Research Terms of Reference

Joint Market Monitoring Initiative
UKR2203
Ukraine

September 2023
v2

REACH Informing more effective humanitarian action

1. Executive Summary

Country of intervention	Ukraine					
Type of Emergency	□	Natural disaster	X	Conflict	□	Other *(specify)*
Type of Crisis	X	Sudden onset	□	Slow onset	□	Protracted
Mandating Body/ Agency	Ukraine Cash Working Group					
IMPACT Project Code	UKR2203					
Overall Research Timeframe *(from research design to final outputs / M&E)*	March 2022 to TBD					
Research Timeframe *Add planned deadlines (for first cycle if more than 1)*	1. Pilot/ training: 05/04/2022		6. Preliminary presentation: _ _/_ _/_ _ _ _			
	2. Start collect data: 06/04/2022		7. Outputs sent for validation: 20/05/2022			
	3. Data collected: 06/05/2022		8. Outputs published: _ _/_ _/_ _ _ _			
	4. Data analysed: 13/05/2022		9. Final presentation: _ _/_ _/_ _ _ _			
	5. Data sent for validation: 13/05/2022					
Number of assessments	□	Single assessment (one cycle)				
	X	Multi assessment (more than one cycle) Monthly data collection				
Humanitarian milestones *Specify **what** will the assessment inform and **when** e.g. The shelter cluster will use this data to draft its Revised Flash Appeal;*	**Milestone**		**Deadline**			
	X	Donor plan/strategy	Ongoing			
	X	Inter-cluster plan/strategy	Ongoing			
	X	Cluster plan/strategy	_ _/_ _/_ _ _ _			
	□	NGO platform plan/strategy	_ _/_ _/_ _ _ _			
	X	Other (Specify): Ukraine CWG plan/strategy	Ongoing			
Audience Type & Dissemination *Specify **who** will the assessment inform and **how** you will disseminate to inform the audience*	**Audience type**		**Dissemination**			
	□ Strategic		X General Product Mailing (e.g. mail to NGO consortium; HCT participants; Donors)			
	X Programmatic		X Presentation of findings (e.g. at HCT meeting; Cluster meeting)			
	X Operational		X Website Dissemination (Relief Web & REACH Resource Centre)			
	□ [Other, Specify]		X CWG mailing and presentation of findings at next working group meeting			

Stakeholder mapping *Has a detailed stakeholder mapping been conducted during research design to identify all actors that could **contribute** to and/or **benefit from** the research?*	□	Yes	X	No
Detailed dissemination plan required	□	Yes	X	No
General Objective	To inform the Ukraine Cash Working Group and other humanitarian actors of evolutions in prices, availability of goods, and market functionality, and to provide an evidence base for multi-purpose cash (MPC) in Ukraine as a response to the humanitarian crisis in the country.			
Specific Objective(s)	1. Track prices and availability of basic commodities in Ukrainian markets on a monthly basis 2. Assess the impact of the current humanitarian crisis on market systems in Ukraine 3. Contribute to a broader understanding of the market environment in Ukraine for the benefit of humanitarian actors across all sectors			
Research Questions	1. What are the prices and availability of basic food and non-food items in markets throughout Ukraine, and how do these vary over time? 2. What disruptions in supply chains for any key commodities are traders facing? 3. To what extent have market operations and functionality changed over time?			
Geographic Coverage	Markets throughout Ukraine, based on participating organisations' capacity			
Secondary data sources	World Food Program's Vulnerability Analysis and Mapping (WFP VAM), State Statistics Service of Ukraine and Acted JMM price monitoring outputs, HSM Situational Overviews			
Population(s) *Select all that apply*	□	IDPs in camp	□	IDPs in informal sites
	X	IDPs in host communities	□	IDPs [Other, Specify]
	□	Refugees in camp	□	Refugees in informal sites
	□	Refugees in host communities	□	Refugees [Other, Specify]
	X	Host communities	□	[Other, Specify]
Stratification *Select type(s) and enter number of strata*	X	Geographical #: Hromada Population size per strata is known? □ Yes X No (stratification by hromada using median-of-median weighting)	□	Group #: _ _ _ Population size per strata is known? □ Yes □ No
	□	*[Other Specify]* #: _ _ Population size per strata is known? □ Yes □ No		
Data collection tool(s)	X	Structured (Quantitative)	□	Semi-structured (Qualitative)
	Sampling method		**Data collection method**	
Structured data collection tool # 1 *Select sampling and data collection method and specify target # interviews*	X Purposive □ Probability / Simple random □ Probability / Stratified simple random □ Probability / Cluster sampling □ Probability / Stratified cluster sampling □ [Other, Specify]		X Key informant interview (Target #): 3 vendors per monitored item per hromada □ Group discussion (Target #):_ _ _ _ _ □ Household interview (Target #):_ _ _ _ _ □ Individual interview (Target #):_ _ _ _ _ □ Direct observations (Target #):_ _ _ _ _	

		□ [Other, Specify] (Target #):_ _ _ _ _
Structured data collection tool # 2 *Select sampling and data collection method and specify target # interviews*	X Purposive □ Probability / Simple random □ Probability / Stratified simple random □ Probability / Cluster sampling □ Probability / Stratified cluster sampling □ [Other, Specify]	X Key informant interview (Target #): 5 customers per hromada □ Group discussion (Target #):_ _ _ _ _ □ Household interview (Target #):_ _ _ _ _ □ Individual interview (Target #):_ _ _ _ _ □ Direct observations (Target #):_ _ _ _ _ □ [Other, Specify] (Target #):_ _ _ _ _

Data management platform(s)	X	IMPACT			□	UNHCR
	□	[Other, Specify]				
Expected ouput type(s)	□	Situation overview #: _ _	□	Report #: _ _	□	Profile #: _ _
	□	Presentation (Preliminary findings) #: _ _	X	Presentation (Final) #: 1 per round if requested	x	Factsheet #: 1 per round
	X	Interactive dashboard # : 1	□	Webmap #: _ _	□	Map #: _ _
	X	Anonymized dataset #: 1 per round				
Access	x	Public (available on REACH resource center and other humanitarian platforms)				
	□	Restricted (bilateral dissemination only upon agreed dissemination list, no publication on REACH or other platforms)				
Visibility *Specify which* ***logos*** *should be on outputs*	***REACH***					
	Donor: TBD					
	Coordination Framework: Ukraine Cash Working Group					
	Partners: None (CWG members only)					

2. Rationale

2.1 Background

On 24 February, after months of military build-up at the border and heightened tensions, Russia started a full-scale invasion of Ukraine, with rocket strikes hitting targets throughout the country and its ground forces advancing from the north, east, and south.

Ground military clashes, rocket strikes, shelling and bombings in these densely populated urban settlements have caused major displacement flows with more than 1 million people moving towards safer areas in the center and west of the country and more than 2 million people fleeing the country.[1]

Military hostilities have caused widespread damage to infrastructure and houses, hundreds of civilian deaths, disrupted markets and essential services, and precipitated massive displacement within Ukraine and into neighbouring countries. As a result, local markets have undergone significant changes in their operations. A considerable portion of these markets faces substantial challenges, including limited functionality due to frequent shelling, constrained availability of goods, ongoing price hikes, significant infrastructure damage, and, in certain instances, harm to the stores themselves. Markets located in close proximity to the combat zones are particularly hard-hit by these adverse conditions.

2.1 Intended impact

[1] UNHCR Ukraine Situation Flash Update #1, 08 March 2022

After the full-scale invasion, it was agreed by the Humanitarian Country Team (HCT) that multi-purpose cash (MPC) should be the main modality of the response. The Cash Working Group (CWG), co-led by OCHA and ACTED, has established four task teams to assess and plan the cash-based response. These teams are focusing on targeting (led by WFP), transfer mechanisms (led by Norwegian Refugee Council, NRC), deduplication and registration (led by UNHCR) and monitoring (led by ACTED).[2] REACH is engaged as a technical partner in all four task teams of the CWG and is fully involved in the development and implementation of the Joint Market Monitoring Initiative (JMMI) tools in Ukraine.

Given the current conditions of mass displacement and active military clashes in urban centers, as well as the importance of MPC in the response in Ukraine, market monitoring is key for the humanitarian intervention. Due to the conflict's sudden expansion to areas of Ukraine that were previously untouched, usable humanitarian market data in areas of partner intervention is highly limited and incomplete. The JMMI seeks to fill this information gap by providing useful and timely data on trends in Ukrainian market prices which will enable the Cash Working Group to continually revise its standard MPC transfer values to reflect developments in the humanitarian situation.

3. Methodology

3.1 Methodology overview

The activity outlined in this TOR is designed to provide longitudinal market and price data using a JMMI methodology, which will be designed to inform the emergency response in Ukraine but will have broader applicability as well. The initiative, to be conducted in partnership with the Ukraine Cash Working Group, will be coordinated through the CWG's Task Team 4 on Monitoring. On behalf of the taskforce, REACH will contribute to the development and coding of data collection tools for the JMMI, as well as leading on the research design, guidance documents, training materials, analysis, and outputs. The task team members, in turn, will work to develop their own KI networks, coordinate the coverage of the assessment, collect data, and review or endorse all aspects of the research design.

Data collection will be a joint, partner-led exercise carried out by participating CWG members across the country using a harmonized questionnaire. The methodology centers on quantitative, structured interviews with purposively sampled market traders who will act as individual informants (IIs) for their respective markets, with supplementary quantitative key informant interviews (KIs) taking place with market customers in affected areas. Partners will focus on interviewing retailers, rather than wholesalers or distributors, as these are the market actors most likely to sell to the vulnerable populations that humanitarian actors generally target. Data will be collected in monthly cycles. Outputs will include cleaned and anonymized datasets and brief market factsheets produced in as automated a fashion as possible.

3.2 Population of interest

The aim of the Ukraine JMMI is to provide rapid information on prices and market functionality to humanitarian actors working throughout the country, both in areas directly affected by hostilities (shelling/air raids) and in those affected by the large number of IDPs arriving in the area. The geographical coverage of the exercise will depend on the access of CWG members to priority areas of the country and their ability to collect data from these areas consistently. The Monitoring Task Team will determine these priority areas based on a combination of the locations with the greatest number of persons of concern and those with the greatest presence of humanitarian actors. The JMMI is prioritizing markets in key urban and rural areas based on the availability of contributing partners with capacity in such locations.

The unit of analysis for this assessment is the hromada (Admin 3), representing the administrative level on which most humanitarian assistance in Ukraine is currently planned. All data is currently being aggregated first to the hromada level, then upwards to the levels of the raion, oblast, region, and country.

3.3 Secondary data review

[2] OCHA Ukraine: Humanitarian Impact. Situation Report, 09 March 2022

Prices and findings on market functionality will be triangulated, where possible, with those from other existing price monitoring efforts in Ukraine, which include:

- Joint Market Monitoring led by ACTED on behalf of the CWG in government-controlled areas along the former eastern frontline (October 2021)
- Monthly price monitoring of food items by WFP VAM (ongoing, most recent update April 2023)[3]
- Economic indicators released by the State Statistics Service of Ukraine (ongoing, most recent update July 2023)[4]

3.4 Primary Data Collection

Coordination

The Ukraine JMMI is a joint exercise led by the Monitoring Task Team of the Ukraine CWG in close collaboration with its members, who will collect data from their respective areas of operation on a voluntary basis. As such, the scope and coverage of the JMMI will largely depend on the interest and capacity of CWG members to participate. The objective of the Monitoring Task Team is to support the design and successful implementation of the JMMI and any further market monitoring projects launched in Ukraine, as well as to build technical consensus among participating members and ensure that all activities are implemented with full consultation.

The Monitoring Task Team includes all partner organizations contributing to the initiative. The task team agrees to adopt a common approach toward the key pillars of the initiative, such as methodology, data collection tools, item list, coverage, visibility, ownership of data, etc.

Methods

All data for the Ukraine JMMI will be collected by member organizations of the Monitoring Task Team on a monthly basis using a structured quantitative tool. Data will be collected in the form of key informant interviews (KIIs), with retailers in target markets serving as the KIs. In accordance with the "joint" methodology of the JMMI:

- All partners will commit to supporting one joint monitoring process.
- All partners will use the same data collection tools.
- All partners will use the same data collection methodology outlined in this Terms of Reference.
- All partners will collect data during the same period of time. One month period will be used for the pilot data collection. After the pilot partners may reconsider the period and agree to collect data on a bi-weekly basis if needed
- All partners will upload their data to the same KoBo server.

Collectively, taskforce members will aim to cover as many conflict-affected and displacement-affected Ukrainian markets as possible, with a focus on urban markets and those that serve the greatest numbers of persons of concern. In practice, maximally broad coverage will need to be achieved via a process of "deconfliction":

1. Each participating organization begins by proposing all hromadas from which it could commit to collect data based on the locations of its field staff.
2. The co-leads of the Monitoring Task Team compare the organizations' potential areas of coverage and suggest modifications to ensure that organizations are not duplicating each other's work.
3. In some cases, the co-leads may propose that these organizations cover key nearby hromadas instead that would otherwise not be incorporated.

Sampling

[3] WFP VAM The Global Market Monitor. Available online .
[4] SSSU Average consumer prices for goods (services) in Ukraine in 2023. Available online

Marketplace selection:

The Ukraine JMMI will prioritize primary marketplaces in key conflict-affected and displacement-affected urban areas. For the purposes of the JMMI, a **marketplace** is defined as **an area with a relatively sizable concentration of traders in close proximity to each other**. These traders can be located in a devoted market structure, in a central business district, along a commercial corridor, or similar. This vague definition is designed to encompass the diverse variety of marketplaces that are used by Ukrainian urban residents and to enable each organization to make judgments about the most valuable ones to monitor based on their local knowledge. Field teams from each participating organization are responsible for identifying the main markets in each targeted hromada that meet this definition.

Participating organizations should target traders from the hromada's **largest marketplaces devoted to retail** (i.e. no marketplaces solely devoted to wholesalers, etc.). In hromadas where markets are relatively well-integrated, and where the same goods tend to flow from central markets outwards to peripheral neighborhoods, simply interviewing traders from the town's main marketplaces should provide a sufficient overview of market conditions throughout the hromada. Field teams may, in certain cases, visit individual traders located outside these defined market areas, for example large chain stores carrying many items that are located at a remove from dense center-city marketplaces.

Only one partner should contribute data from each monitored marketplace per round to avoid duplicating efforts. The easiest way to ensure this is for all partners to ensure that their coverage does not overlap on a hromada level, as mentioned above.

Trader selection:

Within each targeted marketplace, field teams within each participating organization are responsible for identifying a sufficient number of traders to interview that match the following criteria:

- Traders must be **retailers** selling directly to consumers. Wholesalers should be avoided unless they commonly also sell directly to consumers, in which case consumer prices and not wholesale prices should be collected.
- Traders **must sell at least one item monitored** as part of the JMMI survey; preferably, they will sell as many of these items as possible.
- Traders should be housed in **permanent structures** to ensure continuity of presence. Exceptions can be made, at partners' discretion, in cases where market structures have been damaged or destroyed.
- Enumerators should aim to monitor **traders patronized by average residents** of the area. Traders specializing in upmarket goods and expensive brands that are not purchased by most households should be avoided.

Field teams must aim to collect a minimum of 3 prices per assessed item per assessed hromada, ideally all from the hromada's largest and most central marketplace(s). There is no set number of traders that field teams are required to interview to finish data collection; **field teams should continue interviewing traders until they have collected the minimum number of prices for every assessed item.** If an enumerator is able to collect every required price via visits to 3 large general stores, then they will only need to interview 3 traders in that hromada; if they collect prices mostly from small-scale traders that sell just a few items each, the number of interviews will be higher (but each individual interview will be much shorter). If an item is never sold in a specific hromada, or if it is seasonally or otherwise unavailable across the entire hromada, no price data for this item needs to be collected, but enumerators should indicate that the item is fully unavailable.

When approaching a given trader for the first time, the enumerator should begin by introducing themselves and their organization, clearly explaining the purpose and nature of the assessment and the amount of time they expect the survey to take to complete, and should confirm whether the vendor is willing to contribute information to the assessment every month. If the vendor agrees, the enumerator should seek to collect data from that vendor every round as far as possible, and should continue to confirm at the beginning of every survey that the vendor consents to continue participating.

Customer KI selection:

As a supplement to the main retailer survey, partners will aim to remotely interview KIs from among their own networks in Ukraine who can provide a customer's perspective on the functionality of marketplaces and financial service providers in their hromadas. These KIs will be asked to provide general information from their communities on the availability of key categories of items and services, barriers to market access, availability of cash, and functionality of key financial service providers. **Field teams must aim to interview a minimum of 5 customers per assessed hromada.**

Items to monitor

As part of the JMMI, all participating organizations will monitor a common basket of core market commodities commonly purchased by vulnerable households, which is called JMMI basket. The JMMI Basket is a subset of the 335-item consumer set of representative goods (and services) maintained by the State Statistics Service of Ukraine (SSSU), focusing on core food and hygiene items that an average household must purchase on a regular basis. The JMMI Basket was defined in consultation with the Ukraine Cash Working Group (CWG) in March 2022. In July 2023 basket of core market commodities was temporary modified for MEB revision by CWG for one month, following the request of CWG.

In instances where items in the basket are commonly sold in several different varieties, data will be collected on only the cheapest variety available in the marketplace, in line with the purpose of minimum expenditure baskets. While this is a straightforward process for most food items, NFIs tend to be more complicated to standardize, as they can vary significantly in terms of types and specifications. For consumable NFIs (i.e. those that are continually used up and need to be repurchased, such as soap, toothpaste, cleaning products, etc.), enumerators should follow the procedure of only collecting the price of the cheapest variety. For non-consumable NFIs, the JMMI Taskforce will need to agree on a list of loose specifications for each item to ensure that all partners are monitoring comparable commodities.

Data collection tools

All data collection for the Ukraine JMMI will center on the KoBo platform. Once the basket of monitored items has been finalized, ACTED and REACH will develop common retailer and customer quantitative data collection tools in KoBo for use by all participating organizations, to be hosted on a centralized KoBo server at REACH HQ. All data must be uploaded to this central KoBo server using one of two Android apps (KoBoCollect or ODKCollect) or, alternatively, using a link that can be filled out in one's internet browser. Enumerators using either Android app will be able to complete surveys without an internet connection and save them for later submission once they return from the field. Partner organizations are responsible for providing their enumerators with all necessary equipment (smartphone/tablet, laptop, internet connection) to enable them to undertake data collection.

All taskforce members participating in the initiative are asked to submit their data using these common KoBo tools unless circumstances wholly prevent them from using KoBo, in which case an individualized plan can be worked out with each participating organization.

In the event that field teams are able to collect market data in person, PDF versions of the questionnaire can be provided for enumerators that feel more comfortable collecting data on paper in the field. The enumerators will be responsible for printing and transporting these questionnaires themselves. However, filling out a paper form will not be a substitute for submitting data to the central KoBo server; all data collected on paper must then be uploaded to KoBo by the enumerator themselves by the end of each day of data collection, or at latest by the end of the data collection window, just as if they were collecting data using an Android app. No extensions to the data collection window will be provided for this purpose, and partners and enumerators must plan ahead for the extra time needed for data entry.

In-person vs. remote data collection techniques

Due to a variety of factors, including martial law restrictions, protection risks, and insecurity in conflict-affected regions of Ukraine, it may be necessary at times for organizations participating in the JMMI to adopt remote data collection methods. REACH acknowledges that remote data collection can be difficult for both enumerators and interviewees, and that teams

with less experience in these methods may find them especially difficult to manage. For this reason, if individual participating organizations succeed in obtaining data collection waivers, or if OCHA, the HCT, and the Cash Working Group are able to secure a blanket waiver for the collection of all humanitarian data, participants are encouraged to collect market data in person as the security situation allows. It is strongly suggested, however, to continue interviewing customer KIs remotely, identifying interviewees from among their own existing networks in Ukraine, to minimize the risk posed to enumerators.

Customer KIs will be selected from existing partners networks in order to maintain low publicity of the exercise which is preferred because of security risks for enumerators during the martial law. Key informant interviews in general are recommended to be conducted remotely by phone, however it is acceptable if a partner considers in-person data collection as safe in each separate case. Selection criteria will be the following: a KI should be a permanent resident of a hromada, KIs should be representing various sex and age groups. Key informants identified among partner's networks should be able to provide a customer's perspective on the functionality of local marketplaces and financial service providers. These can be professional contacts, personal contacts, or households that have already received aid from partner's organisation. Snowballing could be also used to find contacts of additional needed KIs in a hromada.

If enumerators are able to **visit targeted marketplaces in person**, they should be able to build a sufficiently large network of traders to interview simply by walking around the marketplace and identifying traders that meet the criteria above. Teams that adopt this strategy should follow the guidelines above for obtaining consent from traders to be interviewed every month, and should also **systematically collect phone numbers** from every trader that consents to be interviewed in case they need to move to remote data collection at any point. Field teams should seek to identify and receive consent from **a minimum of 4-5 traders for every item in the JMMI survey**. While only 3 prices per item are needed for the JMMI, it is highly advisable for the field team to build a larger network of traders to allow for greater flexibility, particularly if remote data collection techniques are being adopted.

Building networks of traders can, however, be more difficult for enumerators who face movement restrictions and are unable to conduct interviews face-to-face. In this case, **field teams can employ snowball sampling techniques to build a network of KIs over the phone** as follows:

- Field teams begin by compiling a list of traders in targeted marketplaces that are already part of their personal networks or the networks of their organizations: for example, traders that they themselves already buy from or have a personal relationship with, or traders whom their organization has supported in past market interventions (this information may be available from other teams or departments). The field teams will need to obtain phone numbers for each trader on their list.
- The field teams then begin calling the traders on their list. After verifying that the traders meet the criteria listed above, they ask each trader if they would be willing to receive a phone call from an enumerator once per month and provide full information for the JMMI survey. If the trader agrees, the enumerator should then go through the full list of items monitored by the JMMI and verify which of these items the trader sells.
- At this point, enumerators can also consider working out a plan with the trader to ensure that their phone calls are not overly disruptive—for example, they can find out whether the trader prefers to be called at a certain time of day, or whether they would prefer to split up the interview into 2 or 3 shorter phone calls so they can serve customers in between.
- At the end of this conversation, the field team should ask: "Would you be able to provide me with 3 more phone numbers for other traders in the marketplace who might be willing to participate?" Any new names and phone numbers they receive should be added to their master list of potential contacts.
- The field teams continue collecting phone numbers and calling traders until they have received consent from **a minimum of 4-5 traders for every item in the JMMI survey**. Again, while only 3 prices per item are needed for the JMMI, it is highly advisable for the field team to build a larger network of traders to account for the fact that some traders may be unreachable at the time they are called.

It can take time to build a sufficiently large network of KIs using this snowball sampling methodology, and for this reason, field teams should aim to begin the process in advance of data collection. Note that as part of this process, each participating organization will need to build its own database of vendor names, locations, and phone numbers for KIs in their assessed areas. This database should be accessible by the organization's JMMI focal point and enumerators working on the assessment, but by no one else, and it should be stored and password-protected accordingly. The entries in this database will constitute **personally identifiable information**, and therefore each organization will need to adopt or enforce a clear internal protocol for how this information will be safely handled to minimize exposure and risk of its interviewees. See IMPACT Initiatives' Personally Identifiable Information SOPs for an example.

No matter whether partners build their initial KI networks using in-person or remote techniques, they have the option of adopting fully remote interview methodologies at any time, and should be prepared to do so in the event that either the security situation or martial law restrictions change.

3.5 Data Processing & Analysis

Data cleaning

Following each round of data collection, REACH will compile the centralized, raw data, remove outliers, and follow up with field teams if needed. In particular, the data will be checked for the following:

- Number of prices per item collected per location (to check if the minimum threshold of 3 prices per item has been met)
- Median price per item per location (to check for variation across locations)
- Minimum and maximum price per item per location (to check for variation within locations)
- Outliers (i.e. an item price that is substantially different from others collected in the same month and location)
- Monthly changes in the median price per location (to check for month-on-month variation)
    - Significant price changes (exceeding 50% since previous month) and sudden shortages are further investigated by following up with field teams. Whenever possible, information about the local context is gathered to support qualitative analysis.
- Duration of surveys per location (to check legitimacy of submitted data)

Following each round of data collection, REACH assessment staff triangulates the obtained data through three different steps:

1. Comparison of most recently collected data with previous rounds of data to identify inconsistencies;
2. Review of recent secondary data covering the same location(s), if any;
3. Consultation with field teams and partners to cross-check data quality and contextualize results.

Data analysis

As data is collected from individual market vendors concerning their own operations, the following steps are undertaken to aggregate this individual-level data to the hromada/rajon/oblast/region/national level:

JMMI basket item prices. The calculation of prices for the JMMI basket items is based on principle "medians of medians" and conducted in two steps.

- Step 1: Median prices are calculated for each item in every assessed hromada using prices gathered from individual traders. Subsequently, median prices for rayons are computed based on the hromada median prices, employing the same method. Similar calculations are performed for oblasts, regions, and national prices.
- Stage 2: In cases where prices for specific items were not collected in any hromadas or rayons covered by the JMMI data collection, they are substituted with the median prices of the respective rayons or

oblasts to which they belong. Following this substitution, the calculation described in Step 1 is reiterated.

Restock duration. The median restock duration across all traders in the hromada is calculated for food and non-food items. Rayon, oblast, regional and national medians are then calculated using a "median of medians" approach, as ***JMMI basket item prices***.

Stock levels. For each item, the median stock level is computed by considering all surveyed retailers within the hromada. The medians for rayons, oblasts, regions, and the nation are then determined using a "median of medians" methodology, mirroring ***JMMI basket item prices***. To conduct these computations, the following recoding of responses is necessary: initially, all restock periods are transformed into the average value between the restock period limits in each specific response. Subsequently, calculations are executed through the "median of medians" method, and finally, all results are recoded in the reverse direction.

Level of Market operations. To perform the calculations, the following recoding of responses is necessary: during the initial stage, all answers are transformed into the average value between the limits of the answer choices in each specific response. The percentage of usual retailers in this marketplace is then computed for each hromada by calculating the mean of the collected answers within the hromada. Similarly, the percentages for rayons, oblasts, and regions are calculated by determining the mean of the answers collected within the corresponding rayon, oblast, or region. The national essential item prices are determined as the mean of the region percentages. Finally, during the concluding stage, all results are recoded in the opposite direction.

Availability. Availability is categorized as follows: available, partly available, available on order, and unavailable. Availability is determined for each hromada by counting the occurrences of each answer choice. For rayons, oblasts, and regions, availability figures are calculated by counting the frequency of each answer choice within the hromadas encompassed by the respective rayon, oblast, or region. National availability figures are computed as the mean of the market supply figures from the regions.

Market suppliers. Dependence on a single supplier and the location of a single supplier are computed for each hromada by tallying the occurrences of each answer choice. Market supply figures for rayons, oblasts, and regions are calculated by determining the frequency of each answer choice within the hromadas located in the respective rayon, oblast, or region. National availability figures are derived as the mean of the market suppliers' figures from the regions.

Market supply challenges and difficulties. Market supply challenges and difficulties are computed for each hromada by counting the occurrences of each answer choice. The figures for market supply challenges and difficulties in rayons, oblasts, and regions are calculated based on the frequency of occurrence of each answer choice obtained from the hromadas within the respective rayon, oblast, or region. National market supply figures are determined as the mean of the market supply figures from the regions.

Financial services. All financial services indicators, specifically the availability of banks, ATMs, and Ukrposhta services, are calculated for each hromada by counting the occurrences of each answer choice. Financial services figures for rayons, oblasts, and regions are calculated based on the frequency of occurrence of each answer choice obtained from the hromadas within the respective rayon, oblast, or region. National availability figures are determined as the mean of the financial services figures from the regions.

Payment modalities. All payment modalities indicators, including payment modalities' limitations, payment modalities' markups, and debit withdrawals, are calculated for each hromada by counting the occurrences of each answer choice. Payment modalities figures for rayons, oblasts, and regions are calculated based on the frequency of occurrence of each answer choice obtained from the hromadas within the respective rayon, oblast, or region. National payment modalities figures are determined as the mean of the payment modalities figures from the regions.

Location of food/NFI supplier. The location of the hromada's primary suppliers for each category of monitored items is determined for each hromada by counting the occurrences of each answer choice. Location figures for rayons, oblasts, and regions are calculated based on the frequency of occurrence of each answer choice obtained from the hromadas within the respective rayon, oblast, or region. National location figures are calculated as the mean of the location figures of the regions.

Data from Customers Key Informants will be analyzed in the following way:

Availability of essential items. Essential items, namely food items, hygiene items, vehicle fuel, and heating fuel, are categorized as follows: available, partly available, available on order, and unavailable. The availability of essential items is calculated for each hromada by counting the occurrences of each answer choice. Availability figures for essential items in rayons, oblasts, and regions are calculated based on the frequency of occurrence of each answer choice obtained from the hromadas within the respective rayon, oblast, or region. National availability figures are determined as the mean of the availability figures from the regions.

Essential items prices. All essential items prices,are calculated in each hromada as the median price of each itmes. Essential items prices for rayons, oblasts, and regions is calculated as the median of each essential item price obtained in the hromadas within the respective rayon, oblast, or region. The national essential item prices are calculated as the mean of the essential item price of the regions.

Demand capacity. Limitations on customers' access to stores and financial factors are calculated for each hromada by counting the occurrences of each answer choice. Demand capacity figures for rayons, oblasts, and regions are calculated based on the frequency of occurrence of each answer choice obtained from the hromadas within the respective rayon, oblast, or region. National demand capacity figures are determined as the mean of the demand capacity figures from the regions.

Financial services. All financial services indicators, specifically the availability of banks, ATMs, and Ukrposhta services, are calculated for each hromada by counting the occurrences of each answer choice. Financial services figures for rayons, oblasts, and regions are calculated based on the frequency of occurrence of each answer choice obtained from the hromadas within the respective rayon, oblast, or region. National financial services figures are determined as the mean of the financial services figures from the regions.

4. Key ethical considerations and related risks

For detailed guidance on how to complete this section, see also Step 5 of the IMPACT Research Design Guidelines

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

The proposed research design…	***Yes/ No***	***Details if no (including mitigation)***
… Has been coordinated with relevant stakeholders to **avoid unnecessary duplication** of data collection efforts?	Yes	
… **Respects respondents, their rights and dignity** (*specifically by: seeking informed consent, designing length of survey/ discussion while being considerate of participants' time, ensuring accurate reporting of information provided*)?	Yes	
… Does not **expose data collectors to any risks as a direct result** of participation in data collection?	No	In general, data collection methods are designed to minimize risk for data collectors wherever possible. While in GCA areas data collection will be conducted F2F due to the improved security situation, there remains the possibility of bombardment anywhere in Ukraine due to the recent escalations. Nevertheless, REACH is monitoring the security situation daily and data collectors are trained on how to react in an emergency situation. In NGCA or inaccessible areas data collection will take place via phone to protect data collectors.
… Does not **expose respondents / their communities to any risks as a direct result** of participation in data collection?	No	For those participating in in-person data collection, there is risk associated with COVID-19. All data collection partners will be expected to follow their organization's COVID-19-related safety protocols.
… 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	*REACH Senior Assessment Officer (SAO)*	*REACH Research Manager (RM)*	*REACH Senior Cash and Markets Specialist*	*REACH HQ RDD Unit, JMMI TT*
Supervising data collection	REACH SAO	REACH SAO	REACH RM, JMMI TT	Country CWG
Data processing (checking, cleaning)	REACH Senior Database Officer (SDBO)	REACH SAO	REACH RM	REACH HQ RDD Unit
Data analysis	REACH Senior Database Officer (SDBO)	REACH SAO	REACH RM	REACH HQ RDD Unit
Output production	REACH SAO, REACH GISO	REACH RM	REACH Country Coordinator, REACH HQ RDD Unit	JMMI TT
Dissemination	REACH SAO, JMII TT	JMMI TT	REACH RM, Country CWG	REACH HQ
Monitoring & Evaluation	*REACH SAO, REACH RM*	REACH CC	REACH HQ	JMMI TT
Lessons learned	REACH SAO	REACH RM	REACH CC	REACH HQ

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*

6. Data Analysis Plan

Available upon request.

7. Data Management Plan

Administrative Data		
Research Cycle name	*Joint Market Monitoring Initiative*	
Project Code	*UKR2203*	
Donor	*1. US State Department Bureau for Humanitarian Affairs (BHA) 2. European Civil Protection and Humanitarian Aid Operations (ECHO/Access VII Consortium) 3. OCHA-managed Ukraine Humanitarian Fund (UHF)*	
Project partners	*Ukraine Cash Working Group*	
Research Contacts	*Ievgen Volkovskyi, REACH SAO: ievgen.volkovskyi@reach-initiative.org*	
Data Management Plan Version	*Date: 11/07/2023*	*Version: 01*

Related Policies	ICRC, Market Analysis Guidance – Provides advice, tips and recommendations for how to conduct and carry out market assessments in humanitarian situations. Cash Learning Group, Minimum Standards for Market Monitoring – Provides a wealth of information and best practices for designing and conducting market research.			
Documentation and Metadata				
What documentation and metadata will accompany the data? *Select all that apply*	X	Data analysis plan	X	Data Cleaning Log, including: X Deletion Log X Value Change Log
	□	Code book	□	Data Dictionary
	□	Metadata based on HDX Standards	□	[Other, Specify]
Ethics and Legal Compliance				
Which ethical and legal measures will be taken?	X	Consent of participants to participate	□	Consent of participants to share personal information with other agencies
	□	No collection of personally identifiable data will take place	X	Gender, child protection and other protection issues are taken into account
	X	All participants reached age of majority	X	Any collected personally identifiable data is removed during cleaning and initial analysis
Who will own the copyright and Intellectual Property Rights for the data that is collected?	IMPACT / REACH			
Storage and Backup				
Where will data be stored and backed up during the research?	X	IMPACT/REACH Kobo Server	□	Other Kobo Server: *[specify]*
	□	IMPACT Global Physical / Cloud Server	□	Country/Internal Server
	□	On devices held by REACH staff	□	Physical location *[specify]*
	□	[Other, Specify]		
Which data access and security measures have been taken?	X	Password protection on devices/servers	X	Data access is limited to *[specify, e.g. REACH staff]*
	□	Form and data encryption on data collection server	□	Partners signed an MoU if accessing raw data
	□	[Other, Specify]		

Kobo Access Rights

Kobo Access	Person	Account Name
View Form	Maksym KOPYLOV	jahid_babayev1
View Form and Submit Data	JMMI partners enumerators	ukr_jmmi
Add submissions, View form View submissions	Maksym KOPYLOV	jahid_babayev1
Add submissions, Edit form, Edit submissions, Delete submissions, Validate submissions, View form, View	Maksym KOPYLOV	jahid_babayev1

submissions, Download data		

Raw Data Access Rights		
Raw Data Access	Reason	Person
Accountable	Accountable	Maksym KOPYLOV
Access	*[Explain why this person needs to access to raw data, e.g. GIS: choropleth maps using GPS points]*	*[Insert name]*
[Add relevant number of rows for access rights]	*[Explain why this person needs to access to raw data, e.g. GIS: choropleth maps using GPS points]*	*[Insert name]*

Preservation				
Where will data be stored for long-term preservation?	x	IMPACT / REACH Global Cloud / Physical Server	□	OCHA HDX
	□	REACH Country Server	□	[Other, Specify]
Data Sharing				
Will the data be shared publicly?	x	Yes	□	No, only with mandating agency / body
Will all data be shared?	□	Yes	X	No, only anonymized/ cleaned/ consolidated data will be shared
	□	No, [Other, Specify]		
Where will you share the data?	x	REACH Resource Centre	□	OCHA HDX
	□	Humanitarian Response	□	[Other, Specify]
Data protection risk assessment				
Have you completed the Indicators Risk Assessment table below?	□	Yes	x	No, no information that potentially allows identification of individuals is to be collected.
	[Please complete the first 4 columns in the Indicators Risk Assessment table below]			

Risk indicator	Type of identification risk	Disclosure implications	Benefits	**Class**	**Required mitigation**
[Specify indicator, e.g. KI_phone number]	*[Specify identification risk, e.g. Direct contact/identification of KI]*	*[Specify implications, e.g. loss of privacy/potential target of armed actors]*	*[Specify benefits, e.g. follow up for data cleaning]*	*[To be completed by IMPACT HQ]*	*[To be specified by IMPACT HQ]*
[Add relevant number of rows for risk indicators]					

Responsibilities	
Data collection	Ievgen Volkovskyi, SAO: ievgen.volkovskyi@reach-initiative.org
Data cleaning	Maksym KOPYLOV, SDBO: maksym.kopylov@reach-initiative.org

Data analysis	Maksym KOPYLOV, SDBO: maksym.kopylov@reach-initiative.org
Data sharing/uploading	Ievgen Volkovskyi, SAO: ievgen.volkovskyi@reach-initiative.org

7. Monitoring & Evaluation Plan

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 Number of individuals 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
		# of downloads of x product from Country level platforms	Country team		□ Yes
		# of page clicks on x product from REACH global newsletter	Country request to HQ		□ Yes
		# of page clicks on x product from country newsletter, sendingBlue, bit.ly	Country team		X Yes
		# of visits to x webmap/x dashboard	Country request to HQ		X 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	Ukraine flash appeals Ukraine 2023 HNO
		# references in single agency documents			CWG strategy CWG documents on revision of standard cash transfer values
Humanitarian stakeholders are using IMPACT products	Humanitarian actors use IMPACT evidence/products as a basis for decision making, aid planning and delivery	Perceived relevance of IMPACT country-programs	Country team	Usage_Feedback *and* Usage_Survey template	Usage survey to be sent out to CWG members after three months of data collection
		Perceived usefulness and influence of IMPACT outputs			
		Recommendations to strengthen IMPACT programs			
		Perceived capacity of IMPACT staff			
		Perceived quality of outputs/programs			

	Number of humanitarian 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 *(providing resources, participating to presentations, etc.)*	# of organisations providing resources (i.e.staff, vehicles, meeting space, budget, etc.) for activity implementation	Country team	Engagement_log	X Yes
		# of organisations/clusters inputting in research design and joint analysis			X Yes
		# of organisations/clusters attending briefings on findings			X Yes