



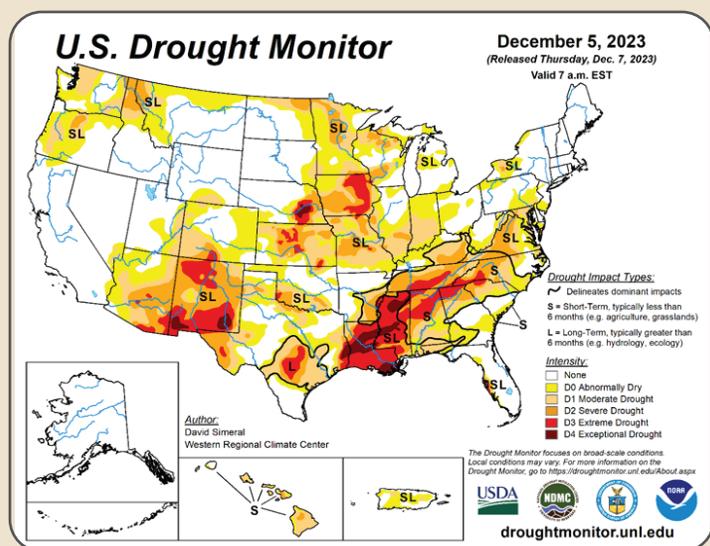
BROILER ECONOMICS

BY DR. PAUL AHO

US HARVEST SECURE - BRAZIL IN DOUBT

Despite persistent dry conditions in the US Corn Belt this year, a crop was harvested which exceeded that of last year and brought ending stocks up sharply for corn. Now attention shifts to Brazil where a dry spell during planting has observers worried. Recent rains helped, but the situation is still uncertain.

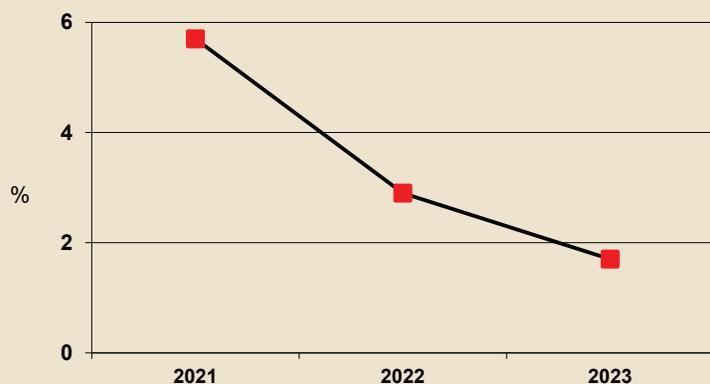
The US Drought monitor shows the Corn Belt in various stages of drought. However, no crop was ever lost due to a drought in December. What happens next spring will be much more important.



One consequence of the lack of rain this year was low water on the Mississippi river. The river stage at Memphis, Tennessee two months ago was minus 11 feet, a point at which shipping was disrupted. Now the river is at minus 6 feet, a much better level. It is interesting to note that the river stage on the Amazon in Brazil is unusually low due to lack of rain in Brazil.

Over the course of this crop year, grain prices are likely to move sideways or down. Grain use will be tempered by a slowing world economy and increased grain supply. Grain prices could, of course, rise from some unexpected consequence of wars or a persistent drought in Brazil.

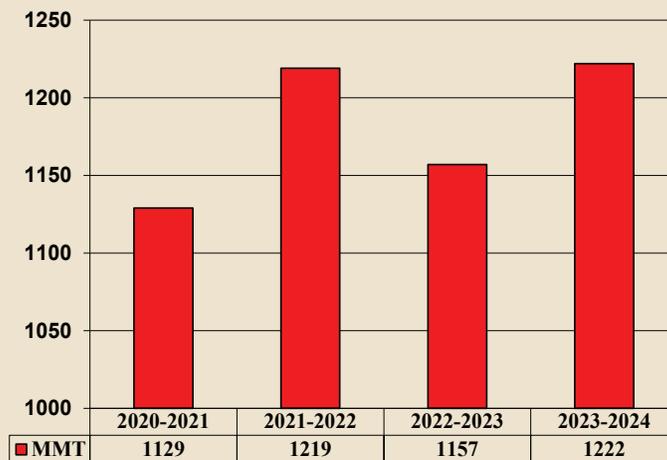
World Economic Growth - World Bank



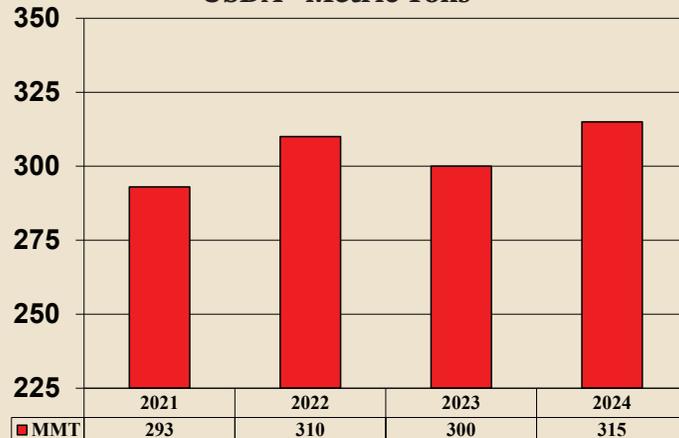
Corn

World corn production is expected to rise this crop year due to increases in the US and Argentina. With higher production, and higher ending inventory, prices can be expected to average less than in crop year 2022-2023. The current price of \$5 per bushel (\$200 per metric ton) is still a bit higher than the average price for crop year 2023-2024. The average price for last crop year was much higher; \$6.54 per bushel (\$262 per metric ton).

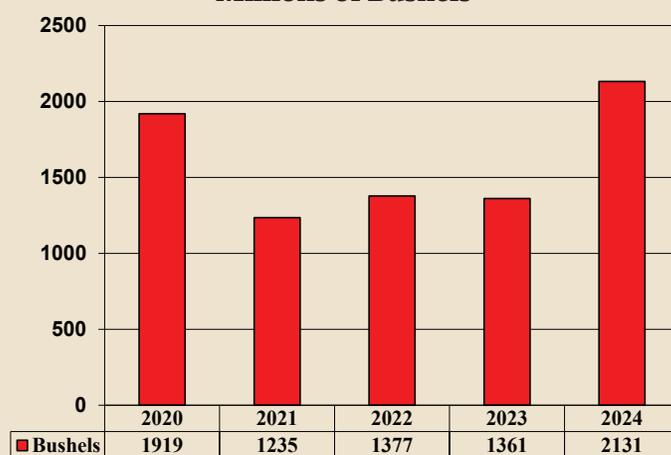
**World Production of Corn
Million Metric Tons**



**World Ending Stock of Corn
USDA - Metric Tons**



**US Ending Stock of Corn
Millions of Bushels**



**Argentina Corn Supply and Demand
WASDE December 2023 Million Metric Tons**

	2021-2022	2022-2023	2023-2024
Harvest	50	37	55
Imports	0	0	0
Exports	36	25	41
Ending Inventory	1	1	1

Note: Production in Argentina was lower last crop year due to drought.

**Brazil Corn Supply and Demand
WASDE December 2023 Million Metric Tons**

	2021-2022	2022-2023	2023-2024
Harvest	116	125	129
Imports	2	1	1
Exports	47	50	55
Ending Inventory	4	7	8

**Ukraine Corn Supply and Demand
WASDE December 2023 Million Metric Tons**

	2021-2022	2022-2023	2023-2024
Harvest	42	27	30
Imports	0	0	0
Exports	27	27	21
Ending Inventory	5	2	7

**China Corn Supply and Demand
WASDE December 2023 Million Metric Tons**

	2021-2022	2022-2023	2023-2024
Harvest	273	277	277
Imports	22	18	23
Exports	0	0	0
Ending Inventory	209	207	202

**US Corn Supply and Demand –
WASDE December 2023 Millions of Bushels**

	2021-2022	2022-2023	2023-2024
Harvest	15,074	13,715	15,234
Supply Total	16,333	15,130	16,621
Ethanol	5,328	5,176	5,325
Exports	2,471	1,661	2,100
Feed	5,717	5,549	5,650
Total Use	14,956	13,769	14,490
Ending Inventory	1,377	1,361	2,131
Farm Price	\$6.00	\$6.54	\$4.85

Soybeans

Production in South America increased 10 MMT last crop year despite a severe drought in Argentina. The enormous capacity of Brazil to increase soybean production negated the effect of the drought in Argentina. This crop year is likely to see an increase of 25 MMT in South America due mostly to higher production in Argentina.

Production of soybeans in South America (Argentina, Brazil and Paraguay) is now twice as high as production in the US (221 MMT versus 112 MMT). Therefore, important clues about what will happen to the future price of soybeans and SBM now come from South America not the US. Rising production in South America suggests that soybean meal prices, now around \$400 per ton, will average lower than \$400 in this current crop year (less than \$440 per metric ton).

**Argentina Soybean Supply and Demand
WASDE December 2023 Million Metric Tons**

	2021-2022	2022-2023	2023-2024
Harvest	44	25	48
Imports	3	9	6
Exports Beans + Meal	31	25	30
Ending Inventory	24	18	24

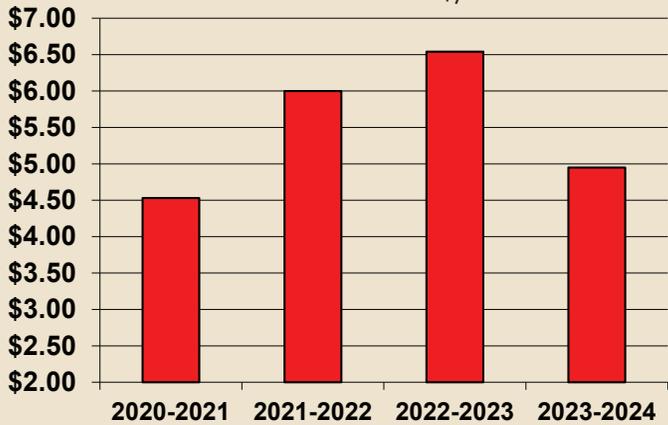
Note: Production in Argentina last crop year was lower due to drought.

**Brazil Soybean Supply and Demand
WASDE December 2023 Million Metric Tons**

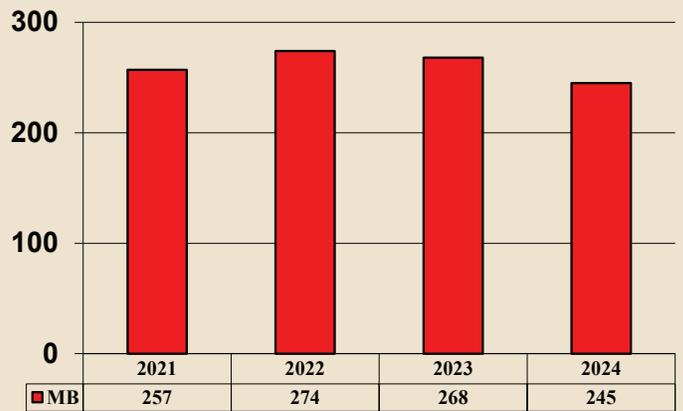
	2021-2022	2022-2023	2023-2024
Harvest	125	160	161
Imports	1	1	1
Exports Beans + Meal	100	116	121
Ending Inventory	21	35	37

US ending stock fell somewhat this crop year while world ending stocks were remarkably stable in the light of the severe drought in Argentina. Lower prices next crop year 2023-2024 is a reasonable expectation given the likelihood of increased production in Brazil and Argentina and the resulting higher world inventory.

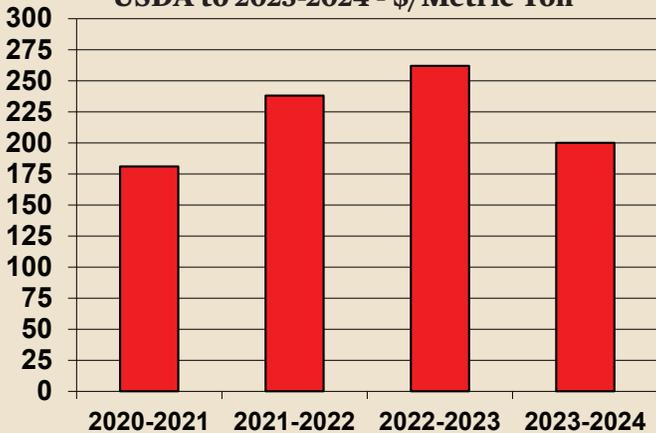
**Average US Farm Price of Corn
USDA to 2023-2024 - \$/Bushel**



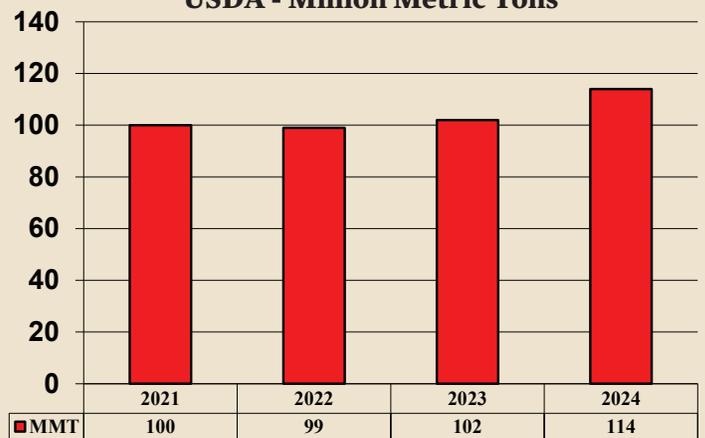
**US Ending Stock of Soybeans
USDA - Millions of Bushels**



**Average US Farm Price of Corn
USDA to 2023-2024 - \$/Metric Ton**



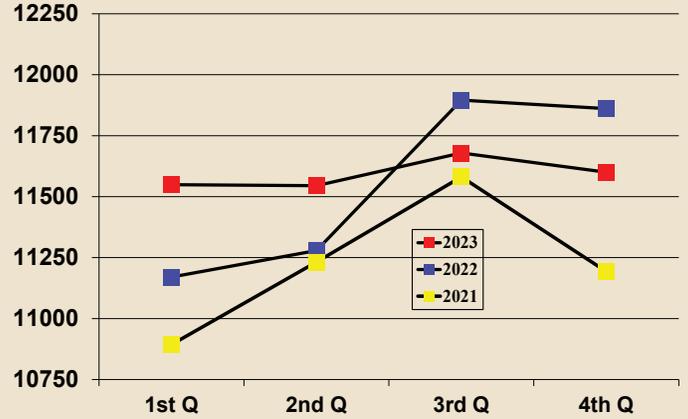
**World Ending Stock of Soybeans
USDA - Million Metric Tons**



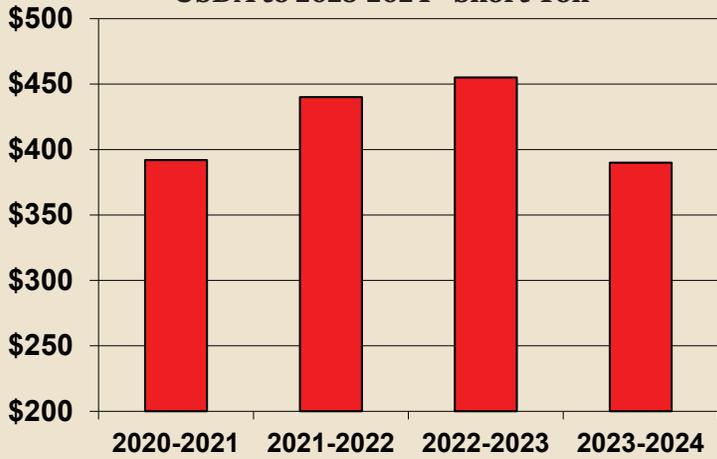
**US Soybeans – USDA - WASDE
December 2023 Millions of Bushels**

	2021-2022	2022-2023	2023-2024
Harvest	4,465	4,270	4,129
Total Supply	4,738	4,569	4,428
Export	2,158	1,992	1,755
Total Use	4,465	4,301	4,182
Ending Stock Inventory	274	268	245
Meal Price short ton	\$440	\$452	\$380

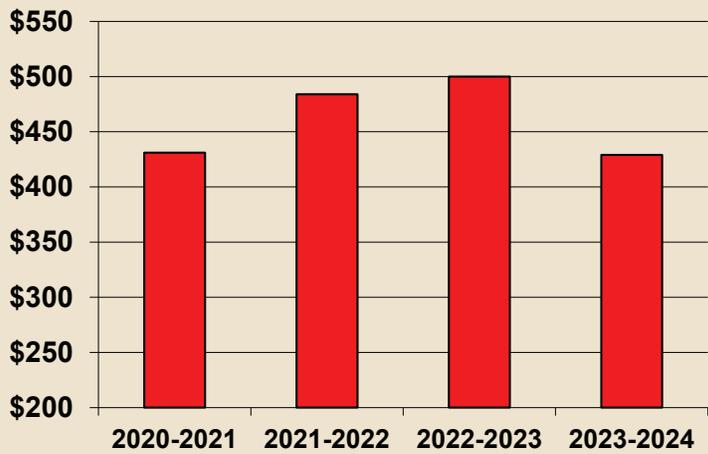
**US Quarterly Broiler Production
USDA - Million Pounds**



**Average US Crop Year Price of Soybean Meal
USDA to 2023-2024 - Short Ton**

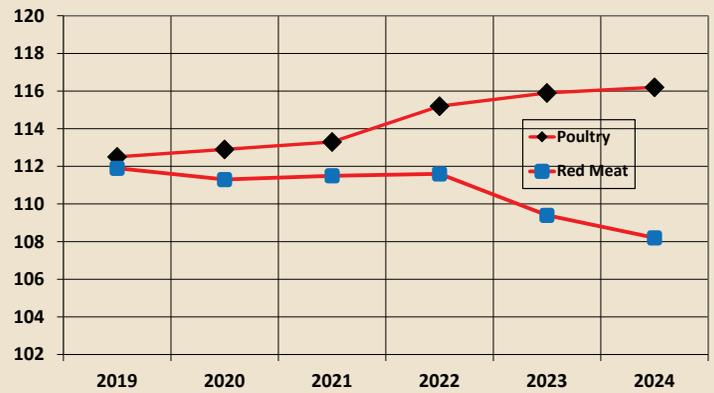


**Average US Crop Year Price of Soybean Meal
USDA to 2023-2024 - Metric Ton**



Poultry per capita consumption in the US has been rising recently while red meat per capita declined. This year, red meat per capita consumption is expected to fall by two pounds (1 kilo) while poultry consumption rises by one pound (1/2 kilo). Next year, poultry consumption is expected to stay the same while red meat consumption falls slightly. In 2024 the beef industry is likely to reach the bottom of the beef cycle. It is interesting to note that total meat consumption did not increase at all from 2019 to 2024.

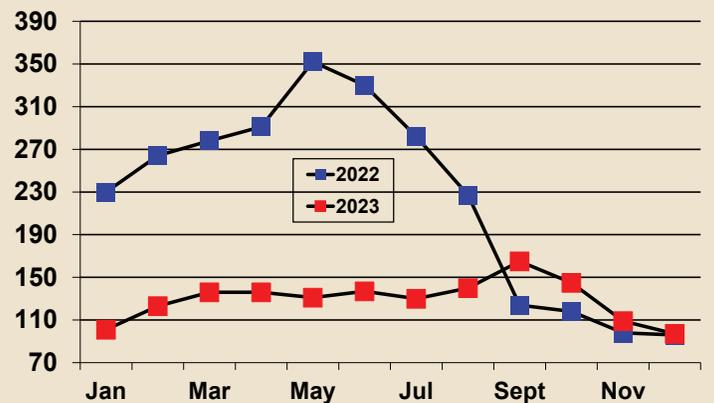
**US Per Capita Consumption of Red Meat & Poultry
USDA to 2024 - Pounds**



Deboned Breast

Deboned breast meat prices fell sharply in the last half of last year at a time when supply increased suddenly. This year, prices again fell significantly in the last half of the year despite lower overall chicken production. Although prices always fall seasonally at this time of year, prices similar to that of last year combined with reduced supply is a worrisome development because it theoretically indicates falling demand.

**Breast - 2022-2023
USDA - National Price - Cents/lb**

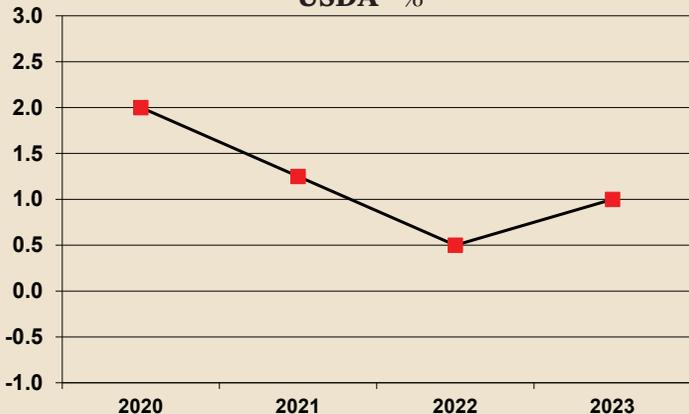


Chicken Industry

The world chicken industry expanded just 0.5% this year. Slow growth was due to a slowing world economy and recent relatively high grain prices in addition to some losses due to avian influenza. Production next year is expected to grow 1%.

US production accelerated in the last half of 2022 leading to a sharp decline in wholesale prices. The increase year over year between August and November of 2022 reached 5.8%. Low prices led to a decrease in year-to-year production in the last half of 2023. For all of 2023 the USDA pegs production growth at only 0.3%.

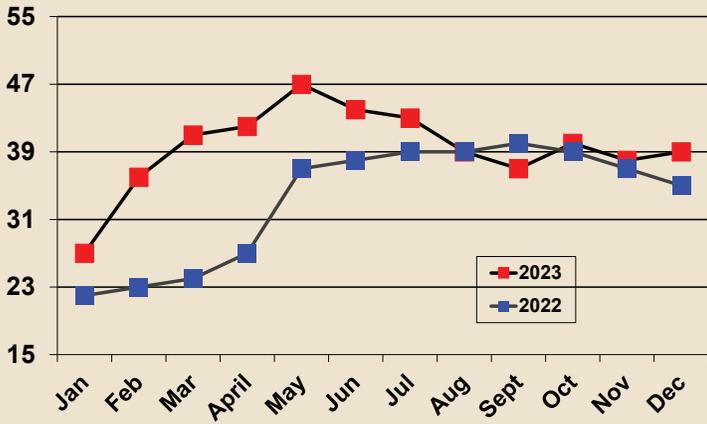
**Increase in World Broiler Chicken Production
USDA - %**



Frozen Leg Quarters for Export

Leg quarter prices rose this year from 23 cents (51 cents per kilo) at the beginning of the year to 40 cents now (88 cents per kilo). Good international demand for frozen leg quarters sent prices higher. The average price in 2024 can be expected to be similar to the average price in 2023.

**Leg Quarter Price - 2022-2023
USDA Frozen Bulk Export - Cents/lb**

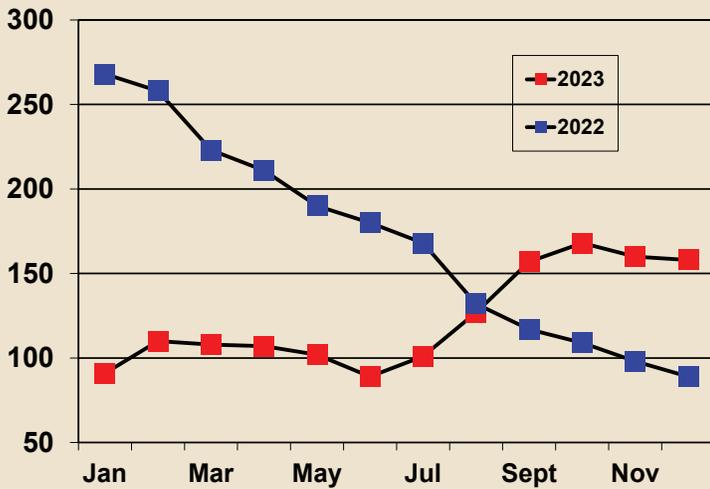


Note: Price series started by USDA in October of 2022

Wings

Wing prices also rose this year. From a price of just \$1 per pound (\$2.20 per kilo) at the beginning of the year, whole wings climbed to \$1.60 per pound (\$3.52 per kilo) now. Unlike deboned breast, wing prices have held up recently. However, wings can be expected to eventually fall if deboned breast prices remain low.

**Whole Wing Prices - 2022-2023
USDA National Price - Cents/lb**



Due to the low price of deboned breast, chicken production in the US is not currently profitable. However, profitability should return after the normal winter seasonal downturn in prices is over.

December 2023 US Measure

Frozen Leg Quarters	\$0.40 per pound
Deboned Breast	\$0.97/lb
Wings	\$1.58 per pound
Chicago Corn	\$4.86 per bushel
Soybean Meal	\$405/Short Ton
Total Wholesale Cost per pound	\$1.00
Revenue per pound	\$0.97
Gain (Loss) per pound	\$(0.03)

December 2023 Metric Measure

Frozen Leg Quarters	\$0.88 per kilo
Deboned Breast	\$2.13/kilo
Wings	\$3.48 per kilo
Chicago Corn	\$191 per ton
Soybean Meal	\$446 per ton
Total Wholesale Cost per kilo	\$2.19
Revenue per kilo	\$2.14
Gain (Loss) per kilo	\$(0.06)

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Dr. Paul Aho is an international agribusiness economist specializing in projects related to the poultry industry and has been a prolific writer in trade journals in both the United States and in Latin America. Dr. Aho now operates his own consulting company called "Poultry Perspective". In this role, he works around the world with poultry managers and government policy makers.

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