

Crisis resilience and adaptation in agriculture

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KSE Agrocenter Discussion Series

War and Post-War Agriculture of Ukraine

Zoom Conference 29 Nov 2023



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Outline

- I. What crises?
- II. The role of resilience in Ukraine's current situation
- III. Adaptation power of the Ukrainian food system

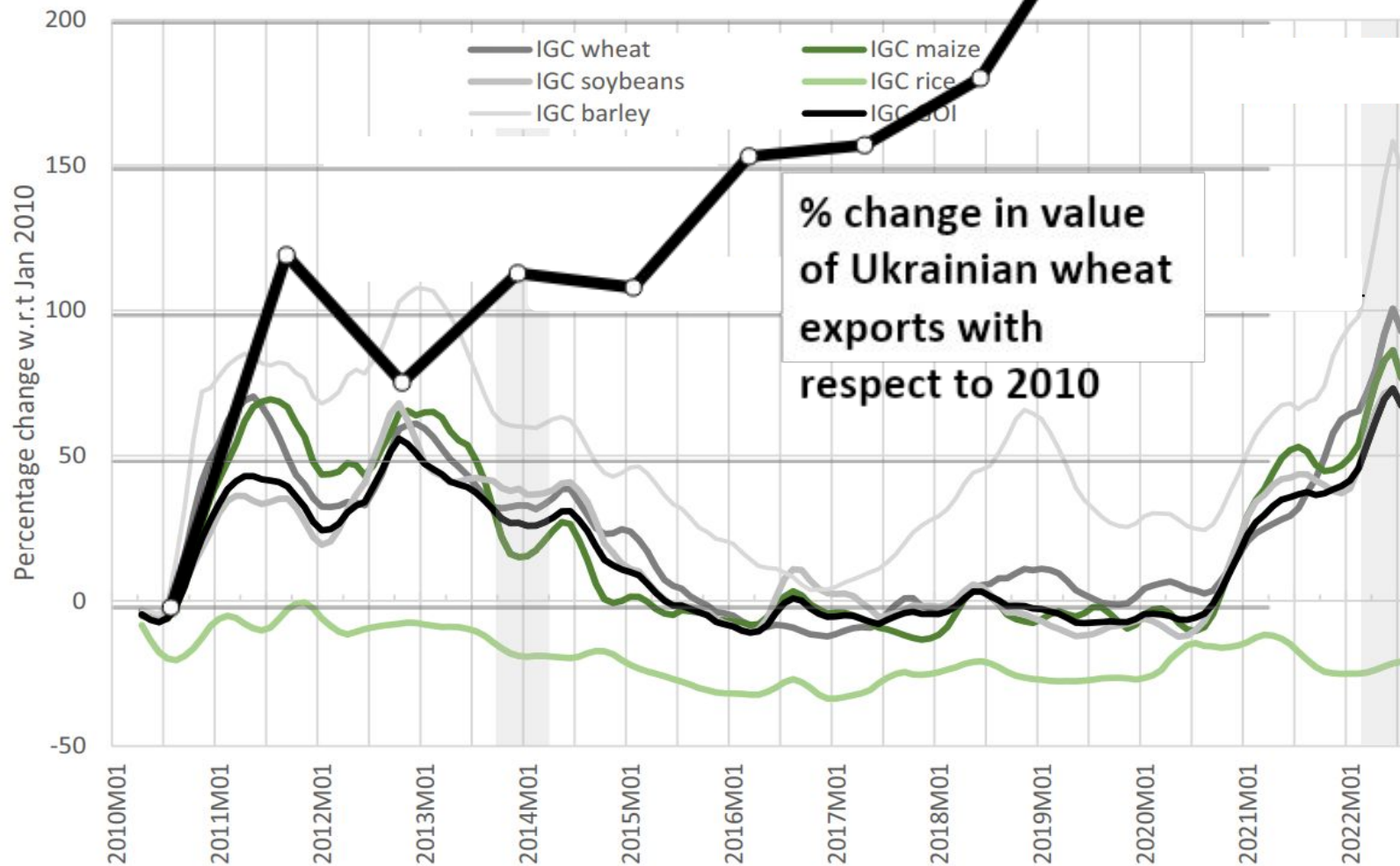


I What crises?

- Ukrainian agriculture has experienced various substantial challenges since 1990
 - Economic transformation (from Soviet Union to now)
 - (Hyper-) Inflation
 - Recession
 - Biological challenges
 - Changes in weather patterns due to climate change
 - Covid ☐ global supply chain disruptions
 - Geopolitical destabilization
 - Governance crises (Trump 2017-2021, Brexit 2020 etc.)
 - Euromaidan and the aftermath
 - Russian invasion ☐ global supply chain disruptions
 - ☐ Existential crisis at national scale
 - ☐ Unique “fate” in modern European & global history
 - ☐ Strong contrast to the sheltered and highly protected & stable development of

I What crises?

Development of World Bank global grain price indices since 2010:



I What crises?

- Which challenges come next?
 - Climate crisis?
 - Sustainability crisis?
 - More/ sustained geopolitical destabilization?
- Similarities
 - Unforeseen challenges & hardships for farms & agribusiness companies
- Differences:
 - Degree of existential character of the challenge/ threat
 - Comprehensiveness of effects/ impacts on the agric. production process & chain
 - Degree & duration of uncertainty
 - In current situation



II Resilience in Ukraine's current situation

A resilient farming system "ensure[s] the provision of the system functions in the face of increasingly complex and accumulating [...] shocks"
(Meuwissen et al., 2019)

- Immense effort
... as well as chance!

II Resilience in Ukraine's current situation

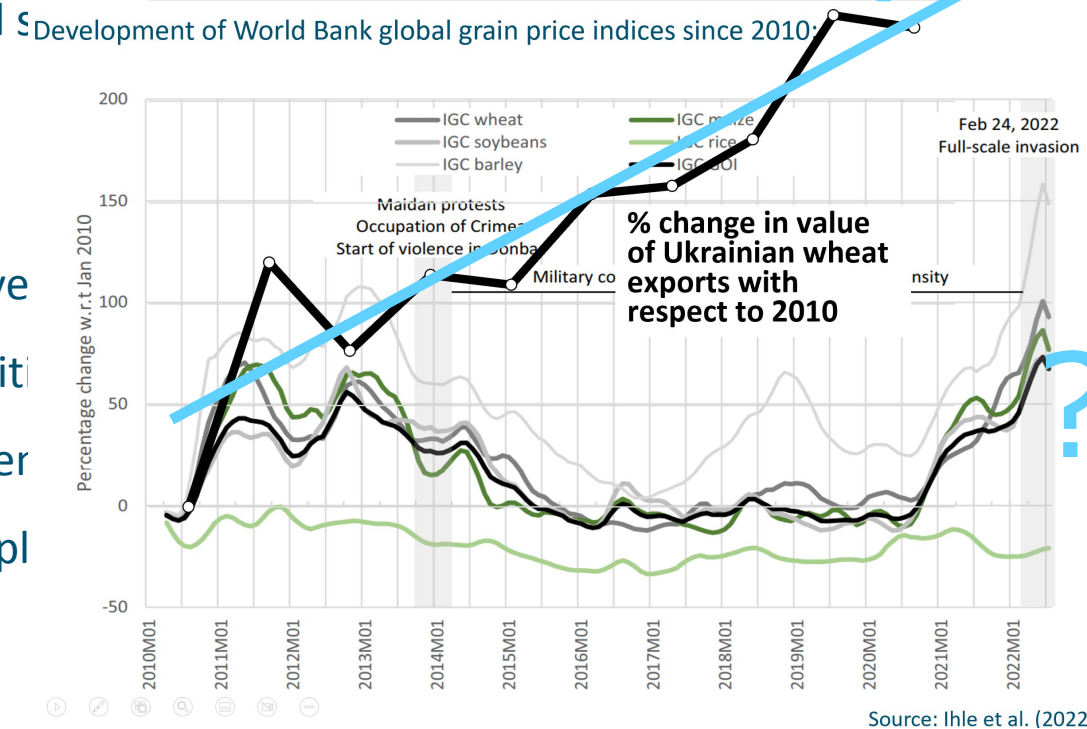
- Necessitates flexibility, creativity & inventiveness from Ukrainian agricultural entrepreneurs
- Unvoluntary “training” at extreme levels enforced upon Ukraine by the Russian Federation
- Enforces increased preparedness & capabilities to ensure farm survival (resilient behavior)
- Any other challenges in the one, two decades after the war: piece of cake
- Final decoupling from the communist past and (inter-) dependence with/ from Russia
- For Ukrainian society as a whole & Ukrainian agriculture specifically
- Chance for
 - Creating,
 - Recording,
 - Optimizing,
 - Maintaining and sharing expertise
 - How to deal with large to existential challenges for the own agric. enterprise
- Resilience (intelligence) expertise leader?

III Adaptation power of Ukrainian food system

- Tragic & painful experience for the Ukrainian society & economy
 - Unanticipated scale of existential threat to European society
- Chance for transforming shock and stress
 - Inventiveness?
 - Innovative power?
 - Constructive and productive

□ Acceleration of sustainability transition

- Ideally in medium and long run □ er
- Anticipate (more predictable) compl



- Forward-looking perspective feasible?



- Losses are immense, painful and traumatic

□ Possible to recognize & realize the changes created by these challenges?

III Adaptation power of Ukrainian food system

- Turn existential threat and societal trauma into
 - Success factor?
 - (Long-run) business accelerator?
 - Stabilizing factor for global food supply chains?



The screenshot shows the CTECH website header with navigation links for 24/7, Buzz, Startups, VC, AI, Innovation, and Opinion. Below the header, it indicates the article is by CALCALIST and is located in the News section. The main content area features a green WhatsApp icon, a blue Facebook icon, a black X icon, and a blue LinkedIn icon. The article title is 'Rise up nation: Bereaved father calls for 1,400 new startups in memory of Israelis murdered by Hamas' under the category 'ISRAEL AT WAR'.



Questions?
Comments?

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To explore
the
potential
of nature to
improve the
quality of
life



References

Ihle, R., Bar-Nahum, Z., Nivievskyi, O. and O.D. Rubin (2022). Russia's invasion of Ukraine increased the synchronisation of global commodity prices. *Australian Journal of Agricultural and Resource Economics* 66(4): 775-796.

<https://onlinelibrary.wiley.com/doi/full/10.1111/1467-8489.12496>

Meuwissen, M. et al. (2019). A framework to assess the resilience of farming systems. *Agricultural Systems* 176: 102656.

<https://doi.org/10.1016/j.agsy.2019.102656>