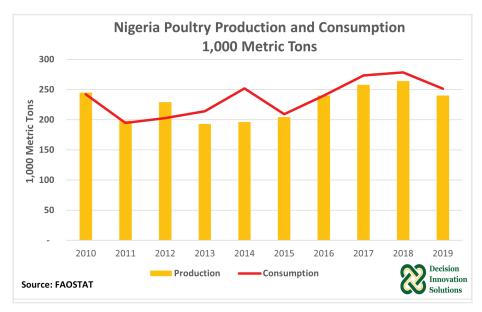


Figure 194. Nigeria poultry production & consumption

| NIGERIA POULTRY STOCKS, SLAUGH | | | | |
|--------------------------------|----------|-------|---------|---------|
| 1,000 head | Chickens | Ducks | Turkeys | Total |
| Stocks | 166'125 | | | 166'125 |
| Producing Animals/Slaughtered | 238'250 | | | 238'250 |
| Production (1,000 MT) | 238 | | | 238 |
| Sources: FAO, 2020 | | | | |

Table 58. Nigeria poultry stocks, slaughter & production

4.5.5.2 GDP and Value of Production

The value of GDP in Nigeria was estimated at \$432.3 billion in 2020. Approximately 94% or \$406.8 billion was derived from nonagricultural production sectors. Crop production represented 5.4% or \$23.5 billion of the total GDP. Red meat production was valued at \$1.8 billion. Contributions from the poultry production sector were derived from chicken production. Approximately, 0.07% or \$293.4 million was derived from chicken production (Figure 195).

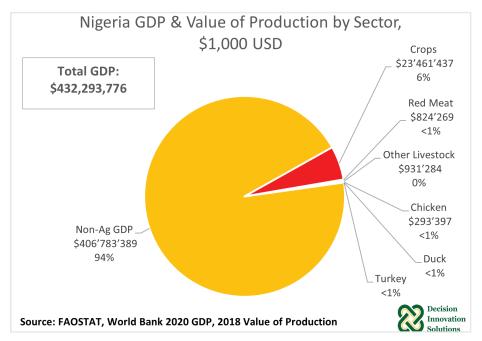


Figure 195. Nigeria GDP & value of production by sector

4.5.5.3 Labor

An estimated 62.3 million people worked in Nigeria's labor force in 2020. Approximately 56% or 34.7 million were male, and 44% or 27.5 million were female. More than 41.5 million people worked in nonagricultural sectors. Agricultural labor accounted for 33% of the total labor with 20.8 million workers. An estimated 233,897 people worked in poultry production (Table 59).

| AGRICULTURAL LABOR FORCE CHARACTERISTICS - NIGERIA | | | | | |
|--|--------------------|----------------------|------------|--|--|
| | Total | Female | Male | | |
| Total Country Labor | 62'259'271 | 27'532'192 | 34'727'079 | | |
| Non-Agricultural Labor | 41'477'969 | 20'478'598 | 20'999'371 | | |
| Agricultural Labor | 20'781'302 | 7'053'594 | 13'727'708 | | |
| Total Non-Poultry Agricultural Labor | 20'547'405 | | | | |
| Total Poultry Labor | 233'897 | | | | |
| Chicken Labor | 233'897 | | | | |
| Turkey Labor | - | | | | |
| Other Poultry Labor | - | | | | |
| | | Wages (\$1 | ,000 USD) | | |
| Total Meat Processing Labor | - | - | | | |
| Livestock Processing Labor | - | - | - | | |
| Poultry Processing Labor | - | - | - | | |
| Source: ILO 2020, World Bank 2020, UNIDO Date | abase, INDSTAT 4 2 | 021, ISIC Revision 3 | | | |

Table 59. Agricultural labor force characteristics - Nigeria

4.5.5.4 Cost of Production

Most of the costs of broiler production in Nigeria was related to feed cost at 65% in 2020. Day-old chick cost had a share of 20% of total cost of poultry production, while the remainder was due to other costs (see Figure 196).

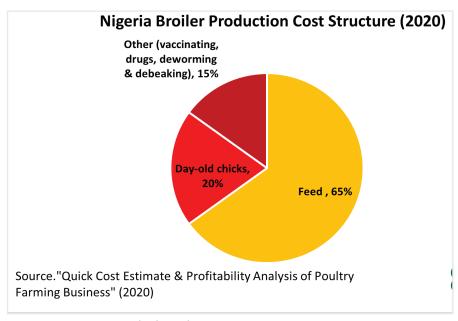


Figure 196. Nigeria broiler production cost structure

4.5.5.5 Trade

India was the largest market for Nigeria's poultry exports in 2020. Nigeria exported \$389,997 in poultry meat to India. The second and third largest markets for Nigeria's poultry exports were Japan, and Turkey, which imported \$188,513 and \$172,138 in poultry meat, respectively. Trade flows illustrated from the Resource Trade database reflect Ireland, Norway, and the United Arab Emirates were also destinations from Nigeria's poultry meat exports in 2020. Nigeria's poultry exports to Ireland, Norway, and the United Arab Emirates totaled less than \$1,000 in 2020 (see Figure 197 and Figure 198).

Nigeria Top-10 Poultry Exports Trade Value (\$1,000 USD)

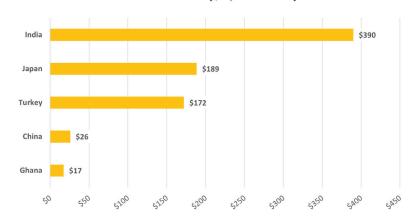


Figure 197. Nigeria top 10 poultry exports, trade value

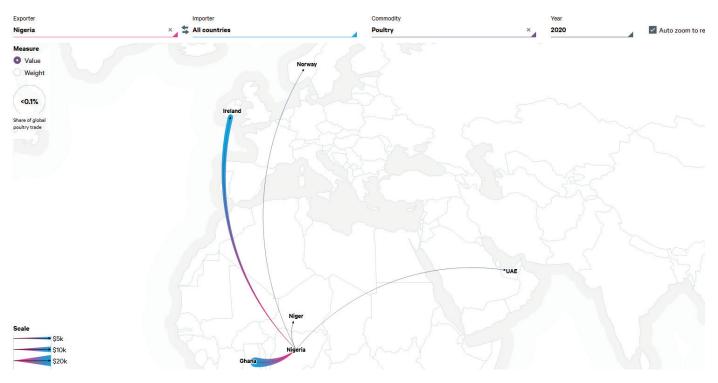


Figure 198. Nigeria poultry explort flows

In 2020, Nigeria's top five suppliers of poultry meat were Italy, South Africa, the USA, Germany, and the Netherlands. The total value of poultry meat exported by these five countries to Nigeria was estimated at \$323,000 (see Figure 199 and Figure 200). According to the USDA FAS, poultry meat imports are one of many agricultural commodities which are generally prevented from entry into the domestic market due to restrictive trade measures¹².

Nigeria Top-10 Poultry Imports Trade Value (\$1,000 USD)

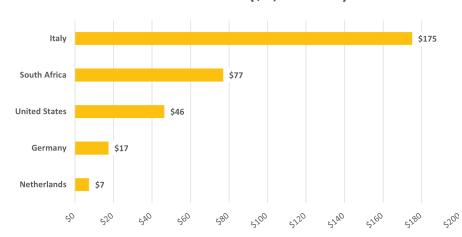


Figure 199. Nigeria top 10 poultry imports, trade value

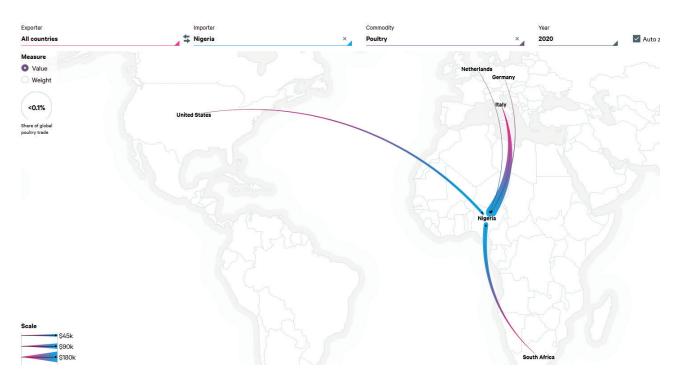


Figure 200. Nigeria poultry import flows

¹² USDA FAS. Food Service- Hotel Restaurant Institutional Report- Nigeria. January 28, 2022

4.5.6 South Africa

4.5.6.1 Demographics

In South Africa, approximately 4,954 poultry farms make up the poultry farming sector. Household or microproducer chicken farms represent 71% or 3,495 of the total (Figure 201). The average number of chickens on these micro-producer farms was 1,024 head. Commercial chicken farms are the next largest type of poultry farm, representing 18% or 909 of the total poultry farms. The average number of chickens on commercial chicken farms was 193,000 head. An estimated 6% or 300 poultry farms were duck farms. The average size of duck farms was 1,390. The remaining 5% or 250 poultry farms were turkey farms, with an average of 2,188 head.

Both poultry production and poultry consumption have steadily increased in South Africa (Figure 202). Compared to 2010, poultry production in South Africa was up 38%, from 1.5 million metric tons to 2.0 million metric tons by 2021. Poultry consumption increased 46%, from 1.7 million metric tons to 2.5 million metric tons in 2021.

In 2020, Approximately, 99% of poultry stocks in South Africa were chickens. Turkeys (547,000 head) and ducks (417,000 head) were each less than 1% of South Africa's poultry stocks. Compared to 2010, chicken stocks decreased 9%, duck stocks increased 10%, and turkey stocks increased 5%.

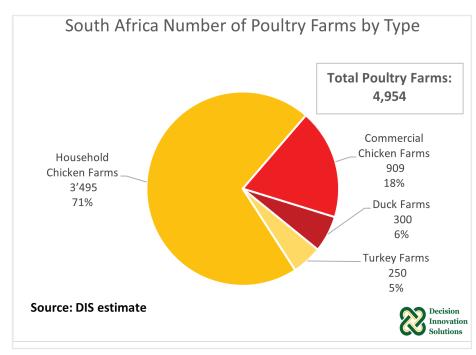


Figure 201. South Africa number of poultry farms by type

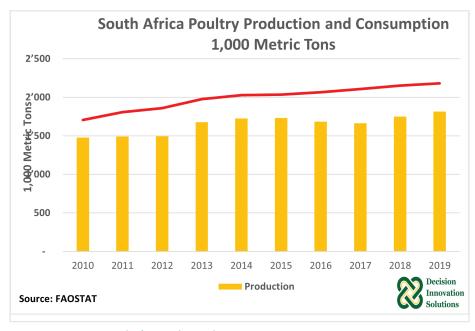


Figure 202. South Africa poultry production & consumption

| SOUTH AFRICA POULTRY STOCKS, S | | | | |
|--------------------------------|----------|-------|---------|---------|
| 1,000 head | Chickens | Ducks | Turkeys | Total |
| Stocks | 179'017 | 417 | 547 | 179'981 |
| Producing Animals/Slaughtered | 967'966 | 476 | 703 | 969'145 |
| Production (1,000 MT) | 1'873 | 1 | 6 | 1'880 |
| Sources: FAO, 2020 | | | | |

Table 60. South Africa poultry stocks, slaughter & production



South Africa's poultry slaughter totaled 969.1 million head (Table 60). The vast majority of South Africa's poultry slaughter were chickens. In fact, chickens accounted for 99.9% or 968.0 million head of poultry. Turkeys (703,000 head) and ducks (476,000) each accounted for less than 1% of poultry slaughter. South Africa's poultry stocks were mainly chickens in 2020. Compared to 2010, chicken slaughter decreased 7%, duck slaughter increased 9%, and turkey slaughter increased 7%.

Poultry production included 1.9 million metric tons of chicken, 6,000 metric tons of turkey, and 1,000 metric tons of duck. Compared to 2010, chicken production increased 27%, turkey production increased 9%, and duck production increased 9%.

4.5.6.2 GDP and Value of Production

In 2020, the GDP of South Africa was valued at \$301.9 billion. Approximately 93%, or \$280.2 billion of the total GDP was derived from non-agricultural production sectors. agricultural production sectors, the crop production sector was the largest agricultural in value with an estimated contribution of 4% or \$10.8 billion of the total GDP. Red meat production was the next largest representing about 2% or \$7.2 billion of the total GDP. Chicken production followed with an estimated contribution of 1% or \$3.7 billion of the total GDP. Approximately 0.002% or \$5.2 million of South Africa's total GDP is represented by turkey production.

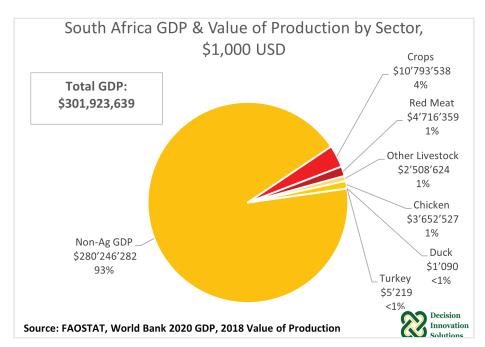


Figure 203. South Africa GDP & value of production by sector

Duck production represented an even smaller share (0.0004%) valued at \$1.1 million (Figure 203).

The combined (direct and indirect) effects of agricultural production in the USA are estimated to be \$53.9 billion. Of this amount, \$9.7 billion comes from the poultry industry, with \$9.6 billion from chicken meat production, \$2 million from duck production, and \$14 million from turkey production. Agriculture pays a net value of \$1.1 billion in taxes, \$143 million of which is estimated to be from the poultry industry (Table 61).

| ECONOMIC EFFECTS - SOUTH AFI | | | | |
|--|-------------------------------|------------------|--------------|-------------|
| | Direct | Indirect | Total | Taxes paid* |
| All agriculture | \$21'677'357 | \$32'227'846 | \$53'905'203 | \$1'106'087 |
| Livestock | \$10'883'819 | \$16'181'034 | \$27'064'853 | \$555'347 |
| Poultry | \$3'658'836 | \$6'000'491 | \$9'659'327 | \$143'297 |
| Chicken | \$3'652'527 | \$5'990'144 | \$9'642'671 | \$143'050 |
| Duck | \$1'090 | \$1'788 | \$2'878 | \$43 |
| Turkey | \$5'219 | \$8'559 | \$13'778 | \$204 |
| Source: FAOSTAT, OECD Input-Output Tables .*Ta | xes is equal to total taxes r | net of subsidies | | |

Table 61. Economic effects - South Africa

4.5.6.3 Labor

In South Africa, an estimated 21.3 million individuals were employed in the labor force (Table 62). Of that total, 20.5, million worked in non-agricultural sectors.

Approximately 859,427 worked in agricultural sectors. Within the agricultural sector, poultry production accounted for 146,273 jobs.

The meat processing sector accounted for 35,800 jobs and \$188.9 million in wages earned. Poultry processing dominated the sector by number of jobs.

| AGRICULTURAL LABOR FORCE CH | HARACTERIST | ICS - SOUTH | AFRICA | |
|--|-------------|--------------|------------|--|
| | Total | Female | Male | |
| Total Country Labor | 21'345'809 | 9'534'678 | 11'811'131 | |
| Non-Agricultural Labor | 20'486'382 | 9'262'905 | 11'223'477 | |
| Agricultural Labor | 859'427 | 271'773 | 587'654 | |
| Total Non-Poultry Agricultural Labor | 713'154 | | | |
| Total Poultry Labor | 146'273 | | | |
| Chicken Labor | 146'021 | | | |
| Turkey Labor | 209 | | | |
| Other Poultry Labor | 44 | | | |
| | | Wages (\$ | 1,000 USD) | |
| Total Meat Processing Labor | 35'800 | | | |
| Livestock Processing Labor | 10'800 | 00 \$106'384 | | |
| Poultry Processing Labor | 25'000 | \$82 | 2'530 | |
| Source: ILO 2020, World Bank 2020, UNIDO Database, INDSTAT 4 2021, ISIC Revision 3 | | | | |

Table 62. Agricultural labor force characteristics - South Africa

In 2020, there were 25,000 people employed in poultry processing. Collectively, wages earned was \$82.5 million for poultry processing. Livestock processing employed 10,800 people. Wages earned from livestock processing was \$106.4 million.

4.5.6.4 Cost of Production

The largest component of the cost of broiler production in South Africa was feed at 68% of total cost in 2021, followed by day-old chicks (20%), and labor (9.3%) (see Figure 204).

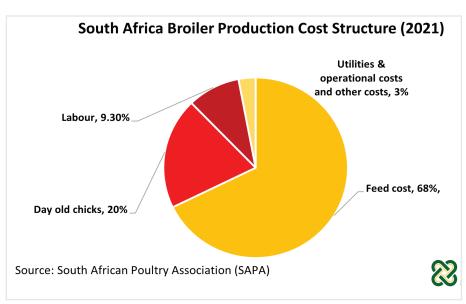


Figure 204. South Africa broiler production cost structure



The value of South Africa's poultry exports to its top ten markets was more than \$75.6 million in 2020. The three leading markets for South Africa poultry meat exports were Lesotho (\$28.7), Mozambique (\$23.6 million), and Namibia (\$12.3 million) (see Figure 205 and Figure 206).

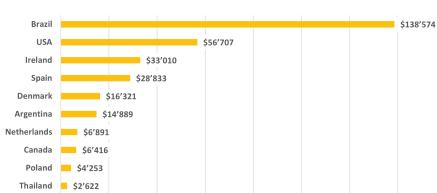


Figure 205. South Africa top 10 poultry exports, trade value



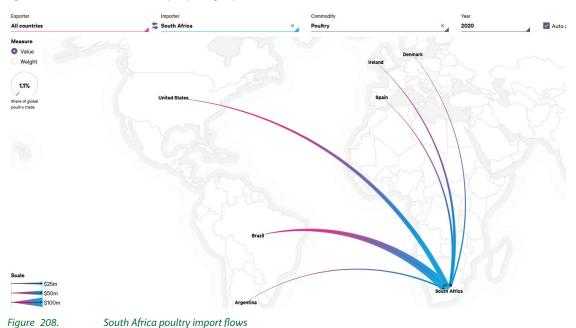
Figure 206. South Africa poultry export flows

South Africa Top-10 Poultry Imports Trade Value (\$1,000 USD)



In 2020, South Africa imported poultry meat mainly from Brazil (\$139.4 million). After Brazil, the other three largest sources of poultry meat for South Africa were the USA (\$56.7 million), Ireland (\$33.0 million) and Spain (\$28.8 million) (see Figure 207 and Figure 208). Increased tariffs and anti-dumping measures have been imposed sporadically since 2015 and as recently as January 2022 on bone-in and boneless chicken imports to South Africa¹³,14.





13 USDA FAS, Poultry and Products Annual- Republic of South Africa, Sept. 7, 2021 14 USDA FAS, South Africa Imposes Provisional Anti-Dumping Duties Against Bone-in Chicken Imports from Brazil Denmark Ireland Poland and Spain, Jan. 19, 2022