# Russian wheat:
# the new reference for cash wheat worldwide

## From net importer to No. 1 Exporter

**Swithun Still**
**Solaris Commodities S.A.**

# Table of Contents

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- Solaris Commodities S.A. started trading in Feb. 2012
- See WWW.SOLARIS-CH.COM
- Traded 1.6 Million MT of Russian grain last season
- Largest trader of Russian corn in 2015/2016 season
- Export partner of MIRO GROUP RESOURCES, based in the grain heartland of southern Russian, Krasnodar.
- Exporting from 3,000 MT coasters from Azov Sea to 63,000 MT Panamax size + containers.

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# RUSSIAN WHEAT – SYNOPSIS OF PRESENTATION

1. Overview of agricultural sector in Russia.
2. Where wheat is grown in Russia
3. Winter/ spring wheat production/yields.
4. Production and Export statistics.
5. Cost advantages of growing wheat in Russia
6. Quality of Russian wheat vs. other origins.
7. Export destinations.
8. Challenges and future potential.
9. Conclusions / questions.

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# Russia and Farming

- During the Soviet period farms were collectives, called ‘Kolkhoz’ - ‘Sovhoz’
- USSR ended in1991 and farms were privatised.
- Cash is king. Sale of wheat domestically is in roubles and include 10% VAT, which is reimbursed to the exporter between 2-6 months after export

# Russian Land

- Russia has 10% of all arable land in the world and 40% of what is known as “Black Earth” (3% of the arable land in Russia) which are in an area called the “Kuban” Krasnodar / Stavropol regions)
- Yields for wheat in the Kuban are often over **7 tonnes per hectare** as opposed to the Russian average of **2.5** tonnes per hectare.

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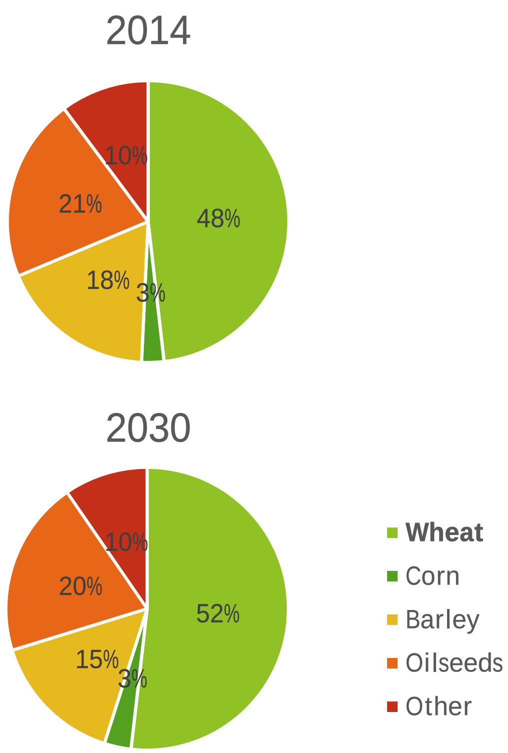
# Russian Agricultural Sector

- The Russian agricultural sector employs around 7 million people or 9% of the working population and produces 5% of the gross national product of Russia
- The Russian agriculture sector has 124mln ha (of which **49 mln ha are set aside for grain production, of which 29mln ha of wheat (15mln ha winter wheat / 14mln ha spring wheat**)
- In 1990 there were around **25,000** “collective” farms. In 2015 there were **285,000** private farms, which generally have between 10 and 100 hectares, but there are 40 huge agri-businesses in Russia with over 100,000 hectares



Source: AEGIC

# Russian Grain Area Growth




In 2017 Russian wheat area to be 7% higher than in 2016 : this is the **5th consecutive year of annual growth.**

This represents the **largest area since 1990**

The total area sown to grain & oilseed crops in Russia is expected to grow from 49 million ha in 2014 to 52.1 million ha in 2030.

This represents a 6% growth in total area, with the **wheat area increasing from 48% of the total area to 52% over the same period.**

The Russian government is expected to invest over $38 billion in the next 15 years with investment from the private sector totalling over $40 billion.

Despite this investment, Russian still has 18Mln ha of idle farmland (although some say this could be as much as 30Mln !!)



Source:AEGIC


WHEAT PRODUCING REGIONS
800
Kara Sea
Barents Sea
1,000 HECTARES
51 - 250
501 - 1,000
Over 1,000
Exports to Europ
Exports to Midd
North Africa
Ural Mountains
RUSSIA
AND
Sverdlovsk
Tyumen
Moscow
Kurgan
LARUS
Chelyabinsk
Astana
Volga River
UKRAINE
MONGOLIA
KAZAKHSTAN
ANIA
Black
Sea
ARIA
Caspian
Sea
UZBEKISTAN
GEORGIA
TURKEY
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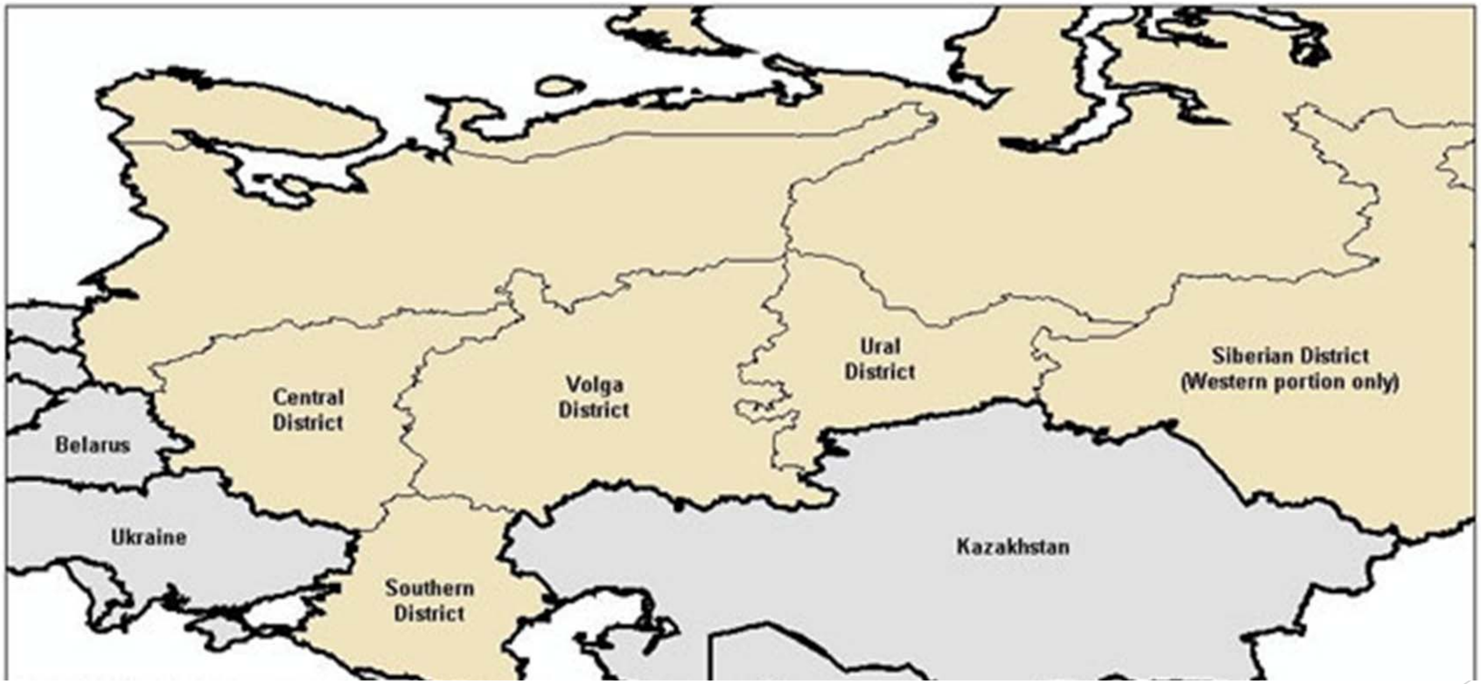
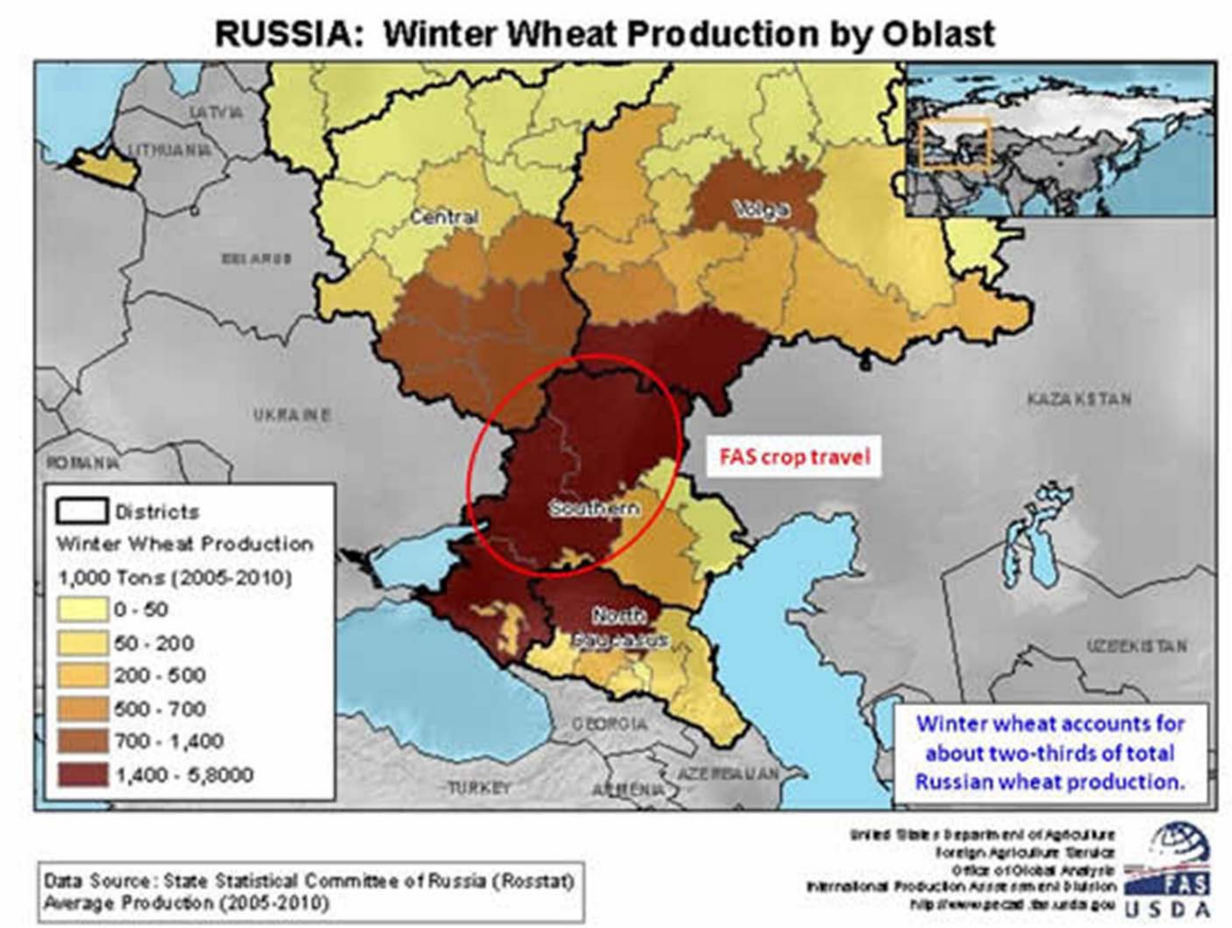
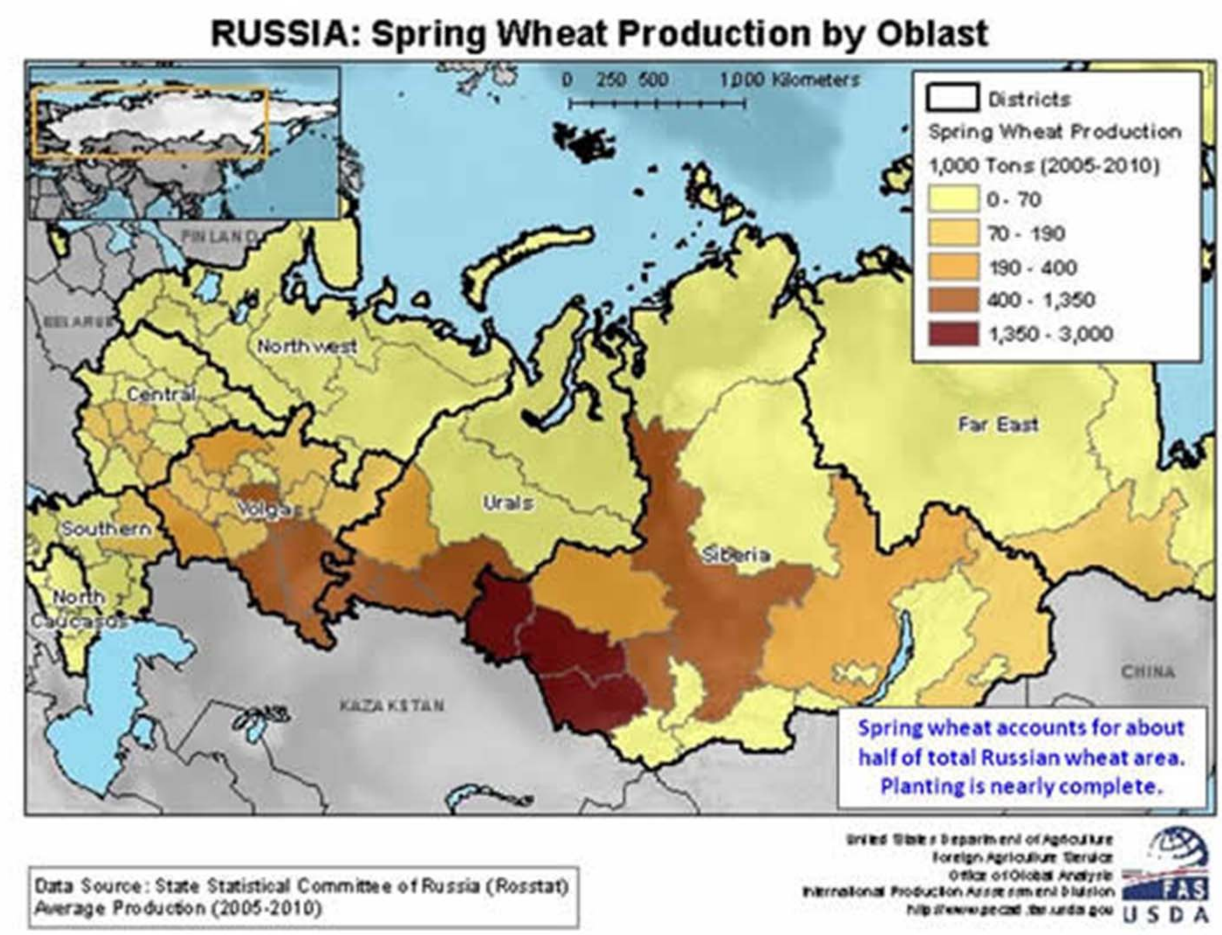





SOURCES: USDA / ROSSTAT




**RUSSIAN SPRING WHEAT PRODUCTION** **Source – USDA/ Rosstat**

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# SOVIET UNION - Russia
# Importer to top exporter

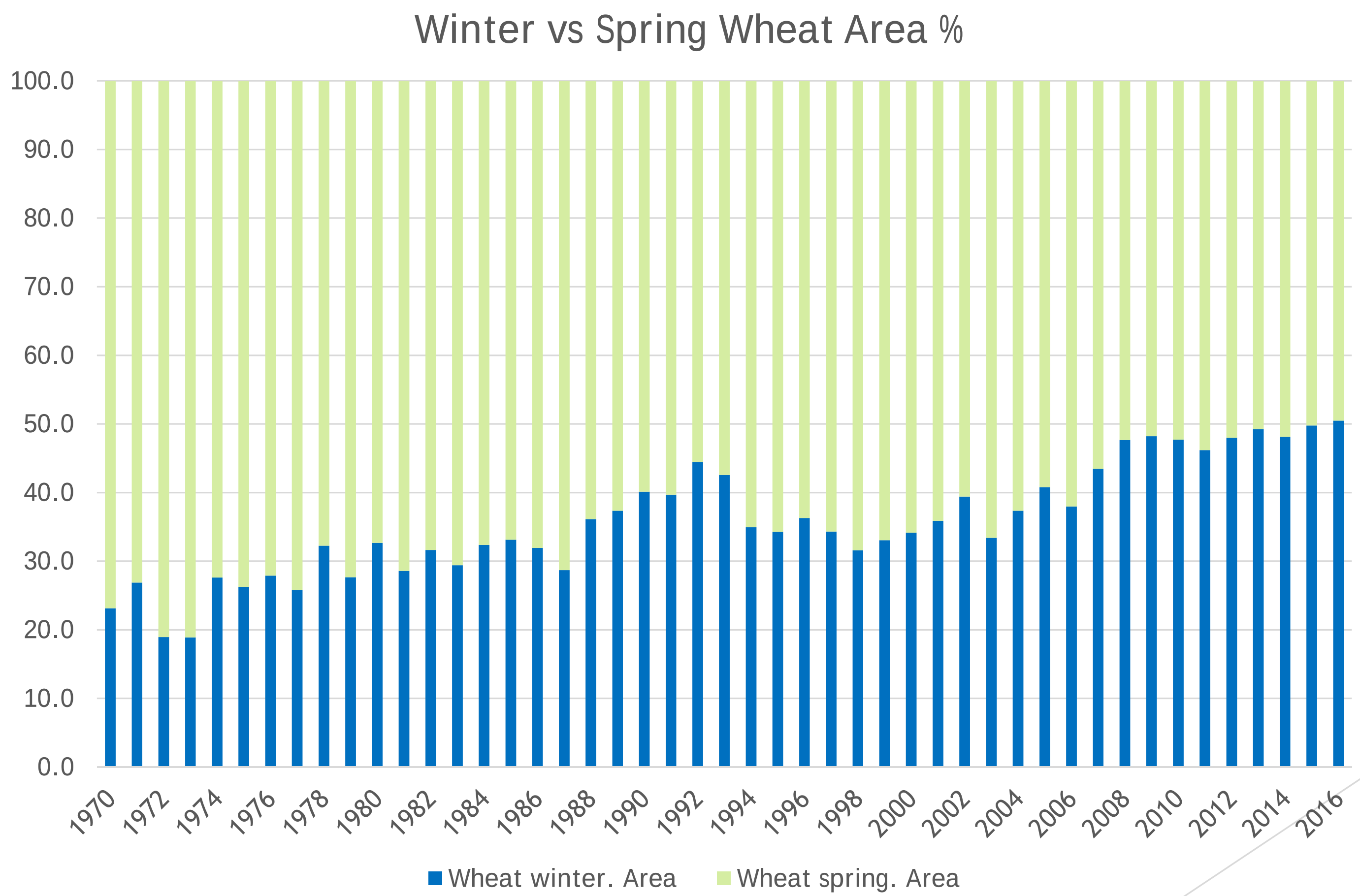
**1970s**
- Soviet Union imported millions of tonnes of grain
- The "Great Grain Robbery"

**1980s**
- Imports continue

**1990s**
- 1991 End of USSR. Start of Exports

**2000 -2015**
- Russia becomes a major wheat exporters (with exceptions in 2010 & 2012)

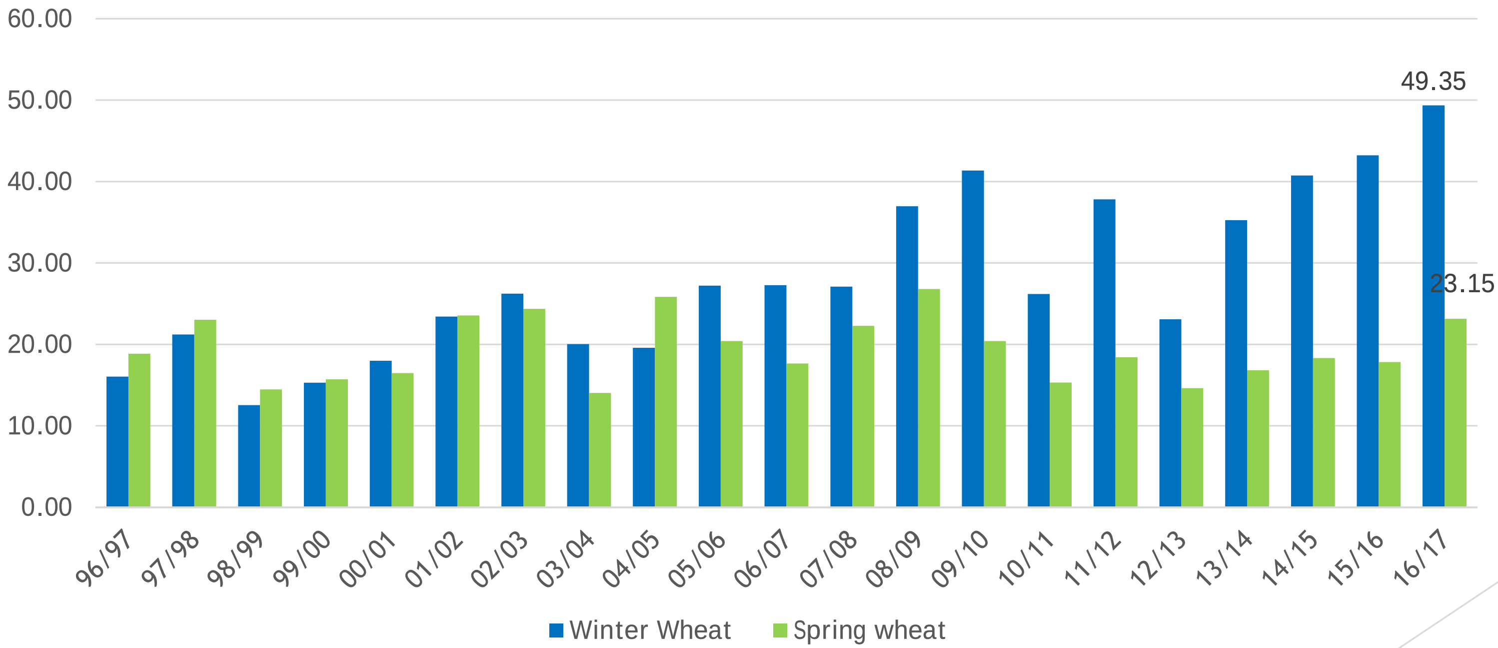
**2030-2040**
- Russia could produce over 75 million MT of wheat with 35-40 million MT of exports



Winter vs Spring Wheat Area %
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
2016
Wheat winter. Area
Wheat spring. Area

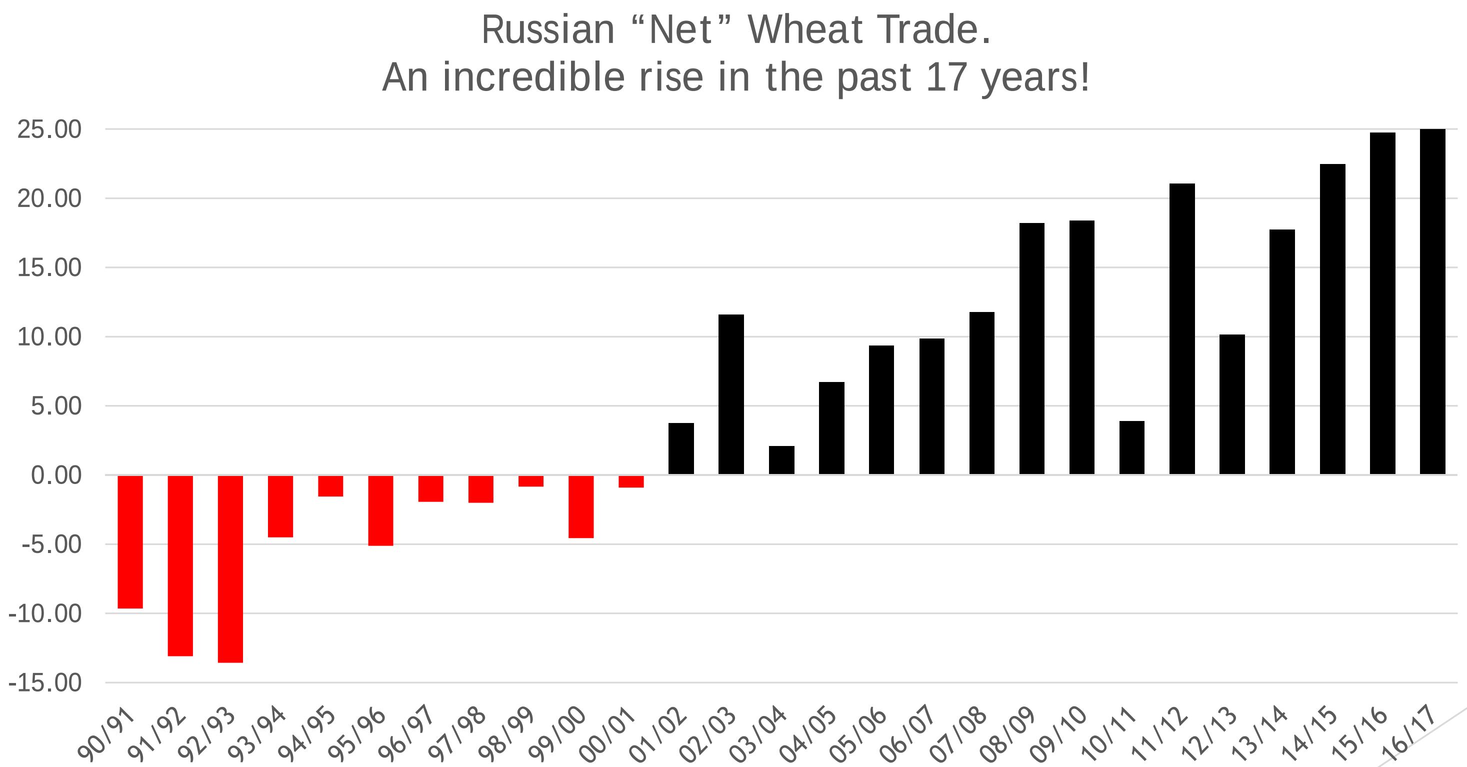

Source:IKAR

# Winter vs Spring Wheat Production (MMT). Areas planted are similar, but winter wheat has better yields





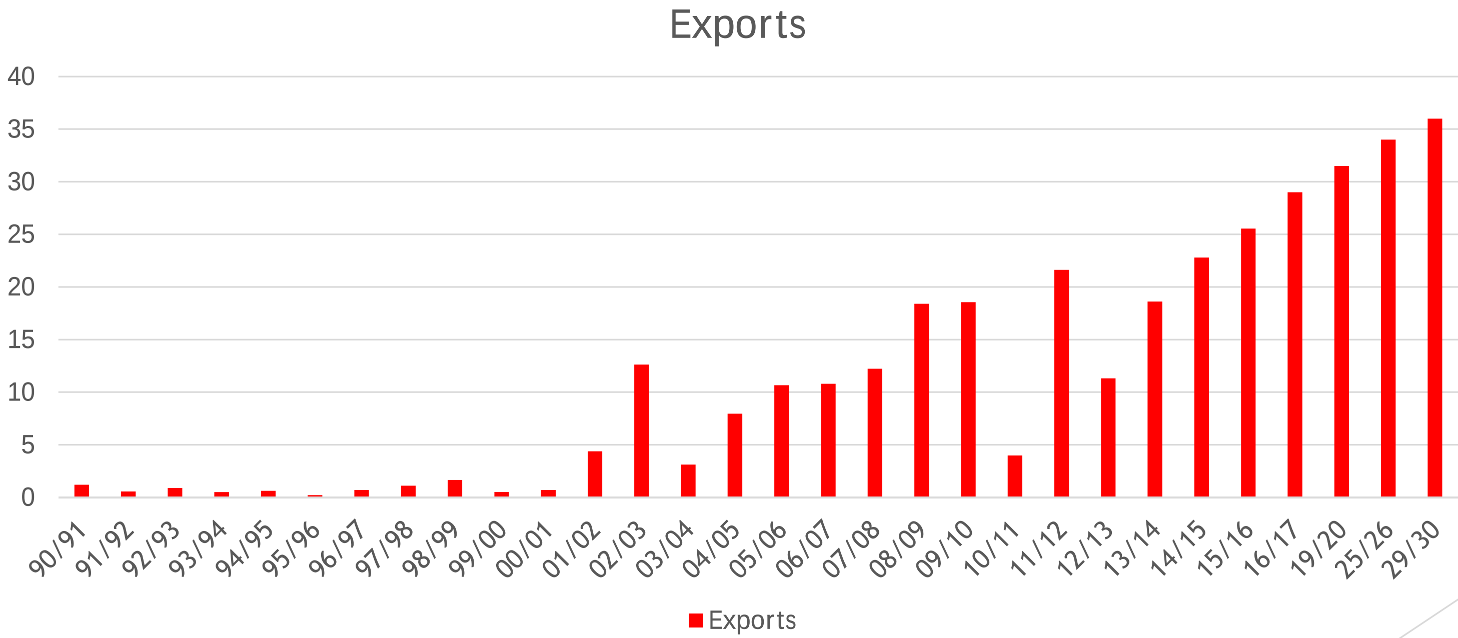

Source:IKAR






Sources:Agrochart-AgResource-USDA

## Russian Wheat Exports – MMT

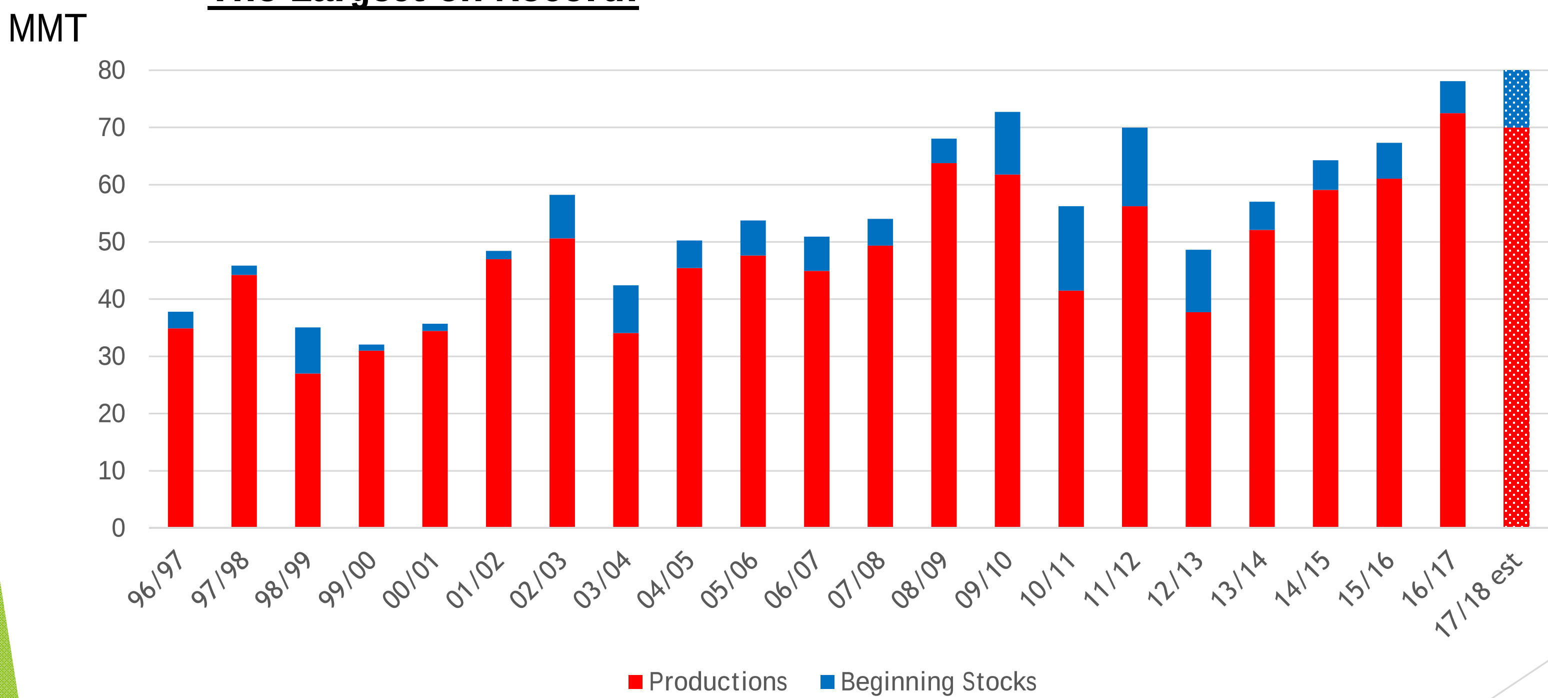





Source:Agrochart

Russia's Total 2016/17 Wheat Supply will be up16% from 2015/16

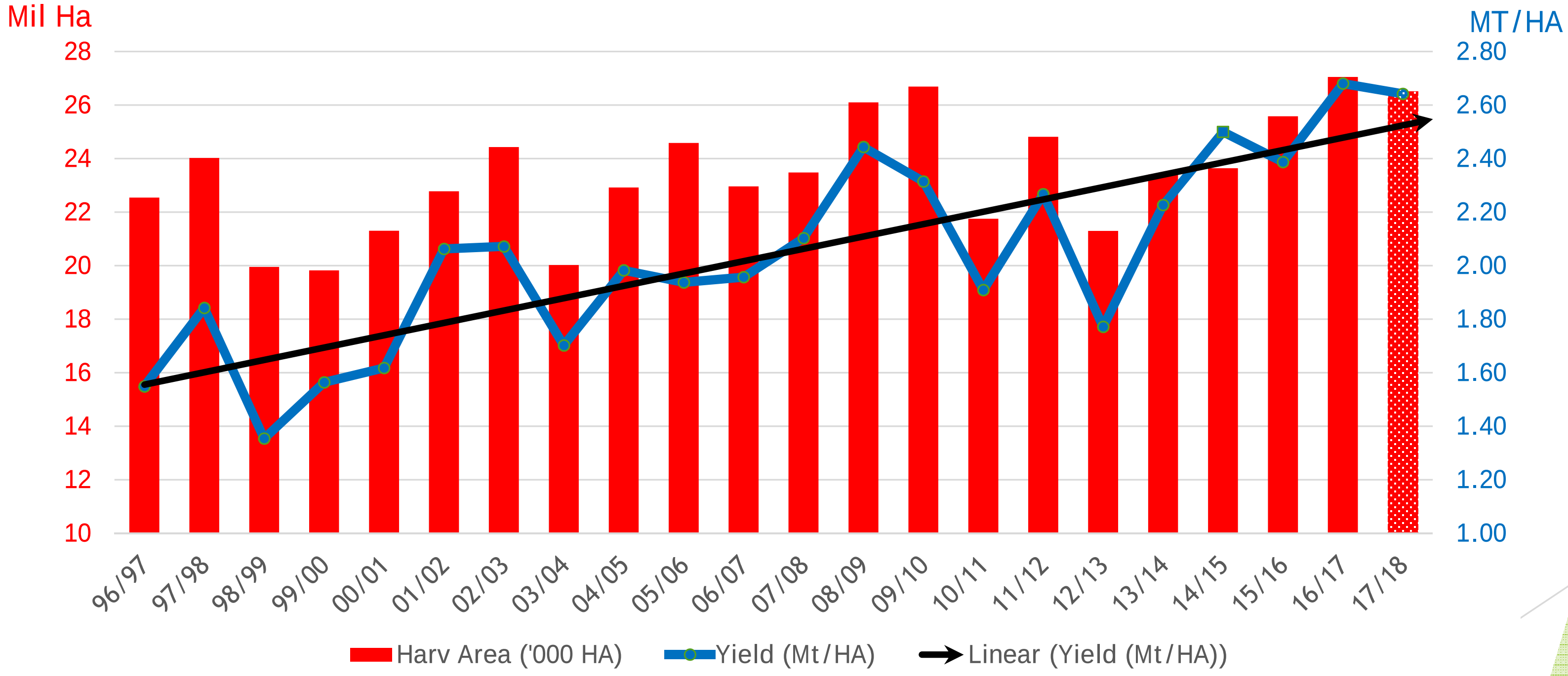
**The Largest on Record!**






Source:Agrochart

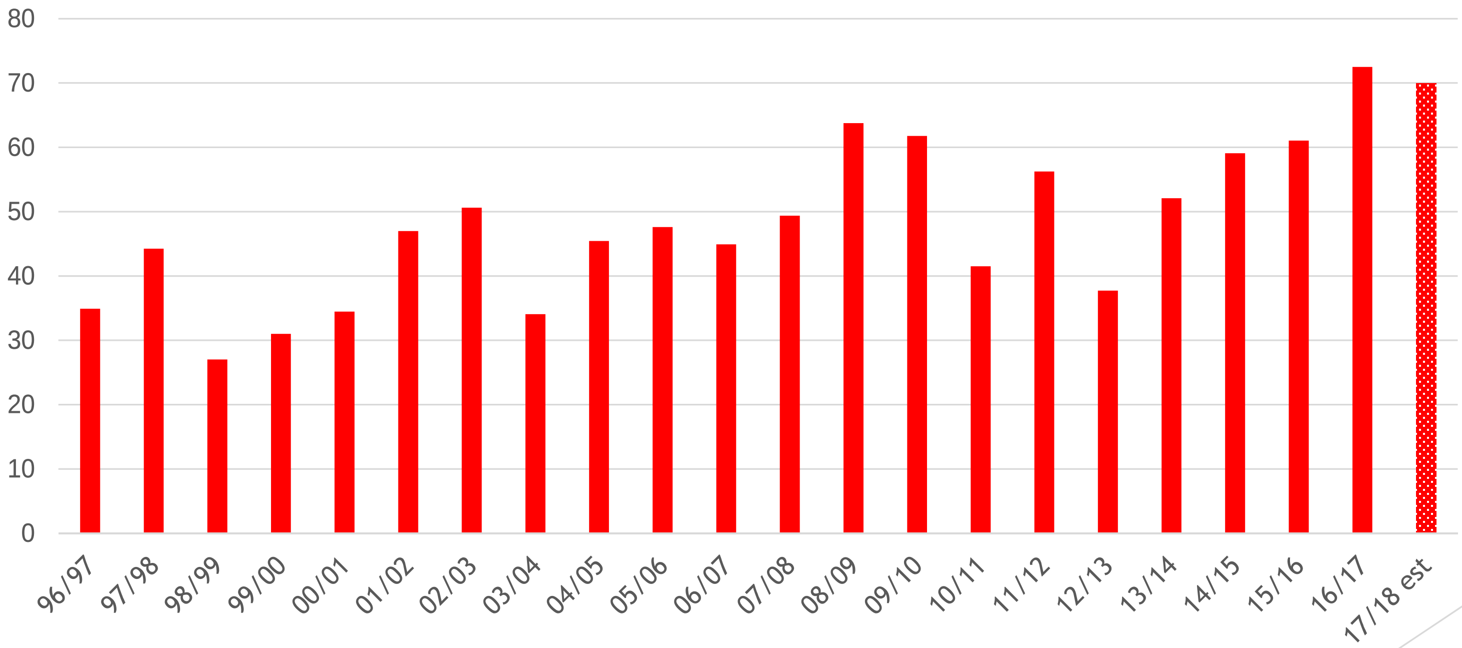
# Russian Wheat Harvested Acres & Yields






Source:Agrochart

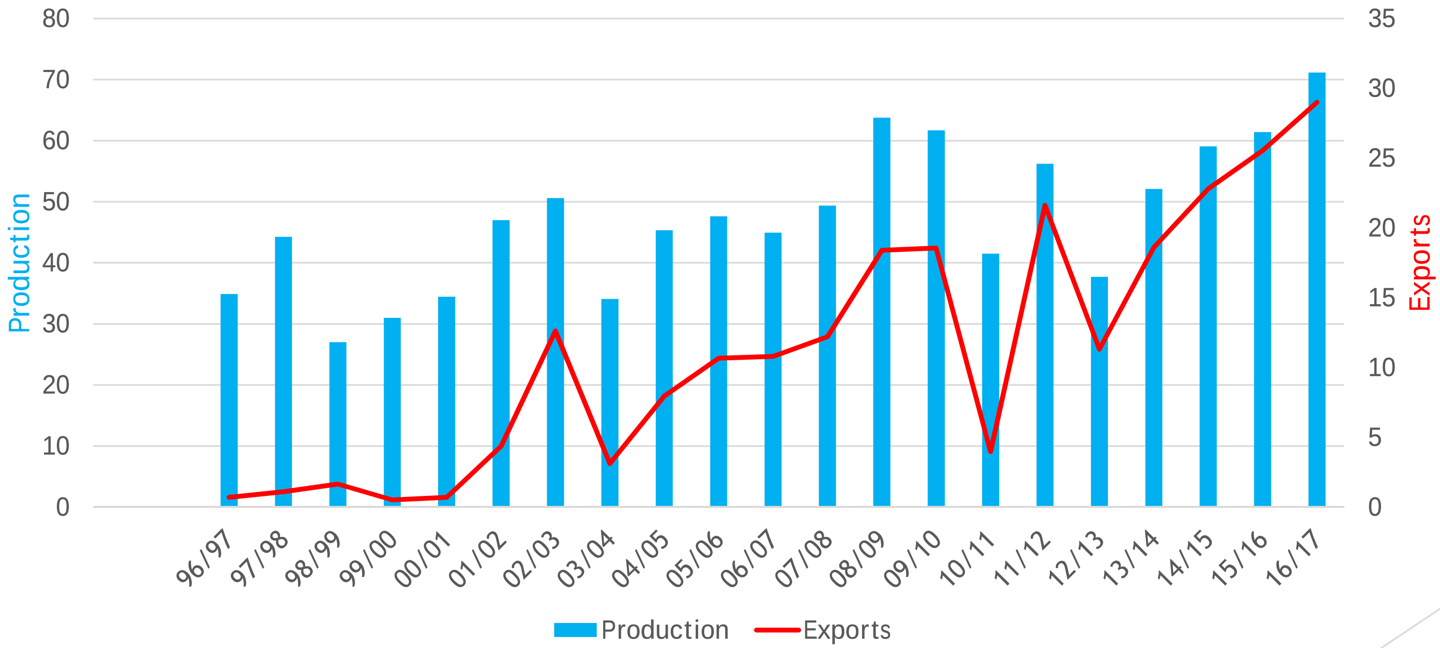
# Russian Wheat Production (MMT)






Source:Agrochart

# Russian Wheat Production & Exports (mmt)






Source: Agrochart

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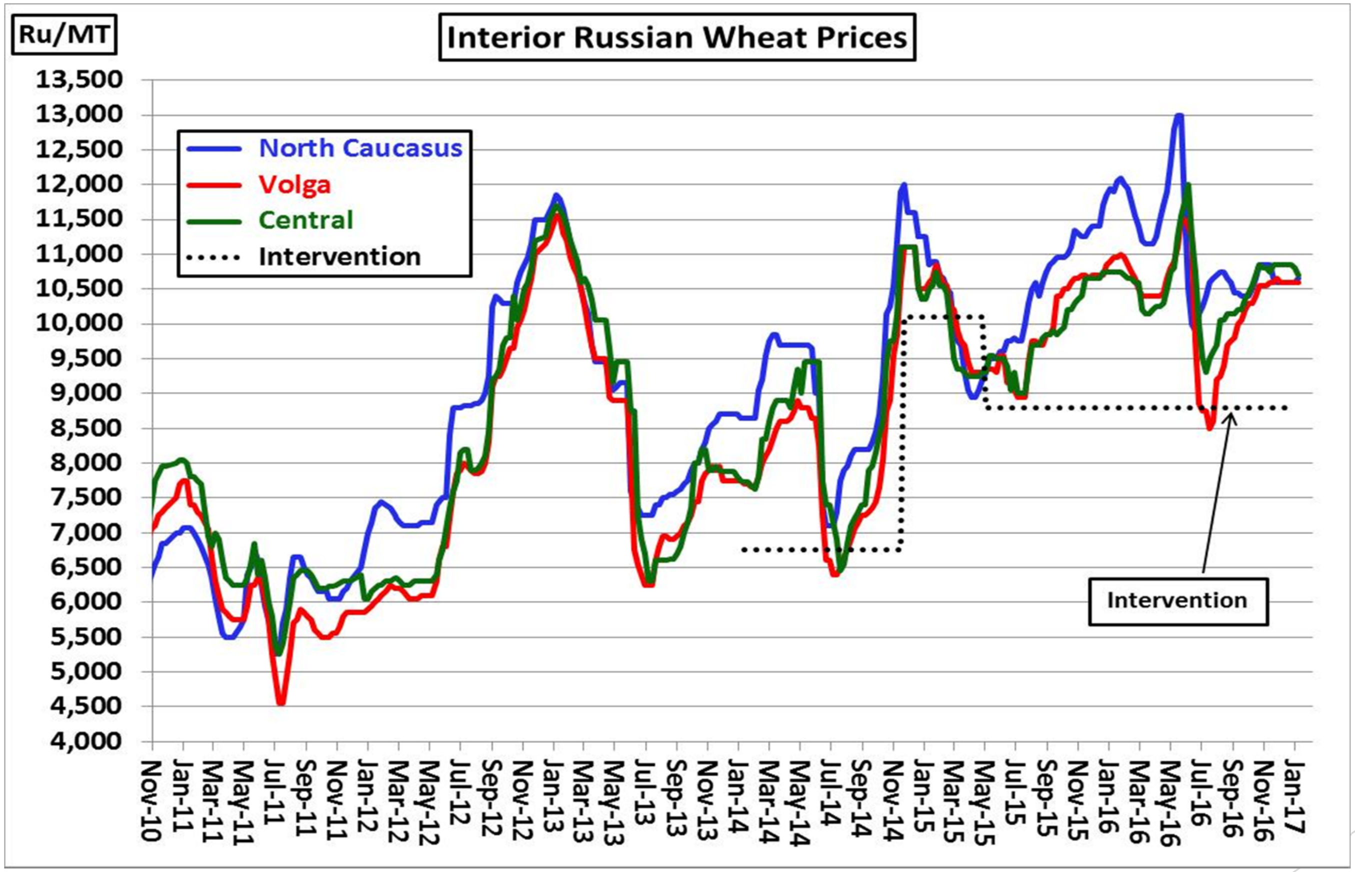
| | | | | |
|---|---|---|---|---|
| **Russian Wheat Supply/Demand Balances** | | | | |
| **July/June; Mln HA; MMT** | | | **Est** | |
| | **15/16** | **16/17** | **17/18** | |
| | | | | |
| **Harvested** | 25.6 | 27.1 | 26.5 | |
| **Yield** | 2.4 | 2.7 | 2.6 | |
| | | | | |
| **Carry In** | 6.3 | 5.7 | 10.5 | |
| **Production** | **61.1** | **72.5** | **70** | |
| **Imports** | 0.8 | 0.3 | 0.07 | |
| **Supply** | **68.2** | **78.5** | **81.1** | |
| | | | | |
| **Feed** | 14 | 16 | 16 | |
| | | | | |
| **Other Ind** | 23 | 23 | 23 | |
| **Domestic Use** | **37** | **37** | **39** | |
| | | | | |
| **Exports** | **26** | **29** | **30** | |
| | | | | |
| **Total Demand** | 63 | 68 | 69 | |
| | | | | |
| **Carry Out** | **5.7** | **10.5** | **12.1** | |
| **Stocks/Use** | 9.1 | 15.4 | 17 | |
| | | | | |
| **Exports Season to Date** | | 17.3 | | |
| | | | | |
| **Balance to Ship** | | 11.7 | | |



Source:WASDE




Source: IntlFCStone

# Sale of Wheat in Russia

- Sales of wheat are as per local «**GOST**» standards in roubles.
- Some traders give finance to farmers against their production, but legally the farmer can repay these prepayments (with interest) rather than deliver the goods. This engenders certain risks for the traders..
- The busiest time of year is July-September as farmers come to market with their crops after harvest. Most farmers deliver their goods ex-works on the farm, but some are entering the export market directly.
- Many large scale farming operations, but many decisions are still taken by the owner only. Futures comntracts to hedge are not widely used. Prices are followed on local information provideres such as IKAR or SOVECON or RUSAGRORTANS.

# Quality of GOST Standard

- 5 grades of wheat in Russia.
- 1st class 14.5 protein / 32 % wet gluten
- 2nd class 13.5 protein / 28 % wet gluten.
- 3rd class 12.5 protein / 23 % wet gluten.
- 4th class. 11 protein / 18 % wet gluten.
- 5th class. *Feed wheat.* No min protein/gluten

- GOST Gluten= +2% for ISO result.

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# Export Quality – 12.5% Protein Milling Wheat

Protein: min. 12.5% (N x 5,7 dry matter)

- *(minimum 12% for GASC)*

| | | |
|---|---|---|
| Specific Weight: | min. | 77 kg/hl |
| Gluten: | min. | 25% (ISO 21415-1) |
| Falling Number Hagberg: | min. | 250 sec |
| W: | min. | 180 |
| Moisture: | max. | 14% |
| Foreign Matter: | max. | 2% |
| Bug Damage: | max. | 1% |

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# Quality of Russian wheat

**(as per SGS data)**

| Specification/ Russia | Min. | Average | Max. |
| --- | --- | --- | --- |
| Protein (dry matter basis) % | 9.5% | **13%** | 18% |
| Moisture % | 9% | **12.5%** | 20% |
| Test Weight (kg/hl) | 66.5 | **77.8** | 80 |
| Foreign matter % | 0.17% | **0.77%** | 7 % |
| Bug damage % | 0.2% | **0.84%** | 5% |
| Falling Number /Hagberg (seconds) | 60 | **346** | 490 |
| Gluten, ISO 21415-2 | 13% | **26%** | 38% |

# Loading Ports


Novorossisk
13 MMT annual capacity via 3 silos
(NKHP 4, KSK 4 & NZT 5)

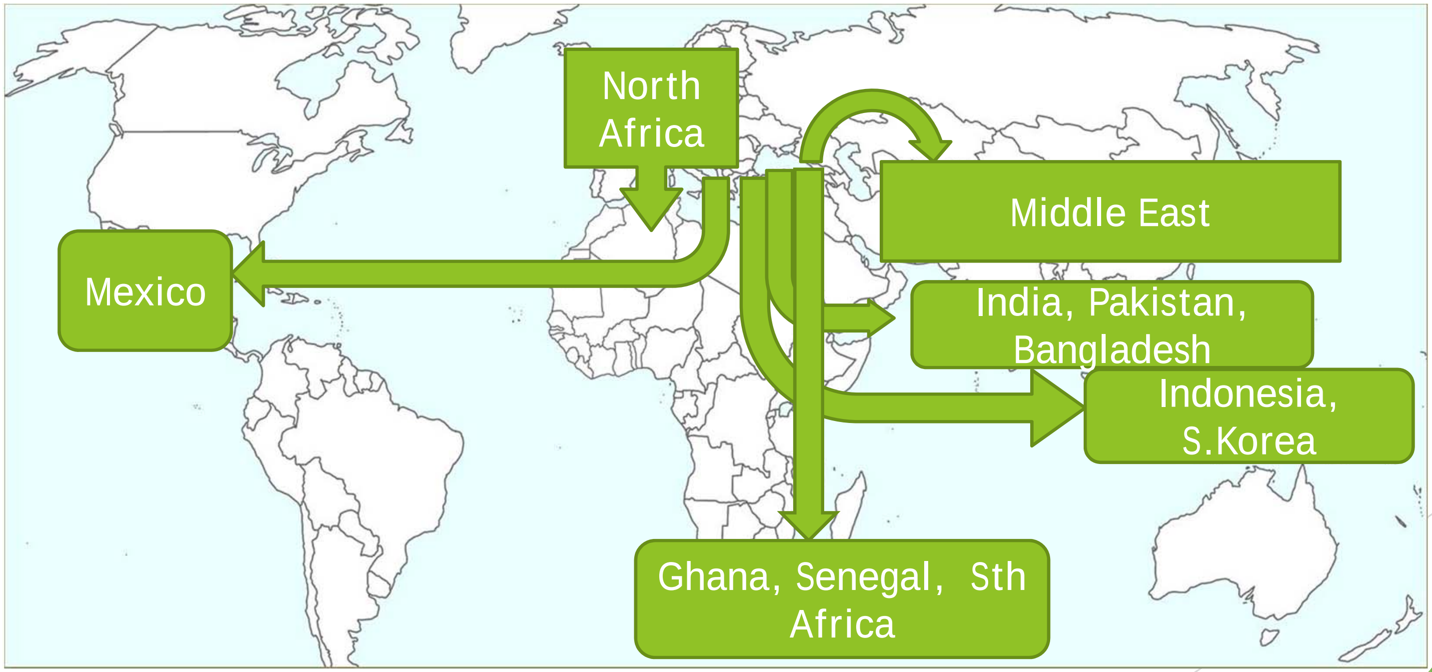
# TOP 10 importers of Russian wheat period 2011 to date..

| | | |
|---|---|---|
| 1 | Egypt | 26.46 mmt |
| 2 | Turkey | 17.38 mmt |
| 3 | Iran | 5.42 mmt |
| 4 | Yemen | 4.71 mmt |
| 5 | Nigeria | 3.28 mmt |
| 6 | Bangladesh | 3.27 mmt |
| 7 | Israel | 2.82 mmt |
| 8 | Sudan | 2.80 mmt |
| 9 | Libya | 2.20 mmt |
| 10 | Lebanon | 1.82 mmt |

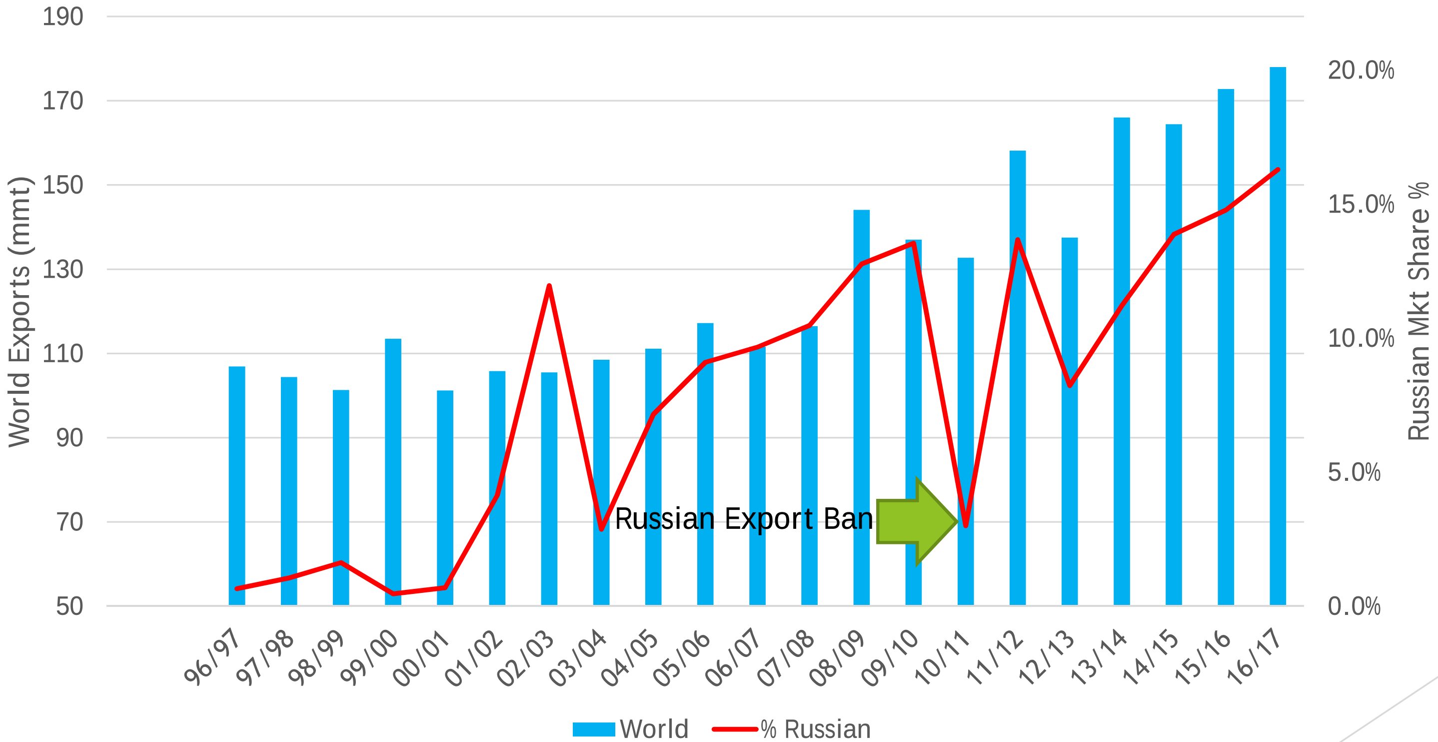


Source:IKAR

# Destinations of Russian Grains Truly Global



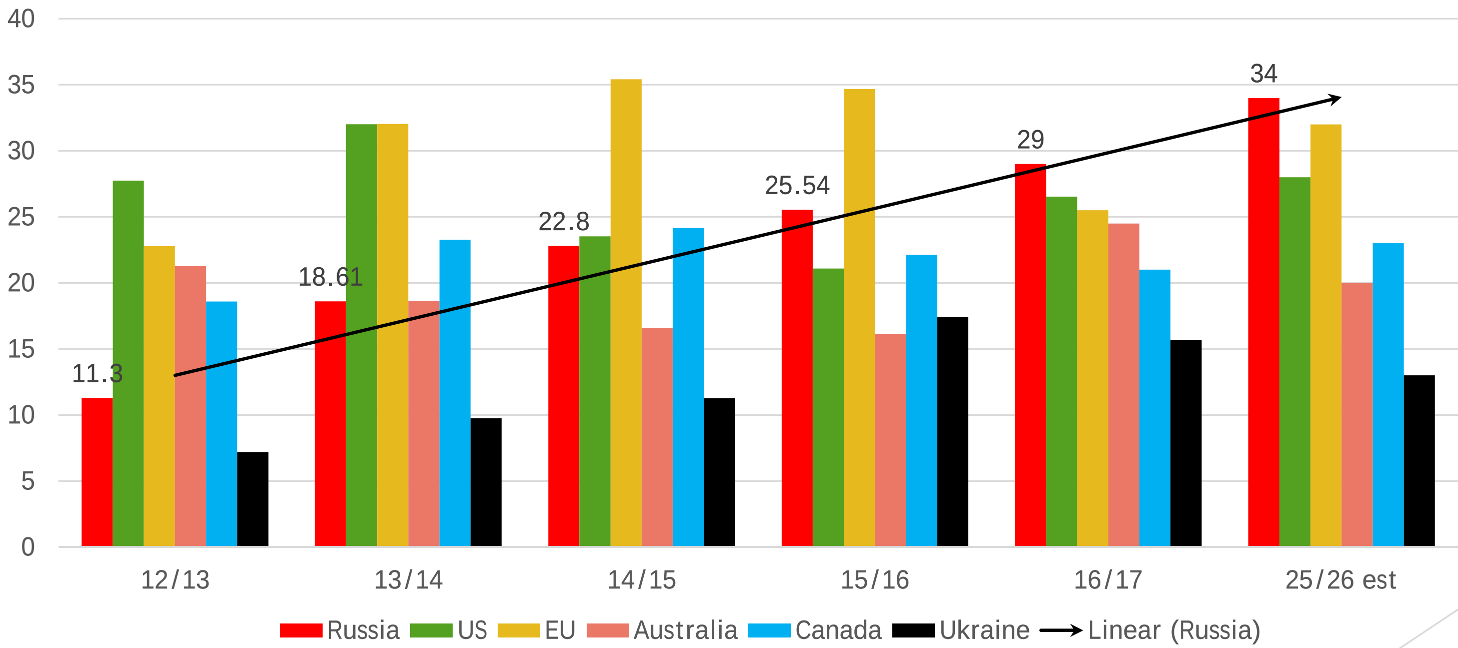
Growing Share of World Wheat Exports






Source:Agrochart

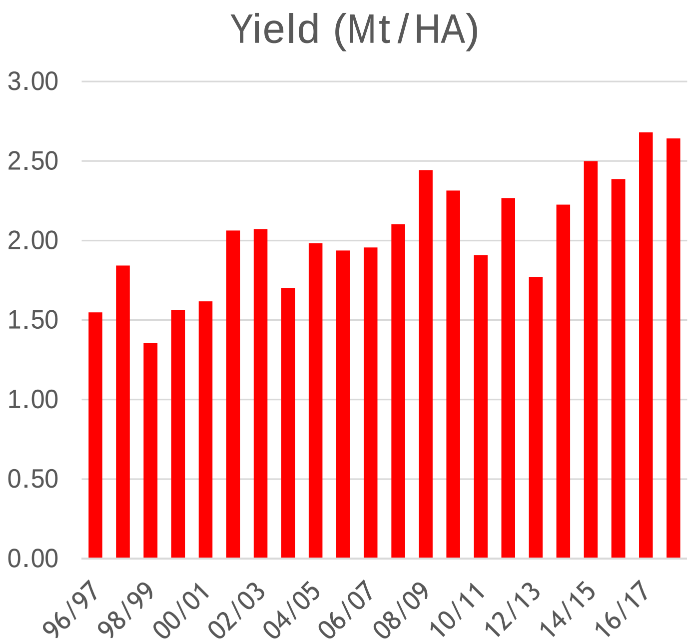
# Top World Exporters of Wheat (mmt)
# Russian = top exporter in 2016

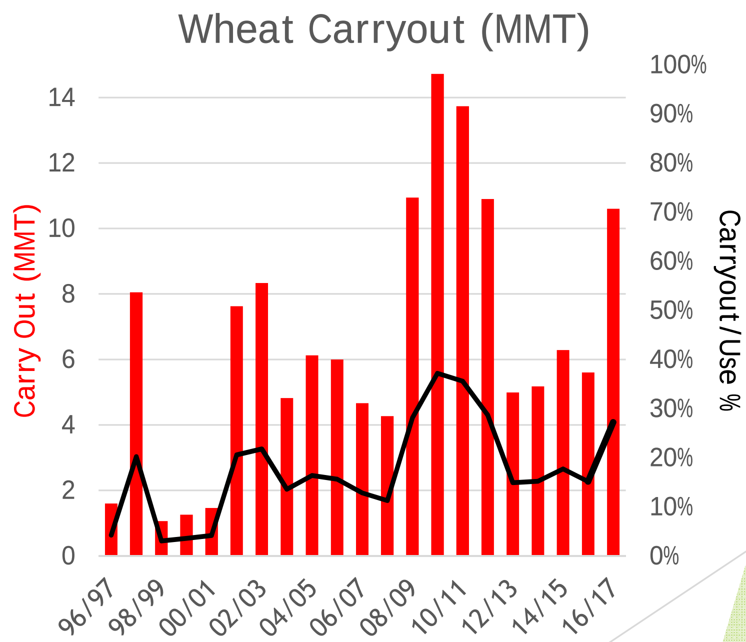





Source:USDA

# Russian Wheat – Yield and Carryout

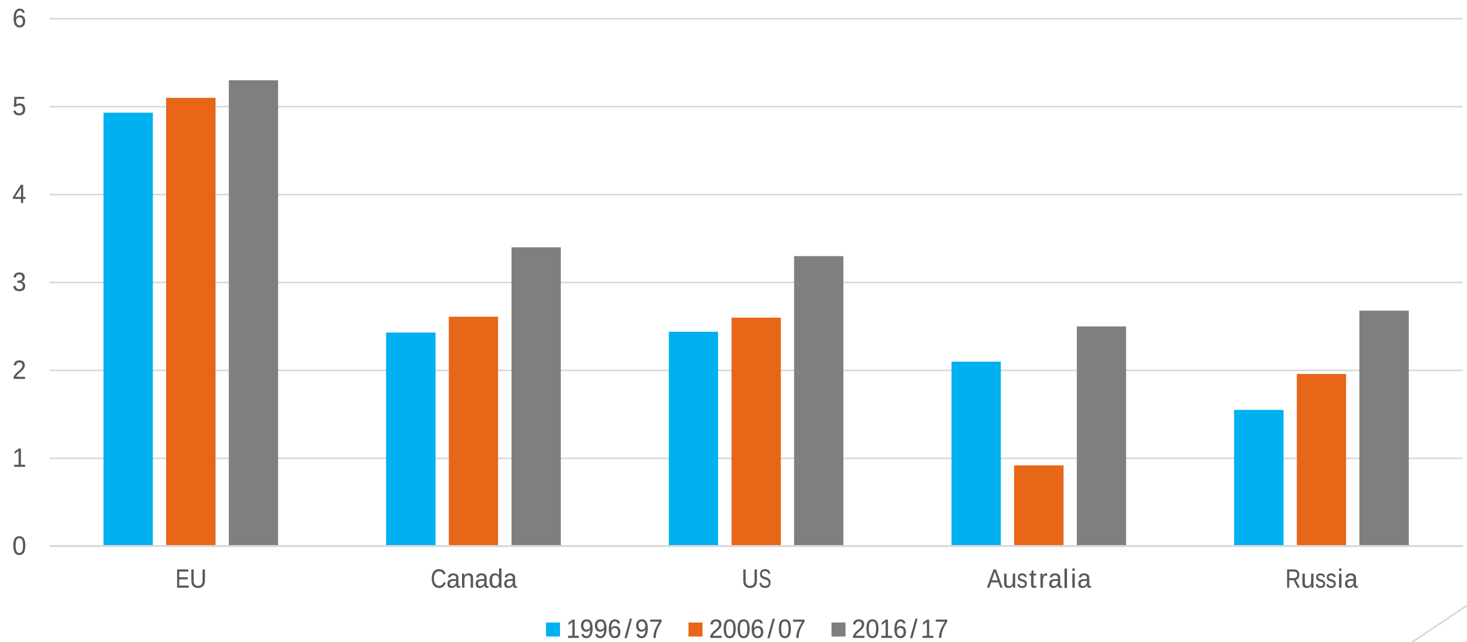




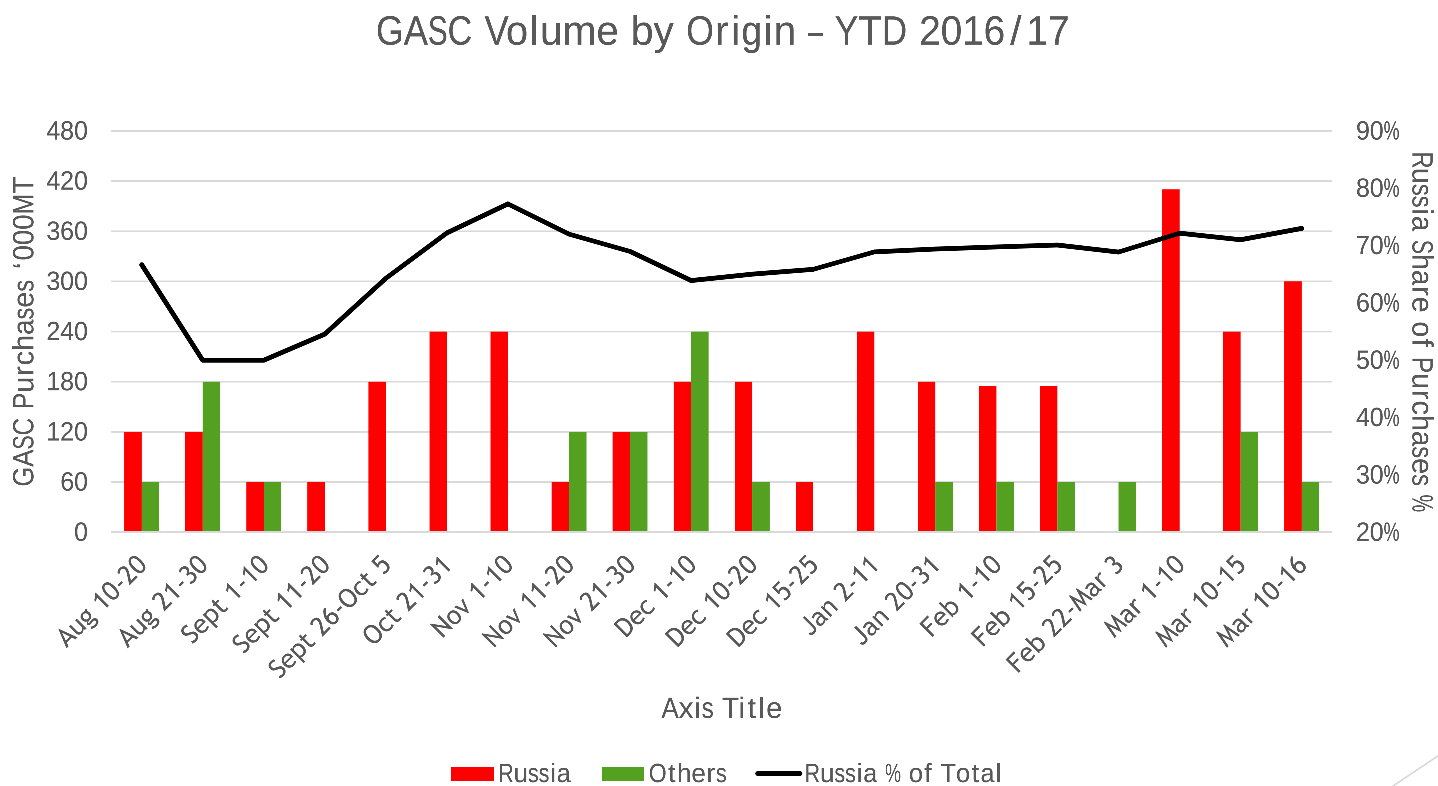

Source: Agrochart

# Wheat Yields for Major Producers – MT/HA

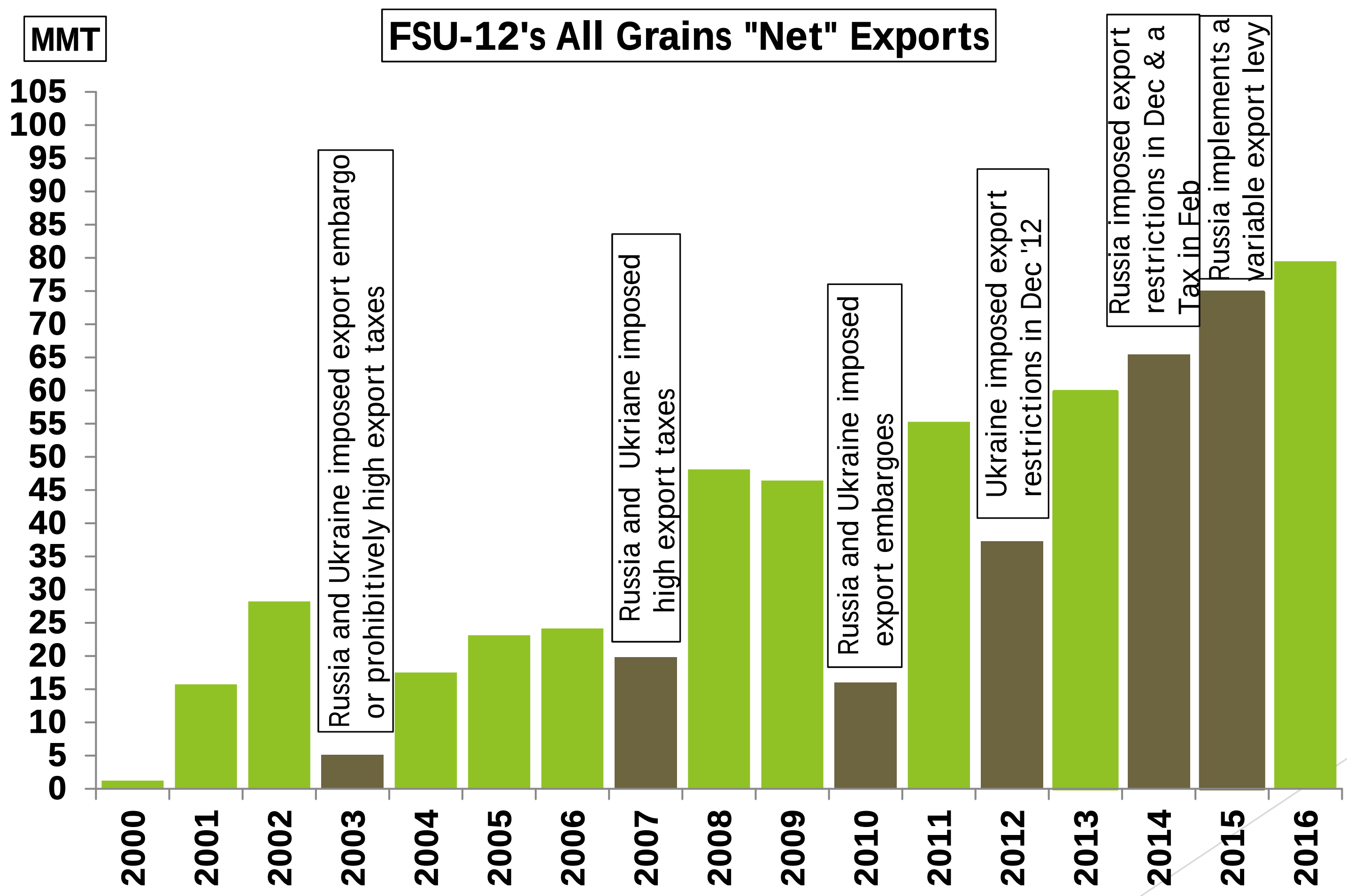





Source:WASDE

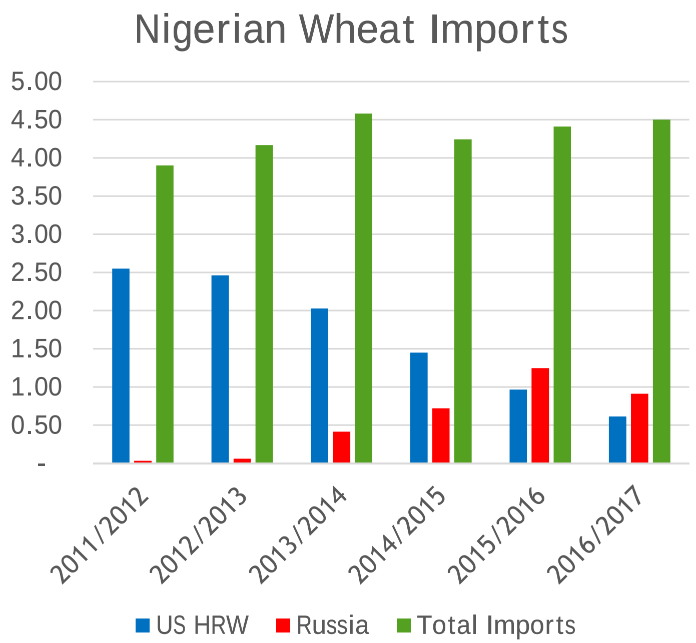


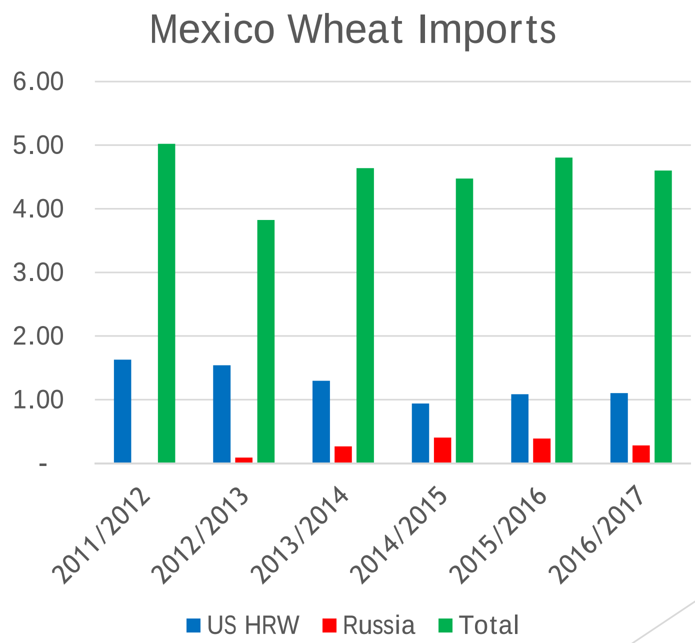

YTD total purchases 4.6MT, of which Russia 3.34MT or 73%.



MMT
FSU-12's All Grains "Net" Exports
105
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
Russia and Ukraine imposed export embargo or prohibitively high export taxes
Russia and Ukriane imposed high export taxes
Russia and Ukraine imposed export embargoes
Ukraine imposed export restrictions in Dec '12
Russia imposed export restrictions in Dec & a Tax in Feb
Russia implements a variable export levy
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
Source:AgResource

# The Growing Reach of Russian Wheat

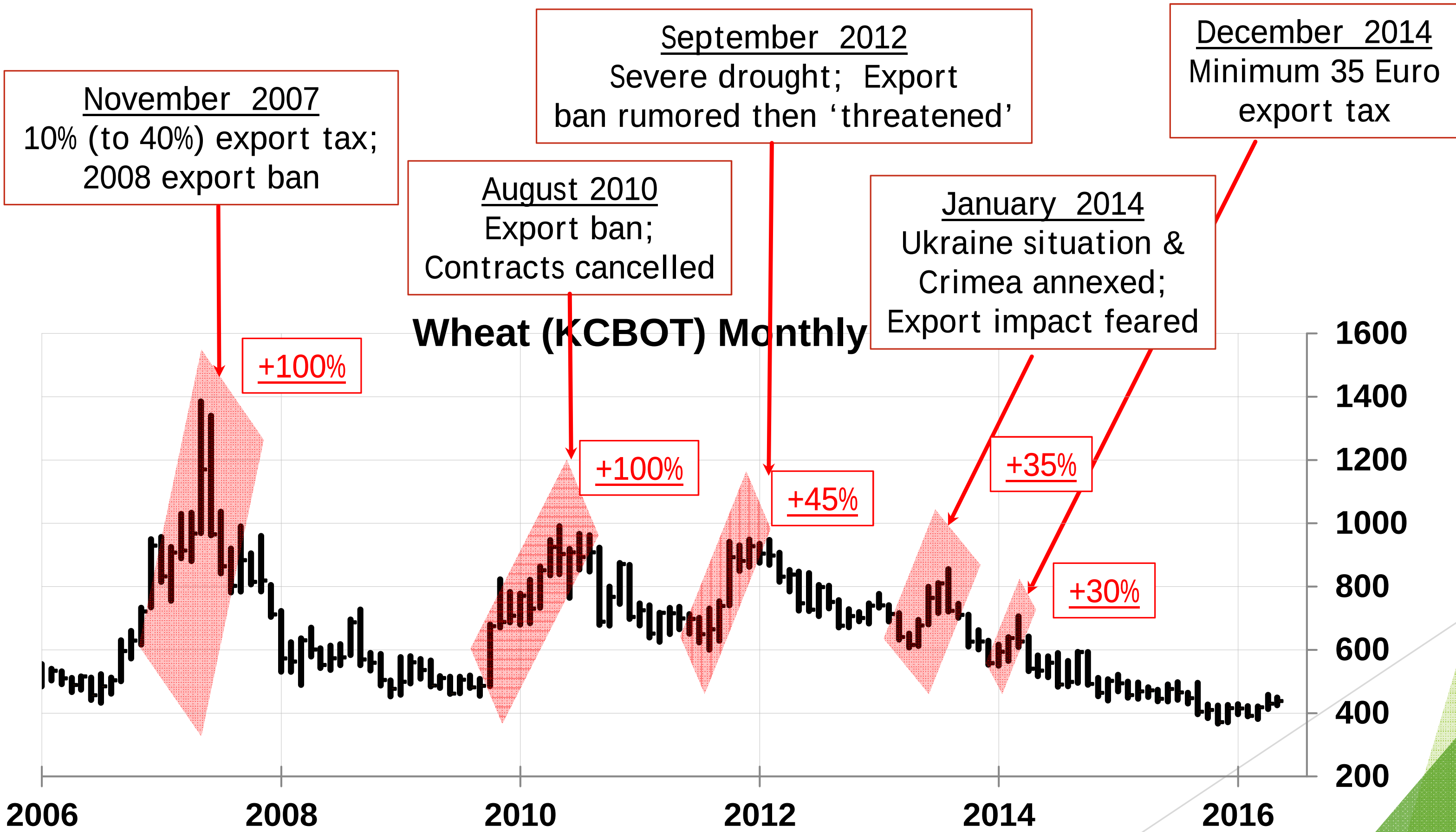





Source: WASDE

## When Russia Sneezes the Wheat Market Catches a Cold (and Heats Up !! )
## Russian Wheat Exports: State Intervention in Markets 2007 to 2016




Source:AgResource

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| **PRODUCTION COSTS** | | |
|---|---|---|
| SEEDS | rub/ha | 1,210 |
| OTHER FARM INPUT COSTS/PESTICIDES | rub/ha | 3,150 |
| FERTILIZERS | rub/ha | 6,040 |
| FUEL(PETROL/DIESEL) | rub/ha | 1,560 |
| **COST OF LAND RENTAL/OWNERSHIP-SALARIES-ADMINISTRATION COSTS** | **rub/ha** | 14,290 |
| | | 26,250 |
| YIELD OF WHEAT(MT/HA IN KRASNADOR | mt/ha | 5.20 |
| **COSTS PER TONNE (MT)** | rub/mt | **5,048** |
| **STORAGE+TRANSPORT TO INLAND SILO/CLEANING** | rub/mt | **555** |
| **TOTAL COST** | **rub/mt** | **5,603** |

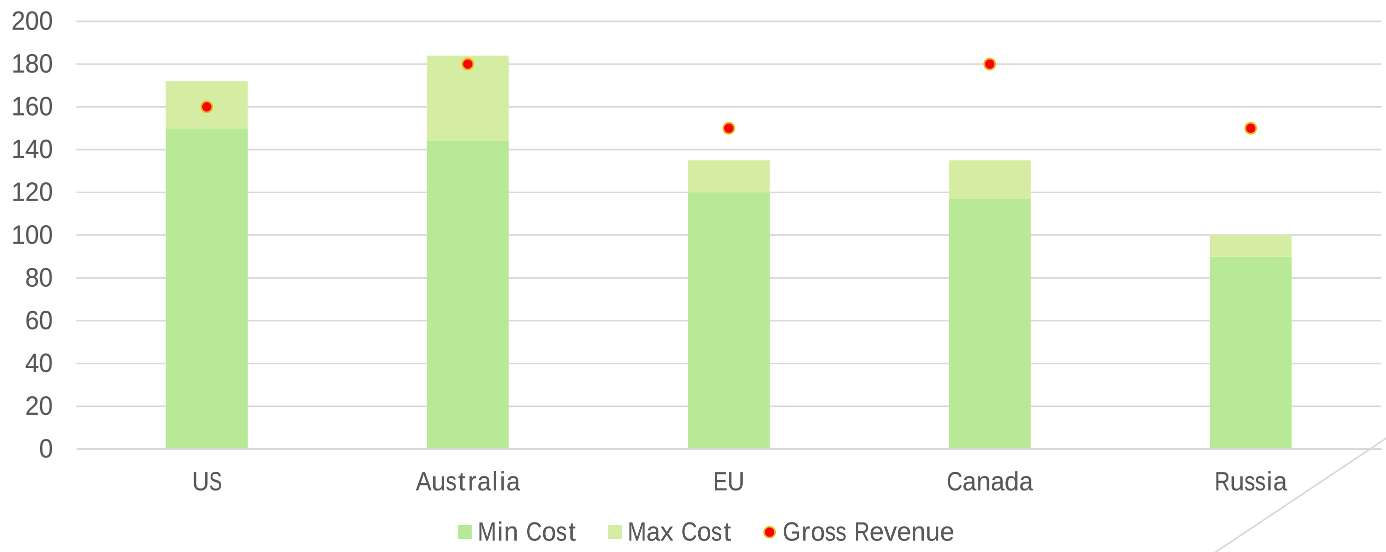
**(approximate ) Exchange Rate of 1 USD = 60 roubles** **$93 / MT**

| | | |
|---|---|---|
| Cost of transport to port of loading (Novorossisk) CPT | 900 | $15 |
| Cost of fobbing at Novorossisk | 1200 | $20 |
| | Total cost FOB | $128 |
| FOB PRICE 12.5% FEBRUARY 2017 = 190 usd | PROFIT | **$62 / MT** |

Income & Production Costs of Wheat – US$/mt

With the exception of the Ukraine, Russia is the most cost effective producer of wheat in the world currently. With significant cost advantages in fertilizer & pesticide cost as well as low land values and labour costs.

Vast improvements in supply chain efficiencies during the peak load period of July-September have taken place since 2009 with significant investment, particularly in port infrastructure.






Source: IntlFCStone

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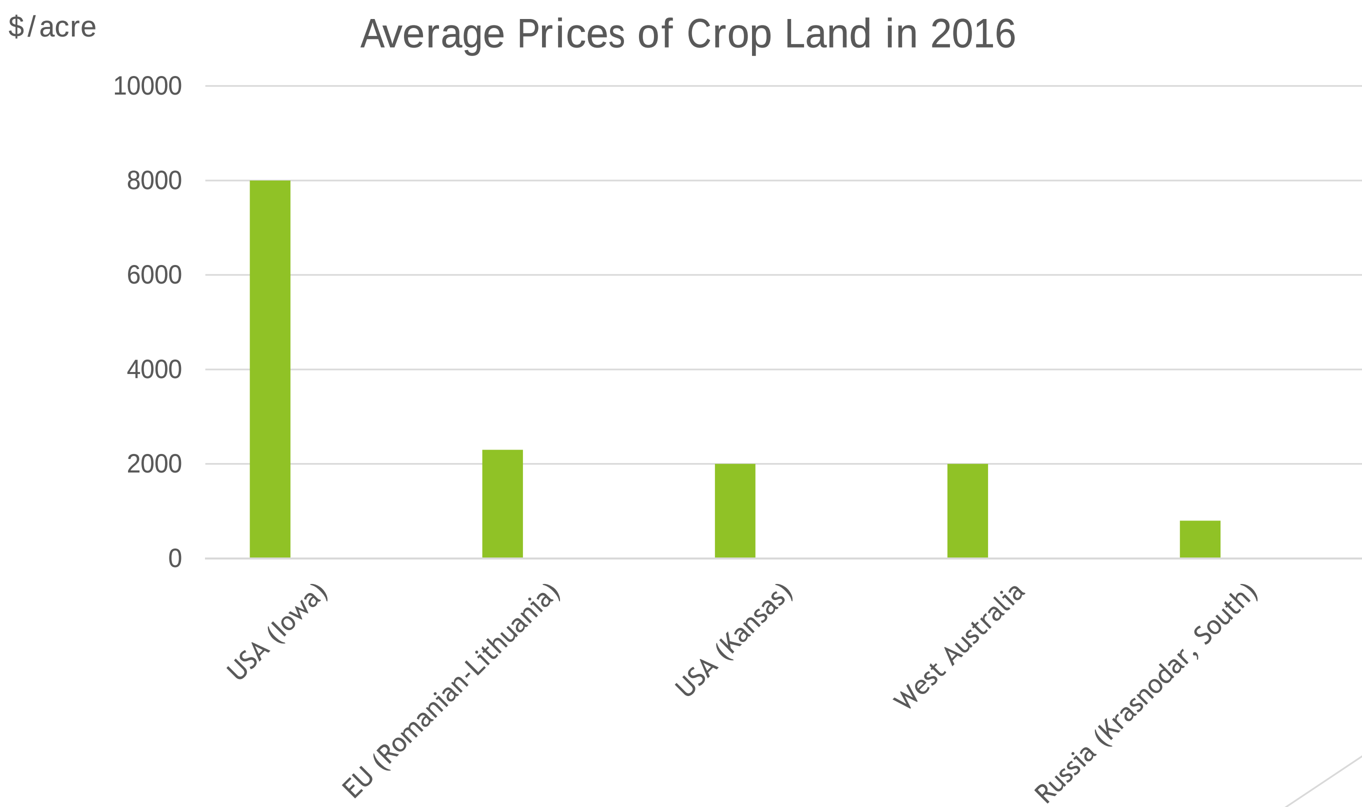
# Russian Wheat is the Best Value Milling Wheat in the World

Current World FOB Levels (as of Feb 23rd )

- Russian 12.5% $191
- HRW 12% Gulf $217
- 2SRW Gulf $188
- French 11% $191
- German 12.5% $194
- APW $207
- Argentina 12% $188

Source: Fryers Report






Source: SovEcon, USDA

# Future for Russian wheat

- **Russia can improve yields and increase global market share.**
- **Infrastructure projects are planned in the Black Sea, the Azov sea as well as in the Caspian to serve demand in Iran and in the Far East, notably in Vladivostok for the Asian market.**
- **Russian wheat often has the best quality/ price ration. Good extraction values for flour.**
- *Production costs are low ($ 90-115/mt) & the price of land up to 5x less than in USA/ EU. (between $1,500 - $3,000 per hectare vs $5,000 in Kansas? $20,000 in Iowa? As per Sovecon)*

# Some points to watch

- Politics: there have been some export restrictions/ taxes (most notably the ban in 2010, unlikely to be repeated)
- Weather – extreme cold in winter/ very hot in the summer.
- Default risk/ counterparty risk.
- Fraud + financing issues
- Cost of logistics rising/ expensive FOBBING cost $28/mt in peak season in Novorossissk. Can infrastructure keep pace?
- Cultural differences/ communication difficulty/ Few local participants know international rules (such as GAFTA)
- The % of bug damage impacts on quality.
- Success of Russian Wheat exports has been without a centrally funded lobby group (no US Wheat Associates or France Export Cereales equivalent)

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# Thank You - Спасибо !