

Research Terms of Reference

Rapid Assessment of the Libyan Wheat Supply Chain

LBY2204

Libya

April 2020
V1

REACH Informing
more effective
humanitarian action

1. Executive Summary

| | | | | | | |
|---|---|--|---|------------|-------------------------------------|-----------------|
| Country of intervention | Libya | | | | | |
| Type of Emergency | <input type="checkbox"/> | Natural disaster | <input checked="" type="checkbox"/> | Conflict | <input type="checkbox"/> | Other (specify) |
| Type of Crisis | <input checked="" type="checkbox"/> | Sudden onset | <input type="checkbox"/> | Slow onset | <input checked="" type="checkbox"/> | Protracted |
| Mandating Body/ Agency | | | | | | |
| IMPACT Project Code | | | | | | |
| Overall Research Timeframe | 31/03/2022 to 25/05/2022 | | | | | |
| Research Timeframe | 1. Pilot/ training: __/__/____ | | 6. Preliminary presentation: N/A | | | |
| <i>Add planned deadlines (for first cycle if more than 1)</i> | 2. Start collect data: 15/04/2022 | | 7. Outputs sent for validation: 12/05/2022 | | | |
| | 3. Data collected: 25/04/2022 | | 8. Outputs published: 25/05/2022 | | | |
| | 4. Data analysed: 05/05/2022 | | 9. Final presentation: TBD | | | |
| | 5. Data sent for validation: 05/05/2022 | | | | | |
| Number of assessments | <input checked="" type="checkbox"/> | Single assessment (one cycle) | | | | |
| | <input type="checkbox"/> | Multi assessment (more than one cycle) | | | | |
| Humanitarian milestones | Milestone | | Deadline | | | |
| | <input type="checkbox"/> | Donor plan/strategy | __/__/____ | | | |
| | <input type="checkbox"/> | Inter-cluster plan/strategy | __/__/____ | | | |
| | <input checked="" type="checkbox"/> | Cluster plan/strategy | __/__/____ Inform Cash and Markets Working Group (CMWG) understanding and programming around cash assistance | | | |
| | <input type="checkbox"/> | NGO platform plan/strategy | __/__/____ | | | |
| | <input type="checkbox"/> | Other (Specify): | __/__/____ | | | |
| Audience Type & Dissemination Specify who will the assessment inform and how you will disseminate to inform the audience | Audience type | | Dissemination | | | |
| | <input checked="" type="checkbox"/> | Strategic | <input checked="" type="checkbox"/> General Product Mailing (e.g. mail to NGO consortium; HCT participants; Donors) | | | |
| | <input checked="" type="checkbox"/> | Programmatic | <input type="checkbox"/> Cluster Mailing (Education, Shelter and WASH) and presentation of findings at next cluster meeting | | | |
| | <input checked="" type="checkbox"/> | Operational | <input checked="" type="checkbox"/> Presentation of findings (e.g. at HCT meeting; Cluster meeting) | | | |
| | <input type="checkbox"/> | [Other, Specify] | <input checked="" type="checkbox"/> Website Dissemination (Relief Web & REACH Resource Centre) | | | |
| Detailed dissemination plan required | <input type="checkbox"/> | Yes | <input checked="" type="checkbox"/> | No | | |
| General Objective | The objective of the present assessment is to provide a quantitative and qualitative understanding of the immediate impact of the escalated conflict in Ukraine from the 24 th of February 2022 on the prices of essential consumer goods such as wheat flour and bread in Libya, as well as of the coping and | | | | | |

| | |
|-------------------------------------|---|
| | <p>mitigation mechanisms devised by traders, importers and concerned market regulation authorities. In turn, this aims to inform tailored and evidence-based decision making of practitioners involved in the support and protection of Libyan food security as well as in the Libyan trade and economic sector recovery.</p> |
| <p>Specific Objective(s)</p> | <ul style="list-style-type: none"> ▪ Impact on consumer prices: To determine the price changes of the different MEB components across different key urban areas of Libya, with a particular focus on wheat derived goods, and identify some potential correlation with the global wheat supply chain disruption due to the conflict in Ukraine: <ul style="list-style-type: none"> - Describe the price trend of the MEB components across the different key urban areas monthly monitored by the JMMI during March and April 2022, identifying the potential differences by mantika and/or by area. - Identify the potential correlation between the identified MEB trends and the global oil and wheat price trends over the same time period. - Facilitate the understanding of the interdependancies and potential causal linkages between the identified MEB trends, the current structure of the Libyan wheat import supply chain, the international oil and wheat trading markets and the disruption of the Ukrainian wheat supply chain due to the ongoing conflict in Ukraine. ▪ Traders and importers: To explore the potential impacts of the conflict in Ukraine on the functioning of the Libyan wheat supply chain and to determine the trading strategies and behaviours adopted by traders and importers operating along the Libyan supply chain of imported wheat in response to these impacts: <ul style="list-style-type: none"> - Understand whether, and if so how, the disruption of Ukraine's wheat supply chain has changed the functioning of Libya's, namely in terms of prices (subsidised and non-subsidised), available stocks, accessible quantity, frequency of sourcing and selling. - Identify the mitigation, and potentially speculative, business strategies and coping mechanisms adopted by traders and importers, both belonging to the public and private sector, to respnd to the Ukrainian wheat supply chain disruption. - Identify whether, and if so how, the government is supporting the Libyan wheat supply chain, especially in terms of price (wheat and oil) containment and stock provision since the start of the conflict. - Explore the possible effects of the wheat crisis on traders' and importers' businesses, namely in terms of solvency, accessibility to credits and to foreign currency at the official exchange rate. ▪ Government authorities: To understand what market mitigating measures have been put into place by the Libyan Government to respond to the Ukrainian wheat crisis and how these may contribute to protecting the libyan wheat supply chain and Libyan food security: <ul style="list-style-type: none"> - Map and describe the measures put into place by the government authorities to mitigate the potential impacts of the Ukrainian wheat crisis - Facilitate the understanding of how these measures may contribute to absorbing the price increase and reduce the availability crisis along the wheat supply chain - Facilitate the understanding of how the identified measures may insert into the current economic environment of Libya, and how it may affect food trading businesses |
| <p>Research Questions</p> | <ol style="list-style-type: none"> 1. How did the price of the different MEB components, especially of wheat derived goods, change across the different key urban areas of Libya across March and April 2022, and what are potential correlations with the global wheat supply chain disruption due to the conflict in Ukraine? <ul style="list-style-type: none"> - How have prices of the Libyan MEB components changed during March and April 2022 across the different key urban areas monthly monitored by the JMMI and are there dynamics identifiable at the mantika or area level? - What are the potential correlations between the identified MEB trends and the global oil and wheat price trends across the same time period? - What are the interdependancies and potential causal linkages between the identified MEB trends, the current structure of the Libyan supply chain of imported wheat, and the disruption of the international wheat supply chain due to the ongoing conflict in Ukraine? |

| | | | | |
|-------------------------------|--|--|-------------------------------------|--|
| | <p>2. What are the potential impacts of the conflict in Ukraine on the functioning of the Libyan wheat supply chain and what are the trading strategies and behaviours adopted by traders and importers operating along the Libyan supply chain in response to these impacts?</p> <ul style="list-style-type: none"> - How has the functioning of Libya's supply chain of imported wheat changed since February 2022, in terms of prices (subsidised and non-subsidised), available stocks, accessible quantity, frequency of sourcing? - How has the demand for imported wheat changed since February 2022 across the Libyan supply chain? - What are the mitigation, and potentially speculative, business strategies and coping mechanisms adopted by retailers, wholesalers and importers, to respond to the identified changes? - What are the possible effects of the wheat crisis on traders' and importers' businesses, in terms of solvency, accessibility to credits and to foreign currency at the official exchange rate? <p>3. What market mitigating measures have been put into place by the Libyan Government to respond to the Ukrainian wheat crisis and how may these contribute to protecting the Libyan wheat supply chain?</p> <ul style="list-style-type: none"> - What are the measures put into place by the government authorities to mitigate the potential impacts of the Ukrainian wheat crisis? - How do these measures contribute to absorbing the price increase and reducing the availability crisis along the wheat supply chain? - Has the international demand for Libyan oil increased due to the international sanctions imposed on Russia, and does this increase Central Bank of Libya's foreign currency reserves, potentially enabling stronger price subsidisation and Letters of Credit access? | | | |
| Geographic Coverage | Libya, national and regional level (East, West, South) | | | |
| Secondary data sources | <ul style="list-style-type: none"> • Arab Reform Initiative, “The Impact of the Ukraine War on the Arab Region: Food Insecurity in an Already Vulnerable Context”, March 2022 • REACH, “Ukraine – Agrarian sector in proximity to conflict – 22 Feb. to 09 Mar. 2022”, March 2022 • European Union, “EU sanctions against Russia following the invasion of Ukraine”, 2022 • Trading Economics, March 2022 • AMIS, Market Monitor, March 2022 • GIEWS, “Slightly below-average cereal production harvested in 2021”, December 2021 • GIEWS, “GIEWS Country Brief Libya – Archives” • Chatham House, Resource Trade Earth, March 2022 • UN Comtrade Database, March 2022 • FAO, “COVID-19 impacts on agri-food value chains: Libya”, 2021 • World Bank, “Libya Economic Monitor”, 2021 • REACH, “Breaking Down the Chain – Understanding the Supply of Wheat and Bread in Libya”, June 2020 • REACH, “Market Systems in Libya”, October 2017 • Libya Herald, “Most Tripoli bakeries close due to new exchange rate raising flour prices”, January 2021 • Libya Herald, “Fake bakeries receiving subsidized flour for seven years”, March 2015 • REACH, Joint Market Monitoring Initiative (JMML), November 2021 • FAO, Food Price Index, March 2022 • Libyan News Agency, “GNA Minister of Economy and Trade says Libya's wheat reserves enough for more than a year and warns against speculators trying to create chaos for gains”, February 2022 | | | |
| Population(s) | <input type="checkbox"/> | IDPs in camp | <input checked="" type="checkbox"/> | IDPs in informal sites |
| | <input checked="" type="checkbox"/> | IDPs in host communities | <input type="checkbox"/> | IDPs [Other, Specify] |
| | <input type="checkbox"/> | Refugees in camp | <input checked="" type="checkbox"/> | Refugees in informal sites |
| | <input checked="" type="checkbox"/> | Refugees in host communities | <input type="checkbox"/> | Refugees [Other, Specify] |
| | <input checked="" type="checkbox"/> | Host communities | <input type="checkbox"/> | [Other, Specify] |
| Stratification | <input checked="" type="checkbox"/> | Geographical #: 3 (East, West, South) | <input type="checkbox"/> | Group #: 3 (Key role across the supply chain: trader, |
| | | | <input type="checkbox"/> | [Other Specify] #: __ |

| | | | | | |
|--|-------------------------------------|--|---|-------------------------------------|--|
| Select type(s) and enter number of strata | | Population size per strata is known? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | importer, governmental authority) Population size per strata is known? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | Population size per strata is known? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Data collection tool(s) | <input checked="" type="checkbox"/> | Structured (Quantitative) | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Semi-structured (Qualitative) |
| | | Sampling method | | | Data collection method |
| Semi-structured data collection tool (s) # 1 | <input checked="" type="checkbox"/> | Purposive <input checked="" type="checkbox"/> Snowballing <input type="checkbox"/> [Other, Specify] | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Key informant interview (Target #):_____ |
| | | | | <input type="checkbox"/> | Individual interview (Target #):_____ |
| | | | | <input type="checkbox"/> | Focus group discussion (Target #):____ |
| | | | | <input type="checkbox"/> | [Other, Specify] (Target #):_____ |
| Semi-structured data collection tool (s) # 2 | <input checked="" type="checkbox"/> | Purposive <input checked="" type="checkbox"/> Snowballing <input type="checkbox"/> [Other, Specify] | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Key informant interview (Target #):____ |
| | | | | <input type="checkbox"/> | Individual interview (Target #):_____ |
| | | | | <input type="checkbox"/> | Focus group discussion (Target #):____ |
| | | | | <input type="checkbox"/> | [Other, Specify] (Target #):_____ |
| Semi-structured data collection tool (s) # 3 | <input checked="" type="checkbox"/> | Purposive <input checked="" type="checkbox"/> Snowballing <input type="checkbox"/> [Other, Specify] | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Key informant interview (Target #):____ |
| | | | | <input type="checkbox"/> | Individual interview (Target #):_____ |
| | | | | <input type="checkbox"/> | Focus group discussion (Target #):____ |
| | | | | <input type="checkbox"/> | [Other, Specify] (Target #):_____ |
| Target level of precision if probability sampling | | __% level of confidence | | | __+/- % margin of error |
| Data management platform(s) | <input checked="" type="checkbox"/> | IMPACT | <input type="checkbox"/> | <input type="checkbox"/> | UNHCR |
| | <input type="checkbox"/> | [Other, Specify] | | | |
| Expected output type(s) | <input type="checkbox"/> | Situation overview #: __ | <input type="checkbox"/> | <input type="checkbox"/> | Report #: __ |
| | <input type="checkbox"/> | Presentation (Preliminary findings) #: __ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Profile #: __ |
| | <input type="checkbox"/> | Presentation (Final) #: __ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Factsheet #: __ |
| | <input type="checkbox"/> | Interactive dashboard #: __ | <input type="checkbox"/> | <input type="checkbox"/> | Map #: __ |
| Access | <input checked="" type="checkbox"/> | Public (available on REACH resource center and other humanitarian platforms) | | | |
| | <input type="checkbox"/> | Restricted (bilateral dissemination only upon agreed dissemination list, no publication on REACH or other platforms) | | | |
| Visibility Specify which logos should be on outputs | | REACH [By default unless specified otherwise] | | | |
| | | Donor: [List logos here as per contract] | | | |
| | | Coordination Framework: [List logos here as relevant] | | | |
| | | Partners: Libya Cash & Market Working Group (CMWG) | | | |

2. Rationale

2.1 Background

Russia and Ukraine together constitute one third of the world's wheat exports share, respectively 22% and 10%.¹ The escalation of hostilities on the 24th of February 2022, has come with an important disruption of the Ukrainian supply chains of grains (wheat, barley, maize) and oilseeds (sunflower). As of the 9th of March 2022, almost half (45,7%) of the total

¹ Arab Reform Initiative, "The Impact of the Ukraine War on the Arab Region: Food Insecurity in an Already Vulnerable Context", March 2022

Ukrainian cropland area was affected by the conflict, an area that in 2021 yielded 47,6% of the total wheat and barley production.² Due to the hostilities, REACH reports that spring planting may be compromised in 11 oblasts, while the magnitude of the conflicts' damages on winter crops remains still unknown.³ In addition, the major export routes have also been affected, culminating in the closure of the exporting routes of Odessa and the Black Sea ports, which alone canalised 95% of Ukrainian wheat exports in 2020.⁴ On the other hand, Russia has temporarily banned its grains exports towards ex-Soviet countries in the Eurasian zone,⁵ and one of its main sea exports routes, the Asov Sea, remains still closed at the time of writing (14/03/2022),⁶ further aggravating the sudden wheat scarcity on international markets, and further pushing international prices up.

The decreased availability of Ukrainian and Russian cereals, the disruption of the logistical infrastructure supporting their physical accessibility, and the heavy sanctions and restrictions imposed on Russian economy by for example the European Union, the United States of America and Canada, have had an immediate destabilizing effect on financial markets.⁷ From the start of the conflict, global wheat prices increased by 57% in only two weeks, peaking at a 14-years high of 1252 USD/bushel on the 7th of March 2022.⁸ While wheat prices have then decreased, possibly due to the ongoing ceasefire talks between Russia and Ukraine helping to ease concerns and speculative reactions on the market, at the time of writing (17/03/2022) they remain higher than 1000 USD/bu, or, 25% higher than pre-conflict levels.⁹ Similarly, global crude oil prices have soared, increasing by 33% and peaking at 123,7 USD/Bbl on the 08th of March 2022, further aggravating the global wheat crisis and global food consumer prices inflation; further compromising global food security.¹⁰

In fact, both Russia and Ukraine are referred to as global breadbaskets, as they together contribute to 12% of the globally traded supply of food energy in kilo calories, exporting millions of tonnes of cereals per year to food import dependent countries in the Middle East and North Africa (MENA), the South of Asia, and in the Sub-Saharan Africa.¹¹ With a particular focus on the MENA region, available data shows that 50% of total wheat imports in Arab countries depend on Russia and Ukraine.¹² A decrease in global wheat availability and the correlated price increase, coupled with the increase in oil prices, threaten the status of global food security. The vulnerability to food insecurity of Ukrainian and Russian wheat import-dependent countries, including Libya, is aggravated and especially affects the poorest population groups.

As for Libya, 90% of its cereal consumption requirements, mostly wheat and barley, depend on imports, as domestic production is still negligible in term of quantity (only 12% of its total surface is arable).¹³ Libya's total cereal import requirement in 2019 was around 3,2 million tonnes,¹⁴ of which, just wheat from Ukraine constituted 22%, or 0,55 million tonnes, while total Ukrainian cereal imports accounted for 44%, or 1,4 million tonnes.¹⁵ As such, the cereal supply from Ukraine contributed to almost half of Libya's total cereal requirements in 2019, making it the biggest cereal import partner of Libya.¹⁶ To further note that the cereal trade flow between the two countries has maintained an upward trend across the last 5 years, increasing by 9,3% between 2015 and 2020.¹⁷

² The Oblast constitutes the first level administrative division of Ukraine, for a total of 24 officially recognised oblasts, in addition to two special-status cities (Kyiv and Sevastopol) and one autonomous republic (Crimea)

³ REACH, "[Ukraine – Agrarian sector in proximity to conflict – 22 Feb. to 09 Mar. 2022](#)", March 2022

⁴ Ibid.

⁵ Reuters, "[Russia temporarily bans grain exports to ex-Soviet countries](#)", March 2022

⁶ Alarabiya, "[Russia gradually resuming wheat exports from Black Sea ports](#)", March 2022

⁷ European Union, "[EU sanctions against Russia following the invasion of Ukraine](#)", 2022

⁸ [Trading Economics](#), March 2022

⁹ Ibid.

¹⁰ Ibid.

¹¹ AMIS, "[Market Monitor](#)", March 2022

¹² Arab Reform Initiative, "[The Impact of the Ukraine War on the Arab Region: Food Insecurity in an Already Vulnerable Context](#)", March 2022

¹³ GIEWS, "[Slightly below-average cereal production harvested in 2021](#)", December 2021

¹⁴ GIEWS, "[GIEWS Country Brief Libya – Archives](#)"

¹⁵ Chatham House, "[Resource Trade.Earth](#)", March 2022

¹⁶ More recent data for the years 2020 and 2021 are less complete or not available, limiting the possibility to disaggregate data and advance descriptive and comparative analysis.

¹⁷ Chatham House, "[Resource Trade.Earth](#)", March 2022

On the other hand, Russia is the second main cereal trade partner of Libya, accounting in 2019 for 16% of total Libya cereal imports requirements, with wheat alone constituting 7% of total imports, or 0,22 million tonnes.¹⁸ Contrary to trade flow with Ukraine, the cereal trade flow with Russia has maintained a downward trend in the last five years, declining by 9,2% between 2015 and 2020. Despite the lack of visibility over 2021 figures, this data suggests that while Libya's strategic dependency on Russia's cereals has been decreasing in the last years, dependency on Ukraine's has been increasing, potentially amplifying the impacts of Ukraine's supply chain disruption on Libya's national wheat supply chain and its strategic architecture.¹⁹

Libya actually relies on imports to cover 75-80% of its overall food needs.²⁰ While cereals constitute the bulk of imports, accounting for over 74% of total food imports, Libya also imports meats (ovine, poultry, bovine), dairy products, processed fish, processed tomatoes, amongst others.²¹ The high dependency of Libya's food security on imports renders it extremely vulnerable to exogenous variables, such as variations on international production volumes, fluctuations on international food prices, as well as oil prices, national and international export and energy policies.

Differently than other wheat-import dependent MENA countries though, Libya is an oil net-exporter with oil exports being the load-bearing pillar of the Libyan economy, fuelling Government revenues since the pre-Libyan conflict era and accounting for over 60% of GDP in 2019.²² However, in 2020, a 9-months-long blockade of Libyan oil ports reduced oil production to a third of 2019 levels, dragging a decrease of the Libyan GDP by 31%, further demonstrating the critical dependency of Libyan GDP on Libyan oil production and export capacity.²³ This means that while an increase in international wheat and oil prices will impact Libya's food consumer prices, this may be compensated by an increase in oil revenues and Libyan public national and foreign currency reserves. This in turn, may potentially help the government to cover and ensure wheat's subsidised prices to the Libyan population.

In fact, wheat is a highly subsidised good in Libya, and parallel to the private importing supply chain, the government is present at all steps along the Libyan wheat supply chain. Part of the wheat is imported through two separate publicly owned non-cooperating bodies: the Joint Stock National Company for Flour Mills and Fodders (MATAHAN) based in Tripoli and serving the West, and the National Milling Company (NMC) based in Benghazi, serving the East. Wheat is then distributed by at subsidized prices to bakeries and consumers associations (Jam'iyat) through the Price Stability Fund (PSF).²⁴ The PSF is a Ministry of Economy's body and plays a pivotal role along the Libyan food supply chain, as it absorbs the market price of certain imported essential goods, and then distributes them at subsidized prices across the country to both private businesses and consumers' associations, the latter being small government-run shops.²⁵ Nevertheless, since 2014 up until 2021 this public subsidy mechanism has proven to chronically fail to ensure the coverage of essential's goods prices, especially wheat's,²⁶ resulting in the unequal and unstable access to officially subsidized flour across the country, in consumer price distortions, in bakeries closure,²⁷ in the development of flour speculative and smuggling activities,²⁸ and the flourishing of the black market.

Finally, it is worth noting that, despite the steady minimum expenditure basket (MEB)²⁹ price increase observed in the second semester of 2021 in Libya,³⁰ most probably due to the prolonged global food price increase all along 2021,³¹ Libyan food

¹⁸ UN Comtrade [Database](#), March 2022

¹⁹ Chatham House, [Resource Trade Earth](#), March 2022

²⁰ FAO, "[COVID-19 impacts on agri-food value chains: Libya](#)", 2021

²¹ Ibid.

²² World Bank, "[Libya Economic Monitor](#)", 2021

²³ Ibid.

²⁴ REACH, "[Breaking Down the Chain – Understanding the Supply of Wheat and Bread in Libya](#)", June 2020

²⁵ REACH, "[Market Systems in Libya](#)", October 2017

²⁶ GIEWS, "[Slightly below-average cereal production harvested in 2021](#)", December 2021

²⁷ Libya Herald, "[Most Tripoli bakeries close due to new exchange rate raising flour prices](#)", January 2021

²⁸ Libya Herald, "[Fake bakeries receiving subsidized flour for seven years](#)", March 2015

²⁹ The Minimum Expenditure Basket (MEB) represents the minimum culturally adjusted group of items required to support a five-person Libyan household (HH) for one month

³⁰ REACH, [Joint Market Monitoring Initiative \(JMMI\)](#), November 2021

³¹ FAO, [Food Price Index](#),

price trend remained considerably more stable across 2021 than in 2020, favoured by a continued oil production and export, the regular issuance of Letters of Credit (LCs), and the resulting contained black market exchange rate fluctuations.³² Henceforth, before the escalation of the conflict in Ukraine, the Libyan overall food accessibility conditions from the supply side had managed to relatively stabilize for the 2021 period.

The Libyan political scenario remains highly uncertain, with access to official exchange rate, to liquidity, to public salaries and to subsidised goods still constituting chronic and deeply rooted issues in the Libyan economy. The disruption of the main wheat imports partners' supply chains may profoundly threaten Libya's food security, both in terms of availability and economic accessibility. In the specific, while the government claims to have sufficient wheat reserves to contain the damages for six months³³, the government has also announced a series of emergency measures to contain the looming food crisis, among which centralising and portioning the distribution of flour across the country through the National Baker's Syndicate, as well as increasing the strategic stock of wheat to enable public flour mills to operate at full production capacity for at least three months and reiterate the unified price for a 50Kg bag of wheat to 110 LYD.³⁴ Yet, it is not clear to what degree public mechanisms such as the PSF and subsidised prices will be able to absorb the impacts of the upcoming wheat crisis.

Plausibly expected short-term impacts are a general shortage in wheat-derived goods and an increase in the price of all imported goods due to international fuel prices increase, leading to a reduced purchasing power of consumers and an increased exposure to food insecurity at the household level. Furthermore, speculative behaviours of actors along the supply chain, such as holding flour stocks waiting for the price to further increase, are likely to arise, further adding distortive effects on market prices. It is in this scenario that the rationale for the present assessment arises.

While it is too early to predict the full magnitude of the disruption in the global supply of key staples from Ukraine and Russia as well as the systemic implications of a prolonged rise in oil prices on agricultural markets, the present assessment aims at capturing the first immediate impact of this global shock on the Libyan import-reliant wheat supply chain. In the specific, while REACH monitors price trends of essential goods on a monthly basis, through the Joint Market Monitoring Initiative (JMMI), the present assessment seeks to complement the JMMI quantitative picture with a qualitative insight about the impacts of the Ukrainian wheat crisis on the functioning of the Libyan wheat supply chain, as well as on the adopted trading behaviours and coping mechanisms from the different key players along the wheat supply chain to respond to such impacts.

2.2 Intended impact

The dominant prevalence of imported wheat in the Libyan daily pro-capita energy requirements, as well as the nodal political importance of wheat economic accessibility across the country calls for a qualitative rapid assessment of the Libyan wheat supply chain complementing a quantitative assessment of wheat consumer prices. In fact, this assessment aims at addressing and filling a relevant information gap, as timely and up-to-date information about the burden of this global and sudden cereal shortage on the Libyan food trading sector has not been readily available.

The present work wants to provide essential qualitative and quantitative visibility on how the Libyan wheat supply chain has reacted to the sudden disruption of the global wheat supply chain by capturing MEB variations, with a special focus on wheat-derived products, as well as the experiences and perspective of the different players along the supply chain, namely importers and traders, both public and private, as well as government authorities respectively in terms of trading strategies and mitigation measures adopted.

Such an assessment is of foremost relevance to maintain and ensure an appropriate response to protect Libyan households' food security, as well as to contain the systemic consequences of this global shock and to prevent further deterioration of the fragile economic recovery of Libya. The findings will aim at informing the analysis and the decision making of practitioners

³² REACH, [Joint Market Monitoring Initiative \(JMMI\)](#), November 2021

³³ Libyan News Agency, "[GNA Minister of Economy and Trade says Libya's wheat reserves enough for more than a year and warns against speculators trying to create chaos for gains](#)", February 2022

³⁴ Al Wasat, "[Le ministère de l'Économie du gouvernement « d'unité » identifie 5 mécanismes pour résoudre la crise de la farine](#)", March 2022

involved in the economic recovery of the country, as well as in cash and food security activities. This will include NGOs, Civil Society Organisations (CSOs), Humanitarian Clusters and other Sectorial coordination groups and Libyan Governmental institutions.

3. Methodology

3.1 Methodology overview

The entire research cycle, from the draft of TORs to data collection, data analysis and output dissemination, will be entirely coordinated by the REACH team based in Tunisia. Given the exploratory and yet punctual nature of the present assessment, a combination of methods of enquiry was deemed more appropriate to achieve the general objective. In fact, a mixed methods approach will allow to combine the quantitative evaluation of the Libyan MEB price change, advancing some inferences about the correlation with the international wheat and oil price fluctuations following the escalation of the conflict in Ukraine, with a qualitative snapshot of the way the disruption of the Ukrainian wheat supply chain has impacted Libya's, exploring the perspective of importers, traders and government authorities.

The quantitative component of the present assessment will consist of a systematic secondary data review of the MEB datasets monthly collected and published by the REACH's JMMI up until April 2022. The JMMI datasets provide a solid and comparable pull of data about essential food items prices across different Libyan locations, allowing for multi-level geographical and item-led aggregations. A longitudinal analysis of the MEB datasets up to April 2022 will provide a complete and detailed overview of fluctuations that occurred in the key urban areas across the country. This will allow observations of the price trends before and after the escalation of the conflict in Ukraine, as well as to advance comparative analysis with last year's MEB's trends and with the price fluctuations of the international oil and wheat markets across the same time period. This in turn, will allow to track down potential correlations in trends, and advance indicative quantitative inferences about the potential impact of the Ukrainian and Russian's wheat crisis. Data analysis will be conducted on Excel spreadsheets through the application of a deductive analytical reasoning responding to the defined research questions.

The qualitative and inductive component of the present assessment will consist of primary data collection carried out through Key Informant Interviews (KIIs). This will grant the flexibility required by the purpose of the assessment, allowing to probe and explore the different perceptions, lived experiences, expertise and perspectives of the different respondents' profiles. **This component wants to provide a qualitative insight into the capacity of the different professional actors working along the Libyan supply chain of imported wheat to source and sell wheat, for importers, and wheat flour, for wholesalers and retailers. Given the fact that bread appears mostly at the retail level of the supply chain, only KIIs at the retail stage will investigate the sale of bread too.**

The assessment aims at a total of 49 Key Informant Interviews (KIIs), carried out through 7 distinct semi-structured qualitative data collection tools, all employing a mix of closed and open-ended questions. The questions pertaining to each tool will tailor the targeted category of KIs. Seven categories of KIs were identified, according to their professional role and position along the Libyan supply chain of imported goods wheat: private retailers and Jam'iyat, private wholesalers and the PSF, private and public importers, and Government officials. The number of interviews per category of KIs was justified by the purpose and timeframe of the assessment, as well as the type of output aimed at. The sampling strategy will be purely purposive, complemented by snowballing sampling when relevant. While aiming at an equal and even representativeness of all areas of Libya, the geographical distribution of interviews may vary according to the network of resources on the ground, as well as physical access possibilities. Data will be analysed through two different tools: closed ended questions will be analysed through Excel, while the open-ended questions will be analysed through REACH's data saturation and analysis grid. For the latter, themes and discussion points saturation will be achieved with an inductive reasoning, led by a content analysis approach.

3.2 Population of interest

3.2.1 Geographical area assessed

JMMI's Dataset systematic literature review. The JMMI covers markets in key urban areas across all of Libya on a monthly basis. In the specific, the MEB price of approximately 40 municipalities across the country is assessed monthly, and subsequently aggregated at the regional level: West, East, South. This provides a detailed insight into each municipality's trend, as well as an overview on regional trends, allowing to advance comparative analysis of the MEB at the regional level. This will provide a rather complete quantitative picture of the MEB, including bread and wheat derived prices, across the entire Libyan territory.

Key Informant Interviews. The assessment will aim at an even representation of the different supply chain actors per geographical area, namely West, East and South, in order to understand geographical trends. For this purpose, the municipalities of Tripoli, Benghazi and Sebha, counting as the main importing and/or distribution nodes of imported wheat respectively across the three regions, will be targeted.

The geographical localisation of the interviews per category of KIs is strongly conditional to the timeframe of the assessment, as well as to access possibilities and conditions. The actual geographical scope of the KIs might vary according to relevant KIs contacts availability, as well as their willingness to take part to the assessment. This is acknowledged to potentially reduce the geographical coverage of the assessment, considerably reducing the margin of geographical comparativeness among the different regions of Libya, providing instead only an indicative insight on the subject matter of this assessment.

3.2.2 Population assessed

The assessment targets the different professional trading actors involved in the Libyan supply chain of imported wheat, both private and public, in order to provide the operational and business perspective on the subject matter of enquiry. This includes retailers, wholesalers and importers, the latter category usually incorporating also the processing stage, being structurally connected to milling establishments³⁵. This will allow delving into the various changes experienced at the different stages of the supply chain, as well as into the mitigating strategies devised. Alongside this, the assessment is also interested in national-level actors such as Government officials involved in Libyan market and trade regulation, in order to provide a macro-economic and policy perspective on national-level supply chain dynamics. This approach will allow to capture the potential impacts and changes entailed by the Ukrainian and Russian wheat supply chain disruption at both the macro- and micro-levels of the Libyan wheat trading sector. The categories were selected as such to capture the opinions and experiences of actors working in the key professional nodes along the wheat supply chain and in its institutional enabling environment, while the criteria of individual eligibility to the surveys are built around the employment in the wheat importing, processing, distributing, retailing and regulating sectors.

3.2.3. Unit of measurement

All KIs will be conducted at an organisational/business/institution level and produce data that during the analysis phase will be aggregated at a professional category level and at a regional geographical level, if relevant and applicable.

3.3 Secondary data review

Two different secondary data reviews will be carried to achieve the general objective of the present assessment: a systematic literature review and a non-systematic.

The **systematic secondary data** review follows a clearly defined protocol of source research and selection, where the criteria are explicitly defined before the start of the research, ensuring it to be comprehensive, transparent and replicable. The search and selection criteria of the systematic literature review of the present assessment will exclusively target the datasets monthly published by the JMMI on REACH resource center's [website](#) from January 2021 up until April 2022. The

³⁵ REACH, "[Breaking Down the Chain – Understanding the Supply of Wheat and Bread in Libya](#)", June 2020

datasets will provide the quantitative component feeding into this assessment, providing a detailed insight into price fluctuations of the different MEB wheat-derived components as well as other imported-food components across the country and capturing potential anomalous changes on a monthly, but also quarterly and yearly, basis. This in turn, through the comparison with the global oil and wheat price trends over the same time period, will allow the identification of some potential indicative correlation between the MEB fluctuations and the effects on the global wheat supply chain disruption due to the ongoing conflict in Ukraine. The time frame of database selection will allow to capture price trends from the escalation of the conflict in February 2022, as well as to advance comparative analysis between 2021 and 2022, ensuring to account for yearly seasonal price fluctuations linked to both the international agricultural cycle as well as to socio-cultural events such as Ramadan, happening approximately in the same period across the two years (April). Furthermore, a longitudinal analysis of the MEB will allow to triangulate data retrieved from the present assessment in order to merge the qualitative perspective with a complementing quantitative perspective.

A **non-systematic secondary data review** (SDR) of relevant studies and news articles was carried out during the design of the present assessment with a two-fold objective. Firstly, the SDR allowed the identification of the information gap addressed by the present assessment, while contextualizing the field of enquiry, identifying the key definitions, informing the research questions, the methodology and the development of the data collection tools. Secondly, secondary literature review will allow the thorough discussion and triangulation of the findings, informing the analytical reasoning and eventually contributing to more solid answers to the overarching research questions. For this purpose, up until the analytical stage of the assessment, the list of secondary sources will continue to be updated to ensure that the most up-to-date and relevant literature is included in the discussion of the primary data. All relevant sources used to triangulate the findings will be referenced in the final report. The main secondary literature consulted for this assessment are:

- Arab Reform Initiative, [“The Impact of the Ukraine War on the Arab Region: Food Insecurity in an Already Vulnerable Context”](#), March 2022
- REACH, [“Ukraine – Agrarian sector in proximity to conflict – 22 Feb. to 09 Mar. 2022”](#), March 2022
- European Union, [“EU sanctions against Russia following the invasion of Ukraine”](#), 2022
- [Trading Economics](#), March 2022
- AMIS, [Market Monitor](#), March 2022
- GIEWS, [“Slightly below-average cereal production harvested in 2021”](#), December 2021
- GIEWS, [“GIEWS Country Brief Libya – Archives”](#)
- Chatham House, [Resource Trade.Earth](#), March 2022
- UN Comtrade [Database](#), March 2022
- FAO, [“COVID-19 impacts on agri-food value chains: Libya”](#), 2021
- World Bank, [“Libya Economic Monitor”](#), 2021
- REACH, [“Breaking Down the Chain – Understanding the Supply of Wheat and Bread in Libya”](#), June 2020
- REACH, [“Market Systems in Libya”](#), October 2017
- Libya Herald, [“Most Tripoli bakeries close due to new exchange rate raising flour prices”](#), January 2021
- Libya Herald, [“Fake bakeries receiving subsidized flour for seven years”](#), March 2015
- REACH, [Joint Market Monitoring Initiative \(JMMI\)](#), November 2021
- FAO, [Food Price Index](#), March 2022
- Libyan News Agency, [“GNA Minister of Economy and Trade says Libya's wheat reserves enough for more than a year and warns against speculators trying to create chaos for gains”](#), February 2022

3.4 Primary Data Collection

REACH will lead the primary data collection with ACTED’s staff based across the three different field bases of ACTED Libya: Tripoli, Benghazi, Sebha. Data collection will take place between the 15th and the 20th of April 2022. For the qualitative primary data collection component of the present assessment, semi-structured KIIs will be conducted to seven different population groups, for a total of 49 KIIs. The seven identified groups of respondents are designed upon the seven identified stages along the supply chain of imported wheat: public and private retail, public and private wholesale, public and private import and the regulating environment.

| Supply stage | KI group | Wheat derived good | Tripoli | Benghazi | Sebha | National | Sampling | Tool |
|------------------------|--|-------------------------------|---------|----------|-------|----------|-------------------------|-----------------|
| Retail | Private: small shops, supermarkets, bakeries | Wheat flour Bread | 4 | 4 | 4 | 12 | Purposive & Snowballing | Questionnaire 1 |
| | Jam'iyat | Wheat flour Bread | 3 | 3 | 3 | 9 | | Questionnaire 2 |
| Wholesale | Private | Wheat flour | 4 | 4 | 4 | 12 | | Questionnaire 3 |
| | Price Stability Fund (PSF) | Wheat flour | 1 | 1 | 1 | 3 | | Questionnaire 4 |
| Import (& processing) | Private | Wheat Wheat flour | 4 | 4 | / | 8 | | Questionnaire 5 |
| | MATAHAN/ NMC | Wheat Wheat flour | 1 | 1 | / | 2 | | Questionnaire 6 |
| Government authorities | | Bread Wheat flour Wheat | / | / | / | 3 | | Questionnaire 7 |
| Total | | | | | | 49 | | |

Enumerators will conduct face-to-face KIIs with retailers (bakeries, small shops, supermarkets), consumer associations (jam'iyat owners/workers), and wholesalers, both public and private, in each of the three municipalities. This will allow to facilitate the understanding of supply chain dynamics at the municipality level. For the import stage the assessment will focus only on Tripoli and Benghazi, since the main wheat import routes in Libya transit through the Mediterranean Sea. On the other hand, Government authorities KIIs will be conducted at the national level to provide information on the national supply chain. For the national-level respondent groups enumerators will also conduct face-to-face KIIs where possible. For example, in the case of Government officials located in Tripoli. However, in cases where enumerators cannot meet with respondents, remote telephone KIIs will be carried out.

For the purpose of this assessment, seven distinct semi-structured qualitative data collection tools will be designed in the form of mostly open-ended questions questionnaires, constructed on, and carried out via, Kobo. The questions of each tool will tailor the targeted category of key informant. The number of interviews per category of KIs was informed by the general and specific objectives of the assessment, by the reviewed architecture of the Libyan supply chain of wheat, as well as by the timeframe of the assessment. In fact, since this is a rapid assessment, the timeframe of realisation remains restrained, as the assessment aims at providing up to date information and inform humanitarian and institutional decision-making milestones in the shortest delay. Resources allowing, the assessment team reserves the possibility to revise sample dimensions up or down according to the stage of saturation achievement per population group. The sampling strategy will be purely purposive, complemented by snowballing sampling when relevant. The language used for all interviews will be Arabic and will be subsequently translated to English by the Assessment Officer (AO) in Tunis.

Questionnaire 1: Private retailers

This component of the assessment will target private retail businesses in the supply chain sourcing and selling wheat flour in the municipalities of Tripoli, Benghazi and Sebha. The category will include private small shops, supermarkets and bakeries. Only private retail businesses trading wheat flour and bread respond to the eligibility criteria for the KI interview. Respondents will be identified through a mixture of purposive sampling and snowballing. Furthermore, the selection will leverage the REACH field team members with strong local knowledge and extended network to identify and reach key respondents. This will most probably include the network of traders monthly interviewed for the JMMI.

The tool, composed of a mix of closed and open-ended questions, will be designed in order to capture the impressions of private retailers regarding the changes occurred along the supply side of the wheat flour chain (namely in terms of subsidised prices, available stocks, accessible quantity, frequency of sourcing and selling), as well as on the demand side of wheat flour and bread, to identify the potential changes experienced since the escalation of the conflict in Ukraine, to probe the causes and drivers, and understand the resilience strategies, if any, employed by the various private retail businesses.

Questionnaire 2: Consumer associations

This component of the assessment will target public retail businesses in the supply chain sourcing and selling wheat derived goods in the municipalities of Tripoli, Benghazi and Sebha. In the specific, this category will target consumer associations, also known as “Jam’iyat”. Jam’iyat are small Government-run shops selling subsidised goods provided directly by the PSF according to the number of households registered with each association. Each household can obtain a certain monthly quota of the subsidized goods, which corresponds to the number of household members as well as the PSF’s ability to procure goods³⁶. Respondents will be identified through a mixture of purposive sampling and snowballing. Furthermore, the selection will leverage the REACH field team members with strong local knowledge and extended network to identify and reach key persons.

The tool, composed of mostly open-ended questions, will be designed in order to capture the impressions of public retailers regarding the changes occurred along the supply side of the wheat flour chain (namely in terms of subsidised and non-subsidised prices, available stocks, accessible quantity, frequency of sourcing and selling), as well as on the demand side of wheat flour and bread, to identify the potential changes experienced since the escalation of the conflict in Ukraine, to probe the causes and drivers, and understand the resilience strategies, if any, employed by consumer associations.

Questionnaire 3: Private wholesalers

This component of the assessment will target private wholesale businesses belonging to the supply chain sourcing and selling wheat flour in the municipalities of Tripoli, Benghazi and Sebha. Only private wholesale businesses trading imported wheat flour respond to the eligibility criteria for the KI interview. Respondents will be identified through a mixture of purposive sampling and snowballing. Furthermore, the selection will leverage the REACH field team members with strong local knowledge and extended network to identify and reach key persons. This will most probably include the network of wholesalers supplying the products whose price is monthly monitored by the JMMI.

The tool, composed of a mix of closed and open-ended questions, will be designed in order to capture the impressions of private wholesalers regarding the changes occurred upstream and downstream along the supply chain of wheat flour (namely in terms of subsidised and non-subsidised prices, available stocks, accessible quantity, frequency of sourcing and selling), to identify the potential changes experienced since the escalation of the conflict in Ukraine, to probe the causes and drivers retrieved by the importers’ and retailers’ questionnaires, and understand the resilience strategies, if any, employed by private wholesale businesses.

³⁶ REACH, [“Market Systems in Libya”](#), October 2017

Questionnaire 4: Price Stability Fund

This component of the assessment will target the public wholesale institution, namely the Price Stability Fund (PSF). The PSF is the entity commissioned by the authorities with the task of providing subsidised goods to the population. Each city has its own branch of the PSF, which receives shipments and distributes subsidised goods, including wheat flour, through a network of consumer associations as well as bakeries. The assessment will target the PSF branches in the municipalities of Tripoli, Benghazi and Sebha. Respondents will be identified through a mixture of purposive sampling and snowballing. Furthermore, the selection will leverage the REACH field team members with strong local knowledge and extended network to identify and reach key persons.

The questionnaire, composed of mostly open-ended questions, will be designed in order to capture the impressions of PSF representatives/employees regarding the changes occurred upstream and downstream along the public supply chain of subsidised wheat flour (namely in terms of subsidised and non-subsidised prices, available stocks, accessible quantity, frequency of sourcing and selling), to identify the potential changes experienced since the escalation of the conflict in Ukraine, to probe and to compare the causes and drivers retrieved along the private supply chain, and understand the resilience strategies, if any, employed by the PSF.

Questionnaire 5: Private importers

This component of the assessment will target private importers importing and selling wheat flour in the municipalities of Tripoli and Benghazi. Only private businesses importing wheat respond to the eligibility criteria for the KI interview. Respondents will be identified through a mixture of purposive sampling and snowballing. Furthermore, the selection will leverage the REACH field team members with strong local knowledge and extended network to identify and reach key persons.

The questionnaire, composed of a mix of closed and open-ended questions, will be designed in order to capture the impressions of importers regarding the changes occurred upstream and downstream along the supply chain of imported wheat (namely in terms of prices, available stocks, accessible quantity, frequency of sourcing and selling), to identify the potential changes experienced since the escalation of the conflict in Ukraine, to compare the public and private perspectives, to probe the causes and drivers retrieved downstream by wholesalers' and retailers' questionnaires, and understand the resilience strategies, if any, employed by import businesses.

Questionnaire 6: Public importers (MATAHAN/NMC)

This component of the assessment will target public importers importing and selling wheat flour in the municipalities of Tripoli and Benghazi. Wheat is in fact publicly imported through two separate non-cooperating bodies: the Joint Stock National Company for Flour Mills and Fodders (MATAHAN) based in Tripoli and serving the West, and the National Milling Company (NMC) based in Benghazi, serving the East. Wheat is then distributed by at subsidized prices to bakeries and consumers associations (Jam'iyat) through the Price Stability Fund (PSF). Respondents will be identified through a mixture of purposive sampling and snowballing. Furthermore, the selection will leverage the REACH field team members with strong local knowledge and extended network to identify and reach key persons.

The questionnaire, composed of mostly open-ended questions, will be designed in order to capture the unique impressions of public importers regarding the changes occurred upstream and downstream along the supply chain of imported wheat (namely in terms of prices, available stocks, accessible quantity, frequency of sourcing and selling), to identify the potential changes experienced since the escalation of the conflict in Ukraine, to compare the public and private perspectives, to probe the causes and drivers retrieved downstream by wholesalers' and retailers' questionnaires, and understand the resilience strategies, if any, employed by public import businesses.

Questionnaire 7: Government authorities

This final component of the assessment will target Governmental authorities involved in the regulation of the Libyan market and trading environment. Hence, while the profiles of KIs of this group may differ, the eligibility criteria are to be professionally involved to varying degrees and in different ways to the public enabling environment supporting and regulating the Libyan wheat supply chain. This may include respondents from the Ministry of Economy (MoE), the Chamber of Commerce. Respondents will be identified through a mixture of purposive sampling and snowballing. Furthermore, the selection will leverage the REACH field team members with strong local knowledge and extended network to identify and reach key persons.

The questionnaire will be composed mostly of open-ended questions designed to map the web of policies and mitigating measures put into place to protect the Libyan wheat supply chain, as well as to capture the impressions of KIs on the short and medium term macro-economic strategies devised to deal with the current international wheat crisis and how these may affect trading businesses along the Libyan supply chain.

3.5 Data Processing & Analysis

Secondary data. Data retrieved from the systematic secondary data review of the JMMI datasets will be analysed with a deductive reasoning, through the means of MS Excel spreadsheets. In fact, the analysis of the JMMI datasets will look into predefined selected variables, namely the MEB wheat-derived components as well as other imported-food components, measuring their changes through precise and selected indicators relative to price change through the production of pivot tables and graphs. This will allow for inferences to be made across the different aggregations, namely the different wheat derived products, geographical areas, and time units. Since the JMMI datasets are assembled and designed by REACH within a separate research cycle, the data therein has already undergone cleaning in line with [IMPACT Data cleaning minimum standards](#)³⁷.

Primary data. Given the fact that most questions will be open ended with free text entry answers, enumerators will be asked to record answers in Arabic, the language of the respondent. This, in order to minimize the presence of language barriers during data collection and minimize the risk of missing information from respondents due to enumerator's interpretation and translation. The data collection, carried out by ACTED's field teams based in Tripoli, Benghazi and Sebha municipalities, who report to the Field Officers (FOs) based in the corresponding municipalities, and to the Assessment Officer in Tunis. The Project Officer in Tunis is responsible over general data collection monitoring and supervision and data processing will be carried out by the assessment officers. Data translation and cleaning will be conducted subsequently by the Tunis AO to produce a consolidated and cleaned dataset for analysis and in line with [IMPACT Data cleaning minimum standards](#). Qualitative data collection will be conducted through the KoBo application. Data will be collected online or offline using smartphone and/or tablet devices through the OpenDataKit app. Once data is collected, it will be uploaded to the KoBo server where the Tunis AO will download it directly in Excel for translation and cleaning purposes. These qualitative entries will be processed daily in line with [IMPACT minimum standards for semi-structured data processing and analysis](#). Data will be entered into a data saturation and analysis grid using [IMPACT data saturation and analysis template](#). Once thematic saturation is achieved, responses for each issue point will be tallied and a summary of findings produced. Themes and discussion points saturation will be achieved with an inductive reasoning, led by a content analysis approach as defined by [IMPACT Data Processing and Analysis of Qualitative Data](#).

4. Key ethical considerations and related risks

The proposed research design meets / does not meet the following criteria:

| <i>The proposed research design...</i> | <i>Yes/ No</i> | <i>Details if no (including mitigation)</i> |
|--|----------------|---|
|--|----------------|---|

³⁷ For further detailed information about JMMI methodology, please consult the corresponding [TORs](#).

| | | |
|--|------------|--|
| ... Has been coordinated with relevant stakeholders to avoid unnecessary duplication of data collection efforts? | YES | |
| ... Respects respondents, their rights and dignity (<i>specifically by: seeking informed consent, designing length of survey/ discussion while being considerate of participants' time, ensuring accurate reporting of information provided</i>)? | YES | |
| ... Does not expose data collectors to any risks as a direct result of participation in data collection? | YES | |
| ... Does not expose respondents / their communities to any risks as a direct result of participation in data collection? | YES | All ACTED and IMPACT staff will abide to IMPACT COVID-19 SOPs in the process of data collection and processing |
| ... Does not involve collecting information on specific topics which may be stressful and/ or re-traumatising for research participants (both respondents and data collectors)? | YES | |
| ... Does not involve data collection with minors i.e. anyone less than 18 years old? | YES | |
| ... Does not involve data collection with other vulnerable groups e.g. persons with disabilities, victims/ survivors of protection incidents, etc.? | YES | |
| ... Follows IMPACT SOPs for management of personally identifiable information ? | YES | |

5. Roles and responsibilities

Table 3: Description of roles and responsibilities

| Task Description | Responsible | Accountable | Consulted | Informed |
|--------------------------------------|--|--------------------|--|---|
| Research design | Assessment Officer | Assessment Officer | IMPACT HQ – Research Design and Data Unit (RDDU) CMWG | CMWG REACH Libya Country Coordinator |
| Supervising data collection | Assessment Officer Acted Field Team | Assessment Officer | REACH Libya Operations Manager | REACH Libya Country Coordinator |
| Data processing (checking, cleaning) | Assessment Officer | Assessment Officer | RDDU | REACH Libya Country Coordinator |
| Data analysis | Assessment Officer | Assessment Officer | RDDU | REACH Libya Country Coordinator |
| Output production | Assessment Officer | Assessment Officer | IMPACT HQ – Research Reporting Unit | REACH Libya Country Coordinator |
| Dissemination | Assessment Officer | Assessment Officer | REACH Libya Country Coordinator | REACH Libya Country Coordinator CMWG |
| Monitoring & Evaluation | Assessment Officer | Assessment Officer | RDDU | REACH Libya Country Coordinator |
| Lessons learned | Assessment Officer | Assessment Officer | RDDU | REACH Libya Country Coordinator |

Responsible: the person(s) who executes the task

Accountable: the person who validates the completion of the task and is accountable of the final output or milestone

Consulted: the person(s) who must be consulted when the task is implemented

Informed: the person(s) who need to be informed when the task is completed

NB: Only one person can be Accountable; the only scenario when the same person is listed twice for a task is when the same person is both Responsible and Accountable.

5. Data Analysis Plan

Questionnaire 1: Private retailers

| Research Questions | Sub-research Question | Topic | SUBQ# | Questionnaire QUESTION | Questionnaire ANSWER | Key disaggregations | Data collection method |
|--|---|------------------|-------|--|-------------------------------------|--------------------------|------------------------|
| N/A | Time & Date | Time_Date | | | | | |
| | Enumerator ID | Enumerator ID | | | | | |
| | Key Informant ID | Key Informant ID | | | | | |
| | KI Function | KI function | | | | | |
| | Shop type | Shop type | | What type of shop is this? | Small shop Supermarket Bakery | | |
| | Business Name | Shop name | | What is the name of this shop? | | | |
| | Location_Admin1 | Mantika | | In which Mantika is the shop based? | Select_one | | |
| | Location_Admin2 | Baladiya | | In which Baladiya is the shop based? | Select_one | | |
| 2. What are the potential impacts of the conflict in Ukraine on the functioning of the Libyan wheat supply chain and what are the trading strategies and behaviours adopted by traders and importers operating along the Libyan supply chain in response to these impacts? | 2.1 How has the functioning of Libya's supply chain of imported wheat changed since February 2022, namely in terms of prices (subsidised and non-subsidised), available stocks, accessible quantity, frequency of sourcing? | Supply_Quantity | 1 | Has your business been able to buy wheat flour since the end of February 2022? | Yes No | Geographical unit_Region | KII |
| | | Supply_Quantity | 2 | If No_Please explain why? | Text | | |

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| | | | | | | | |
|--|--|------------------|----|---|--|-----------------------------|-----|
| | | Supply_Quantity | 3 | How has the quantity of wheat flour your business is able to buy changed since the end of February 2022? | Increased Stayed the same Decreased | Geographical unit_Region | KII |
| | | Supply_Quantity | 4 | How many KG was your business able to buy per order before February 2022? | Integer | Geographical unit_Region | KII |
| | | Supply_Quantity | 5 | How many KG was your business able to buy on the last order (post February 2022)? | Integer | Geographical unit_Region | KII |
| | | Supply_Origin | 6 | Has your business changed wheat flour supplier since the end of February 2022? If yes, please explain why and how. | Yes No | Geographical unit_Region | KII |
| | | Supply_Origin | 7 | Who does your business buy the wheat flour from since the end of February 2022? | Public supplier Private supplier Other_Please Specify | | |
| | | Supply_Price | 8 | How has the price of the wheat flour your business buys changed since the end of February 2022? | Increased Stayed the same Decreased | Geographical unit_Region | KII |
| | | Supply_Price | 9 | How much did your business use to pay (LYD) for 1KG of wheat flour before the end of February 2022? | Integer | Geographical unit_Region | KII |
| | | Supply_Price | 10 | How much (LYD) did your business pay for 1KG of wheat flour in the last order (post February 2022)? | Integer | Geographical unit_Region | KII |
| | | Supply_Frequency | 11 | How has your business' frequency of buying wheat flour changed since the end of February 2022? Please explain. | Text | Geographical unit_Region | KII |
| | | Supply_Stock | 12 | How has your business' usual stock of wheat flour changed since the end of February 2022? Please explain. | Text | Geographical unit_Region | KII |
| | | Supply_Stock | 13 | Does your business currently have wheat flour stock left? | Yes No | Geographical unit_Region | KII |
| | | Supply_Drivers | 14 | If in the above questions you have noticed some changes along the supply of wheat flour in terms of quantity, price, frequency and stock since the end of February 2022, why do you think these changes occurred? | Text | Geographical unit_Region | KII |

| | | | | | | | |
|--|---|-----------------------------|----|--|---|--------------------------|-----|
| | | Supply_Government | 15 | Since the end of February 2022, have the authorities set limitations on the quantity, the price or the frequency of wheat flour your business can buy? If so, please explain what these limitations are. | Text | Geographical unit_Region | KII |
| | | Supply_Government | 16 | How do you think these limitations may affect your business? Please explain. | Text | Geographical unit_Region | KII |
| | | Supply_Other | 17 | Are there other changes you have noticed in the supply chain of wheat flour since the end of February 2022? Please explain. | Text | Geographical unit_Region | KII |
| | | Supply_Next 6 months | 18 | How do you think the price and availability of wheat flour your business is able to buy is going to change within the next six months? Please explain how and why. | Text | Geographical unit_Region | KII |
| | 2.2 How has the demand for imported wheat changed since February 2022 across the Libyan supply chain? | Demand_Wheat Flour | 19 | Does your business sell wheat flour? [If No_Skip to (23)] | Yes No | Geographical unit_Region | KII |
| | | Demand_Wheat Flour_Quantity | 20 | If (19) Yes_How has the quantity of wheat flour your business sells per customer changed since the end of February 2022? | Increased Stayed the same Decreased | Geographical unit_Region | KII |
| | | Demand_Wheat Flour_Price | 21 | If (19) Yes_How has the price of the wheat flour your business sells changed since the end of February 2022? | Increased Stayed the same Decreased | Geographical unit_Region | KII |
| | | Demand_Drivers | 22 | If (19) Yes_If you noticed some changes in the demand (quantity and price) of wheat flour, why do you think these changes occurred? | Text | Geographical unit_Region | KII |
| | | Demand_Wheat Bread | 23 | Does your business sell wheat bread? [If No_Skip to (27)] | Yes No | Geographical unit_Region | KII |
| | | Demand_Wheat Bread_Quantity | 24 | If (23) Yes_How has the quantity of wheat bread your business sells per customer changed since the end of February 2022? | Increased Stayed the same Decreased | Geographical unit_Region | KII |
| | | Demand_Wheat Bread_Price | 25 | If (23) Yes_How has the price of the wheat bread your business sells changed since the end of February 2022? | Increased Stayed the same Decreased | Geographical unit_Region | KII |

| | | | | | | | |
|--|---|-------------------|----|---|-----------|--------------------------|-----|
| | | Demand_Drivers | 26 | If (23) Yes_If you noticed some changes in the demand (quantity and price) of bread, why do you think these changes occurred? | Text | Geographical unit_Region | KII |
| | | Demand_Gvt limit | 27 | Since the end of February 2022, have the authorities set an official limit on the quantity and price of wheat flour and/or bread your business can sell per customer? If so, please explain what these limitations are. | Text | Geographical unit_Region | KII |
| | | Demand_Gvt limit | 28 | If yes_How do you think these limitations may affect your business? Please explain. | Text | Geographical unit_Region | KII |
| | | Demand_Other | 29 | Are there other changes you have noticed in the demand of wheat flour and bread since February 2022? Please explain. | Text | Geographical unit_Region | KII |
| | | Supply_Demand | 30 | Overall, do you think the current level of wheat flour your business is supplying is sufficient to meet the demand of wheat flour and bread your business is facing? | Yes No | Geographical unit_Region | KII |
| | 2.3 What are the mitigation, and potentially speculative, business strategies and coping mechanisms adopted by retailers, wholesalers and importers, to respond to the identified changes? | Coping mechanisms | 31 | Have you changed your business' strategy or adopted some business mitigating measures related to wheat flour/wheat bread since the end of February 2022? | Yes No | Geographical unit_Region | KII |
| | | Coping mechanisms | 32 | If yes_How? | Text | Geographical unit_Region | KII |
| | 2.4 What are the possible effects of the wheat crisis on traders' and importers' businesses, namely in terms of solvency, accessibility to credits and to foreign currency at the official exchange rate? | Solvency | 33 | Were you able to pay your suppliers since the end of February 2022? | Yes No | Geographical unit_Region | KII |
| | | Solvency | 34 | Do you think the increase of international wheat and oil prices since the end of February 2022 is going to affect your business ability to pay debts? If Yes, please explain how. | Text | Geographical unit_Region | KII |
| | | Credit_Access | 35 | Do you think the increase of international wheat and oil prices since the end of February 2022 is going to affect | Text | Geographical unit_Region | KII |

| | | | | | | | |
|---|--|--|---------|---|---|--------------------------|--------------------------|
| | | | | your business ability to access credits? If Yes, please explain how. | | | |
| | | Forex_Access | 36 | Do you think the increase of international wheat and oil prices since the end of February 2022 is going to affect your business ability to access foreign currency at the official exchange rate? If Yes, please explain how. | Text | Geographical unit_Region | KII |
| 3. What market mitigating measures have been put into place by the Libyan Government to respond to the Ukrainian wheat crisis and how may these contribute to protecting the Libyan wheat supply chain? | 3.1 What are the measures put into place by the Government authorities to mitigate the potential impacts of the Ukrainian wheat crisis? | Government intervention | 37 | Have you noticed any change in the financial support of the authorities to wheat retail businesses since February 2022? Please explain. | Text | Geographical unit_Region | KII |
| | | Government intervention | 38 | Are there new measures put into place by the authorities to protect the Libyan wheat supply chain due to the escalation of the conflict in Ukraine? | Yes No Do not know | Geographical unit_Region | KII |
| | 3.2 How do these measures contribute to absorbing the price increase and reducing the availability crisis along the wheat supply chain? | Government intervention | 39 | If (38) Yes_What are they and to what extent do they, according to you, contribute to absorbing the price increase and reducing the availability threat along the wheat supply chain? | Text | Geographical unit_Region | KII |
| | | Government intervention | 40 | If (38) Yes_How may these measures affect your wheat trading business? Please explain. | Text | Geographical unit_Region | KII |
| | 1. How did the price of the different MEB components, especially of wheat derived goods, change across the different key urban areas of Libya across March and April 2022, and what are potential correlations with the global wheat supply chain disruption due to the conflict in Ukraine? | 1.3 What are the interdependencies and potential causal linkages between the identified MEB trends, the current structure of the Libyan supply chain of imported wheat, and the disruption of the international wheat supply chain due to the ongoing conflict in Ukraine? | Ramadan | 41 | How does the wheat supply and demand change during Ramadan period? | Text | Geographical unit_Region |
| Ramadan | | | 42 | How do you perceive this year's Ramadan market trend to be in comparison with the past Ramadan market trends? | Similar to the past Ramadan market trend Different than the past Ramadan market trends | Geographical unit_Region | KII |
| Ramadan | | | 43 | If Different_How is it different? Please explain. | Text | Geographical unit_Region | KII |

| | | | | | | | |
|--|--|------------------|----|---|------|--------------------------|-----|
| | | Ukraine_Conflict | 44 | If you have observed any changes in the wheat supply chain since February 2022, do you think there are any connections to the conflict in Ukraine? If so how? | Text | Geographical unit_Region | KII |
|--|--|------------------|----|---|------|--------------------------|-----|

Questionnaire 2 : Consumer Associations

| Research Questions | Sub-research Question | Topic | SUBQ# | Questionnaire QUESTION | Questionnaire ANSWER | Key disaggregations | Data collection method |
|--|---|------------------|-------|--|---|--------------------------|------------------------|
| N/A | Time & Date | Time_Date | | | | | |
| | Enumerator ID | Enumerator ID | | | | | |
| | Key Informant ID | Key Informant ID | | | | | |
| | KI Function | KI function | | | | | |
| | Business Name | Shop name | | | | | |
| | Location_Admin1 | Mantika | | In which Mantika is the shop based? | Select_one | | |
| | Location_Admin2 | Baladiya | | In which Baladiya is the shop based? | Select_one | | |
| 2. What are the potential impacts of the conflict in Ukraine on the functioning of the Libyan wheat supply chain and what are the trading strategies and behaviours adopted by traders and importers operating along the Libyan supply chain in response to these impacts? | 2.1 How has the functioning of Libya's supply chain of imported wheat changed since February 2022, namely in terms of prices (subsidised and non-subsidised), available stocks, accessible quantity, frequency of sourcing? | Supplyt_Quantity | 1 | Was this Jam'iyat able to buy wheat flour since the end of February 2022? | Yes No | Geographical unit_Region | KII |
| | | Supplyt_Quantity | 2 | If No_Please explain why? | Text | Geographical unit_Region | KII |
| | | Supply_Quantity | 3 | How has the quantity of wheat flour this Jam'iyat is able to buy changed since the end of February 2022? | Increased Stayed the same Decreased | Geographical unit_Region | KII |

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| | | | | | | | |
|--|--|-------------------|----|--|---|--------------------------|-----|
| | | Supply_Quantity | 4 | How many KG did this Jam'iyat use to buy per order before the end of February 2022? | Integer | Geographical unit_Region | KII |
| | | Supply_Quantity | 5 | How many KG was your business able to buy on the last order (post February 2022)? | Integer | Geographical unit_Region | KII |
| | | Supply_Price | 6 | How has the subsidised price of wheat flour your business buys changed since the end of February 2022? | Increased Stayed the same Decreased | Geographical unit_Region | KII |
| | | Supply_Price | 7 | How much did this Jam'iyat use to pay (LYD) for 1KG of subsidised wheat flour before the end of February 2022? | Integer | Geographical unit_Region | KII |
| | | Supply_Price | 8 | How much (LYD) did this Jam'iyat pay for 1KG of subsidised wheat flour in your last order (post February 2022)? | Integer | Geographical unit_Region | KII |
| | | Supply_Frequency | 9 | How has this Jam'iyat's frequency of buying subsidised wheat flour changed since the end of February 2022? Please explain. | Text | Geographical unit_Region | KII |
| | | Supply_Stock | 10 | How has this Jam'iyat's stock of wheat flour changed since the end of February 2022? Please explain. | Text | Geographical unit_Region | KII |
| | | Supply_Stock | 11 | Does this Jam'iyat currently have wheat flour stock left? | Yes No | Geographical unit_Region | KII |
| | | Supply_PSF | 12 | How have the conditions of wheat supply from the PSF changed since February 2022, and how has this affected the functioning of this Jam'iyat? | Text | Geographical unit_Region | KII |
| | | Supply_Drivers | 13 | If in the previous questions you have noticed some changes along the supply of subsidised wheat flour in terms of quantity, price, frequency or stock since the end of February 2022, why do you think these changes occurred? | Text | Geographical unit_Region | KII |
| | | Supply_Government | 14 | Since the end of February 2022, have the authorities set new limitations on the quantity, the price or the frequency of wheat | Text | Geographical unit_Region | KII |

| | | | | | | | |
|---|-----------------------------|----------------------|--|---|--------------------------|--------------------------|-----|
| | | | | flour this Jam'iyat can buy? If so, please explain what these new limitations are. | | | |
| | | Supply_Other | 15 | Are there other changes you have noticed in the supply chain of wheat flour since the end of February 2022? Please explain. | Text | Geographical unit_Region | KII |
| | | Supply_Next 6 months | 16 | How do you think is the subsidised price and availability of wheat products going to change within the next six months? Please explain how and why. | Text | Geographical unit_Region | KII |
| 2.2 How has the demand for imported wheat changed since February 2022 across the Libyan supply chain? | Demand_Wheat Flour | 17 | Does this Jam'iyat sell wheat flour? [If No_Skip to (22)] | Yes No | Geographical unit_Region | KII | |
| | Demand_Wheat Flour_Quantity | 18 | If (17) Yes_How has the quantity of wheat flour this Jam'iyat sells per customer changed since the end of February 2022? | Increased Stayed the same Decreased | Geographical unit_Region | KII | |
| | Demand_Wheat Flour_Price | 19 | If (17) Yes_How has the price of the wheat flour this Jam'iyat sells changed since the end of February 2022? | Increased Stayed the same Decreased | Geographical unit_Region | KII | |
| | Demant_Drivers | 20 | If (17) Yes_If you noticed some changes in the demand (quantity and price) of wheat flour, why do you think these changes occurred? | Text | Geographical unit_Region | KII | |
| | Demand_Gvt limit | 21 | Since the end of February 2022, have the authorities set new limitations on the quantity and the price of wheat flour this Jam'iyat can sell per customer? If so, please explain what these new limitations are. | Text | Geographical unit_Region | KII | |
| | Demand_Wheat Bread | 22 | Do you sell wheat bread? [If No_Skip to (27)] | Yes No | Geographical unit_Region | KII | |
| | Demand_Wheat Bread_Quantity | 23 | If (22) Yes_How has the quantity of the wheat bread this Jam'iyat sells per customer changed since the end of February 2022? | Increased Stayed the same Decreased | Geographical unit_Region | KII | |

| | | | | | | | |
|--|---|--------------------------|----|--|---|--------------------------|-----|
| | | Demand_Wheat Bread_Price | 24 | If (22) Yes_How has the price of the wheat bread this Jam'iyat sells changed since the end of February 2022? | Increased Stayed the same Decreased | Geographical unit_Region | KII |
| | | Demant-Drivers | 25 | If (17) Yes_If you noticed some changes in the demand (quantity and price) of bread, why do you think these changes occurred? | Text | Geographical unit_Region | KII |
| | | Demand_Gvt limit | 26 | Since the end of February 2022, have the authorities set an official limit on the quantity and price of bread this Jam'iyat can sell per customer? If so, please explain what these limitations are. | Text | Geographical unit_Region | KII |
| | | Demand_Other | 27 | Are there other changes you have noticed in the demand of wheat flour and bread since the end of February 2022? Please explain. | Text | Geographical unit_Region | KII |
| | | Supply_Demand | 28 | Overall, do you think the current level of wheat this Jam'iyat is supplying is sufficient to meet the demand of wheat flour and wheat bread that this Jam'iyat is facing? | Yes No | Geographical unit_Region | KII |
| | 2.3 What are the mitigation, and potentially speculative, business strategies and coping mechanisms adopted by retailers, wholesalers and importers, to respond to the identified changes? | Coping mechanisms | 29 | Has this Jam'iyat changed its business' strategy or adopted some business mitigating measures related to wheat flour/wheat bread since the end of February 2022? | Yes No | Geographical unit_Region | KII |
| | | Coping mechanisms | 30 | If yes_How? | Text | Geographical unit_Region | KII |
| | 2.4 What are the possible effects of the wheat crisis on traders' and importers' businesses, namely in terms of solvency, accessibility to credits and to foreign currency at the official exchange rate? | Solvency | 37 | Do you think the increase of international wheat and oil prices since the end of February 2022 is going to affect this Jam'iyat's ability to pay debts? If so, please explain how. | Text | Geographical unit_Region | KII |
| 3. What market mitigating measures have been put into place by the Libyan Government to respond to | 3.1 What are the measures put into place by the government authorities | Government intervention | 26 | Have you noticed any change in the funding of the authorities to this Jam'iyat since the end of February 2022? Please explain. | Text | Geographical unit_Region | KII |

| | | | | | | | |
|--|--|-------------------------|----|---|---|-----------------------------|-----|
| the Ukrainian wheat crisis and how may these contribute to protecting the Libyan wheat supply chain? | to mitigate the potential impacts of the Ukrainian wheat crisis? | Government intervention | 32 | Are there new measures put into place by the authorities to protect the Libyan wheat supply chain due to the escalated conflict in Ukraine? | Yes No Do not know | Geographical unit_Region | KII |
| | 3.2 How do these measures contribute to absorbing the price increase and reducing the availability crisis along the wheat supply chain? | Government intervention | 33 | If (32) Yes_ What are they and to what extent do they, according to you, contribute to absorbing the price increase and reducing the threat of wheat unavailability along the wheat supply chain? | Text | Geographical unit_Region | KII |
| | | Government intervention | 34 | If (32) Yes_How may these measures affect this jam'iyat business? Please explain. | Text | Geographical unit_Region | KII |
| | 3.3 Has the international demand for Libyan oil increased due to the international sanctions imposed on Russia, and does this increase Central Bank of Libya's foreign currency reserves, potentially enabling stronger price subsidisation and Letters of Credit access? | Government intervention | 35 | Do you think the increase of international wheat and oil prices since the end of February 2022 is going to affect this Jam'iyat's ability to provide subsidised flour to the Libyan population in the next 6 months? If so, please explain how. | Text | Geographical unit_Region | KII |
| | | Government intervention | 36 | Do you think an improvement in the Central Bank of Libya's foreign currency reserves due to increased oil revenues could potentially enable stronger subsidisation of wheat and oil prices in Libya? Please explain. | Text | Geographical unit_Region | KII |
| 1. How did the price of the different MEB components, especially of wheat derived goods, change across the different key urban areas of Libya across March and April 2022, and what are potential correlations with the global wheat supply chain disruption due to the conflict in Ukraine? | 1.3 What are the interdependencies and potential causal linkages between the identified MEB trends, the current structure of the Libyan supply chain of imported wheat, and the disruption of the international wheat supply chain due to the ongoing conflict in Ukraine? | Ramadan | 38 | How does the wheat supply and demand change during Ramadan period? | Text | Geographical unit_Region | KII |
| | | Ramadan | 39 | How do you perceive this year's Ramadan market trend to be in comparison with the past Ramadan market trends? | Similar to the past Ramadan market trend Different than the past Ramadan market trends | Geographical unit_Region | KII |
| | | Ramadan | 40 | If Different_How is it different? Please explain. | Text | Geographical unit_Region | KII |

| | | | | | | | |
|--|--|------------------|----|--|------|--------------------------|-----|
| | | Ukraine_Conflict | 41 | If you have observed any changes in the wheat supply chain since the end of February 2022, do you think there are any connections to the escalated conflict in Ukraine? If so how? | Text | Geographical unit_Region | KII |
|--|--|------------------|----|--|------|--------------------------|-----|

Questionnaire 3 : Private wholesalers

| Research Questions | Sub-research Question | Topic | SUBQ# | Questionnaire QUESTION | Questionnaire ANSWER | Key disaggregations | Data collection method |
|--|---|------------------|-------|--|---|--------------------------|------------------------|
| N/A | Time & Date | Time_Date | | | | | |
| | Enumerator ID | Enumerator ID | | | | | |
| | Key Informant ID | Key Informant ID | | | | | |
| | KI Function | KI function | | | | | |
| | Business Name | Business name | | | | | |
| | Location_Admin1 | Mantika | | In which Mantika is the business based? | Select_one | | |
| | Location_Admin2 | Baladiya | | In which Baladiya is the business based? | Select_one | | |
| 2. What are the potential impacts of the conflict in Ukraine on the functioning of the Libyan wheat supply chain and what are the trading strategies and behaviours adopted by traders and importers operating along the Libyan supply chain in response to these impacts? | 2.1 How has the functioning of Libya's supply chain of imported wheat changed since February 2022, namely in terms of prices (subsidised and non-subsidised), available stocks, accessible quantity, frequency of sourcing? | Supply_Quantity | 1 | Was your business able to buy wheat flour since the end of February 2022? | Yes No | Geographical unit_Region | KII |
| | | Supply_Quantity | 2 | If No_Please explain why. | Text | Geographical unit_Region | KII |
| | | Supply_Quantity | 3 | How has the quantity of wheat flour your business is able to buy changed since the end of February 2022? | Increased Stayed the same Decreased | Geographical unit_Region | KII |
| | | Supply_Quantity | 4 | How many KG did your business use to buy per order before the end of February 2022? | Integer | Geographical unit_Region | KII |

| | | | | | | | |
|--|--|-------------------|----|---|---|--------------------------|-----|
| | | Supply_Quantity | 5 | How many KG was your business able to buy on the last order (post February 2022)? | Integer | Geographical unit_Region | KII |
| | | Supply_Price | 6 | How has the market price of wheat flour your business buys changed since the end of February 2022? | Increased Stayed the same Decreased | Geographical unit_Region | KII |
| | | Supply_Price | 7 | How much did your business use to pay (LYD) for 1KG of wheat flour before February 2022? | Integer | Geographical unit_Region | KII |
| | | Supply_Price | 8 | How much (LYD) did your business pay for 1KG of wheat flour in the last order (post February 2022)? | Integer | Geographical unit_Region | KII |
| | | Supply_Frequency | 9 | How has your business' frequency of buying wheat flour changed since the end of February 2022? Please explain. | Text | Geographical unit_Region | KII |
| | | Supply_Stock | 10 | How has your business' usual stock of wheat flour changed since the end of February 2022? Please explain. | Text | Geographical unit_Region | KII |
| | | Import_Stock | 11 | Does your business currently have stock of wheat flour left? | Yes No | Geographical unit_Region | KII |
| | | Supply_Drivers | 12 | If you have noticed some changes along the supply of wheat flour in terms of quantity, price, frequency or stock since the end of February 2022, why do you think these changes occurred? | Text | Geographical unit_Region | KII |
| | | Supply_Origin | 13 | Has your business changed wheat flour supplier since the end of February 2022? If yes, please explain why and how. | Text | Geographical unit_Region | KII |
| | | Supply_Origin | 14 | Who and where does your business buy the wheat flour from since the end of February 2022? | Text | Geographical unit_Region | KII |
| | | Supply_Government | 15 | Since the end of February 2022, have the authorities set limitations on the quantity, the price or the frequency of wheat flour your business can buy? If so, please explain what these limitations are. | Text | Geographical unit_Region | KII |
| | | Supply_PSF | 16 | Are you aware of any change in the distribution of subsidised wheat from the PSF since the end of February 2022? If yes, please explain how did it change, and how this affects the private wheat wholesale market? | Text | Geographical unit_Region | KII |

| | | | | | | |
|---|---|-------------------|--|--|--------------------------|--------------------------|
| | Supply_Other | 17 | Are there other changes you have noticed in the supply chain of wheat flour since the end of February 2022? Please explain. | Text | Geographical unit_Region | KII |
| | Supply_Next 6 months | 18 | How do you think is the price and availability of wheat products your business buys going to change within the next six months? Please explain how and why. | Text | Geographical unit_Region | KII |
| | Import_Bakers Syndicate | 19 | Is your business in any way connected to the Bakers Syndicate? If yes, please explain how. | Text | Geographical unit_Region | KII |
| 2.2 How has the demand for imported wheat changed since February 2022 across the Libyan supply chain? | Demand_Wheat Flour_Quantity | 20 | How has the quantity of wheat flour your business sells changed since the end of February 2022? | Increased Stayed the same Decreased | Geographical unit_Region | KII |
| | Demand_Wheat Flour_Price | 21 | How has the price of the wheat flour your business sells changed since the end of February 2022? | Increased Stayed the same Decreased | Geographical unit_Region | KII |
| | Demant_Drivers | 22 | If you noticed some changes in the demand (quantity and price) of wheat flour since the end of February 2022, why do you think these changes occurred? | Text | Geographical unit_Region | KII |
| | Demand_Gvt limit | 23 | Since the end of February 2022, have the authorities set limitations on the quantity, the price or the frequency of wheat flour your business can sell per customer? If so, please explain what these limitations are. | Text | Geographical unit_Region | KII |
| | Demand_Gvt limit | 24 | If yes_How do you think these limitations may affect your business? Please explain. | Text | Geographical unit_Region | KII |
| | Demand_Other | 25 | Are there other changes you have noticed in the demand of wheat flour and bread since the end of February 2022? Please explain. | Text | Geographical unit_Region | KII |
| | Supply_Demand | 26 | Overall, do you think the current level of wheat flour your business is supplying is sufficient to meet the demand of wheat flour your business is facing? | Yes No | Geographical unit_Region | KII |
| | 2.3 What are the mitigation, and potentially speculative, | Coping mechanisms | 27 | Have you changed your business' strategy or adopted some business mitigating measures related to wheat flour/wheat bread since the end of February 2022? | Yes No | Geographical unit_Region |

| | | | | | | | |
|---|---|-------------------------|----|---|--------------------------|--------------------------|-----|
| | business strategies and coping mechanisms adopted by retailers, wholesalers and importers, to respond to the identified changes? | Coping mechanisms | 28 | If yes_How? | Text | Geographical unit_Region | KII |
| | 2.4 What are the possible effects of the wheat crisis on traders' and importers' businesses, namely in terms of solvency, accessibility to credits and to foreign currency at the official exchange rate? | Solvency | 29 | Were you able to pay your suppliers since the end of February 2022? | Yes No | Geographical unit_Region | KII |
| | | Solvency | 30 | Do you think the increase of international wheat and oil prices since the end of February 2022 is going to affect your business' ability to pay debts? If Yes, please explain how. | Text | Geographical unit_Region | KII |
| | | Credit_Access | 31 | Do you think the increase of international wheat and oil prices since the end of February 2022 is going to affect your business' ability to access credits? If Yes, please explain how. | Text | Geographical unit_Region | KII |
| | | Forex_Access | 32 | Do you think the increase of international wheat and oil prices since the end of February 2022 is going to affect your business ability to access foreign currency at the official exchange rate? If Yes, please explain how. | Text | Geographical unit_Region | KII |
| 3. What market mitigating measures have been put into place by the Libyan Government to respond to the Ukrainian wheat crisis and how may these contribute to protecting the Libyan wheat supply chain? | 3.1 What are the measures put into place by the Government authorities to mitigate the potential impacts of the Ukrainian wheat crisis? | Government intervention | 33 | Have you noticed any change in the financial support of the authorities to wheat wholesale businesses since the end of February 2022? Please explain. | Text | Geographical unit_Region | KII |
| | | Government intervention | 34 | Are there new measures put into place by the authorities to protect the Libyan wheat supply chain due to the escalation of the conflict in Ukraine? | Yes No Do not know | Geographical unit_Region | KII |
| | 3.2 How do these measures contribute to absorbing the price increase and reducing the availability crisis along the wheat supply chain? | Government intervention | 35 | If (34) Yes_ What are they and to what extent do they, according to you, contribute to absorbing the price increase and reducing the threat of wheat unavailability along the wheat supply chain? | Text | Geographical unit_Region | KII |
| | | Government intervention | 36 | If (34) Yes_How may these measures affect your wheat flour trading business? Please explain. | Text | Geographical unit_Region | KII |

| | | | | | | |
|--|------------------|----|---|---|--------------------------|-----|
| 1. How did the price of the different MEB components, especially of wheat derived goods, change across the different key urban areas of Libya across March and April 2022, and what are potential correlations with the global wheat supply chain disruption due to the conflict in Ukraine? | Ramadan | 37 | How does the wheat supply and demand change during Ramadan period? | Text | Geographical unit_Region | KII |
| | Ramadan | 38 | How do you perceive this year's Ramadan market trend to be in comparison with the past Ramadan market trends? | Similar to the past Ramadan market trend Different than the past Ramadan market trends | Geographical unit_Region | KII |
| | Ramadan | 38 | If Different_How is it different? Please explain. | Text | Geographical unit_Region | KII |
| | Ukraine_Conflict | 39 | If you have observed any changes in the wheat supply chain since February 2022, do you think there are any connections to the conflict in Ukraine? If so how? | Text | Geographical unit_Region | KII |

Questionnaire 4 : Price Stability Fund

| Research Questions | Sub-research Question | Topic | SUBQ# | Questionnaire QUESTION | Questionnaire ANSWER | Key disaggregations | Data collection method |
|--|---|------------------|-------|---|----------------------|--------------------------|------------------------|
| N/A | Time & Date | Time_Date | | | | | |
| | Enumerator ID | Enumerator ID | | | | | |
| | Key Informant ID | Key Informant ID | | | | | |
| | KI Function | KI function | | | | | |
| | Business Name | Business name | | | | | |
| | Location_Admin1 | Mantika | | In which Mantika is the business based? | Select_one | | |
| | Location_Admin2 | Baladiya | | In which Baladiya is the business based? | Select_one | | |
| 2. What are the potential impacts of the conflict in Ukraine on the functioning of | 2.1 How has the functioning of Libya's supply chain of imported wheat changed since February 2022, namely | Supply_Quantity | 1 | Was this PSF branch able to buy wheat flour since the end of February 2022? | Yes No | Geographical unit_Region | KII |

| | | | | | | | |
|--|--|------------------|----|--|---|--------------------------|-----|
| <p>the Libyan wheat supply chain and what are the trading strategies and behaviours adopted by traders and importers operating along the Libyan supply chain in response to these impacts?</p> | <p>in terms of prices (subsidised and non-subsidised), available stocks, accessible quantity, frequency of sourcing?</p> | Supply_Quantity | 2 | If No_Please explain why? | Text | Geographical unit_Region | KII |
| | | Supply_Quantity | 3 | How has the quantity of wheat flour that this PSF branch is able to buy changed since the end of February 2022? | Increased Stayed the same Decreased | Geographical unit_Region | KII |
| | | Supply_Quantity | 4 | How many KG did this PSF branch use to buy per order before the end of February 2022? | Integer | Geographical unit_Region | KII |
| | | Supply_Quantity | 5 | How many KG was this PSF branch able to buy on the last order (post February 2022)? | Integer | Geographical unit_Region | KII |
| | | Supply_Origin | 6 | Has this PSF branch changed wheat flour supplier since the end of February 2022? If yes, please explain why and how. | Text | Geographical unit_Region | KII |
| | | Supply_Origin | 7 | Who and where does this PSF branch buy the wheat flour from since the end of February 2022? | Text | | KII |
| | | Supply_Price | 8 | At what price does this PSF branch buy wheat flour? | Subsidised Price Market Prices (supply/demand) Other_Please explain | Geographical unit_Region | KII |
| | | Supply_Price | 9 | How has the price of wheat flour that this PSF branch buys changed since the end of February 2022? | Increased Stayed the same Decreased | Geographical unit_Region | KII |
| | | Supply_Price | 10 | How much did this PSF branch use to pay (LYD) for 1KG of wheat flour before February 2022? | Integer | Geographical unit_Region | KII |
| | | Supply_Price | 11 | How much (LYD) did this PSF branch pay for 1KG of wheat flour in the last order (post February 2022)? | Integer | Geographical unit_Region | KII |
| | | Supply_Frequency | 12 | How has this PSF branch's frequency of buying wheat flour changed since the end of February 2022? Please explain. | Text | Geographical unit_Region | KII |
| | | Supply_Stock | 13 | How has this PSF branch's usual stock of wheat flour changed since the end of February 2022? Please explain. | Text | Geographical unit_Region | KII |
| | | Supply_Stock | 14 | Does this PSF branch currently have stock of wheat flour left? | Yes No | Geographical unit_Region | KII |

| | | | | | | | |
|--|---|-----------------------------|----|--|---|--------------------------|-----|
| | | Supply_Drivers | 15 | If in the previous questions you have noticed some changes in terms of quantity, price, frequency and stock along the supply of wheat flour since the end of February 2022, why do you think these changes occurred? | Text | Geographical unit_Region | KII |
| | | Supply_Government | 16 | Since the end of February 2022, have the authorities set limitations on the quantity, the price or the frequency of wheat flour that this PSF branch can buy? If so, please explain what these limitations are. | Text | Geographical unit_Region | KII |
| | | Supply_Bakers Syndicate | 17 | Is the PSF in any way connected to the Bakers Syndicate? If yes, how? | Text | Geographical unit_Region | KII |
| | | Supply_Bakers Syndicate | 18 | If yes_Has this connection changed in any way since the end of February 2022? Please explain. | Text | Geographical unit_Region | KII |
| | | Supply_Other | 19 | Are there other changes you have noticed in the supply chain of wheat flour since the end of February 2022? Please explain. | Text | Geographical unit_Region | KII |
| | | Supply_Next 6 months | 20 | How do you think is the price and availability of the wheat flour this PSF branch sources going to change within the next six months? Please explain how and why. | Text | Geographical unit_Region | KII |
| | 2.2 How has the demand for imported wheat changed since February 2022 across the Libyan supply chain? | Demand_Wheat Flour_Quantity | 21 | How has the quantity of wheat flour this PSF branch sells changed since the end of February 2022? | Increased Stayed the same Decreased | Geographical unit_Region | KII |
| | | Demand_Wheat Flour_Price | 22 | How has the price of the wheat flour this PSF branch sells changed since the end of February 2022? | Increased Stayed the same Decreased | Geographical unit_Region | KII |
| | | Demant-Drivers | 23 | If you noticed some changes in the demand (quantity and price) of wheat flour since the end of February 2022, why do you think these changes occurred? | Text | Geographical unit_Region | KII |
| | | Demand_Gvt limit | 24 | Since the end of February 2022, has the authorities set new restrictions on the quantity, the price or the frequency of wheat flour this PSF branch can sell per customer? If so, please explain what these new limitations are. | Yes No | Geographical unit_Region | KII |
| | | Demand_Other | 25 | Are there other changes you have noticed in the demand of wheat flour since February 2022? Please explain. | Yes No | Geographical unit_Region | KII |

| | | | | | | | |
|---|---|-------------------------|----|--|--------------------------|-----------------------------|-----|
| | | Supply_Demand | 26 | Overall, do you think the current level of wheat flour this PSF branch is supplying is sufficient to meet the demand of wheat flour it is facing? | Yes No | Geographical unit_Region | KII |
| | 2.3 What are the mitigation, and potentially speculative, business strategies and coping mechanisms adopted by retailers, wholesalers and importers, to respond to the identified changes? | Coping mechanisms | 27 | Has this PSF branch changed its business' strategy or adopted some business mitigating measures related to wheat flour since the end of February 2022? | Yes No | Geographical unit_Region | KII |
| | | Coping mechanisms | 28 | If yes_Please explain how. | Text | Geographical unit_Region | KII |
| | 2.4 What are the possible effects of the wheat crisis on traders' and importers' businesses, namely in terms of solvency, accessibility to credits and to foreign currency at the official exchange rate? | Solvency | 29 | Was this PSF branch able to pay its suppliers since the end of February 2022? | Yes No | Geographical unit_Region | KII |
| | | Solvency | 30 | Do you think the increase of international wheat and oil prices since the end of February 2022 is going to affect this PSF branch ability to pay debts? If Yes, please explain how. | Text | Geographical unit_Region | KII |
| | | Credit_Access | 31 | Do you think the increase of international wheat and oil prices since the end of February 2022 is going to affect this PSF branch ability to access credits? If Yes, please explain how. | Text | Geographical unit_Region | KII |
| | | Forex_Access | 32 | Do you think the increase of international wheat and oil prices since the end of February 2022 is going to affect this PSF branch access foreign currency at the official exchange rate? If Yes, please explain how. | Text | Geographical unit_Region | KII |
| 3. What market mitigating measures have been put into place by the Libyan Government to respond to the Ukrainian wheat crisis and how may these contribute to protecting the Libyan wheat supply chain? | 3.1 What are the measures put into place by the Government authorities to mitigate the potential impacts of the Ukrainian wheat crisis? | Government intervention | 33 | Have you noticed any change in the funding of the authorities to this branch of the PSF since the end of February 2022? Please explain. | Text | Geographical unit_Region | KII |
| | | Government intervention | 34 | Are there new measures put into place by the authorities to protect the Libyan wheat supply chain due to the escalated conflict in Ukraine? | Yes No Do not know | Geographical unit_Region | KII |
| | 3.2 How do these measures contribute to absorbing the price increase and reducing the availability crisis along the wheat supply chain? | Government intervention | 35 | If Yes_ What are they and to what extent do they, according to you, contribute to absorbing the price increase and reducing the availability threat along the wheat supply chain? | Text | Geographical unit_Region | KII |

| | | | | | | | |
|--|--|-------------------------|-------------------------|---|---|--------------------------|--------------------------|
| | | Government intervention | 36 | If (34) Yes_How may these measures affect this PSF branch wheat flour business? Please explain. | Text | Geographical unit_Region | KII |
| | 3.3 Has the international demand for Libyan oil increased due to the international sanctions imposed on Russia, and does this increase Central Bank of Libya's foreign currency reserves, potentially enabling stronger price subsidisation and Letters of Credit access? | Government intervention | 37 | Do you think the increase of international wheat and oil prices since the end of February 2022 is going to affect this PSF branch ability to provide subsidised flour to the Libyan population in the next six months? If so, please explain how. | Text | Geographical unit_Region | KII |
| | | Government intervention | 38 | Do you think an improvement in the Central Bank of Libya's oil revenues and foreign currency reserves due to international oil prices increase since the end of February 2022 could potentially enable the authorities to better fund the PSF and the subsidisation of wheat and oil prices in Libya? Please explain. | Text | Geographical unit_Region | KII |
| | | Government intervention | 39 | Given the current global wheat and oil prices increase since February 2022, do you think there is a difference/division in institutional response between the Eastern and Western regions of Libya? Please explain. | Text | Geographical unit_Region | KII |
| | | Government intervention | 40 | In your opinion, what is the authorities strategy going to be in the next six months regarding the distribution of wheat? | Text | Geographical unit_Region | KII |
| | | | Government intervention | 40 | In your opinion, what is the authorities strategy going to be in the next six months regarding the distribution of wheat? | Text | Geographical unit_Region |
| 1. How did the price of the different MEB components, especially of wheat derived goods, change across the different key urban areas of Libya across March and April 2022, and what are potential correlations with the global wheat supply chain disruption due to the conflict in Ukraine? | 1.3 What are the interdependencies and potential causal linkages between the identified MEB trends, the current structure of the Libyan supply chain of imported wheat, and the disruption of the international wheat supply chain due to the ongoing conflict in Ukraine? | Ramadan | 41 | How does the wheat flour supply and demand change during Ramadan period? | Text | Geographical unit_Region | KII |
| | | Ramadan | 42 | How do you perceive this year's Ramadan market trend to be in comparison with the past Ramadan market trends? | Similar to the past Ramadan market trend Different than the past Ramadan market trends | Geographical unit_Region | KII |
| | | Ramadan | 43 | If Different_How is it different? Please explain. | Text | Geographical unit_Region | KII |

| | | | | | | | |
|--|--|------------------|----|--|------|--------------------------|-----|
| | | Ukraine_Conflict | 44 | If you have observed any changes in the wheat supply chain since the end of February 2022, do you think there are any connections to the conflict in Ukraine? If so how? | Text | Geographical unit_Region | KII |
|--|--|------------------|----|--|------|--------------------------|-----|

Questionnaire 5 : Private Importers

| Research Questions | Sub-research Question | Theme | SUBQ# | Questionnaire QUESTION | Questionnaire ANSWER | Key disaggregations | Data collection method |
|--|---|------------------|-------|---|---|--------------------------|------------------------|
| N/A | Time & Date | Time_Date | | Time & Date | | | |
| | Enumerator ID | Enumerator ID | | Name of interviewer | | | |
| | Key Informant ID | Key Informant ID | | Name of interviewee | | | |
| | KI Function | KI function | | Function of interviewee | | | |
| | Business Name | Business Name | | Business name | | | |
| | Location_Admin1 | Mantika | | In which Mantika is the business based? | Select_one | Geographical unit_Region | |
| | Location_Admin2 | Baladiya | | In which Baladiya is the business based? | Select_one | Geographical unit_Region | |
| 2. What are the potential impacts of the conflict in Ukraine on the functioning of the Libyan wheat supply chain and what are the trading strategies and behaviours adopted by traders and importers operating along the Libyan supply chain in response to these impacts? | 2.1 How has the functioning of Libya's supply chain of imported wheat changed since February 2022, namely in terms of prices (subsidised and non-subsidised), available stocks, accessible quantity, frequency of sourcing? | Import_Quantity | 1 | Was your business able to import wheat since the end of February 2022? | Yes No | Geographical unit_Region | KII |
| | | Import_Quantity | 2 | If No_Please explain why? | Text | Geographical unit_Region | KII |
| | | Import_Quantity | 3 | How has the quantity of wheat your business imports changed since the end of February 2022? | Increased Stayed the same Decreased | Geographical unit_Region | KII |
| | | Import_Quantity | 4 | How many tonnes did your business use to import per shipment before the end of February 2022? | Integer | Geographical unit_Region | KII |

| | | | | | | | |
|--|--|----------------------|----|---|---|--------------------------|-----|
| | | Import_Quantity | 5 | How many tonnes was your business able to import on your last order (post February 2022)? | Integer | Geographical unit_Region | KII |
| | | Import_Price | 6 | How has the market price of the wheat your business imports changed since the end of February 2022? | Increased Stayed the same Decreased | Geographical unit_Region | KII |
| | | Import_Price | 7 | How much did your business use to pay (LYD) for 1 tonne of wheat (before February 2022)? | Integer | Geographical unit_Region | KII |
| | | Import_Price | 8 | How much (LYD) did your business pay for 1 tonne of wheat in the last order (post February 2022)? | Integer | Geographical unit_Region | KII |
| | | Import_Frequency | 9 | How has your business' frequency of importing wheat changed since the end of February 2022? Please explain. | Text | Geographical unit_Region | KII |
| | | Import_Stock | 10 | How has your business' usual stock of wheat changed since the end of February 2022? Please explain. | Text | Geographical unit_Region | KII |
| | | Import_Stock | 11 | Does your business currently have stock of wheat left? | Yes No | Geographical unit_Region | KII |
| | | Import_Drivers | 12 | If you have noticed some changes along the supply in terms of price, quantity, and frequency of wheat import since the end of February 2022, why do you think these changes occurred? | Text | Geographical unit_Region | KII |
| | | Import_Origin | 13 | Which country did your business buy wheat from before the end of February 2022? | Select_Multiple | Geographical unit_Region | KII |
| | | Import_Origin | 14 | Has your business changed wheat import partner since the end of February 2022? If Yes, please explain why. | Text | Geographical unit_Region | KII |
| | | Import_Origin | 15 | If Yes_In which country is your new supplier? | Select_Multiple | Geographical unit_Region | KII |
| | | Import_Institutional | 16 | Are you aware of any change in the import of wheat from the authorities (NMC/MATAHAN) since the end of February 2022? If yes, please explain how did it change, and how this affects the private wheat import market? | Text | Geographical unit_Region | KII |

| | | | | | | | |
|--|---|----------------------|----|--|---|--------------------------|-----|
| | | Import_Institutional | 17 | Are there other changes you have noticed in the supply chain of imported wheat since the end of February 2022? Please explain. | Text | Geographical unit_Region | KII |
| | | Import_Institutional | 18 | Is your business in any way connected to the Bakers Syndicate? If yes, please explain how. | Text | Geographical unit_Region | KII |
| | | Import_Next 6 months | 19 | How do you think the price and availability of wheat that your business imports are going to change within the next six months? Please explain how and why. | Text | Geographical unit_Region | KII |
| | 2.2 How has the demand for imported wheat changed since February 2022 across the Libyan supply chain? | Import_Mill | 20 | Does your business also mill the imported wheat? | Yes No | Geographical unit_Region | KII |
| | | Demand_Quantity | 21 | How has the quantity of wheat/wheat flour your business sells changed since the end of February 2022? | Increased Stayed the same Decreased | Geographical unit_Region | KII |
| | | Demand_Price | 22 | How has the price of the wheat/wheat flour your business sells changed since the end of February 2022? | Increased Stayed the same Decreased | Geographical unit_Region | KII |
| | | Demand_Changes_WHY | 23 | If you have noticed some changes in the wheat/wheat flour demand (quantity and price) since the end of February 2022, why do you think these changes occurred? | Text | Geographical unit_Region | KII |
| | | Demand_Customers | 24 | Have your customers changed since the end of February 2022? If so, please explain how and why. | Text | Geographical unit_Region | KII |
| | | Demand_Other | 25 | Are there other changes you have noticed in the demand of wheat flour since the end of February 2022? Please explain. | Text | Geographical unit_Region | KII |
| | | Demand_Gvt limit | 26 | Since the end of February 2022, have the authorities set limitations on the quantity, the price, the frequency or the type of customers you can sell wheat/wheat flour to? If so, please explain what these limitations are. | Text | Geographical unit_Region | KII |

| | | | | | | | |
|---|---|-------------------------|----|--|--------------------------|-----------------------------|-----|
| | | Supply_Demand | 27 | Overall, do you think that the current level of wheat your business is supplying is sufficient to meet the demand of wheat/wheat flour your business is facing? | Yes No | Geographical unit_Region | KII |
| | 2.3 What are the mitigation, and potentially speculative, business strategies and coping mechanisms adopted by retailers, wholesalers and importers, to respond to the identified changes? | Coping mechanisms | 28 | Have you changed your business strategy or adopted some business mitigating measures related to Wheat/Wheat flour since the end of February 2022? | Yes No | Geographical unit_Region | KII |
| | | Coping mechanisms | 29 | If yes_Please explain how? | Text | Geographical unit_Region | KII |
| | 2.4 What are the possible effects of the wheat crisis on traders' and importers' businesses, namely in terms of solvency, accessibility to credits and to foreign currency at the official exchange rate? | Solvency | 30 | Was your business able to pay the suppliers since the end of February 2022? | Yes No | Geographical unit_Region | KII |
| | | Solvency | 31 | Do you think the increase of international wheat and oil prices since the end of February 2022 is going to affect your business' ability to pay debts? If Yes, please explain how | Text | Geographical unit_Region | KII |
| | | Credit_Access | 32 | Do you think the increase of international wheat and oil prices since the end of February 2022 is going to affect your business' ability to access credits? If Yes, please explain how. | Text | Geographical unit_Region | KII |
| | | Forex_Access | 33 | Do you think the increase of international wheat and oil prices since the end of February 2022 is going to affect your business ability to access Letters of Credit? If Yes, please explain how | Text | Geographical unit_Region | KII |
| 3. What market mitigating measures have been put into place by the Libyan Government to respond to the Ukrainian wheat crisis and how may these contribute to protecting the Libyan wheat supply chain? | 3.1 What are the measures put into place by the Government authorities to mitigate the potential impacts of the Ukrainian wheat crisis? | Government intervention | 34 | Have you noticed any change in the financial support of the authorities to the private wheat import sector since the end of February 2022? Please explain. | Text | Geographical unit_Region | KII |
| | | Government intervention | 35 | Are there new measures put into place by the authorities to protect the Libyan wheat supply chain due to the escalated conflict in Ukraine? | Yes No Do not know | Geographical unit_Region | KII |
| | 3.2 How do these measures contribute to absorbing the price increase and reducing the availability crisis along the wheat supply chain? | Government intervention | 36 | If (35) Yes_What are they and to what extent do they, according to you, contribute to absorbing the price increase and reducing the threat of wheat unavailability along the wheat supply chain? | Text | Geographical unit_Region | KII |
| | | Government intervention | 37 | If (35) Yes_How may these measures affect your wheat import business? Please explain. | Text | Geographical unit_Region | KII |

| | | | | | | | |
|--|--|-------------------------|----|--|---|--------------------------|-----|
| | 3.3 Has the international demand for Libyan oil increased due to the international sanctions imposed on Russia, and does this increase Central Bank of Libya's foreign currency reserves, potentially enabling stronger price subsidisation and Letters of Credit access? | Government intervention | 38 | Do you think an improvement in the Central Bank of Libya's oil revenues and foreign currency reserves due to international oil prices increase since the end of February 2022 could potentially enable stronger access to LCs for importers? Please explain. | Text | Geographical unit_Region | KII |
| | | Government intervention | 39 | Given the current the increase of international wheat and oil prices since the end of February 2022, do you think there is a difference/division in Governmental response between the Eastern and Western regions of Libya? Please explain. | Text | Geographical unit_Region | KII |
| 1. How did the price of the different MEB components, especially of wheat derived goods, change across the different key urban areas of Libya across March and April 2022, and what are potential correlations with the global wheat supply chain disruption due to the conflict in Ukraine? | 1.3 What are the interdependencies and potential causal linkages between the identified MEB trends, the current structure of the Libyan supply chain of imported wheat, and the disruption of the international wheat supply chain due to the ongoing conflict in Ukraine? | Ramadan | 40 | How does the wheat supply and demand change during Ramadan period? | Text | Geographical unit_Region | KII |
| | | Ramadan | 41 | How do you perceive this year's Ramadan market trend to be in comparison with the past Ramadan market trends? | Similar to the past Ramadan market trend Different than the past Ramadan market trends | Geographical unit_Region | KII |
| | | Ramadan | 42 | If Different_How is it different? Please explain | Text | Geographical unit_Region | KII |
| | | Ukraine_Conflict | 43 | If you have observed any changes in the wheat supply chain since February 2022, do you think there are any connections to the conflict in Ukraine? If so how? | Text | Geographical unit_Region | KII |

Questionnaire 6 : Public importers (NMC/MATAHAN)

| Research Questions | Sub-research Question | Theme | SUBQ# | Questionnaire QUESTION | Questionnaire ANSWER | Key disaggregations | Data collection method |
|--|---|------------------|-------|---|---|--------------------------|------------------------|
| N/A | Time & Date | Time_Date | | Time & Date | | | |
| | Enumerator ID | Enumerator ID | | Name of interviewer | | | |
| | Key Informant ID | Key Informant ID | | Name of interviewee | | | |
| | KI Function | KI function | | Function of interviewee | | | |
| | Business Name | Business Name | | Business name | | | |
| | Location_Admin1 | Mantika | | In which Mantika is the business based? | Select_one | Geographical unit_Region | |
| | Location_Admin2 | Baladiya | | In which Baladiya is the business based? | Select_one | Geographical unit_Region | |
| 2. What are the potential impacts of the conflict in Ukraine on the functioning of the Libyan wheat supply chain and what are the trading strategies and behaviours adopted by traders and importers operating along the Libyan supply chain in response to these impacts? | 2.1 How has the functioning of Libya's supply chain of imported wheat changed since February 2022, namely in terms of prices (subsidised and non-subsidised), available stocks, accessible quantity, frequency of sourcing? | Import_Quantity | 1 | Was your business able to import wheat since the end of February 2022? | Yes No | Geographical unit_Region | KII |
| | | Import_Quantity | 2 | If No_Please explain why? | Text | Geographical unit_Region | KII |
| | | Import_Origin | 3 | Which country did your business use to buy wheat from up until the end of February 2022? | Select_Multiple | Geographical unit_Region | KII |
| | | Import_Origin | 4 | Has your business changed wheat import partner since the end of February 2022? | Yes No | Geographical unit_Region | KII |
| | | Import_Origin | 5 | If (4) Yes_Why? | Text | Geographical unit_Region | KII |
| | | Import_Origin | 6 | If (4) Yes_In which country is your new supplier? | Select_Multiple | Geographical unit_Region | KII |
| | | Import_Quantity | 7 | How has the quantity of wheat your business imports changed since the end of February 2022? | Increased Stayed the same Decreased | Geographical unit_Region | KII |
| | | Import_Quantity | 8 | How many tonnes did your business use to import per shipment before February 2022? | Integer | Geographical unit_Region | KII |

| | | | | | | | |
|--|--|----------------------|----|---|---|--------------------------|-----|
| | | Import_Quantity | 9 | How many tonnes was your business able to import on the last order (post February 2022)? | Integer | Geographical unit_Region | KII |
| | | Import_Price | 10 | How has the market price of the wheat your business imports changed since the end of February 2022? | Increased Stayed the same Decreased | Geographical unit_Region | KII |
| | | Import_Price | 11 | How much did your business use to pay (LYD) for 1 tonne of wheat before the end of February 2022? | Integer | Geographical unit_Region | KII |
| | | Import_Price | 12 | How much (LYD) did your business pay for 1 tonne of wheat in the last order (post February 2022)? | Integer | Geographical unit_Region | KII |
| | | Import_Frequency | 13 | How has your business' frequency of importing wheat changed since the end of February 2022? Please explain. | Text | Geographical unit_Region | KII |
| | | Import_Stock | 14 | How has your business' usual stock of wheat changed since the end of February 2022? Please explain. | Text | Geographical unit_Region | KII |
| | | Import_Stock | 15 | Does your business currently have stock of wheat left? | Yes No | Geographical unit_Region | KII |
| | | Import_Drivers | 16 | If in the previous questions you have noticed some changes in terms of price, quantity, frequency and stock in the wheat import business since the end of February 2022, why do you think these changes occurred? | Text | Geographical unit_Region | KII |
| | | Import_Institutional | 17 | Are there other changes you have noticed in the supply chain of wheat since the end of February 2022? Please explain. | Text | Geographical unit_Region | KII |
| | | Import_Institutional | 18 | Is your business in any way connected to the Bakers Syndicate? If yes, please explain how. | Text | Geographical unit_Region | KII |
| | | Import_Institutional | 17 | If yes_has this connection changed in any way since the end of February 2022? Please explain. | Text | Geographical unit_Region | KII |
| | | Import_Institutional | 19 | What is the authorities' strategy going to be in the next six months regarding the importation of wheat? | Text | Geographical unit_Region | KII |

| | | | | | | | |
|---|--|----------------------|---|--|--------------------------|--------------------------|-----|
| | | Import_Next 6 months | 20 | How do you think are the price and availability of wheat you import going to change within the next six months? Please explain how and why. | Text | Geographical unit_Region | KII |
| 2.2 How has the demand for imported wheat changed since February 2022 across the Libyan supply chain? | Demand_Quantity | 21 | How has the quantity of wheat/wheat flour your business sells changed since the end of February 2022? | Increased Stayed the same Decreased | Geographical unit_Region | KII | |
| | Demand_Price | 22 | How has the price of the wheat/wheat flour your business' sells changed since the end of February 2022? | Increased Stayed the same Decreased | Geographical unit_Region | KII | |
| | Demand_Drivers | 23 | If you have noticed some changes in the wheat/Wheat flour demand (quantity and price) since the end of February 2022, why do you think these changes occurred? | Text | Geographical unit_Region | KII | |
| | Demand_Gvt limit | 25 | Since the end of February 2022, has the authorities set restrictions on the quantity, the price or the frequency of wheat/wheat flour your business can sell? If so, please explain what these limitations are. | Text | Geographical unit_Region | KII | |
| | Demand_Other | 24 | Are there other changes you have noticed in the demand of wheat/wheat flour since the end of February 2022? Please explain. | Text | Geographical unit_Region | KII | |
| | Supply_Demand | 26 | Overall, do you think the current level of wheat you are supplying is sufficient to meet the demand of wheat/wheat flour your business is facing? | Yes No | Geographical unit_Region | KII | |
| | 2.3 What are the mitigation, and potentially speculative, business strategies and coping mechanisms adopted by retailers, wholesalers and importers, to respond to the identified changes? | Coping mechanisms | 27 | Have you changed your business' strategy or adopted some business mitigating measures related to wheat/wheat flour since the end of February 2022? | Yes No | Geographical unit_Region | KII |
| Coping mechanisms | | 28 | If yes_Please explain how? | Text | Geographical unit_Region | KII | |

| | | | | | | | |
|---|---|-------------------------|--|---|-----------------------------|-----------------------------|-----|
| | 2.4 What are the possible effects of the wheat crisis on traders' and importers' businesses, namely in terms of solvency, accessibility to credits and to foreign currency at the official exchange rate? | Solvency | 29 | Was this business able to pay its suppliers since the end of February 2022? | Yes No | Geographical unit_Region | KII |
| | | Solvency | 30 | Do you think the increase of international wheat and oil prices since the end of February 2022 is going to affect your business' ability to pay debts? If Yes, please explain how. | Text | Geographical unit_Region | KII |
| | | Forex_Access | 31 | Do you think the increase of international wheat and oil prices since the end of February 2022 is going to affect access to foreign currency at the official exchange rate? If Yes, please explain how. | Text | Geographical unit_Region | KII |
| 3. What market mitigating measures have been put into place by the Libyan Government to respond to the Ukrainian wheat crisis and how may these contribute to protecting the Libyan wheat supply chain? | 3.1 What are the measures put into place by the Government authorities to mitigate the potential impacts of the Ukrainian wheat crisis? | Government intervention | 32 | Have you noticed any change in the authorities funding of the public wheat import sector since the end of February 2022? Please explain. | Text | Geographical unit_Region | KII |
| | | Government intervention | 33 | Are there new measures put into place by the authorities to protect the Libyan wheat supply chain due to the escalated conflict in Ukraine? | Yes No Do not know | Geographical unit_Region | KII |
| | 3.2 How do these measures contribute to absorbing the price increase and reducing the availability crisis along the wheat supply chain? | Government intervention | 34 | If Yes_ What are they and to what extent do they, according to you, contribute to absorbing the price increase and reducing the availability threat along the wheat supply chain? | Text | Geographical unit_Region | KII |
| | 3.3 Has the international demand for Libyan oil increased due to the international sanctions imposed on Russia, and does this increase Central Bank of Libya's foreign currency reserves, potentially enabling stronger price subsidisation and Letters of Credit access? | Government intervention | 35 | Do you think an improvement in the Central Bank of Libya's oil revenues and foreign currency reserves due to international oil prices increase since the end of February 2022 could potentially enable the authorities to better fund the MATAHAN/NMC and the subsidisation of wheat and oil prices in Libya? Please explain. | Text | Geographical unit_Region | KII |
| Government intervention | | 36 | Do you think the increase of international wheat and oil prices since the end of February 2022 could | Text | Geographical unit_Region | KII | |

| | | | | | | | |
|--|--|-------------------------|----|--|---|--------------------------|-----|
| | | | | potentially enable stronger access to LCs for importers? Please explain. | | | |
| | | Government intervention | 37 | Given the current the increase of international wheat and oil prices since the end of February 2022, do you think there is a difference/division in institutional response between the Eastern and Western regions of Libya? Please explain. | Text | Geographical unit_Region | KII |
| 1. How did the price of the different MEB components, especially of wheat derived goods, change across the different key urban areas of Libya across March and April 2022, and what are potential correlations with the global wheat supply chain disruption due to the conflict in Ukraine? | 1.3 What are the interdependencies and potential causal linkages between the identified MEB trends, the current structure of the Libyan supply chain of imported wheat, and the disruption of the international wheat supply chain due to the ongoing conflict in Ukraine? | Ramadan | 38 | How does the wheat supply and demand change during Ramadan period? | Text | Geographical unit_Region | KII |
| | | Ramadan | 39 | How do you perceive this year's Ramadan market trend to be in comparison with the past Ramadan market trends? | Similar to the past Ramadan market trend Different than the past Ramadan market trends | Geographical unit_Region | KII |
| | | Ramadan | 40 | If Different_How is it different? Please explain | Text | Geographical unit_Region | KII |
| | | Ukraine_Conflict | 41 | If you have observed any changes in the wheat supply chain since February 2022, do you think there are any connections to the conflict in Ukraine? If so how? | Text | Geographical unit_Region | KII |

Questionnaire 7 : Government authorities

| Research Questions | Sub-research Question | SUBQ# | Questionnaire QUESTION | Questionnaire ANSWER | Key disaggregations | Data collection method |
|--------------------|-----------------------|-------|-------------------------|----------------------|---------------------|------------------------|
| N/A | Time & Date | | Time & Date | | | |
| | Enumerator ID | | Name of interviewer | | | |
| | Key Informant ID | | Name of interviewee | | | |
| | KI Function | | Function of interviewee | | | |

| | | | | | | | |
|---|--|---|---|--|------|-----|-----|
| | Institutional Body | | For which Institutional body do you work? | | | | |
| | Location_Admin1 | | In which Mantika is the KI based professionally? | Select_one | | | |
| | Location_Admin2 | | In which Baladiya is the KI based professionally? | Select_one | | | |
| 3. What market mitigating measures have been put into place by the Libyan Government to respond to the Ukrainian wheat crisis and how do these may contribute to protecting the Libyan wheat supply chain and Libyan food security? | 3.1 What are the measures put into place by the Government authorities to mitigate the potential impacts of the Ukrainian wheat crisis? | 1 | How do you think the escalation of the conflict in Ukraine since the end of February is impacting the Libyan wheat supply chain? | Text | N/A | KII | |
| | | 2 | What measures have been put into place by the Government to mitigate and protect the Libyan wheat supply chain from the potential impacts? | Text | N/A | KII | |
| | 3.2 How do these measures contribute to absorbing the price increase and reducing the availability crisis along the wheat supply chain? | 3 | To what extent do these measures, according to you, contribute to absorbing the price increase and reducing the availability crisis along the wheat supply chain? | Text | N/A | KII | |
| | | 4 | Given the increase of international wheat and oil prices since the end of February 2022, do you think there is a difference/division in institutional response between the Eastern and Western regions of Libya? Please Explain | Text | N/A | KII | |
| | 3.3 How may the identified measures insert into the current economic environment of Libya, and how it may affect food trading businesses? | 5 | How may the identified measures affect private and public wheat trading businesses? | Text | N/A | KII | |
| | 3.4 Has the international demand for Libyan oil increased due to the international sanctions imposed on Russia, and does this increase Central Bank of Libya's foreign currency reserves, potentially enabling stronger prices subsidisation and Letters of Credit access? | 6 | How is the international demand for Libyan oil changing due to the international sanctions imposed on Russia, and does this affect Central Bank of Libya's foreign currency reserves? | Text | N/A | KII | |
| | | 7 | Do you think an improvement in the Central Bank of Libya's foreign currency reserves due to increased oil revenues could potentially enable stronger access to LCs for importers? | Text | N/A | KII | |
| | | 8 | Do you think an improvement in the Central Bank of Libya's foreign currency reserves due to increased oil revenues could potentially enable stronger subsidisation of wheat and oil prices in Libya? | Text | N/A | KII | |
| | | | 9 | What is the Government strategy going to be in the next six months regarding the importation of wheat? | Text | N/A | KII |

| | | | | | | |
|--|--|----|--|------|-----|-----|
| | | 10 | How do you think the price of essential imported goods, namely oil and wheat, is going to change within the next six months? | Text | N/A | KII |
| | | 11 | How do you think the availability of wheat and oil is going to change within the next six months? | Text | N/A | KII |

7. Data Management Plan available upon request

8. Monitoring & Evaluation Plan

- Please complete the M&E Plan column in the table and use the corresponding Tools in the Monitoring & Evaluation matrix to implement the plan during the research cycle.

| IMPACT Objective | External M&E Indicator | Internal M&E Indicator | Focal point | Tool | Will indicator be tracked? |
|--|--|--|-----------------------|---|------------------------------|
| Humanitarian stakeholders are accessing IMPACT products | Number of humanitarian organisations accessing IMPACT services/products | # of downloads of x product from Resource Center | Country request to HQ | User_log | X Yes |
| | | # of downloads of x product from Relief Web | Country request to HQ | | X Yes |
| | Number of individuals accessing IMPACT services/products | # of downloads of x product from Country level platforms | Country team | | <input type="checkbox"/> Yes |
| | | # of page clicks on x product from REACH global newsletter | Country request to HQ | | <input type="checkbox"/> Yes |
| | | # of page clicks on x product from country newsletter, sendingBlue, bit.ly | Country team | | <input type="checkbox"/> Yes |
| | | # of visits to x webmap/x dashboard | Country request to HQ | | <input type="checkbox"/> Yes |
| IMPACT activities contribute to better program implementation and coordination of the humanitarian response | Number of humanitarian organisations utilizing IMPACT services/products | # references in HPC documents (HNO, SRP, Flash appeals, Cluster/sector strategies) | Country team | Reference_log | N/A |
| | | # references in single agency documents | | | N/A |
| Humanitarian stakeholders are using IMPACT products | Humanitarian actors use IMPACT evidence/products as a basis for decision making, aid planning and delivery Number of humanitarian | Perceived relevance of IMPACT country-programs | Country team | Usage_Feed back and Usage_Survey template | N/A |
| | | Perceived usefulness and influence of IMPACT outputs | | | N/A |
| | | Recommendations to strengthen IMPACT programs | | | N/A |
| | | Perceived capacity of IMPACT staff | | | N/A |
| | | Perceived quality of outputs/programs | | | N/A |

| | | | | | |
|---|--|---|--------------|----------------|------------------------------|
| | documents (HNO, HRP, cluster/agency strategic plans, etc.) directly informed by IMPACT products | Recommendations to strengthen IMPACT programs | | | |
| Humanitarian stakeholders are engaged in IMPACT programs throughout the research cycle | Number and/or percentage of humanitarian organizations directly contributing to IMPACT programs (<i>providing resources, participating to presentations, etc.</i>) | # of organisations providing resources (i.e.staff, vehicles, meeting space, budget, etc.) for activity implementation | Country team | Engagement_log | <input type="checkbox"/> Yes |
| | | # of organisations/clusters inputting in research design and joint analysis | | | <input type="checkbox"/> Yes |
| | | # of organisations/clusters attending briefings on findings; | | | <input type="checkbox"/> Yes |

