Context and methodology

On 24 February 2022, conflict erupted across most of Ukraine, immediately triggering a large scale displacement crisis as well as humanitarian needs. Humanitarian actors and commercial traders are faced with the sudden disruption of major supply routes for key commodities, while bracing for the impact of active conflict and displacement on domestic production. While severe food shortages have already been reported in areas most affected by active conflict including Mariupol and Kharkiv, disruptions in supply chains can also be observed in areas that remain accessible, where retailers and consumers report that a number of commodities have become more difficult to source due to logistical constraints, stalled local production and a sudden rise in demand for basic items. This brief aims to provide background on current challenges faced by aid actors and commercial traders alike in terms of procuring items for the purpose of distributions as well as regular supply of markets across accessible areas of Ukraine. The content is based on information collected through secondary data review (SDR), online monitoring of product availability[1], as well as Key Informant Interviews (KIIs) conducted with consumers in Lviv.

Map 1 : Logistics Cluster Concept of Operations in Ukraine, March 2022.

Key commodity supply chains and ongoing disruptions

Pre-existing supply chains

Ukraine is a major exporter of basic food staples such as maize, seeds oils and wheat to Europe and Central Asia, as well as an importer of fuel and packaged medicaments, among other commodities.[2] The bulk of traded products ordinarily transit through the Sea of Azov and the Black Sea. Other routes for Ukrainian imports and exports include road and rail connections with Russia and Belarus, as well as other neighboring Central and Eastern European countries along its western border. In terms of basic staples for domestic consumption, Ukraine relies heavily on its robust agricultural production.

Ongoing disruptions to supply chains

In addition of the evident impact of the present conflict on trading partnerships with Russia and Belarus, recent events have virtually brought commercial trade through the Black Sea to a halt.[3] Major ports have been closed, and the threat of naval attacks on commercial ships entering Ukrainian ports is further deterring commercial activity.[4] Both of these factors are putting intense pressure on land border entry points with neighbouring Central and Eastern European countries, as commercial suppliers and humanitarian aid agencies compete for limited logistical capacity to ferry a large volume of items into Ukraine. While there are several available border entry points into Ukraine, a large part of the Ukrainian land border toward Europe lies along the Carpathian mountains, providing for difficult terrain for large scale trade.

While supplies are also currently coming into Ukraine from Romania, Slovakia, Moldova and Hungary, transit through Poland appears to be the preferred option for most actors due to stronger pre-existing logistical capacity and easy access to the major center of Lviv, which has been identified as the main logistical hub for the humanitarian response.[5] Along entry points to Lviv, bottlenecks are becoming evident: as reported by the World Food Programme (WFP), competition for transport services is leading to scarcity of trucks and drivers available to deliver commercial goods and assistance to Ukraine.[6]

Beyond procurement, challenges in identifying partners for delivery to both accessible and hard to reach areas of Ukraine also appears to be a challenge for major actors such as WFP, likely owing to the general disorganization caused by the conflict onset among contractors, as well as risk aversion. The Logistics Cluster also reports that the Rzeszów airport, on the Polish side of the border, is becoming crowded due to the arrival of an increasing number of shipments, creating a bottleneck in the arrival of supplies by air. Long queues at land border entry points have also been reported. NGO KIs further add that immediate bottlenecks include the customs clearance process, lack of warehousing space, and the increase in cost of trucking services.

For partners attempting to source supplies via the domestic market, scarcity was observed as a result of the sudden rise in demand, coupled with a decrease in supply due to disruption of production. Farmers and local businesses are also faced with fuel shortages that hamper the delivery of goods to partners and markets, in addition to experiencing major disruption in production as a result of uncertainty regarding conflict trends, displacement of their own employees.

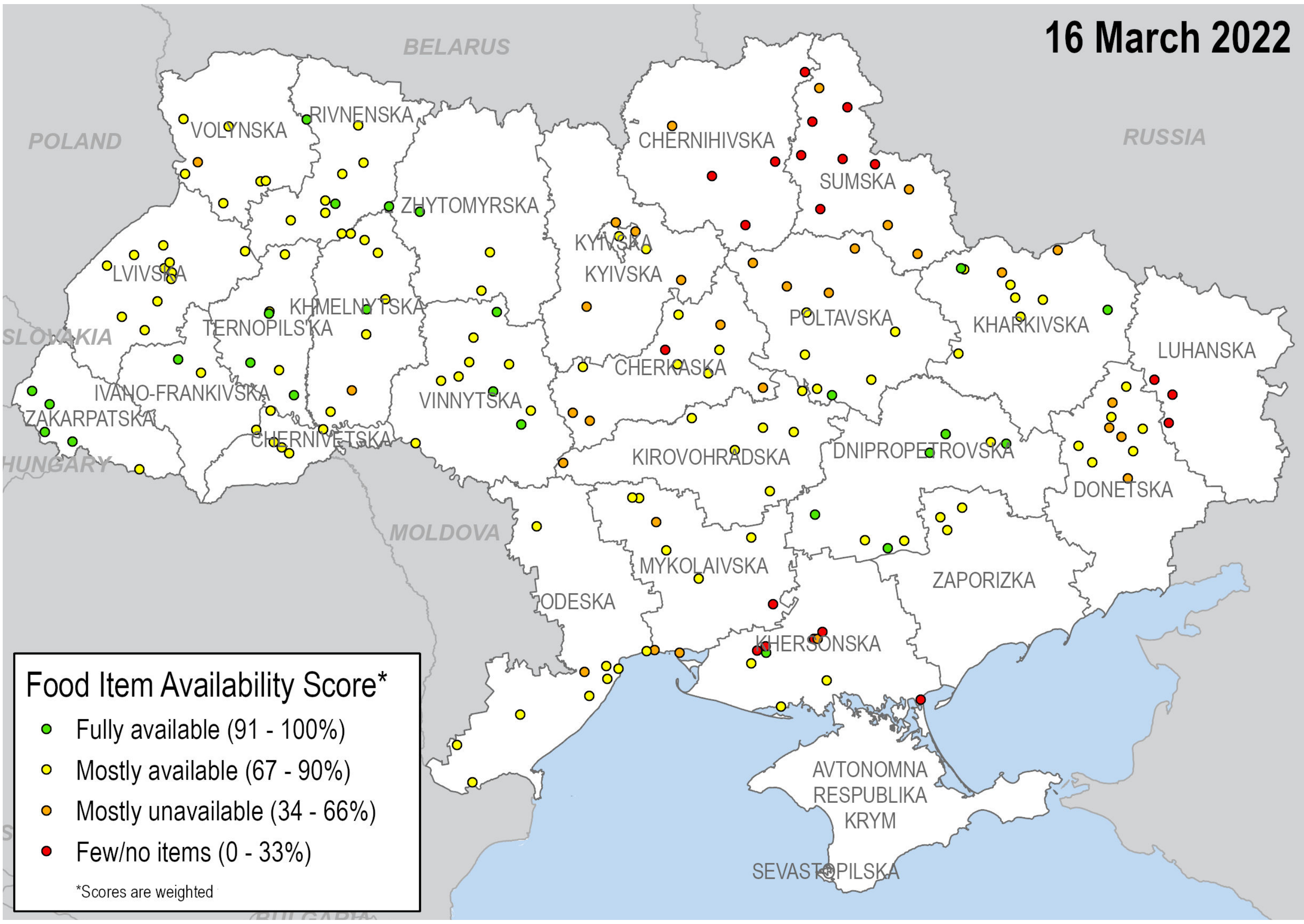
Impact on price and availability of basic goods

These disruptions in import supply chains and local production are impacting prices and availability of basic commodities. In conflict affected areas, severe shortages of food and medicines have already been reported in places like Mariupol and Kharkiv.[7] A rapid exercise of online monitoring of prices and availability of goods conducted by REACH using data published online by a large supermarket chain (ATB) revealed clear patterns in basic commodities availability in different parts of the country (Map 2). While flour and grains appeared to be scarce in most monitored stores, there was a clear difference in availability of basic products between conflict-affected areas (Chernihiv, Sumy Luhansk, Kherson) and western / central oblasts in terms of the variety of goods for which shortage was reported. Conflict affected areas appeared to be experiencing difficulties with the availability of all the groups of commodities that were monitored (flour and grains, staple vegetables, meat, personal hygiene items). Western oblasts appeared to have the least problems with basic commodities availability, with most or all monitored group of items being in stock according to online monitoring. Nevertheless, areas in the west of Ukraine that are currently experiencing a high influx of displaced people such as Lviv appeared to face some shortages of basic commodities. In particular, beside limited availability of wheat flour and staple grains (rice, buckwheat) like in other parts of the country, a number of supermarkets in large western urban centers appeared to have empty stocks of some staple vegetables and menstrual hygiene items.

These findings from online monitoring in western oblasts are also supported by consumers KIs that were interviewed by REACH in Lviv. All respondents reported that they experienced a scarcity of basic food and hygiene items in shops of the city. Most commonly

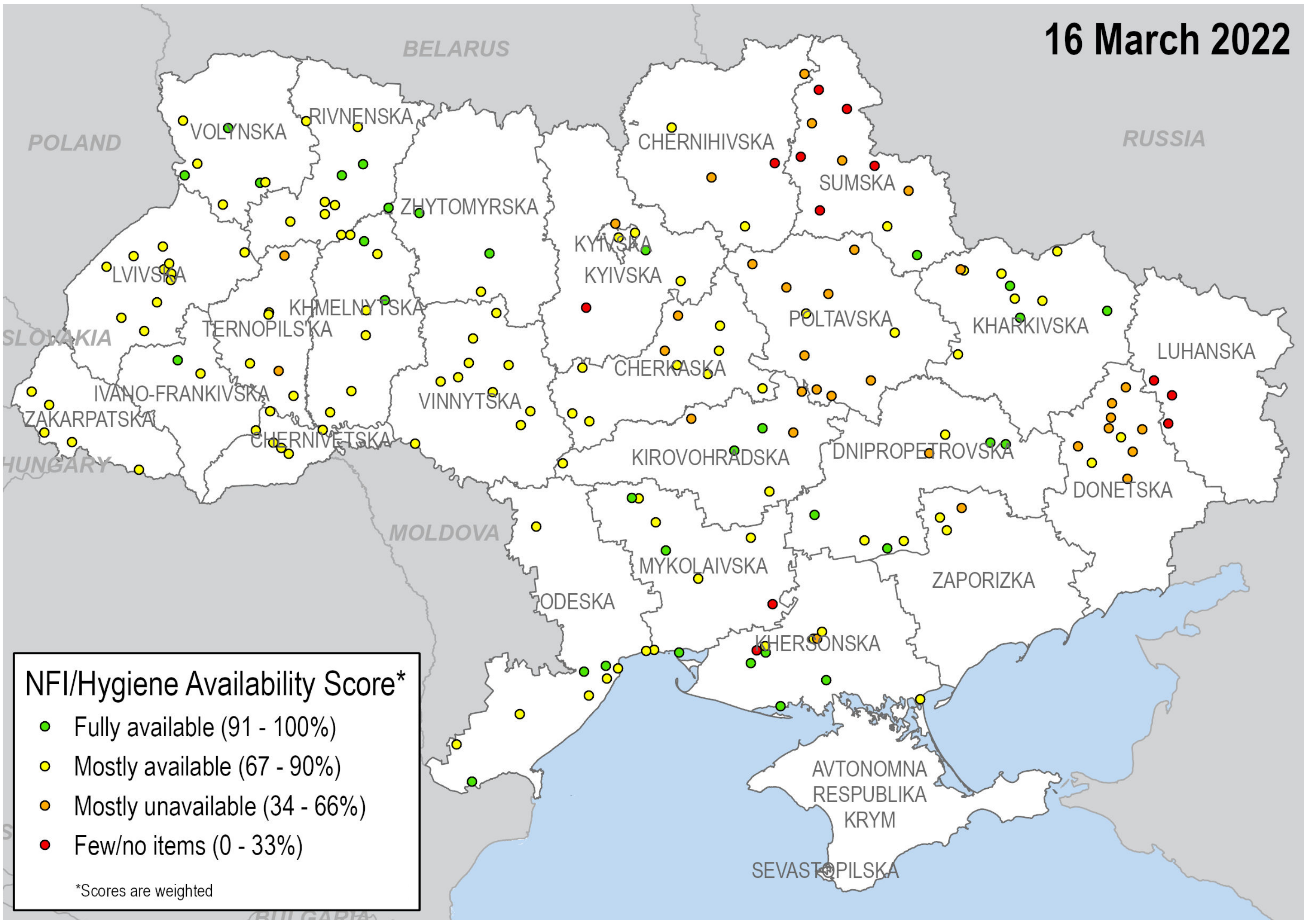
Map 2 : Findings from online monitoring of food item availability across Ukraine from supermarket chain ATB

To gain a first proxy understanding of item availability across the country, REACH conducted a rapid exercice of online monitoring regarding the availability of products across a sample of shops belonging to large supermarket chain ATB. This chain offers a searchable, regularly updated online database showing availability and price of products. **The results shown on the map are entirely indicative, given stores may not all be updating product availability data regularly, and non-functionning stores do not appear on the map.** Further verification would be needed to triangulate the findings. The scoring system was built around a system of weights assigned to 12 basic food items based on relative relevance for ukrainian households : bread (3), eggs (3), milk (1), potatoes (2), carrots (1), onions (1), cabbage (1), chicken (1), oil (1), flour (1), rice (1), buckwheat (1).[8] Each item reported to be available was multiplied by the weight, allowing to calculate a score for each assessed store, subsequently averaged at the town level.



Map 3 : Findings from online monitoring of NFI/Hygiene goods availability across Ukraine from supermarket chain ATB

This map corresponds to the same methodology explained above (Map 2) but focuses on availability of NFI and hygiene items with the following scoring: drinking water (3), diapers (1), body soap (1), laundry soap (1), washing powder (1), toothpaste (1), hygiene / sanitary pads (1). The same limitations stated for the above figure apply to this one as well.



reported unavailable groups of products were flour/grains and personal hygiene items. Half of the respondents also reported price fluctuations since the start of the current conflict escalation, with the flour/grains commodity group having the highest price change. Increase of demand and increase of prices for fuel were the perceived reasons of price changes for basic commodities for most of the respondents.

Conclusion

The Ukrainian commercial sector and humanitarian aid actors are faced with multiple compounding challenges in terms of procurement and delivery of items toward various markets, including in accessible areas. Severe shortages of products are primarily noticeable in areas directly affected by conflict due to disruption in production and supply chains, but also noticeable in areas relatively spared by active conflict such as Lviv due to a sudden rise in demand. This situation has immediate implications on partners ability to provide assistance both in-kind and in cash, and suggests that regular monitoring of markets will be a key priority to guide the humanitarian response. In addition to severe supply chain disruptions, continued conflict is likely to significantly hamper agricultural production and jeopardize the overall output of the upcoming harvest in many areas, which could in turn drive food insecurity. This situation could have implications both in terms of domestic consumption, and in terms of the ability of Ukraine to continue to export to other countries in the long term, further hurting its economy, and threatening other markets around the world with shortages and spikes in prices.

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1. The rapid online market monitoring methodology is outlined above Map 1 (p.2).
2. World Bank WITS. Ukraine Exports. 19 march 2022.
3. International Grains Council (IGC). Ukraine - Russia conflict. March 2022.
4. Idem.
5 WFP. Ukraine Situation Report #5. 14 march 2022
6. Logistics Cluster. Situation Report. 14 march 2022.
7. ICRC. ICRC calls for urgent solution to save lives and prevent worst-case scenario in Mariupol. 13 march 2022.
8. The weights applied were defined during an exercise conducted among Ukrainian members of REACH's cash & market team in order to rank the relative importance of various goods for the average household. The methodology for the weighting process is entirely up for further discussion, should partners have suggestions of improvement.