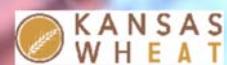


# Other Black Sea Agricultural Production

Allen M. Featherstone  
Kansas State University



## Map of Ukraine



# Countries Surrounding Ukraine

- Republic of Moldova
- Romania
- Hungary
- Slovakia
- Poland
- Belarus



## General Statistics

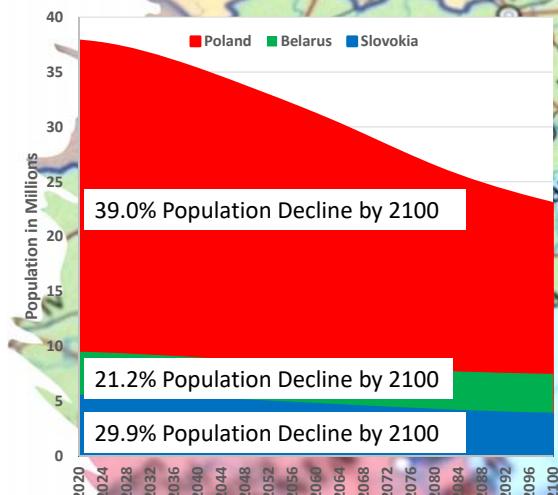
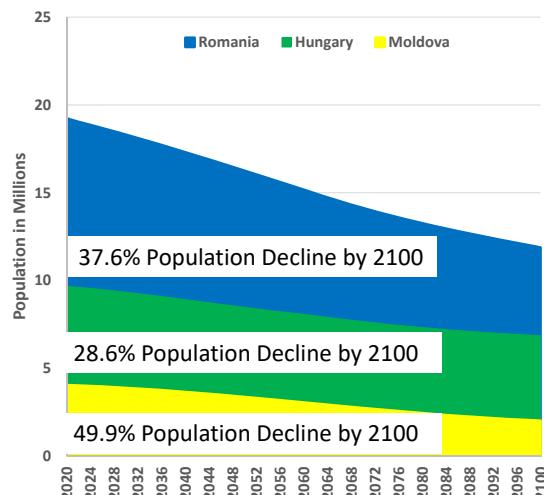
Country	Republic of Moldova	Romania	Hungary
Area (sq. km.)	33,851	238,391	93,028
Population (2021)	3,287,326	18,519,899	9,699,577
Population Density	97.1 persons/sq. km.	77.7 persons/sq. km.	104.3 persons/sq. km.
Real GDP per capita (2020)	\$12,300	\$28,800	\$31,000
% of GDP Agriculture	17.7%	4.2%	0.9%
Agriculture Share of labor (%)	32.3%	28.3%	0.7%
S&P Rating (most recent)	B3 Moody's	BBB-	AA+
Military Expenditures % of GDP	0.4%	2.0%	1.8%
Median Age	37.7	42.5	43.6
Life Expectancy Men	68.6	72.3	73.6
Life Expectancy Women	76.5	79.4	81.1
Fertility Rate (children per female)	1.59	1.63	1.48

# General Statistics

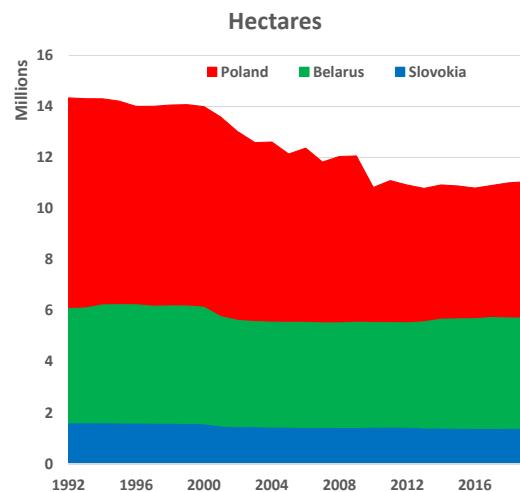
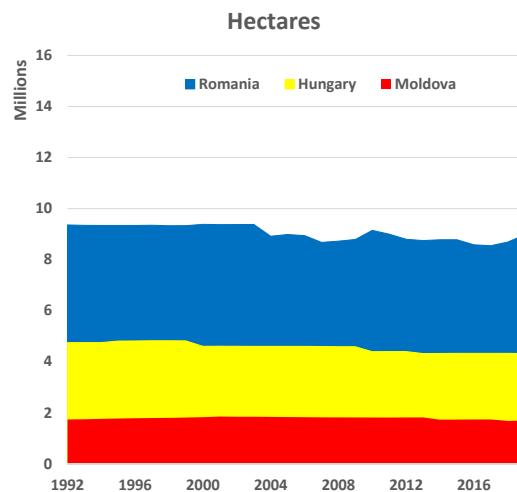
Country	Slovakia	Poland	Belarus
Area (sq. km.)	49,035	312,685	207,600
Population (2021)	5,431,252	38,093,101	9,413,505
Population Density	110.8 persons/sq. km.	77.7 persons/sq. km.	45.3 persons/sq. km.
Real GDP per capita (2020)	\$30,300	\$32,300	\$19,100
% of GDP Agriculture	3.8%	2.4%	8.1%
Agriculture Share of labor (%)	1.7%	11.5%	9.7%
S&P Rating (most recent)	A+	A-	B
Military Expenditures % of GDP	0.4%	2.3%	1.5%
Median Age	41.8	43.6	40.9
Life Expectancy Men	74.8	75.0	68.9
Life Expectancy Women	82.0	82.7	80.0
Fertility Rate (children per female)	1.46	1.40	1.51



## Population Projections until 2100



## Other Black Sea Region Arable Land

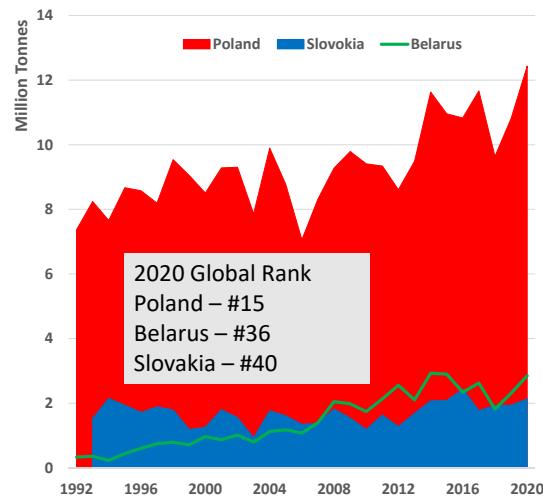
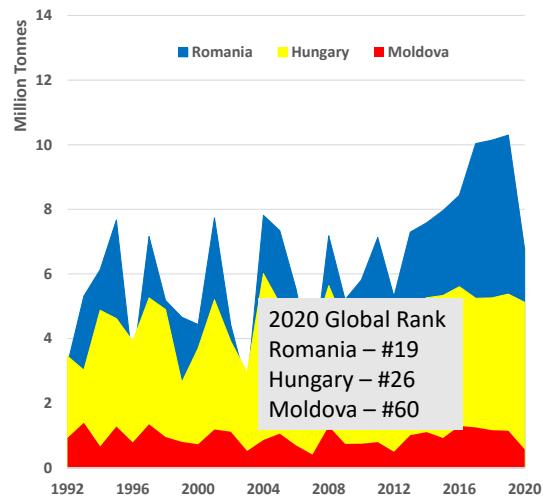


## 2019 Global Arable Land

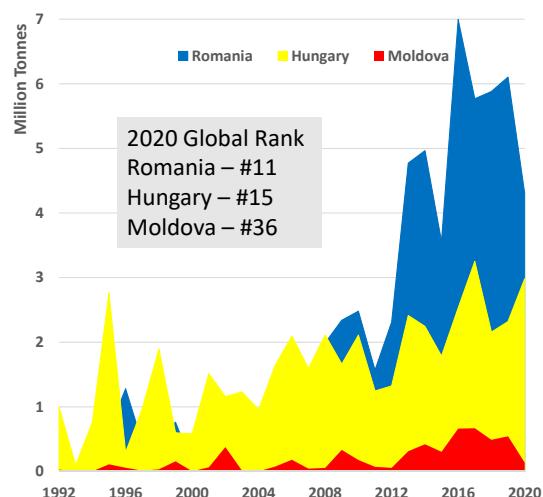
Country	Rank	Percent of Global Land
Russia Federation	#3	8.8%
Ukraine	#8	2.4%
Poland	#27	0.8%
Romania	#28	0.6%
Belarus	#43	0.4%
Hungary	#52	0.3%
Republic of Moldova	#87	0.1%
Slovakia	#93	0.1%



## Other Black Sea Region Wheat Production



## Other Black Sea Region Wheat Exports



## Other Black Sea Region Wheat Summary

Country	Belarus	Hungary	Moldova	Poland	Romania	Slovakia
Production (tonnes)	2,848,391	5,121,480	569,735	12,433,210	6,754,530	2,133,330
% of Global Production	0.4%	0.7%	0.1%	1.6%	0.9%	0.3%
Exports (tonnes)	21,684	2,979,320	135,870	4,689,130	4,304,783	1,274,123
% of Global Exports	0.0%	1.5%	0.1%	2.4%	2.2%	0.1%
Exports as % of Production	0.8%	58.2%	23.8%	37.7%	63.7%	59.7%

Total Production of Six Surrounding Countries 29,860,676 Tonnes

Ukraine – 24,912,350

119.9% of Ukrainian Production

3.9% of World Production

Total Exports of Six Surrounding Countries 13,404,910 Tonnes

Ukraine – 18,055,673

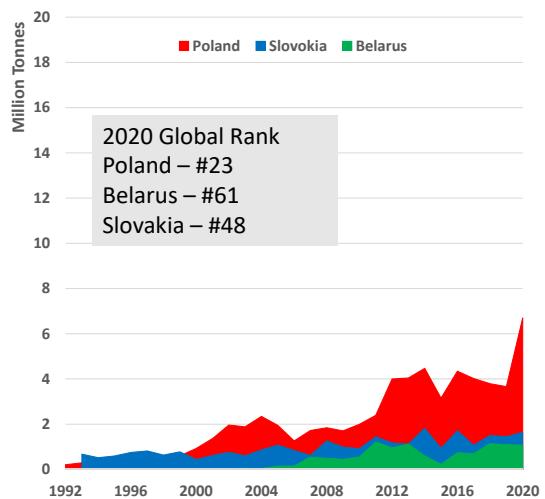
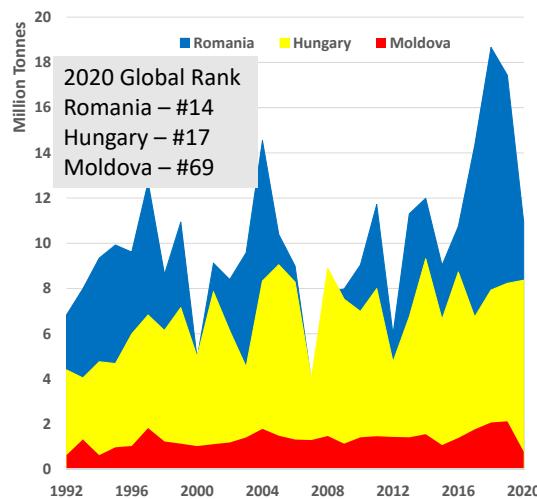
74.2% of Ukrainian Exports

6.8% of World Exports



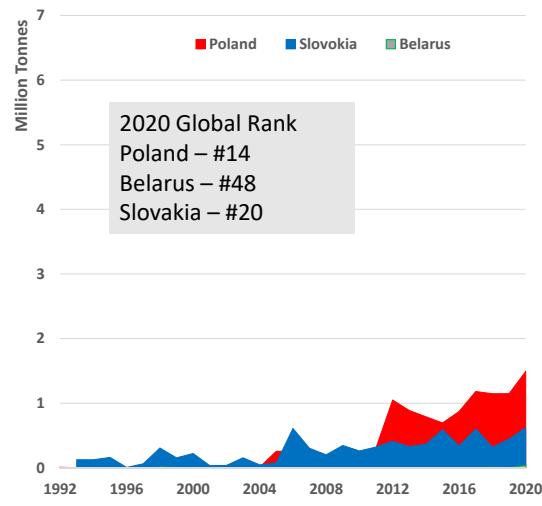
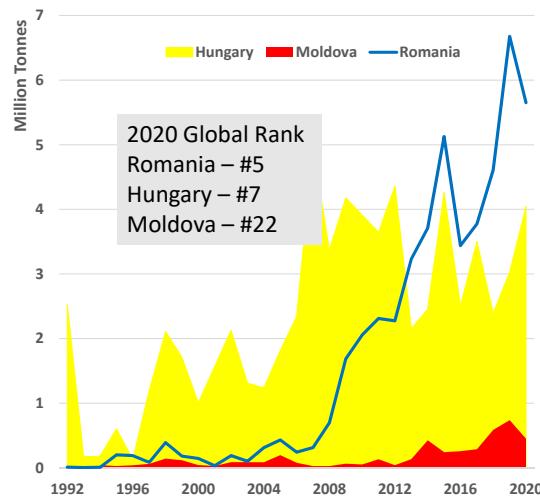
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## Other Black Sea Region Maize Production



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## Other Black Sea Region Maize Exports



## Other Black Sea Region Maize Summary

Country	Belarus	Hungary	Moldova	Poland	Romania	Slovakia
Production (tonnes)	1,075,833	8,365,430	785,170	6,694,650	10,942,350	1,642,670
% of Global Production	0.1%	0.7%	0.1%	0.6%	0.9%	0.1%
Exports (tonnes)	36,318	4,040,502	449,883	1,490,378	5,651,064	619,203
% of Global Exports	0.0%	1.5%	0.1%	2.4%	2.2%	0.1%
Exports as % of Production	3.4%	48.3%	57.3%	22.3%	51.6%	37.7%

Total Production of Six Surrounding Countries 29,506,103 Tonnes

Ukraine – 30,290,340

97.4% of Ukrainian Production

2.5% of World Production

Total Exports of Six Surrounding Countries 12,287,348 Tonnes

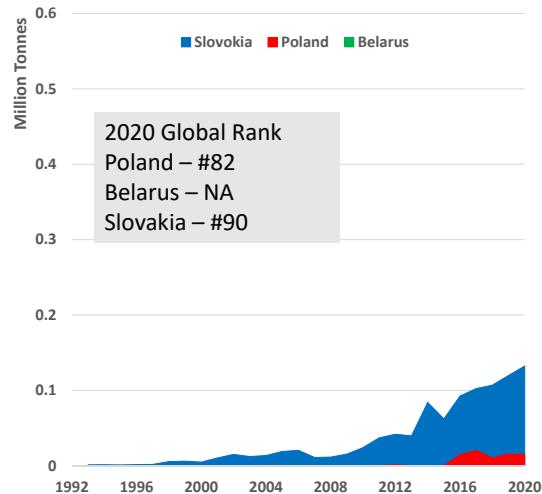
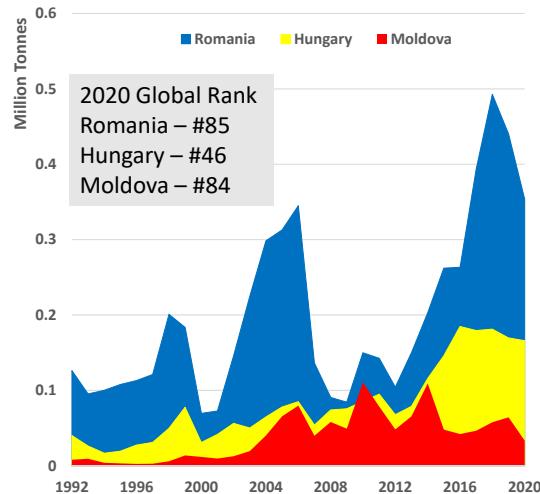
Ukraine – 27,952,4833

44.0% of Ukrainian Exports

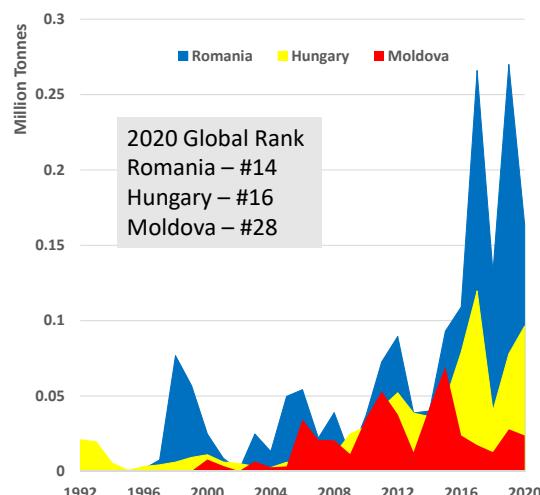
6.4% of World Exports



## Other Black Sea Region Soybean Production



## Other Black Sea Region Soybean Exports



# Other Black Sea Region Soybean Summary

Country	Belarus	Hungary	Moldova	Poland	Romania	Slovakia
Production (tonnes)	NA	165,760	33,360	14,940	353,640	132,200
% of Global Production	0.0%	0.1%	0.0%	0.0%	0.3%	0.1%
Exports (tonnes)	1,435	96,368	23,831	6,266	163,567	95,204
% of Global Exports	0.0%	0.1%	0.0%	0.0%	0.1%	0.1%
Exports as % of Production	NA	58.1%	71.4%	41.9%	46.3%	72.0%

Total Production of Six Surrounding Countries 699,900 Tonnes

Ukraine – 2,797,670

25.0% of Ukrainian Production

0.2% of World Production

Total Exports of Six Surrounding Countries 386,671 Tonnes

Ukraine – 1,789,059

21.6% of Ukrainian Exports

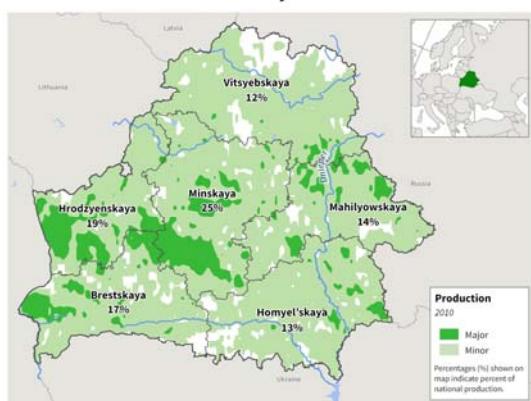
0.2% of World Exports



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## Belarus Barley and Rapeseed Production

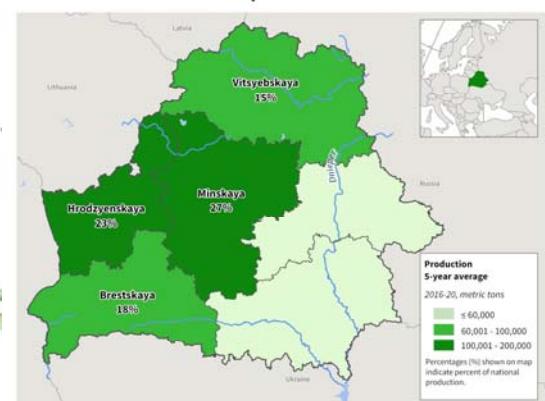
Belarus: Barley Production



USDA Foreign Agricultural Service  
U.S. DEPARTMENT OF AGRICULTURE

Source: International Food Policy Research Institute,  
SPAM 2010

Belarus: Rapeseed Production

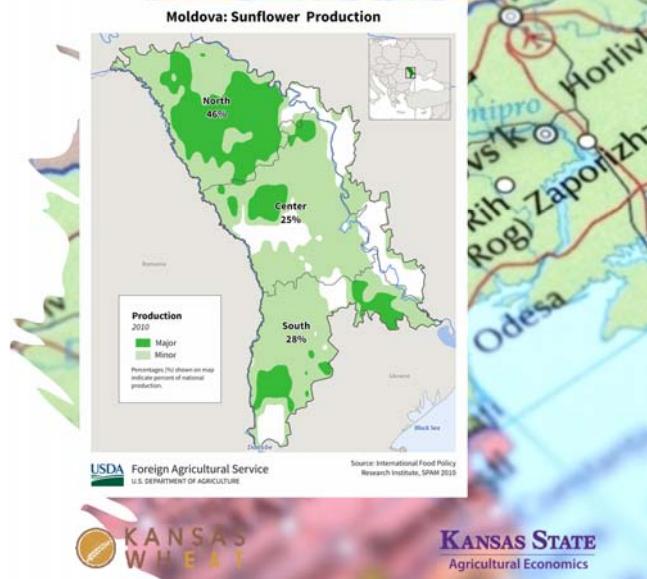
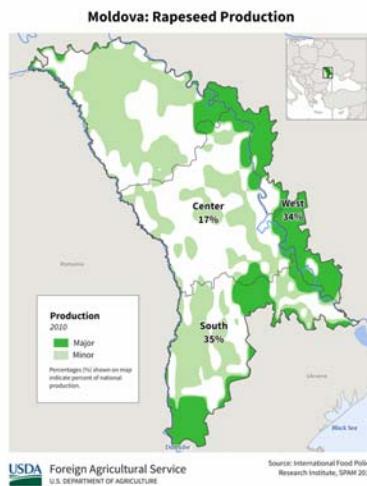


Source: National Statistical Committee of the Republic  
of Belarus, Average Rapeseed Production 2016-2020

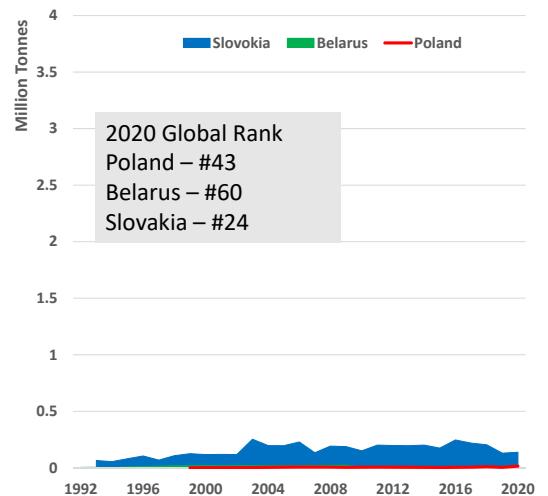
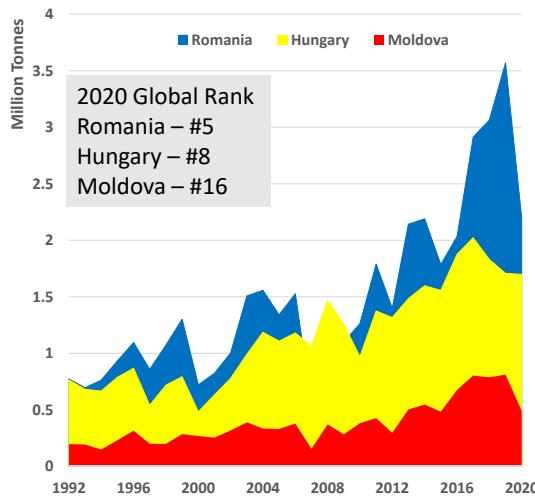


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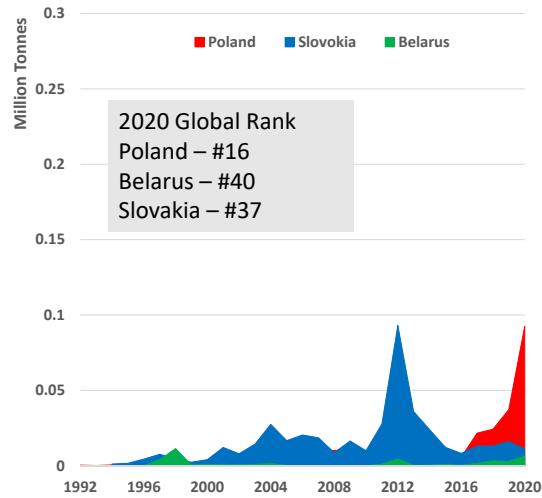
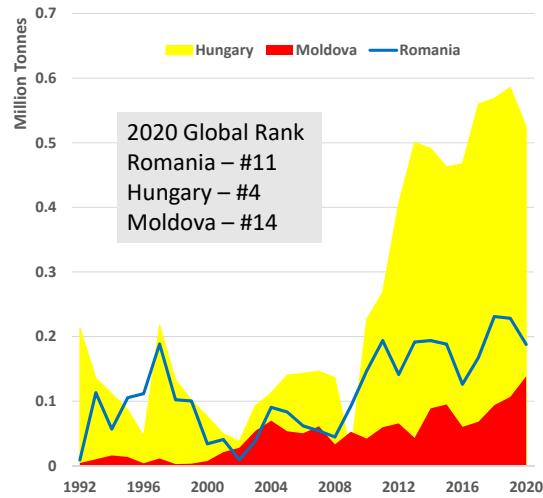
# Moldova Rapeseed and Sunflower Production



# Other Black Sea Region Sunflower Production



## Other Black Sea Region Sunflower Oil Exports



## Other Black Sea Region Sunflower Summary

Country	Belarus	Hungary	Moldova	Poland	Romania	Slovakia
Production (tonnes)	2,274	1,697,960	492,536	14,850	2,198,670	137,210
% of Global Production	0.0%	3.4%	1.0%	0.0%	4.4%	0.3%
Oil Exports (tonnes)	6,450	524,733	138,457	92,416	187,830	11,153
% of Global Exports	0.0%	3.4%	0.9%	0.6%	1.2%	0.1%

Total Production of Six Surrounding Countries 4,533,500 Tonnes

Ukraine – 13,110,430

34.7% of Ukrainian Production

9.0% of World Production

Total Sunflower Oil Exports of Six Surrounding Countries 961,039 Tonnes

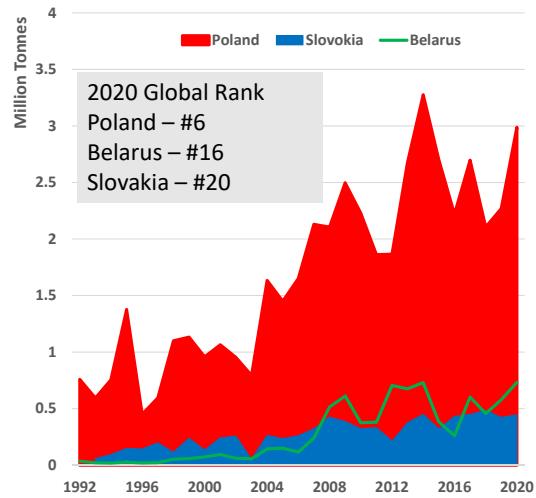
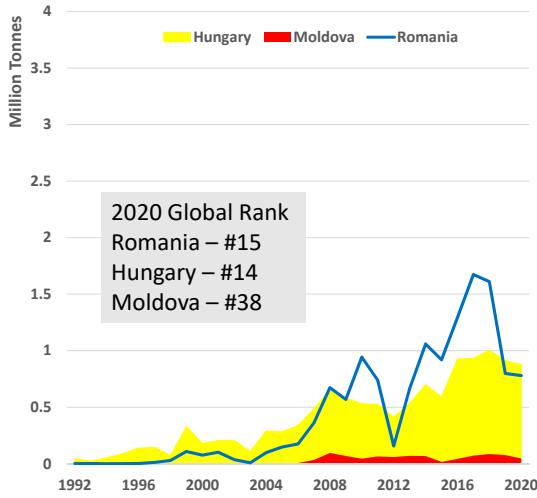
Ukraine – 6,860,958

14.0% of Ukrainian Exports

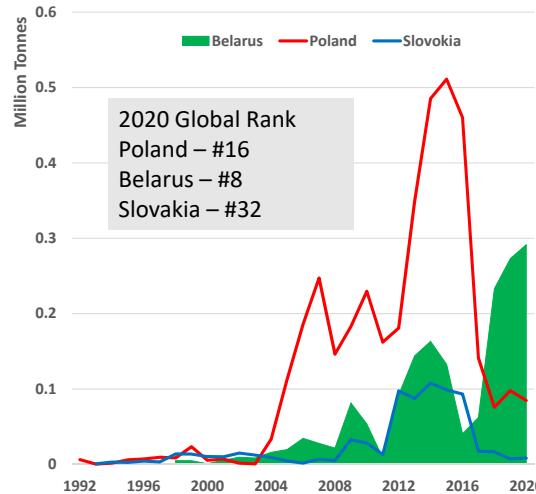
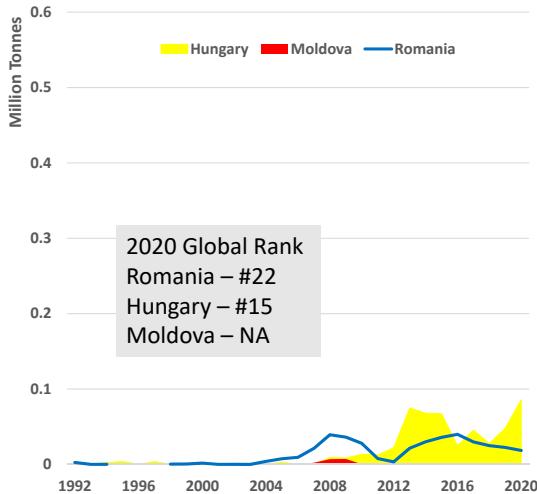
6.2% of World Exports



## Other Black Sea Region Rapeseed Production



## Other Black Sea Region Rapeseed Oil Exports



# Other Black Sea Region Rapeseed Summary

Country	Belarus	Hungary	Moldova	Poland	Romania	Slovakia
Production (tonnes)	731,307	876,900	47,128	2,987,460	780,160	445,720
% of Global Production	1.0%	1.2%	0.1%	4.1%	1.1%	0.6%
Oil Exports (tonnes)	291,396	85,684	NA	84,889	18,504	8,389
% of Global Exports	3.4%	1.0%	NA	1.0%	0.2%	0.1%

Total Production of Six Surrounding Countries 5,888,675 Tonnes

Ukraine – 2,557,200

229.5% of Ukrainian Production

8.1% of World Production

Total Sunflower Oil Exports of Six Surrounding Countries 488,862 Tonnes

Ukraine – 136,885

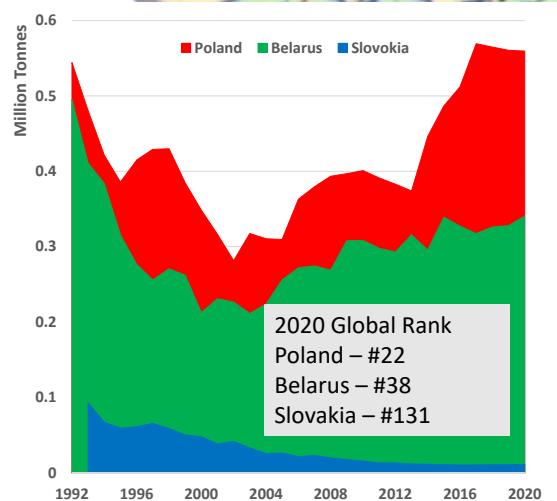
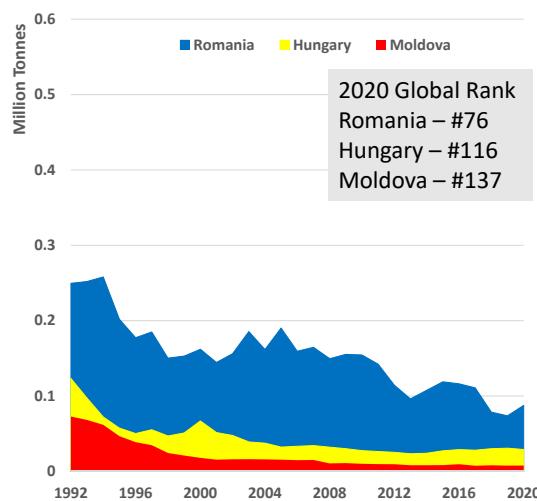
357.1% of Ukrainian Exports

5.8% of World Exports



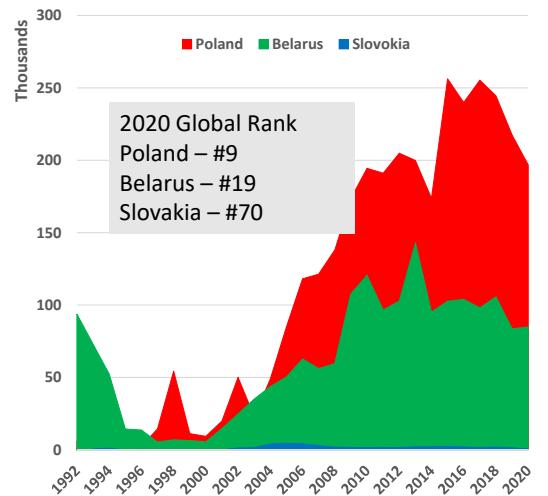
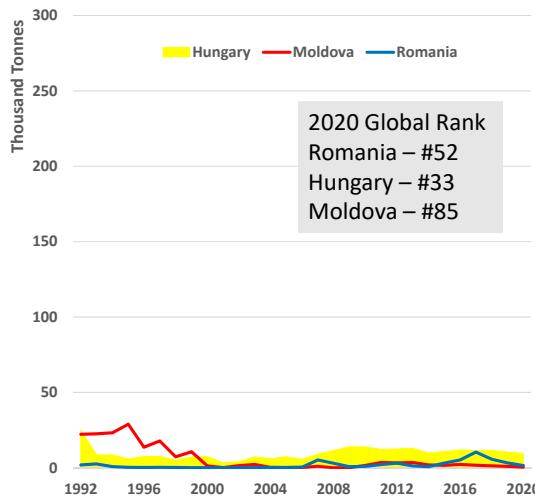
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# Other Black Sea Region Beef Production



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## Other Black Sea Region Beef Exports



## Other Black Sea Region Beef Summary

Country	Belarus	Hungary	Moldova	Poland	Romania	Slovakia
Production (tonnes)	340,500	29,150	7,881	559,460	87,490	10,920
% of Global Production	0.5%	0.0%	0.0%	0.1%	0.1%	0.0%
Exports (tonnes)	84,925	9,343	362	196,825	1,488	730
% of Global Exports	0.6%	0.1%	0.0%	1.3%	0.0%	0.0%
Exports as % of Production	24.9%	32.1%	4.6%	35.2%	1.7%	6.7%

Total Production of Six Surrounding Countries 1,035,401 Tonnes

Ukraine – 345,400

299.8% of Ukrainian Production

1.5% of World Production

Total Exports of Six Surrounding Countries 293,673 Tonnes

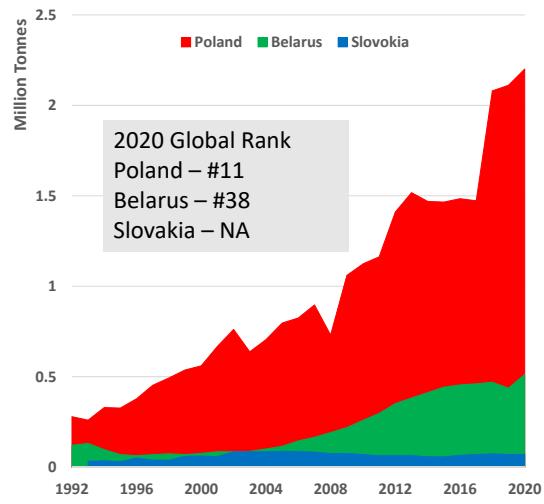
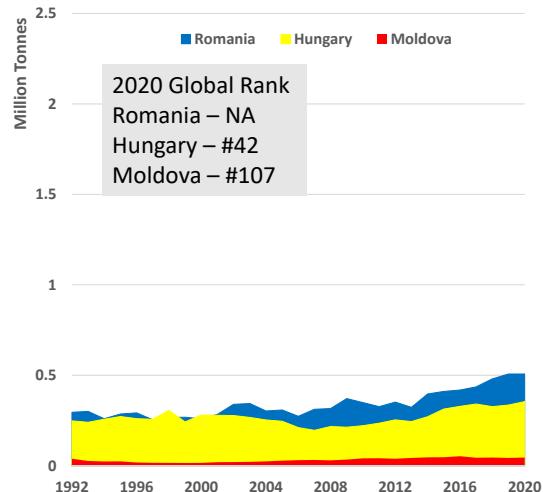
Ukraine – 31,918

920.1% of Ukrainian Exports

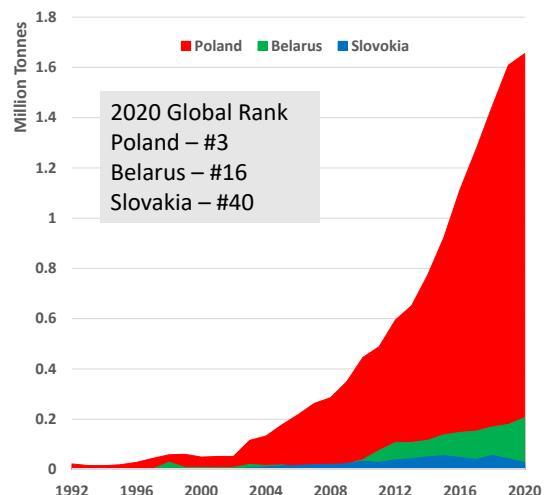
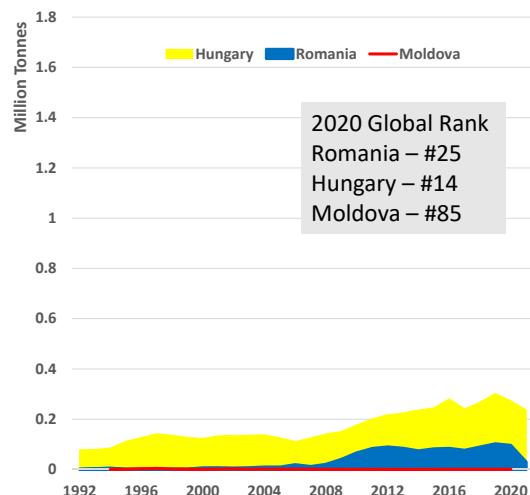
2.0% of World Exports



## Other Black Sea Region Poultry Production



## Other Black Sea Region Poultry Exports



## Other Black Sea Region Poultry Summary

Country	Belarus	Hungary	Moldova	Poland	Romania	Slovakia
Production (tonnes)	512,515	354,480	45,463	2,200,280	507,106	70,100
% of Global Production	0.4%	0.3%	0.0%	1.84%	0.4%	0.1%
Exports (tonnes)	206,050	273,202	364	1,654,616	95,679	27,399
% of Global Exports	1.1%	1.4%	0.0%	8.4%	0.5%	0.1%
Exports as % of Production	40.2%	77.1%	0.8%	75.2%	18.9%	39.1%

Total Production of Six Surrounding Countries 3,689,944 Tonnes

Ukraine – 1,343,910

274.6% of Ukrainian Production

3.1% of World Production

Total Exports of Six Surrounding Countries 2,257,310 Tonnes

Ukraine – 436,405

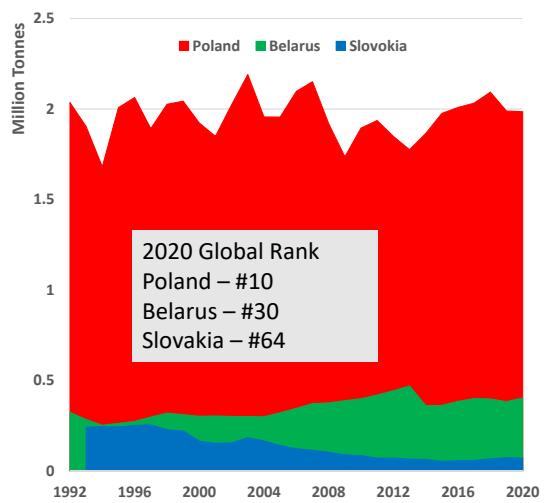
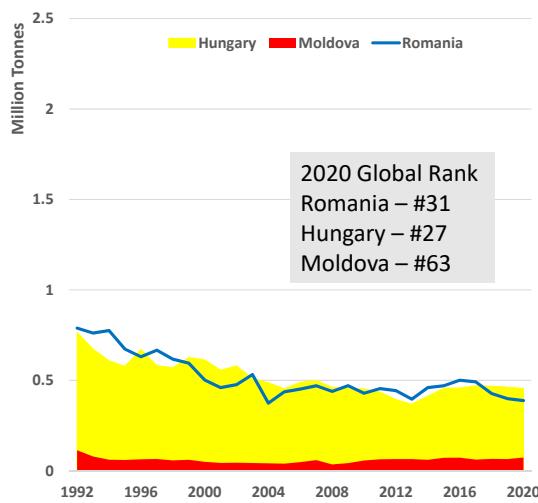
517.3% of Ukrainian Exports

11.5% of World Exports



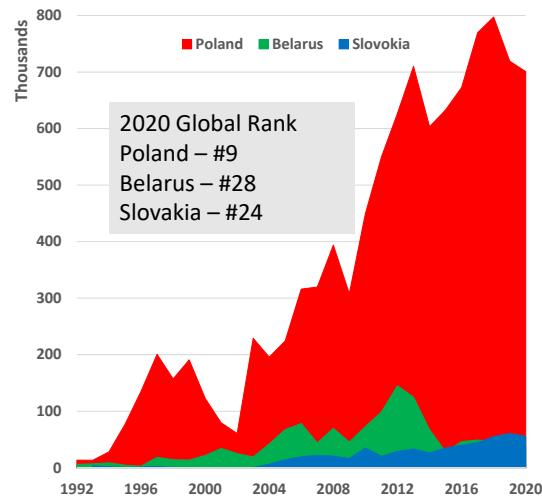
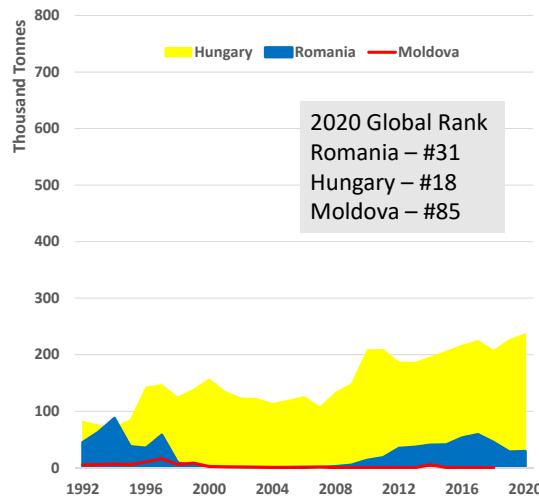
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## Other Black Sea Region Pork Production



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## Other Black Sea Region Pork Exports



## Other Black Sea Region Pork Summary

Country	Belarus	Hungary	Moldova	Poland	Romania	Slovakia
Production (tonnes)	402,700	455,720	73,689	1,985,120	388,170	70,480
% of Global Production	0.4%	0.4%	0.1%	1.8%	0.4%	0.1%
Exports (tonnes)	37,123	237,011	NA	700,586	28,885	55,861
% of Global Exports	0.2%	1.1%	NA	3.4%	0.1%	0.3%
Exports as % of Production	9.2%	52.0%	0.0%	35.3%	7.4%	79.3%

Total Production of Six Surrounding Countries 3,375,829 Tonnes

Ukraine – 697,200

584.2% of Ukrainian Production

3.1% of World Production

Total Exports of Six Surrounding Countries 1,059,466 Tonnes

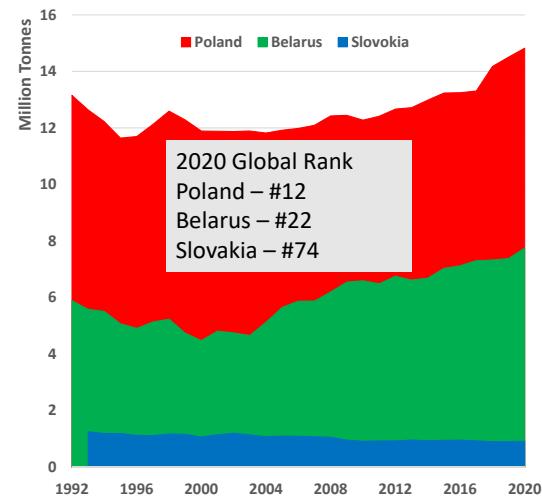
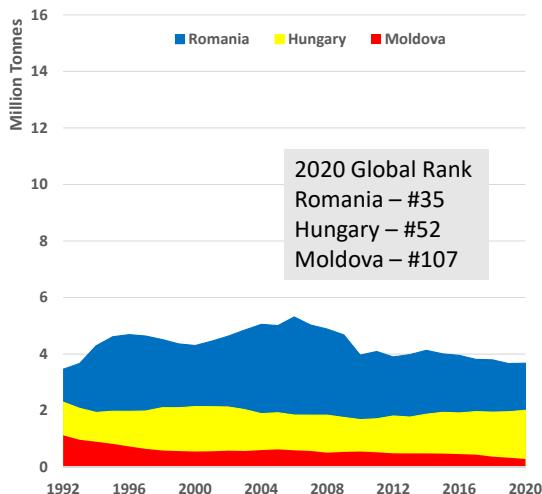
Ukraine – 11,148

3,573.8% of Ukrainian Exports

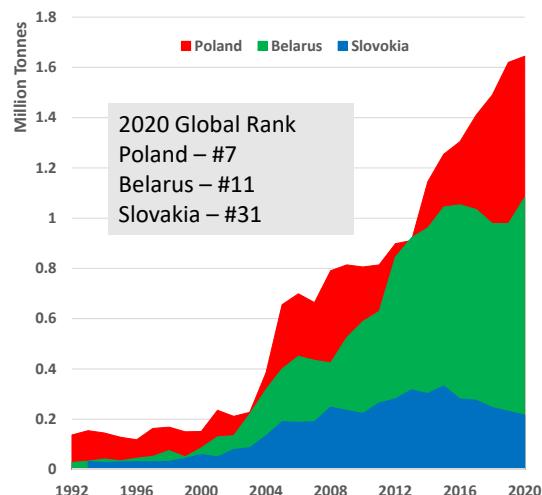
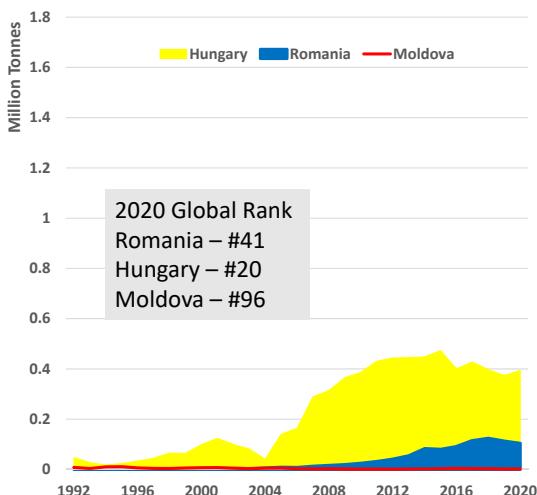
9.3% of World Exports



## Other Black Sea Region Milk Production



## Other Black Sea Region Dairy Exports



# Other Black Sea Region Dairy Summary

Country	Belarus	Hungary	Moldova	Poland	Romania	Slovakia
Production (tonnes)	7,751,800	2,014,330	290,529	14,821,820	3,679,600	917,690
% of Global Production	1.1%	0.3%	0.0%	2.1%	0.5%	0.1%
Exports (tonnes)	1,082,849	393,990	1,707	1,644,543	103,982	216,026
% of Global Exports	2.9%	1.1%	0.0%	4.4%	0.3%	0.6%
Exports as % of Production	14.0%	19.6%	0.6%	11.1%	2.8%	23.5%

Total Production of Six Surrounding Countries 29,475,769 Tonnes

Ukraine – 9,057,970

325.4% of Ukrainian Production

4.1% of World Production

Total Exports of Six Surrounding Countries 3,443,097 Tonnes

Ukraine – 96,343

9,503.6% of Ukrainian Exports

5.1% of World Exports



## Summary of Other Black Sea Countries

Crop	% Ukrainian Production	% Global Production
Wheat	119.9%	3.9%
Corn (Maize)	97.4%	2.5%
Soybean	25.0%	0.2%
Sunflower	34.7%	9.0%
Rapeseed	229.5%	3.4%
Beef	299.8%	1.5%
Poultry	274.6%	3.1%
Pork	584.2%	3.1%
Milk	325.4%	4.1%



# Summary of Other Black Sea Countries

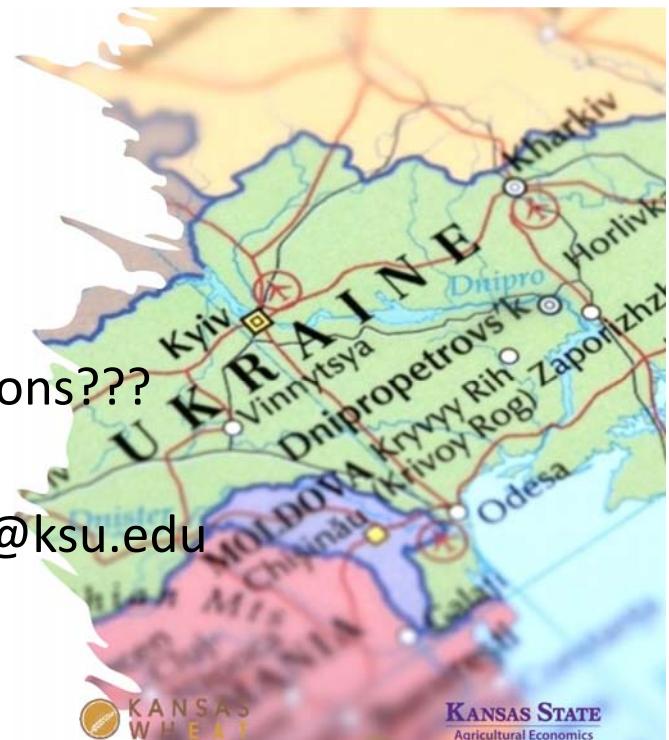
Crop	% Ukrainian Exports	% Global Exports
Wheat	74.2%	6.8%
Corn (Maize)	44.0%	6.4%
Soybean	21.6%	0.2%
Sunflower Oil	14.0%	6.2%
Rapeseed Oil	357.1%	5.8%
Beef	920.1%	2.0%
Poultry	517.3%	11.5%
Pork	9,503.6%	5.1%
Milk	3,573.8%	9.3%



## Summary

- Russian and Ukraine are the major agricultural producers and exporters in the Black Sea region
- Belarus, Hungary, Moldova, Poland, Romania, and Slovakia combined have 0.5% more arable land than Ukraine
- Belarus, Hungary, Moldova, Poland, Romania, and Slovakia combined have 97.6% more population than Ukraine
- Belarus, Hungary, Moldova, Poland, Romania, and Slovakia have a larger focus on livestock, rapeseed, and wheat production than Ukraine
- Belarus, Hungary, Moldova, Poland, Romania, and Slovakia have a smaller focus on maize, soybean, and sunflower production than Ukraine





Questions???

[afeather@ksu.edu](mailto:afeather@ksu.edu)



KANSAS STATE  
Agricultural Economics