

# Impact of 2022 Russian Military Invasion on Food Supplies from Ukraine

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**Kyiv School of Economics** 

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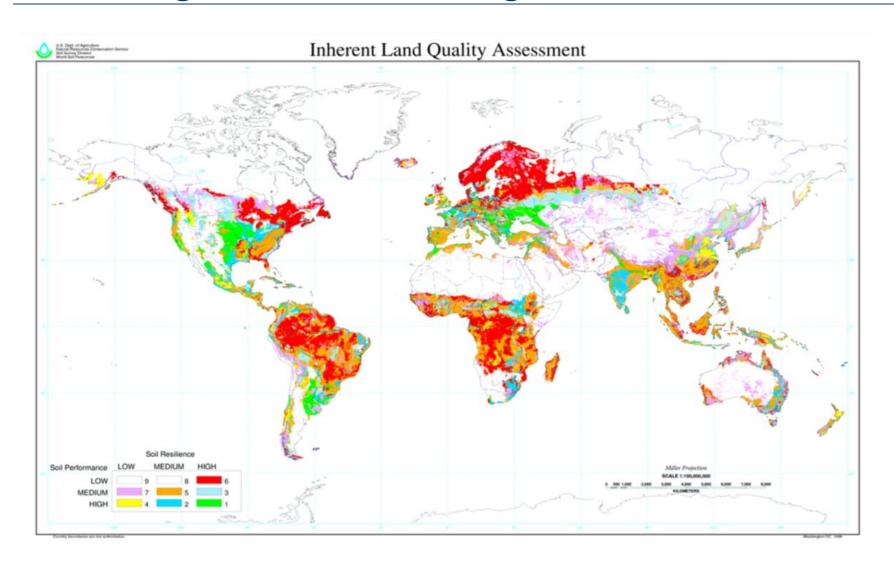
### **Outline**



- 1. Growing role of Ukraine's agriculture
- 2. A long way to a global agricultural player
- 3. Big picture: total damages and losses
- 4. Agricultural sector during the war
  - a) Damages
  - b) Losses
- 5. Implications for Global Food Security



### 1. Growing Role of Ukraine's Agriculture

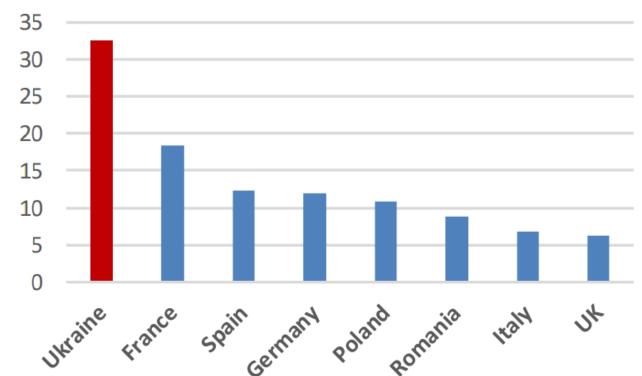




### 1. Growing Role of Ukraine's Agriculture

- Total agricultural land area is 42.7 mln ha or 71% of the total country area
- 1/3 of the most productive farmland in the world (black soil)

Farmland (arable land) in Europe, mln ha





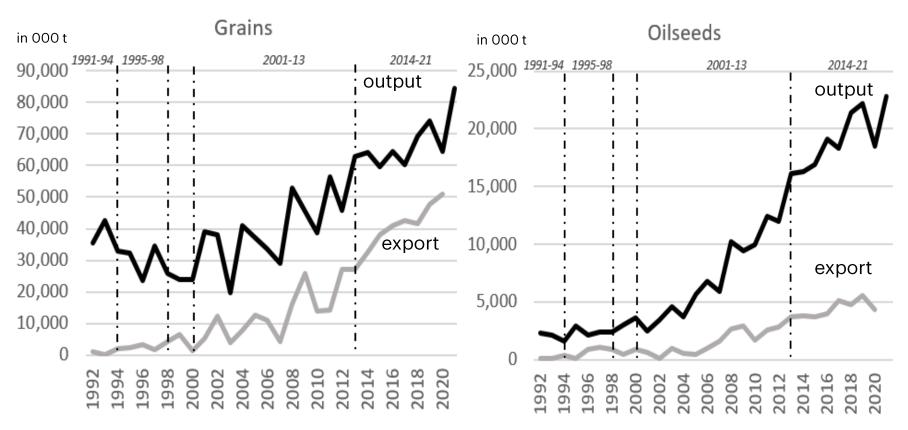
### 1. Growing Role of Ukraine's Agriculture

- Domestically
  - mainly crops (~ 75% of agricultural output)
  - about 20% of Ukraine's economy (GDP) if up and downstream sectors are included
  - more than 40% of total export revenues
- Globally
- Agri-Food Exports from Ukraine:
  - Equivalent of feeding more than 400 mln people
  - 10% of the world wheat, 15% of corn and barley, and 50% of sunflower oil in global exports



### 2. A long way to a global player

Production and export of grains and oilseeds



Source: SSCU

# https://kse.ua/kse-department/kse-institute,

### 3. War TOTAL Damages and Losses







SelfSanctions — LeaveRussia

Read more

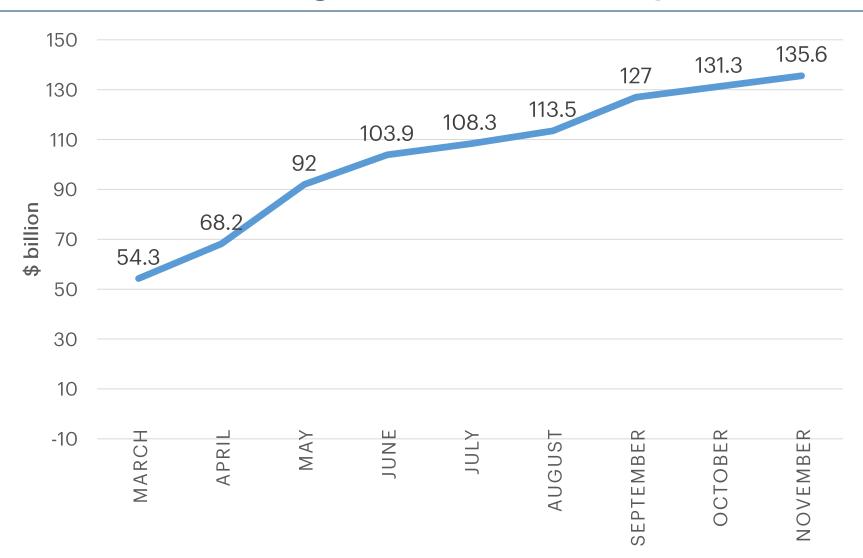


Sanctions against Russia and the reconstruction of Ukraine after the war

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### 3. War TOTAL Damages and Losses Pile Up



War TOTAL Losses: ~ \$700 bln

# https://kse.ua/war-impacts-on-ukrainian-agriculture,

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### 4. War Agricultural Damages and Losses

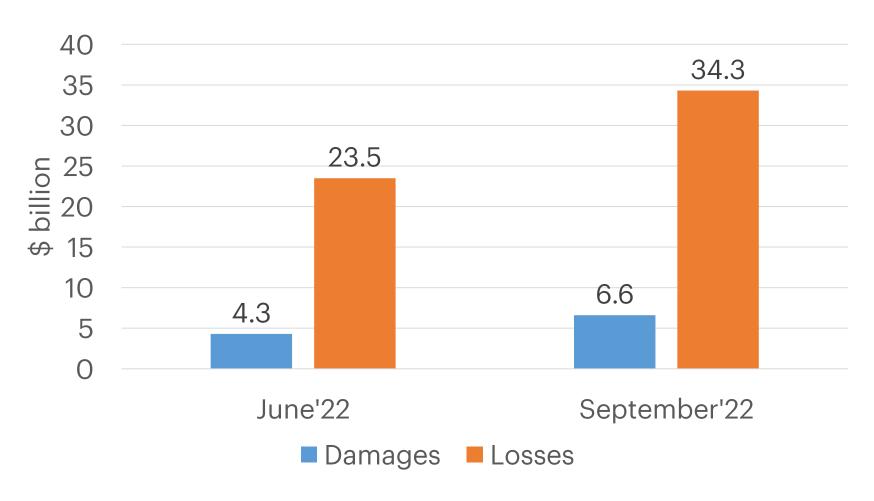


# Agricultural War Damages and Losses Review

Center for Food and Land Use Research (KSE Agrocenter)

Based on the PDNA (Post Desaster Needs Assessment) methodology developed by the World Bank/EU. Supported by the WB/FAO

# 4. Agricultural war damages are piling up quickly

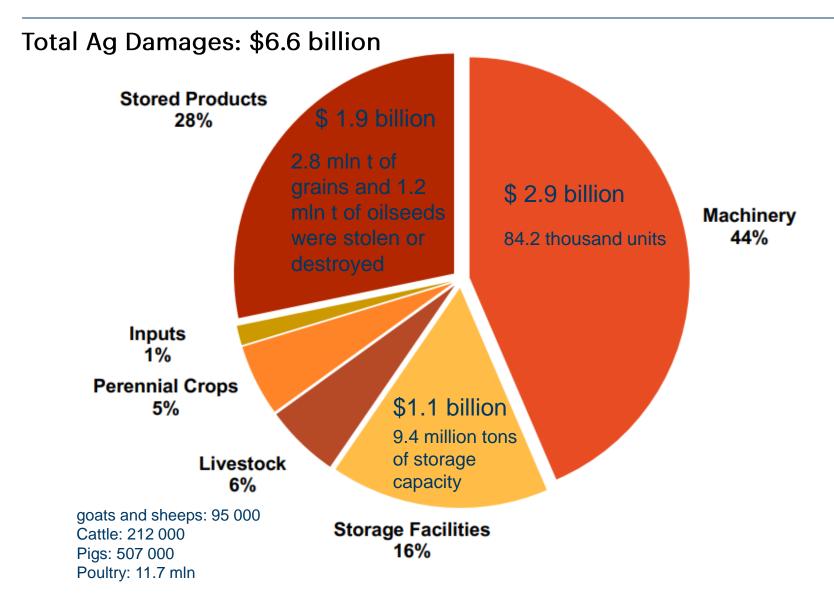


Source: own presentation using the KSE Agrocenter (2022)

# https://kse.ua/wp-content/uploads/2022/11/Damages\_report\_issue2.pdf

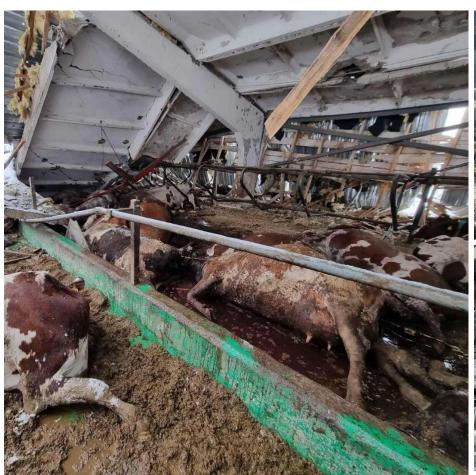
## 4a. Damages: almost a quarter of the sector is destroyed





### 4a. War Damages: example

Case: Agromol Diary company in the North (Kharkiv region)







https://ecopolitic.com.ua/u a/news/pid-harkovomrosiyani-znishhili-vidomuagrofermu-zaginulo-bagatokoriv-video-i-foto-18/

### 4a. War Damages: example





https://superagronom.com/news/15241-na-kiyivschini-traktor-pidirvavsya-na-mini--agrariyivzaklikayut-ne-rizikuvati-jittyam



https://hromadske.ua/posts/na-chernigivshini-traktor-nayihav-na-vibuhivku-vodij-zaginuv

https://novynarnia.com/2022/05/22/u-buchanskomu-rajoni-traktoryst-pidirvavsya-na-mini-foto/

### 4a. War Damages: example

Case: shelled fields in Kharkiv region



https://twitter.com/radiosvoboda/status/1534483247673053184/photo/1

### 4a. War Damages: example

### Case: targeted wheat fields in the East

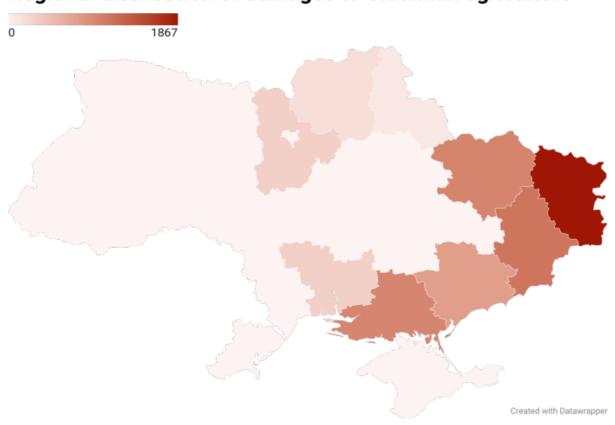


Source: Igor Lutsenko. https://www.facebook.com/igor.lutsenko/posts/pfbidO2VPLByytoZEhcZsd9xdnF8urVJbRd4adGn455M7ssKT8fBpX9ETQLwGCbZuQabcWkl



### 4a. Ag damages geographical distribution

### Regional distribution of damages to Ukrainian agriculture

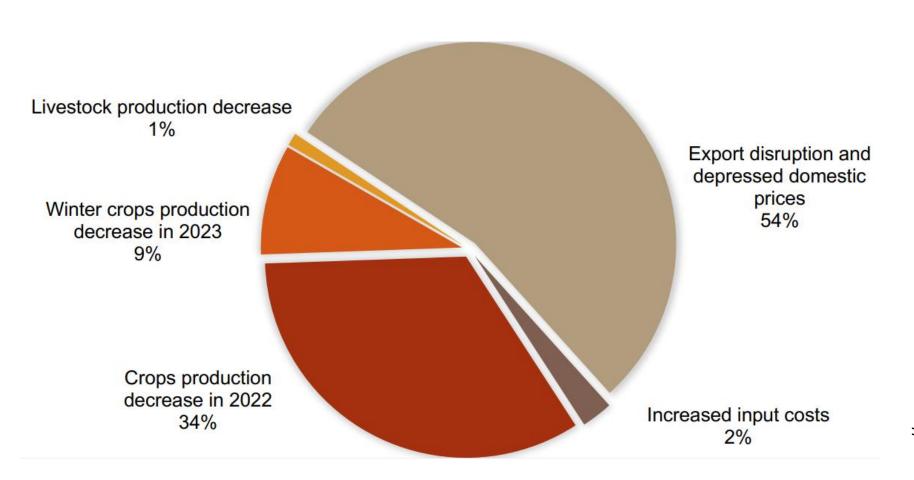


# https://kse.ua/wp-content/uploads/2022/11/Losses\_report\_issue2.pdf

## 4b. Huge Ag Losses despite High World Market Prices

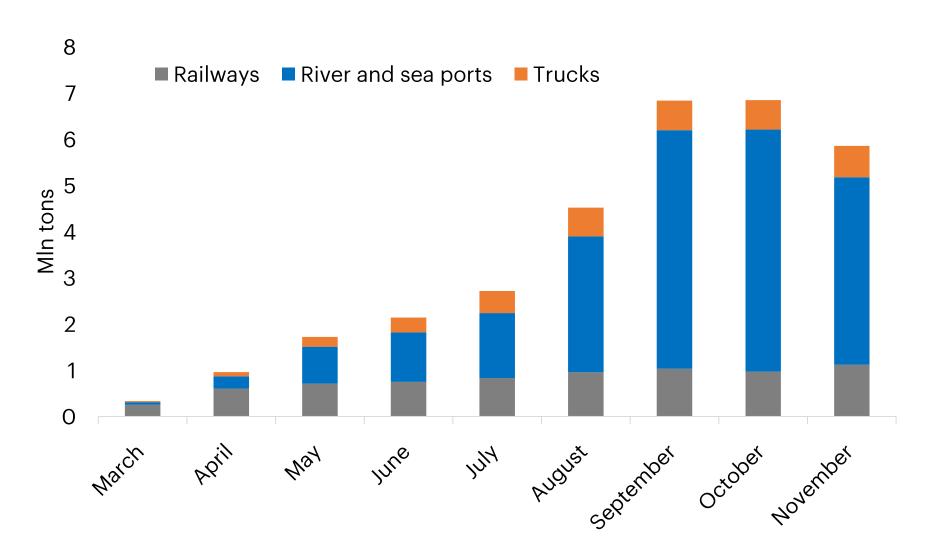


Total Ag Losses: \$34,5 billion

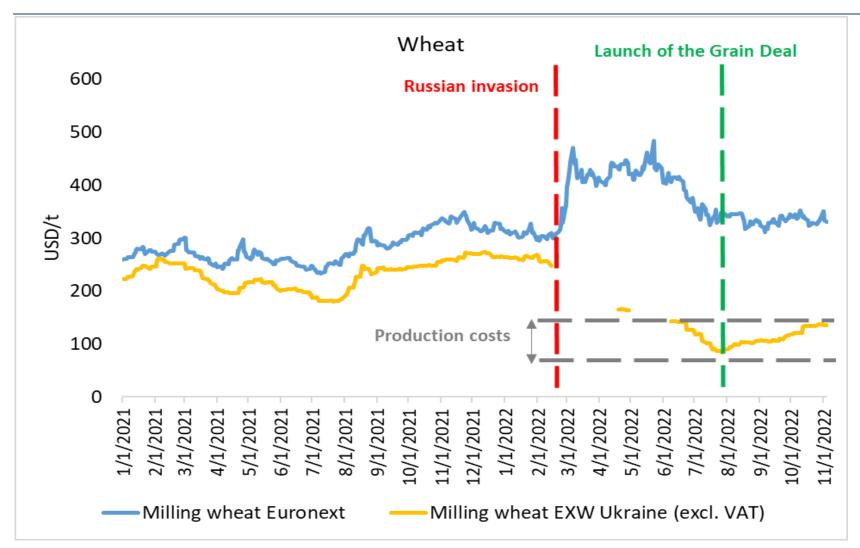




### 4b. Disrupted Exports since Feb'22



### **4b. Depressed Domestic Prices**



Source: own presentation based on the UkrAgroConsult price data. Note: the production costs' ranges are indicative, based on the information received from the farmers and are provided only to guide a reader with respect to expected profitability of the grain business in Ukraine



### 4b. Impact on agriculture: summary

- Sea ports were blocked and vessels/exports were stuck
- Exports via other alternative transport routes were limited
- High logistics costs: ~30 \$/t before the war vs \$200/t now
- Current domestic prices are about 50% lower than the world ones
- Huge liquidity problems with farmers. They decide now whether to plant winter wheat and look for storage capacity
- Winter crops: expected only 40-50% of the last year areas
- Grain Deal with Turkey/UN successful? partially:
  - Export is going out
  - But prices do not increase

# 5. Concluding remarks and threats to global food security



- Agricultural outlook:
  - 2022 harvest of grains and oilseeds: 25-37 mln t less than in 2021
  - Winter crop planting is delayed: only 40% of the last year area
  - => there will be even less harvest/food from Ukraine available
- Global market have remain tight and 2022/23 global stocks might even drop
- Capacity to replace the expected missing exports from Ukraine in the world are limited
- => Every ton of grains from Ukraine will count this and next season



### Thank you! ДЯКУЮ! STAND WITH UKRAINE!!!

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