Syria Non-Food Item (NFI) Market Assessment and Environmental Analysis: Final Report

Greening the Response Cash Champion Initiative

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Contents

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Executive Summary

The goal of the Syria Non-Food Item (NFI) Market Assessment and Environmental Analysis was to provide decision-makers with the feasible scale and geographic scope of potential cash-based interventions for critical NFI items in key governorates of Syria. The assessment provides insights into which NFI items can be significantly or partially scaled up through cash-based interventions, and those that cannot without complementary interventions in support of market capacities.

The assessment evaluated the feasibility of scaling up cash-based response with a strong focus on environmental implications. Specifically, it examined the carbon footprint and life cycle cost of priority items in the current response package, considering factors such as the reuse, recycling, and disposal of provided items.

Although this project was designed to support the Syria NFI Sector with these outputs, it should be noted that the methodology used was a pilot intended to develop ways to integrate environmental considerations into market assessment and analysis, therefore various tools were developed, with a view that they can be adapted for use in other contexts.

The **Market Assessment** in Syria was conducted between July and November 2023. It was conducted in two phases, the first focused on understanding the NFI preferences and priorities of households; modalities and accessibility of markets; gathered through 88 Focus Group Discussions (FGDs) and 137 Key Informant Interviews (KIIs) with the affected populations in 11 governorates[1]. Households consulted were primarily previous recipients of NFI assistance, which was intentional so they could comment on the quality of distributed NFIs and compare with those available in local markets.

The second phase of the assessment collected information from supply-side market actors, specifically 448 vendors across 10 governorates[2], to evaluate the current market conditions for NFIs. This included availability, supply, price trends, market structure, and potential supply response if cash were provided to participants for NFI purchases. The NFIs assessed in this phase were informed by the priorities expressed by households during FGDs and KIIs in phase 1, as well as the NFI sector's priorities.

In addition to market information, the assessment gathered information for conducting **environmental impact analyses** of both in-kind items sourced by UNHCR and other partners, as well as for locally available alternatives. The Project developed a carbon assessment tool, and an environmental scorecard in order to assess different factors that impact the environmental footprint of different NFI items. The scorecard considered a range of factors including carbon footprint assessment; lifespan; cost; possibility of re-use and re-purposing; possibility of environmentally sound disposal at end of life; number of individuals who would benefit from the use of the item; possibility of repair; and possibility for sustainable energy use (for heaters only). Environmental scorecards were produced for four items – Mattresses, Blankets, Plastic Sheets, and Heater – though the methodology can be replicated to other items. Data for the scorecard was gathered through a) direct consultation with UNHCR and partners on in-kind items, b) FGDs conducted during the market assessment to understand quality, durability, re-use and re-purposing practices and c) vendor survey during the market assessment to enable calculation of the carbon footprint for locally available alternatives in local markets. The intention of the scorecard was to provide a 'good enough' idea

[1] Aleppo, Al-Hassakeh, Ar-Raqqa, As-Sweida, Dar'a, Hama, Homs, Lattakia, Quneitra, Rural Damascus, Tartous
[2] Aleppo, Al-Hassakeh, Ar-Raqqa, As-Sweida, Dar'a, Hama, Homs, Lattakia, Quneitra, Tartous

of the drivers of environmental footprint with a view to identifying potential impact-reducing measures depending on the modality of assistance implemented.

The assessment results should be considered with the following **limitations** in mind: 1) Household respondents had previously received mostly in-kind NFI support, and this may have influenced their responses regarding priorities and preferences for NFI assistance; 2) the assessment was conducted after a number of years of large scale NFI assistance which has undoubtedly impacted market capacities due to reduced need to respond to demand; 3) the assessment was originally intended to be piloted in 1 or 2 locations, before replication, but due to various reasons was simultaneously rolled out across 11 governorates – this meant the planned resourcing for the assessment was not in line with what was required, resulting in delays and the consultants leading the assessment having to mobilize additional resources to support analysis; 4) the assessment covered only a sample of market places in targeted sub-districts, and therefore cannot be considered representative at country level – NFI partners should still consider localized rapid assessments to validate results and planned modalities prior to any intervention; 5) the assessment was managed remotely by a team of consultants which was not time efficient and further impacted ability to analyze data having not participated in the data collection directly.

The following is a summary of the **Key Findings** of the assessment, and recommendations for the NFI sector going forward:

Based on the assessment results, the scale up of cash assistance for NFIs in Syria appears feasible. No significant issues were identified that would prevent the use of cash-based approach to meet NFI needs. However, there are a few caveats that should be considered. For some items, such as solar lamps procured by UNHCR, there are no suitable alternatives available on the market. The value of cash transfers should be sufficient and based on the sector guidance on minimum cash transfer values for individuals/ HHs to purchase items of equivalent quality locally. Additionally, transfer values should account for transportation costs, which are especially significant for bulkier items such as mattresses or more remote locations. Lastly, it is crucial to establish consistent market price monitoring to allow transfer values to adjust with seasonal or inflationary price changes.

The assessment also revealed other interesting insights. The responses about needs, gaps, concerns, and preferences were very disparate across different demographics, while responses about market conditions did not differ so much. The differences were influenced by the living arrangements of respondents, that is, whether they live in camp settings, tents or housing, their proximity to the markets, and if they live in urban or rural areas.

This variability affected how people used NFIs they received in-kind and has contributed to the observed tendency to repurpose items to fit varied needs (e.g., use of blankets to insulate tent walls instead of for the intended objective of “enhancing personal warmth”).

These findings suggest that market-based programming could be an effective strategy to address diverse needs, as opposed to a standardized in-kind package.

In addition to addressing immediate needs, in the long run, market mechanisms, such as price signals, work to allocate resources to where they are most needed, thus contributing to resilience and sustainability.

The **priorities for Non-Food Items** (NFIs) are not significantly different based on gender or vulnerability group. Respondents

prioritized items such as mattresses, blankets, kitchen items, solar lamps, and plastic sheets. The needs and priorities were often influenced by the living arrangements. For example, the needs of those living in tents, or camp settings vary from those who are renting or living in partially damaged housing. Respondents, especially FGD participants, focused on primary intended uses of products requested, rather than specific discreet products specified by the NFI Sector.

When it comes to the **modality of assistance**, most respondents expressed a preference for in-kind assistance, except for clothing where cash assistance was preferred. However, a significant minority still prefer cash across all priority items. The generally acceptable quality of items distributed in-kind, juxtaposed with the inconvenience of transportation (especially for bulky items) and concerns about affordability in the local market, were the main reasons for the preference for in-kind. The unique nature of some items distributed in-kind, such as UNHCR's solar lamps, was also cited as a reason. Very few households expressed a preference for vouchers, as they remove the convenience of in-kind assistance (transportation, price stability), while not fully extending the benefits (flexibility) of cash assistance.

Market access is not considered a significant issue for household respondents, including elderly and disabled individuals. All households are accessing markets to meet their needs, and all reported accessing multiple marketplaces. However, affordability and transportation costs were identified as obstacles to access, especially for larger and bulkier items such as mattresses. This indicates that financial (affordability, transportation) rather than physical obstacles are the main barriers to access.

Availability of NFIs does not appear to be a major concern, based on the responses of both households and vendors. Only a very small number of vendors reported shortages in the last year for some items, and only in some sub-districts. Vendors did not indicate any issues with maintaining sufficient stocks, and for those that reported having reduced stocks, this was related to low demand due to affordability rather than supply issues.

Quality of items available in local markets is generally considered acceptable, though for items such as UNHCR's solar lamps, respondents expressed there is no equivalent on the local market. Across all items, 61% of vendors were observed by enumerators to be selling items that are equivalent to the NFI cluster specification.

Prices were generally considered high, with seasonal price increases across most items, particularly during winter.

Market actors are generally considered to have the **capacity** to meet increased demand for NFIs, if cash assistance was to be provided to the affected population. Vendors believe they can increase their supplies, and they do not foresee any major challenges in doing so.

Environmental impact:

- There are multiple alternative types of each NFI available on local markets, making the environmental calculation for locally available alternatives limited in use when informing modality decisions (as ultimately, if cash is provided households can purchase any of these available types, each of which will have a different environmental footprint).
- However, the environmental assessment of the four items considered (mattress, blanket, plastic sheet, and heater) did reveal a varied picture in terms of whether the overall environmental footprint was higher for in-kind items sourced by UNHCR vs locally available alternatives.

- Component materials have the biggest impact on carbon footprint of NFI items. Transport contributes to a relatively small proportion, regardless of whether it is imported or produced locally. (Note: None of the NFI items in this study uses air freight.)
- At country level or field level, it may not always be possible to control the supply of the NFI items, but it may be possible to manage the impact. With information from the scorecard, it is possible to identify where the impacts can be managed. For example, to improve the score of an NFI item, the specifications can be changed to extend the usable life, or if the repair or re-use of a particular type of plastic sheet can be promoted through bringing in tools and skills.
- Generally, the environmental analysis should not be considered as the main driver of modality decisions but can be used as a tool to identify potential ways that environmental impacts can be mitigated with each modality of assistance.
- The environmental assessment was done remotely by the GSC Consultant without adopting the recommended panel approach to the scorecard rating process. Due to challenges during market assessment, there were limitations on what information could be collected. These factors should be taken into consideration when adapting the tools and findings into NFI environmental assessment in other contexts.

Conclusions and Recommendations

The study provides valuable insights into the preferences of the affected population in Syria and the capacity of market actors to maintain functioning markets for non-food items (NFIs). It reveals that there are no significant barriers to market access in terms of availability, security, or physical access. Instead, the main issue is affordability due to lack of income and high and rising prices.

Uncertainty due to ongoing conflict and sanctions significantly influences the preferences of the affected population, particularly their preference for in-kind modality. They express concerns about cash assistance not keeping up with volatile price changes or additional costs such as travel or transportation of bulkier items.

However, the study also shows the existence of functioning markets that can meet the needs of the affected population. These markets are negatively impacted by in-kind intervention, which could potentially harm and distort the markets, reduce resilience and sustainability.

Given these findings, the study **recommends** NFI actors in Syria should consider using cash assistance to address priority NFI needs of households. It emphasizes that markets are functioning and are sufficiently developed to respond to increased demand from potential cash interventions for NFIs. It also recommends a switch to a cash-based intervention to address the diverse needs across various demographics and to fuel growth and strengthening of market capacities.

The study also suggests that NFI partners providing cash assistance should continue to undertake market monitoring to understand any potential impact of cash assistance in local markets, and to inform transfer values. Furthermore, coordinating with other actors to ensure other basic needs are covered alongside NFI needs would support households to fully utilize cash assistance for the intended purposes.

Lastly, the study encourages NFI partners in Syria to conduct localized rapid market assessments to confirm the availability of priority NFIs in their target areas prior to making any modality decisions.

Key Takeaways

1. The following items can be monetised at the governorate level with key limitations on the inference being: the table below does not reflect complete list of items prioritised by households and sampling for household and market survey is not representative. Thus, conclusion is, scope for scaling up of NFIs monetisation exits subject to further assessment to understand the availability of quality items and preference on modality i.e., either cash or in-kind provision, of vulnerable population in targeted locations.

#	Governorate	Potential items for monetisation	
		Group 1 [Items prioritised by HH and available at recommended[3] quality and scale in local marketplace]	Group 2 [Items prioritised by HH but prefer to receive as in-kind. Local vendors note availability of sufficient alternatives at recommended[3] quality]
1	Al-Hasakeh	Sleeping mat	Mattress and winter clothing
2	Aleppo	Cooking/ kitchen set	Solar lamp
3	Ar-Raqqa	Winter clothes	High thermal blankets
4	As-Sweida	Winter clothes, jackets, and cooking/ kitchen set	Solar lamp
5	Dará	Winter clothes, jackets, and heater	
6	Hama	Mattress, cooking/ kitchen set and solar lamp	Sleeping mat, winter clothes, heater and
7	Homs		Mattress, sleeping mat, heater, and cooking/ kitchen set
8	Lattakia	Winter clothes, jackets, and cooking/ kitchen set	High thermal blankets, heater, and plastic sheet
9	Quneitra		Heater and solar lamp
10	Tartous	Winter clothes and jackets	Mattress, sleeping mat and high thermal blanket

2. Affordability, not availability, is the main barrier to market access for the affected population in Syria.
3. Uncertainty due to conflict and sanctions influences the preference for in-kind modality.
4. Functioning markets exist that can meet the needs of the affected population but are negatively impacted by in-kind interventions.
5. The study recommends the use of cash assistance to address priority NFI needs and to fuel growth in market capacities.
6. Regular market monitoring, coordination with other actors, and localised rapid market assessments are recommended for effective NFI assistance.

[3] As per the standards defined in the sector guidelines and their alternatives.

1. Background

The Global Shelter Cluster (GSC) has been implementing multiple efforts to achieve greener humanitarian shelter and settlements responses since 2021 with funding from ECHO, USAID-BHA, UNHCR, IFRC and other partners. One activity under this initiative was to provide 'Cash Champion' support to Shelter and NFI Sectors or Clusters piloting the integration of environmental considerations in the process. The Syria NFI Sector expressed interest, and was subsequently selected, to participate in this initiative, which began in July 2022, and concluded in December 2023.

When the collaboration began in 2022, the number of people requiring NFI support in Syria had reached 4.91 million[4], with numbers only expected to grow. NFI sector interventions in Syria aim at providing lifesaving and life-sustaining support to the most vulnerable groups, through a) provision of core NFIs to displaced populations to maintain health, dignity and safety and the undertaking of daily domestic activities in and around the home, and b) provision of winter NFIs to mitigate the effects of harsh winter conditions. In 2021, the NFI sector reached 2,385,435 people across both categories of support, through a combination of in-kind, cash and voucher assistance modalities. As of mid-2022, few partners had piloted the use of cash assistance to address NFI needs, and 48% of NFIs provided in-kind were sourced outside of Syria. This prompted an opportunity for the NFI sector to explore the potential for scaling up the use of cash assistance to address NFI needs, while also better utilizing local markets in the NFI response and thus had the potential to contribute to 'greening' of the NFI response.

Within this context, the Syria NFI Sector and the Global Shelter Cluster collaborated to focus on three interlinked priorities: 1) Undertake a market assessment to determine the extent to which cash assistance could be scaled up, while understanding the potential environmental implications; 2) Estimate the carbon footprint of the NFIs sector's current response package and understand if there were opportunities to move toward greening the current response; and 3) determine the life cycle cost of the NFI sector's current response package through carbon footprint analysis and analysis of environmental impact considering things such as re-use, recycling, and disposal. The collaboration also originally aimed to develop the capacity of NFI sector partners in cash-based interventions (CBIs) but due to time constraints, and competing priorities (i.e., the catastrophic earthquake that affected Turkey and Syria in February 2023) capacity building was limited to participation in the market assessment process. This report provides an overview of the methodology for both a) NFI market assessment, and b) analysis of potential environmental impact of different NFIs, along with the key findings, conclusions, and recommendations for the NFI sector in Syria moving forward. The report also attempts to highlight some of the learning and reflection from the assessment team on integrating environmental analysis into market assessments and modality decision making. The various tools used throughout the process can also be found annexed to this report. Although these tools were developed specifically for the Syria context, they may be useful as a starting point to be adapted for other contexts (though particular attention should be paid to the learning reflected throughout this report prior to any replication).

2. Methodology

The following section outlines the methodology followed for a) the market analysis, and b) the analysis of potential environmental impact of different NFIs.

[4] Whole of Syria numbers, as defined through the HNO/ HRP 2022

2.1 Market Analysis

2.1.1 Goals and Objectives

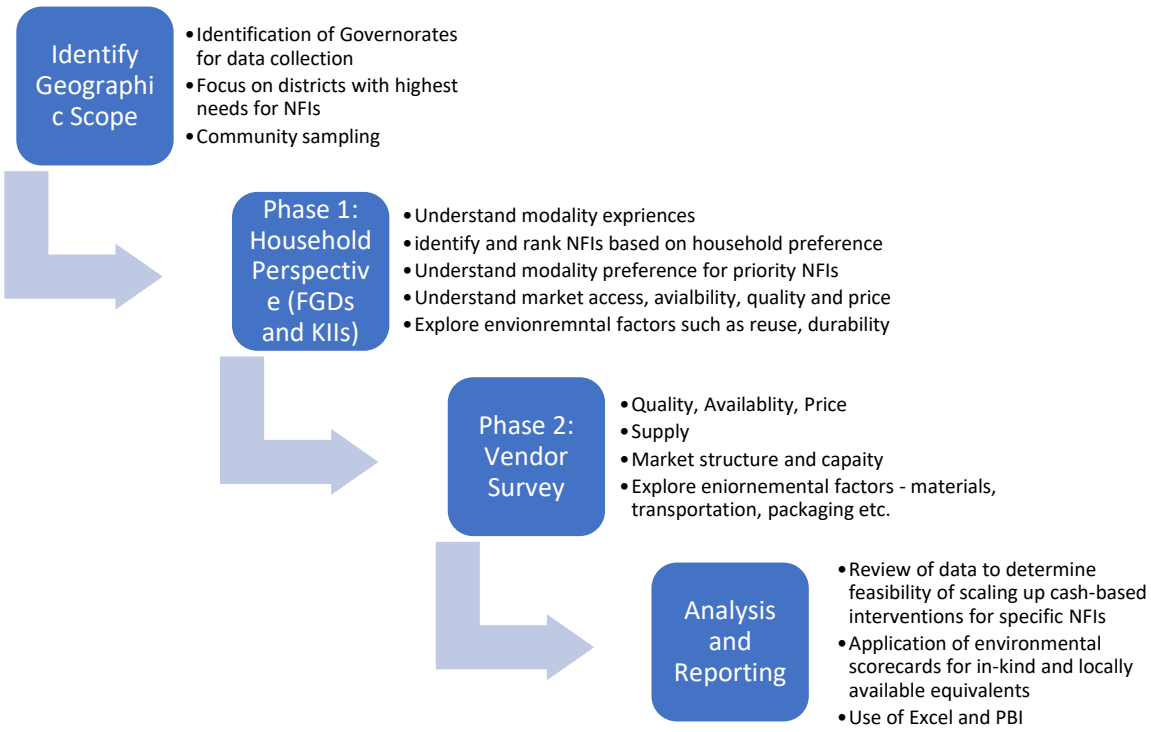
The goal of the NFIs market assessment was to explore the feasibility of expanding the use market-based approaches in Syria. It aimed to provide decision-makers with information about potential cash interventions' scale and scope, including differential patterns for different locations or specific items, when data allows for such inference.

The assessment focused on three objectives: understanding household preferences for non-food items (NFIs) in Syria, including their accessibility and quality in local markets; assessing the environmental impact of these NFIs; and analyzing the structure and conduct of NFI vendors in current market conditions, including availability, supply and demand, pricing, market structure, and potential supply response.

2.1.2 Approach, Sampling and Data Collection Process

The market assessment relied mainly on a) household respondents, and b) NFI vendor respondents. Consequently, the assessment was not intended to provide detailed market maps or qualitative analysis of specific market systems (commonly seen with humanitarian market analysis approaches such as the Emergency Market Mapping and Analysis (EMMA) toolkit), but rather was intended to provide a broad overview of the market situation and indicate any need for more detailed assessments. The assessment also focused on gathering information from 'last mile markets' (i.e., retailers) rather than producers, manufacturers, importers, or wholesalers further up the supply chain.

Figure 1:Overview of Market Assessment Approach



2.1.3 Geographic Scope and Sampling

The assessment gathered data across 11 governorates (see below), based on where NFI sector partners had access to conduct data collection. Within the targeted governorates, potential districts and sub-districts for data collection were identified based on the areas in highest need of NFI assistance (for this purpose, the areas that received the highest proportion of NFI distributions from April 2022 to April 2023 were prioritized as a proxy for volume of need). Sub-district selection represented at least 70% of the NFIs distributed at governorate level (between 1 to 3 sub-districts per governorate). Sub National Coordinators of the NFI sector then reviewed the proposed sub-districts and confirmed that there was a partner that could engage in data collection and that the district and sub-district was accessible for data collection. Once the final selection of sub-districts was confirmed, Sub National Coordinators proposed villages or neighborhoods to be covered in each sub-district for Phase 1 data collection. The intended sampling framework was to have a minimum of 6 FGDs per sub-district (3 male, 3 female) based on common practice that 2 – 3 FGDs per sub-group (in this case gender) would capture 80% of themes for analysis purposes, and at least 2 FGDs per urban, peri-urban, and rural locations to provide information disaggregated by location type at governorate level. For Key Informant Interviews with elderly, disabled and caregivers, 6 elderly and 6 disabled KIIs were targeted per sub-district. In practice, however, it was challenging for Sub-National Coordinators to differentiate urban, peri-urban, and rural locations, therefore it was not possible to disaggregate data according to these parameters. In addition, it was challenging for partners to meet the proposed sampling of 6 FGDs and 12 KIIs per sub-district, therefore data is presented at governorate level only in the report. For Phase 2 data collection - the vendor survey – marketplaces were selected based on the marketplaces reported during Phase 1, as the marketplaces households most commonly accessed to purchase non-food items. Sub-National Coordinators reviewed the list of marketplaces mentioned in the FGDs and KIIs and classified these markets as 'main markets' (serving the majority of the population of a sub-district or larger area), and 'local markets' (serving communities that are far from main sub-district or district-level markets). Based on this, the Sub National Coordinators then prioritized up to 3 main marketplaces and 2 local marketplaces for conducting the vendor survey in each sub-district. To keep data collection manageable, given the wide geographic coverage of the assessment, a sampling target of 5 vendors per NFI item per sub-district, and the enumerators covered this sample across the identified marketplaces. The below sections outline the actual responses per data collection tool, and governorate.

Phase 1: Household-level

Phase 1 of the market assessment captured the perspective of households in terms of priority NFIs, modality of preference for different NFIs, market access, availability, quality, price, and views on factors such as reuse, recycling, and durability for assistance received in-kind and purchased locally. Data was collected through FGD with male and female community members, and through KII with elderly, disabled and caregivers (KIIs were opted for these groups to facilitate their participation and avoid requiring unnecessary travel to a central location for an FGD). FGD and KII respondents were previous recipients of NFI assistance by one of the NFI sector partners – although this may have introduced some bias into response around modality, it was intentional so that respondents could provide informed perspectives comparing in-kind assistance received, and locally available alternatives, particularly for the environmental-related questions. Following a remote orientation, data collection was conducted by NFI sector partners with oversight by the Sub-National Coordinators. Data was collected on paper and entered into a Kobo form in Arabic. Data was then validated by Sub-National Coordinators and translated to English prior to analysis. The KII and FGD tools in English and Arabic can be found in Annex 8.

Focus Group Discussions (FGDs) and Key Informant Interviews (KIIs) were conducted across 11 governorates in Syria. FGD data collection was conducted in June 2023, and a total of 88 FGDs were conducted (41 female FGDs, 46 male FGDs, and 1 mixed), with a total of 851 participants (391 females, and 460 males).

Table 1: FGDs conducted by Governorate and Gender

Governorate	Female		Male		Mixed			Total	
	Number of FGDs	Number of Respondents	Number of FGDs	Number of Resp.	Number of FGDs	Number of Male Resp.	Number of Female Resp.	Total FGDs	Total Resp.
Aleppo	4	49	4	68				8	117
Al Hasakeh	5	38	5	44				10	82
Ar-Raqqa	4	43	4	45				8	88
As-Sweida	3	28	3	26				6	54
Da'ra			1	7				1	7
Hama	2	22	5	54				7	76
Homs	2	16	2	22	1	3	3	5	44
Lattakia	6	60	6	54				12	114
Quneitra			2	18				2	18
Rural Damascus	2	30	1	15				3	45
Tartous	13	102	13	104				26	206
Total	**41**	**388**	**46**	**457**	**1**	**3**	**3**	**88**	**851**

A total of 137 KIIs were conducted (with 68 Female and 69 Male respondents), representing 61 elderly respondents, 44 respondents with disabilities and 30 caregivers of household members with disabilities.

Table 2: KII Respondents by Governorate and Gender

Governorate	Female Respondents	Male Respondents	Total
Aleppo	9	9	18
Al-Hasakeh	3	5	8
Ar-Raqqa	3	2	5
As-Sweida	5	3	8
Dar'a	2	2	4
Hama	3	4	7
Homs	3	2	5
Lattakia	11	11	22
Quneitra	1	1	2
Rural Damascus	3	3	6
Tartous	25	27	52
Total	**68**	**69**	**137**

Table 3: KII Respondents by Governorate and Status

Governorate	Status not provided	Caregiver of disabled household member	Elderly Person	Person with disabilities	Total
Aleppo		6	5	7	18
Al-Hasakeh		3	4	1	8
Ar-Raqqa			3	2	5
As-Sweida		2	5	1	8

Dar'a		1	1	2	4
Hama		5	2		7
Homs		2	3		5
Lattakia		2	11	9	22
Quneitra				2	2
Rural Damascus	2		1	3	6
Tartous		9	26	17	52
Total	**2**	**30**	**61**	**44**	**137**

Phase 2: Vendor Survey

Based on the findings of the FGD and KII data collection, and the NFIs prioritized by the Syria NFI sector, a list of 12 priority NFIs were selected to focus on for data collection during the vendor survey (plus one item for Hasakeh only). These items are listed below. Following an orientation both remotely, and cascaded in country, UNHCR's Outreach Volunteers led the data collection with vendors of these priority NFIs. The vendor survey tool was created in Kobo (in English and Arabic) and data was entered directly into Kobo during data collection. In order to ensure data collected was for NFIs that had a similar and acceptable quality to the NFI Sector standards, enumerators were trained on, and provided with, a cheat sheet specifying the material composition and specifications of each item. Each vendor was asked information on up to three NFIs (to be respectful of the time of the vendor), and for each NFI vendors were asked to share information on two available 'types' – the first type equivalent to the NFI sector standards as per the NFI catalogue, and the second type the next quality nearest to the NFI sector standards available with the vendor. Following data collection, a sample of surveys was spot checked to confirm the correct categorization of type by enumerators, and then vendor survey data was analyzed using PowerBI. Data collection focused on 12 priority items: cooking pot, frying pan, high thermal blanket, mattress, sleeping mat, solar lamp, sweater, thermal underwear, children's socks, plastic sheet, heater, and winter jackets.

A total of 448 surveys were conducted with vendors during November 2023, covering 10 governorates. Vendors provided data on 1 (211 vendors), 2 (173 vendors) or 3 (64 vendors) different NFIs.

Table 4: Vendor Survey Respondents by Governorate

Governorate	Number of Vendor Respondents
Aleppo	49
Al-Hasakeh	60
Ar-Raqqa	13
As-Sweida	16
Dar'a	29
Hama	91
Homs	34
Lattakia	95
Quneitra	15
Tartous	*46*
Total	448

2.1.4 Limitations

There are a number of considerations and limitations that posed a challenge during the implementation, and some that are imposing limitations on the accuracy of the results and interpretation.

- The feasibility assessment was conducted well after the intervention had already started, and even concluded in some locations. This would have inevitably led to significant market distortions. This is not a minor issue as it affects markets, the main subject of the study.
    a. **On the supply side**, the introduction of UNHCR, an exogenous supply source that does not respond to market signals such as price, demand, and competition, may have disincentivized suppliers from developing supply chain capacities or allocating costly storage space for non-productive inventories of NFIs.
    b. **On the demand side**, NFIs being durable or semi-durable, would likely lead to some degree of demand saturation. This could make the impacts of the intervention cumulative and long-term. For example, if a community received a supply of Jerrycans, the demand for them would drop for a considerable period of time. Moreover, saturation would have further enhanced already present tendencies to repurpose items for other uses (e.g., mattresses for ground insulation).
- **The Market Assessment was managed remotely:** The consultants couldn't visit and oversee the data collection in person, extending the timeframe and having the data analysis done by a team not present during the FGDs, KIIs or vendor surveys.
- **Competing priorities and staff turnover:** The market assessment originally slated for Q1 2023 was delayed due to the catastrophic earthquake in northwest Syria and subsequent turnover of consultants leading the exercise. This led to a significant gap between developing the assessment methodology and initiating the data collection process.
- Similar to the other issues caused by the mid-intervention timing of the study, assessing the preferences and priorities of the affected population while constraining choice to the NFI Cluster's specified list posed some challenges. The findings show that the solutions employed by affected populations to address needs similar to the Cluster objectives can sometimes diverge from the narrow NFI specification. For example, while the intervention provides distinct items such as solar lamps, market alternatives were considered in terms of close alternatives, people often resorted to more efficient and cheaper lighting panels connected to a battery charged through a solar panel during the day (matching the objective of supporting domestic energy but not a distinct NFI). In addition, trying to limit the scope to the predetermined list, while having practical value, created some biases as well. Faced with a narrower choice, people prioritized more expensive items, as is often cited in the responses given in FGDs, rather than those that matched their immediate needs.
- **Resourcing limitations:** It was originally planned to conduct a pilot in one or two governorates to test and refine the tools before the scale up. Due to resource constraints, collection was rolled out simultaneously in all 11 governorates; used a single consultant rather than a team; and has not provided resources to data collection partners causing further delays.
- The under-resourced oversight team, and communication lag caused by remote oversight of the collection process, led to specific data quality issues becoming apparent only after the data collection had concluded. The main problems were caused by low response rates in FGDs and KIIs. Respondents were answering a set of questions for each item, sorted from the highest to the lowest priority, with

the response rate declining with each successive, lower-rated item. These smaller sample sizes for some NFIs made it difficult to disaggregate results by items and locations in some cases.

- **Last mile only:** Due to a number of constraints, the vendor survey focused solely on last mile retailers that households use for their purchases. Often, market assessments examine the full supply chain, including wholesalers and importers. A more thorough investigation is needed to estimate the total supply chain capacity for locally available NFIs in Syria.
- **Market information only:** The assessment aimed to inform cash scalability decisions based on market aspects, such as access and functionality. Other important factors, such as accessible cash delivery mechanisms and government acceptance were not covered in this assessment.
- Staff designing the assessment and analyzing results were unable to work with the data collection teams in real time. The processes were separated both temporally and personnel-wise, creating some issues with interpreting answers and naming conventions.
    - There were **regional variations in naming**. This was especially the case for items introduced to the market more recently and the naming convention did not have time to homogenize across the whole country (e.g., solar chargers).
    - Some item names are r**eferencing specific items introduced as in-kind assistance**, such as solar chargers and lamps that some refer to as "UNHCR lamps." However, assistance varies by location and actor involved and might not be comparable.
    - Some item names **denote intended use** rather than a specific item. For example, same type of mats might appear as "mat" or “floor mat”; “insulation” when used as an insulator on floors or walls, "sleeping mat" or “mattress” when used to add thickness to a mattress.
    - Some item names are used to **denote a broader category**. For example, jerry cans are sometimes used interchangeably with buckets, gallons, or other names to denote a broader category of plastic implements.

  The item names have therefore been standardized for this report to allow for comparison and analysis. Response entries that were harder to decode were inferred by using responses to related questions, such as availability, quality, type, reasons for choosing the item, etc.

Some additional lessons learnt on the overall methodology and how to factor in environmental considerations are also referenced in Annex 1.

2.2 Assessment of Potential Environmental Impact of NFI

During the initial stages of the project, with input from the Global Shelter Cluster’s Environment Focal Points, an NFI environmental scorecard was developed. The scorecard is an assessment process that takes into consideration various factors affecting the environmental impact of an NFI, e.g., the possible carbon footprint associated with the NFI, the lifespan of the item, the number of persons who might benefit from the use of the item, etc.

The scorecard has a list of 8 factors relating to environmental considerations, and data required for the scoring process were collected from various sources:

- **UNHCR supply chain:** Questionnaires were sent to UNHCR supply chain colleagues and partners for the NFI items distributed in-kind, one list of questions for each NFI item.
- **Phase 1 FGD:** Environmental related questions were integrated into the FGD to collect information on in-kind and market sourced NFI items.

- **Phase 2 vendor survey:** Environmental related questions were integrated into the vendor survey to collect information on market sourced NFI items.

After receiving the data collected, the data is analyzed and then used in the scoring process of the scorecard. The scorecard rating process is recommended to be done by a panel of three to five stakeholders who are familiar with and / or have technical knowledge of the NFIs being assessed, e.g., familiar with the sourcing and logistics of the NFI, the local context of how it is used in the field. The panel should review the data collected, discuss the results based on their knowledge and experience of the NFI, and agree the scoring for each factor. For Syria, a panel approach was not used, instead the GSC Consultant compiled the scorecard remotely based on the data collected.

After the scoring for each factor is completed, the results are plotted onto a spider chart - one spider chart for each alternative NFI item under comparison. The calculated area of each spider chart is the overall score for that particular NFI item. The spider chart produces a quick comparison of alternative NFI options. The greater the spider chart area, the less the expected environmental impact. The relative significance of each factor can also be seen in the plot. For more information refer to Annex 2: NFI Potential Environmental Impact Scorecard for Syria.

The spider charts can be used to identify which factors have greater or less potential negative environmental impacts (higher scores have less negative impact). It helps to identify the factors that can be improved (by raising the score) to reduce expected negative environmental impacts. For example, this can be done by changing specifications to extend the usable life of an NFI or reducing packaging.

The scorecard is not designed to be a comprehensive measurement of the environmental impact of a specific NFI. The scores provide a good enough basis for comparing different options for an NFI in terms of environmental impact and can provide information to feed into the decision-making process as well as highlight potential areas where overall environmental impact might be reduced.

For further details refer to Annex 3: Non-Food Item Potential Environmental Impact Scorecard for Syria - Guidance Notes.

To facilitate the use of the NFI Environmental Scorecard at field level, the following tools were developed, and these tools were designed to be user friendly and usable by non-experts:

- **NFI Carbon Assessment Tool for Syria (Annex 4):** A spreadsheet developed for assessing the anticipated global warming potential (GWP) of NFI items calculated as carbon dioxide equivalents (kg CO_2 eq). It should not be taken as an accurate measurement of the GWP of a specific NFI, instead it provides an estimate of the kg CO_2 eq for NFI items, which is used as a factor of consideration in the NFI Environmental Impact Scorecard.
- **Spider Chart Area Calculation Tool for Syria (Annex 5):** The calculated area of each spider chart in the scorecard is the overall score for that particular NFI item. This tool is developed to minimize the work needed to calculate each spider chart area. The end user only needs to select the pre-calculated triangle sizes based on the scoring of each factor and add the areas of all the triangles to get an overall score.

3. Key Findings

The following section of the report describes the key findings from the a) market assessment and b) environmental scorecard analysis in Syria.

3.1 Non-Food Item (NFI) Household Priorities

Respondents of FGDs and KIIs were asked to rank which specific non-food items were the most important for them and their household for the purposes targeted by the NFI Sector (i.e., Enhancing: ground insulation; shelter insultation; personal warmth; living space warmth; domestic activities; domestic energy). Each FGD group and KII respondent listed 8 priorities and organized them in order of importance. For FGDs, the answers were reported at the level of each session, i.e., the preferences are the result of the consensus among the participants of each FGD.

For various reasons mentioned in page 16 on naming conventions, the item names used by respondents are not always consistent.

The item names have therefore been standardized for this report to allow for comparison and analysis. Response entries that were harder to decode were inferred by using responses to related questions, such as availability, quality, type, reasons for choosing the item, etc. In summary, blankets, kitchen items, sleeping mats, clothing, mattresses, and solar lamp were items most commonly mentioned within the top 8 priorities for FGDs, with solar lamp, mattress, and plastic sheets most listed as 'priority 1', and blankets, mattress, sleeping mat, lamp and solar as 'priority 2'. For elderly and disabled respondents under the KIIs, priorities were slightly different, with clothing, blankets, mattresses, lamp, mat, and kitchen items most commonly mentioned across all priorities, and lamp, mattress, solar-charger, kitchen items and sleeping mat most listed as 'priority 1', and blankets, mattress, fan, lamp, and clothes as 'priority 2'.

Table 8: Prioritized NFIs, in order of importance (8 priorities) (FGDs)

	1st priority	2nd priority	3rd priority	4th priority	5th priority	6th priority	7th priority	8th priority	Frequency
Mattress	23	16	13	10	4		1	1	68
Solar lamp	20	5	5	5	3	2			40
Fuel	4		2	2	2	1	1	2	14
Water Tank	3	1						1	5
Blankets	7	32	19	10	4	2	2	1	77
Lamp	8	7	12	5	3	2	1	3	41
Insulation	1	1	6	4	4	2	1		19
Plastic sheets	7	3	5	10	7	2	4		38
Heater	2	5	5	7	6	4	3	2	34
Mat/rug	5	7	4	5	18	10	8	5	62
Kitchen items	1	3	4	13	7	18	9	14	69
Clothes	1	4	9	6	8	9	16	15	68
Jerry can			1	1	1	3	4	3	13

Table 9: Prioritized NFIs, in order of importance (8 priorities) (KIIs)

	1st priority	2nd priority	3rd priority	4th priority	5th priority	6th priority	7th priority	8th priority	Frequency
Mattress	30	25	22	15	6	2	4	8	112
Lamp	41	9	7	16	6	4	2	4	89
Solar lamp	15	4	2	1	1	1	1		25

Fuel	5	2	3	4	2	3	1		20
Blankets	8	55	25	7	9	3	4	3	114
Heater	1	1	7	6	3	1	4		23
Plastic sheets	5	1	8	19	18	4	14	6	75
Clothes	6	7	17	19	24	19	12	23	127
Mat/rug	9	6	4	7	21	22	11	6	86
Insulation	1	1	1			4	2	2	11
Jerry can					1	4	6	5	16
Kitchen items	10	4	13	11	7	14	13	23	95

The analysis of NFI priorities does not reveal any significant differences when broken down by the gender of the surveyed participants. Annex 10 contains additional information on preferences provided by FGD and KII participants, including results broken down by location and gender.

3.2 Feedback on NFIs received in-kind

In addition to asking participants about their priority NFIs, the assessment also asked households about their past experience with NFI assistance, including cash, vouchers and in-kind, and asked what their experience was, including what they liked and disliked about different modalities of assistance. The information on these helps triangulate preference data but also contextualizes some of the findings with these qualitative results. More detail can be found in Annex 10.

Items most disliked when received in-kind:

- Sleeping mats are universally disliked or ranked lower due to their poor quality and small size.
- Clothes are disliked for their low quality and because they are rarely provided in appropriate sizes or styles.
- Kitchen items are disliked because of their poor quality, inadequate quantities, and because they do not meet people's actual kitchen needs. In some locations, such as Al Hasakeh, people have a preference for certain materials such as aluminum pots.
- Jerry cans and other similar plastic implements generate very little enthusiasm, and there are many substitutes that are readily available. Some exceptions are noted for people living in camps with inadequate water supply and distribution and who have to carry and store water.
- Many types of heaters are inadequate for the spaces where people reside. Some types produce smoke and are not suitable for small and poorly ventilated spaces such as tents and often affect individuals with chronic respiratory conditions. Moreover, the heaters pose a fire risk in enclosed spaces and tents.
- Some respondents cite issues with mattress quality.

Items most liked

- The most liked item is the solar lamp. The items are sometimes referred to as "UNHCR lamps," and the particular type is not available in the market.
- Blankets are highly desirable, not only for their intended use but also due to their versatility to be used for insulation, curtains, or privacy separators.

- Finally, plastic sheeting, insulators, mats, and rugs, all contributing to space warmth, are highly rated by participants in FGDs and KIIs, but the quality was not always the same, and it varied in different distributions.

3.3 Factors influencing specific NFI choices

FGDs and KIIs respondents mentioned various reasons for prioritizing specific items. In summary, the below are the most frequently mentioned reasons:

- People are Influenced by their **living arrangements.** People living in tents, camp settings, damaged or rented housing have different needs. For example, people living in tents had different preferences for heaters, space, or ground insulators. In a more obvious example, heaters using combustible fuels were not ranked high by people residing in tents. The information regarding living arrangements was not systematically collected, so the analysis might be understating its effect.
- **Preferences are not well differentiated as specific products**, but rather by their intended use. For example, mats are mentioned as important for both ground insulation (mats) and sleeping as add-ons to mattresses. Plastic sheeting is sometimes cited as something that can be used as curtains, ground insulation, plugging holes in damaged housing, sunshade, or protecting tents from rain and wind. And in some cases, there is an overlap with other items, used in similar fashion.
- **Items are used for many purposes**, not always as they were intended by those providing them. For example, blankets are used as curtains, privacy dividers, ground insulators. In a more extreme example, one respondent mentioned using blankets to tailor warm clothes for children.
- **The use of items is informed by their quality**, or lack thereof. For example, some respondents requested mattresses of poor quality because they are useful as ground insulators; or very bad quality mats, which are used to insulate ground where mattresses are placed to provide insulation and additional thickness.
- Item **preferences are assessed not purely based on needs but also perceived gaps and cost and effort needed to obtain them.** This is sometimes mentioned explicitly as the reason. Items that are expensive, hard to obtain because of transportation logistics (e.g., mattresses) are more desirable. Questions on NFI priorities were separate from questions on preferred modality of assistance, but for many respondents who have received these through in-kind assistance it is hard to separate the two.
- **(Non)availability in the market** is an obvious reason for listing items as preferences, as these correspond to gaps for many households. Most notably, solar lamps, referred to as "UNHCR lamps" and "UNHCR chargers." Another example is plastic sheeting delivered by certain NGOs or UN agencies.
- In some cases, items are **preferred because they contribute to coping strategies for households**. One clear example of this includes blankets or thermal clothing preferred “because there is no heating.”
- Another finding emerging from the analysis is that **there is a strong substitution effect** affecting choice and usage behaviors. The substitution effect is not only at play because of the hardship but can also be triggered by quality of items provided. For example, blankets of lower quality were seen as a good ground insulator, not for NFI Cluster’s classification to “enhancing personal warmth,” but to the cluster’s classification for “enhancing ground insulation.” This is why it is important to examine incentives created by the in-kind intervention.

Annex 9 provides further information on preferences, including a list of reasons and frequency for FGDs and KIIs.

3.4 Modality Preferences

FGD and KII respondents were asked to indicate which modality of assistance (cash, vouchers or in-kind) they preferred for each of the 8 NFIs they prioritized. Most respondents preferred in-kind assistance for all items, with the exception of clothing where more respondents preferred cash.

Table 10a: Preferred modality (by item)

	FGD data			KII data		
	In-kind	Cash	Voucher	In-kind	Cash	Vouchers
Blankets	53	22	2	82	28	4
Clothes	14	43	9	53	57	16
Kitchen items	36	24	6	55	30	10
Mat/rug	40	19	2	63	19	4
Mattress	36	11	2	78	32	2
Solar lamp	31	7	2	19	5	1
Lamp	28	12	0	70	18	1
Plastic sheets	31	5	2	62	9	4
Heater	24	12	0	16	6	1
Fan	18	9	1	39	8	1
Insulation	11	7	0	10	1	0
Jerry can	6	6	0	9	5	2
Fuel	9	2	0	14	5	1
	337	179	26	570	223	47

The following table summarize the modality preferences by governorate. There are some notable differences, for example in Hama and Ar-Raqqa, a higher proportion of FGDs and KIIs reported preferring cash modalities, and in Al-Hasakeh almost an even split between FGDs preferring cash vs in-kind. Whereas in other governorates such as Homes, As-Sweida, Aleppo, Lattakia and Tartous, a higher portion of FGDs reported a preference for in-kind.

Table 10b: Modality preference (by governorate)

	FGD Data			KII Data		
	Cash	In-kind	Voucher	Cash	In-kind	Voucher
Al-Hasakeh	35	40	0	44	19	0
Aleppo	2	40	1	15	29	1
Ar-Raqqa	31	29	1	12	22	0
As-Sweida	5	23	17	12	28	13
Dar'a	4	0	0	1	4	0
Hama	23	16	0	30	22	3
Homs	5	17	0	13	26	1
Lattakia	12	45	0	38	79	11
Quneitra	0	8	0	0	10	3

Rural Damascus	0	18	5	3	31	13
Tartous	76	129	2	60	334	3
	193	365	26	228	604	48

Those who prefer the cash modality overwhelmingly gave “choice” and “past experience” with in-kind assistance as their main reason for the preference. The negative experience with in-kind assistance is most often related to quality issues or items not fitting the needs of individuals in households, such as clothes with sizes that don't match the need of individual household members. In general, a number of factors inform modality preference for respondents but the most often cited were these:

- **Availability**: Some items distributed through humanitarian assistance as in-kind are unique, such as "UNHCR" lamps and solar chargers, plastic sheeting, and in some cases, blankets. Markets are also generally not stable in terms of consistency of offering of products that are well known and recognizable, and prices are constantly rising.
- **Acceptability**: People prefer in-kind assistance because the items, while not perfect, are of acceptable quality. For example, mattresses that do not hold thickness and are of unsatisfactory quality are used for other purposes, such as ground insulation. Coupled with the inconveniences of transportation, acceptable quality plays an important role.
- **Affordability**: The amount that would be (or has been) provided as a transfer value for cash assistance is perceived as insufficient to satisfy needs, especially in the context of unstable prices and inflation.
- **Exploitation:** Some respondents are concerned about potential exploitation and price gouging by vendors who hold monopolistic positions in the market (though they did not mention that this had actually happened). This is especially problematic in camps where often there is only one vendor available for the entire camp.
- **Security and discrimination**: While not commonly mentioned, in some locations, particularly Al-Hasakeh, Aleppo and As-Sweida), people mentioned preferring in-kind assistance due to security and discrimination risks. Traveling through checkpoints and experiencing discrimination (towards those living in camps) are reasons for the preference of in-kind distributions.
- **Other reasons** given, such as inflation, convenience, and transportation (effort and price), overlap or are mutually reinforced with other cited reasons. Therefore, this is just an indicative rather than precise way to measure, but it provides valuable insight into modality preferences.

- While reasons for preferring in-kind can be broken down into many components, **choice** plays an outsized role in the preference for cash. The second reason cited for cash preferences is the **bad experiences with past in-kind distributions**, especially in terms of inadequate quality.

Chart 1. Reasons cash modality is preferred

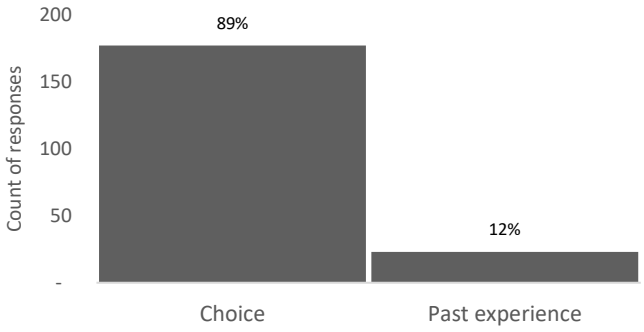
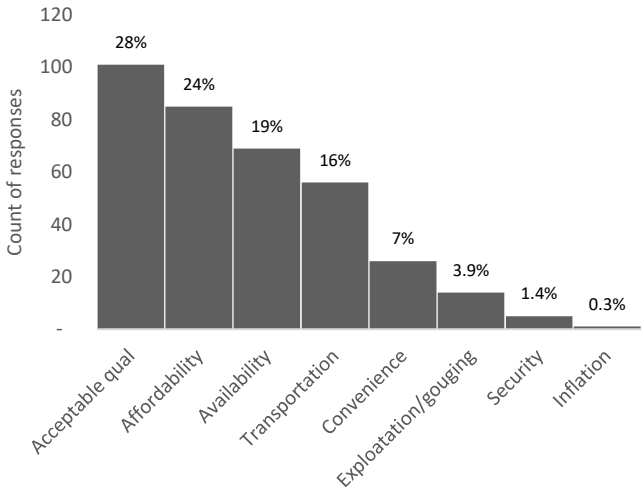


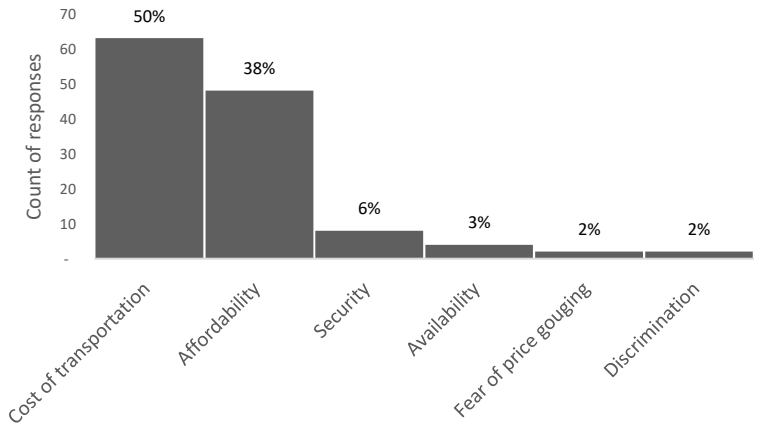
Chart 2. Reasons in-kind modality is preferred



3.5 Market Access

Generally, the participants of the FGDs and KIIs do not consider access to markets as a major issue. This was the case across men, women, and people living with disabilities and the elderly. When explicitly asked about obstacles to access, most respondents in the focus group discussions (FGD) and key informant interviews (KII) mention affordability and transportation costs, especially for larger and bulkier items like mattresses, rather than physical access challenges (such as distance). Other access-related issues such as security, availability, or discrimination account for small number of responses of the FGD participants and are not mentioned by KII respondents at all. The same is evident in discussions about preference for different modalities, where access to markets is not identified as a reason for preferring in-kind options. Instead, concerns about affordability, transportation costs, and convenience take precedence.

Chart3. Challenges accessing markets (FGD)



The main obstacle to accessing markets listed by respondents is transportation; however, contextualizing the information using qualitative analysis of answers shows that the primary concern is affordability, whether it includes unaffordable transportation or items themselves, rather than physical access challenges or being far from markets. In many cases, transporting larger, bulkier items, such as mattresses, can be more expensive than the items themselves.

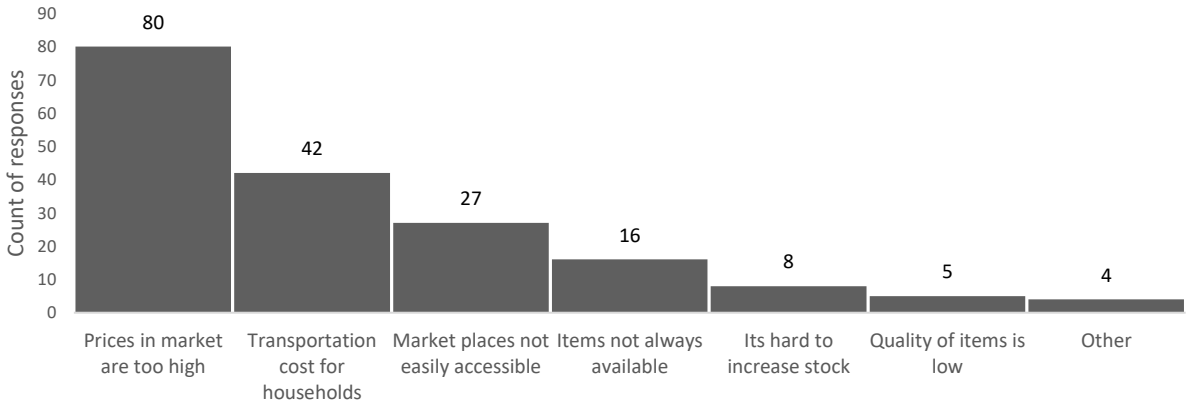
Transportation was reported as a problem in some locations as the means of transportation are not always easy to find, there are few public transportation options, the available connections are not relevant for those living in remote camps, all of which also contributes to the high cost of transportation. Less prevalent, but mentioned by a few participants, is that the means of transportation are overcrowded and pose security risks, and it is hard to find transportation options for bulkier items, such as mattresses or stoves.

Some people cite **security**, specifically having to go through checkpoints, as an issue in accessing markets. **Fear of exploitation by monopolistic vendors and price gouging** is also cited as a concern, especially in camp settings where there is often one monopolistic vendor serving the whole community.

Finally, some respondents cite **discrimination**, specifically the discrimination of people living in camps, as a challenge for market access.

In addition to FGDs and KIIs, the vendor survey also shows similar patterns. When asked about potential challenges their customers would face if they received cash assistance, the vendors surveyed cite similar issues, with 43% citing affordability and 23% citing high transportation costs as the two top anticipated problems.

Chart 4. Potential challenges in purchasing from local markets

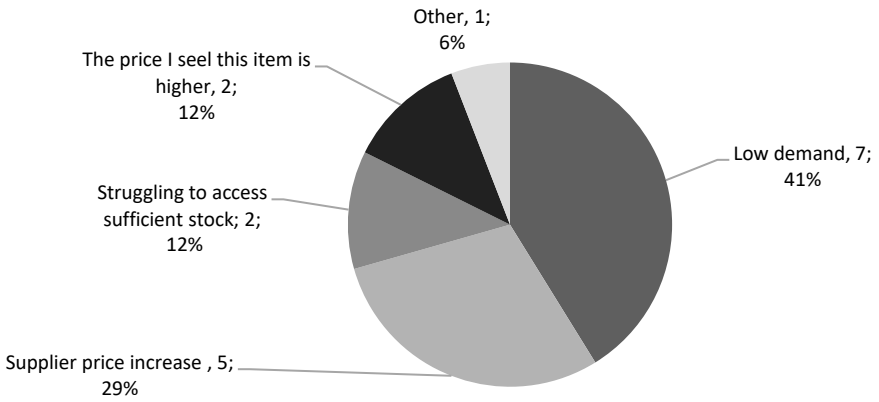


3.6 Availability

Availability does not appear to be a major concern based on the responses from FGDs, KIIs, and the Vendor Survey across all NFIs assessed. None of the respondents from either households or vendors reported large or persistent shortages. While there were some minor discrepancies, such as shortages reported by the governorate of As-Sweida in the FGD, the data from KIIs and Vendor Survey does not validate these results. Annex 10 provides a detailed breakdown by location and survey.

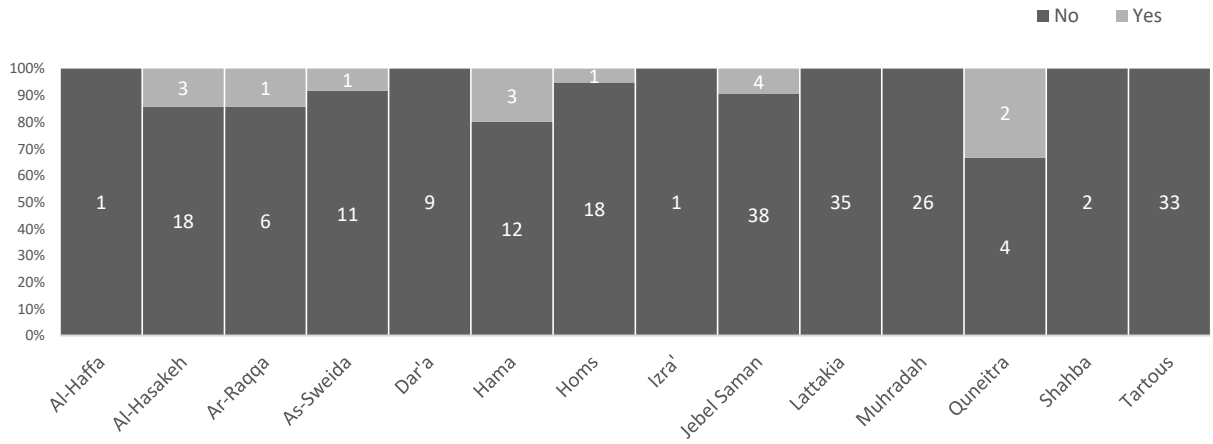
Furthermore, respondents of the Vendor Survey did not indicate any issues with maintaining sufficient stocks of items. When asked about reasons for reducing stocks, most vendors cited demand-driven factors rather than supply difficulties. Specifically, only 11.76% identified access to sufficient stocks as an issue, while low demand or high prices faced by customers accounted for 82%.

Chart 5. Vendors' reasons for reducing stock



In addition, 93% of vendors reported no shortages in the past year (across all items and locations). The charts below provide a breakdown of reported shortages by governorate and item, highlighting only locations and items where fewer than 100% of respondents reported shortages.

Chart 6. Have there been any shortages you experienced in the past year?



When looking by item, there were no shortages reported in the last year for cooking pots, frying pans, or winter jackets, and 90% or more vendors reported there being no shortages in the last year of heaters, children's socks, sweater, mattress, sleeping mat, plastic sheets, thermal underwear, and high thermal blanket. 87% of vendors reported that there had been no shortages for solar lamps in markets in the last year.

According to additional data from the vendor survey, it is also suggested that the market has the capacity to maintain and increase supplies in response to seasonal or more acute shocks.

When asked about when they experience the most shortages, vendor responses indicated that the majority of shortages occur either between January and May or from May to September. Specifically, 67% of vendors reported that most shortages occur in the former time frame. This somewhat corresponds to the FGD and KII findings that indicate shortages are mostly in winter. There is, however, insufficient data to disaggregate this by item.

Respondents of the FGDs were also asked to identify ways they cope with shortages, regardless of how infrequent they may be. Table 11 summarizes their responses.

Chart 7. Were there any shortages of items reported in the last year?

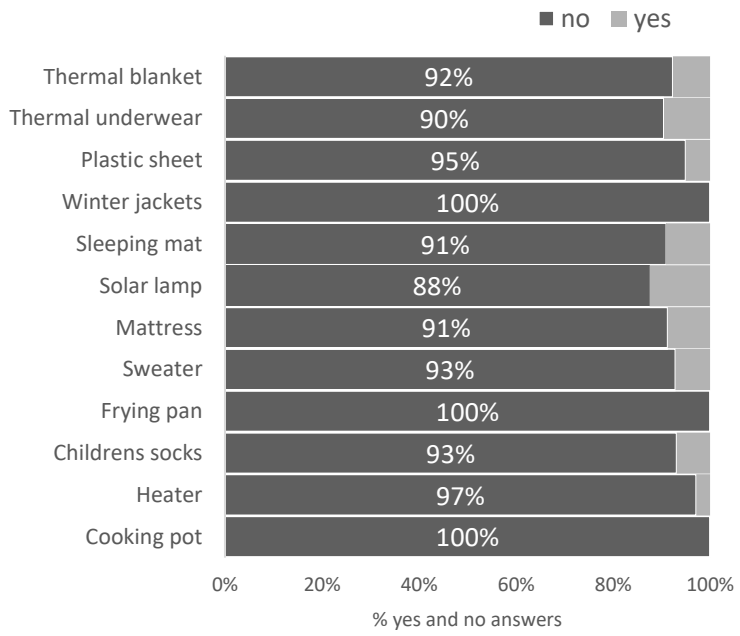


Table 11: How did FGDs participants cope with shortages

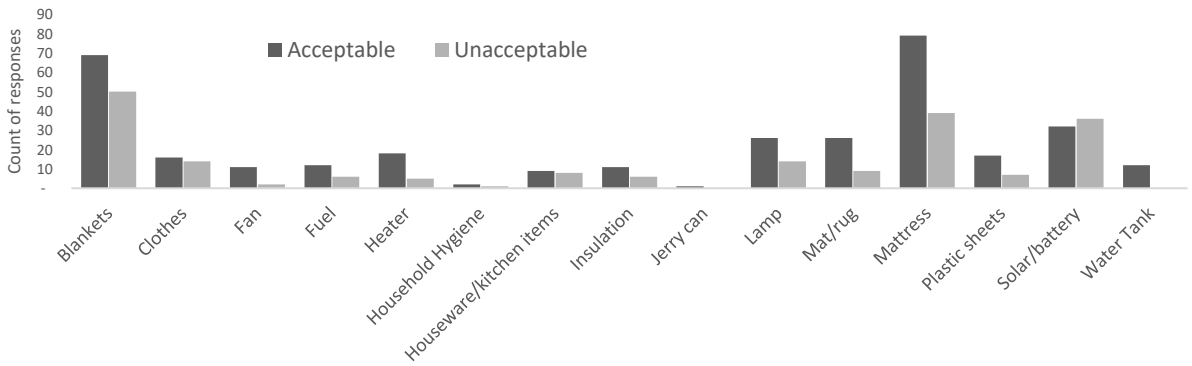
To cope with shortages of heating and adequate bedding	
Used blankets for warmth	8
Burning junk	1
Used small heaters	1
Use makeshift insulation	1
Used warm clothing	1
Firewood	8
To cope with shortages of electricity and light	
Candles	7

Kerosene lamp	2
Use portable lamps	2
Other solutions	
Other makeshift solutions	1
Purchase second-hand items	5
Tried to repair old items	4

3.7 Quality

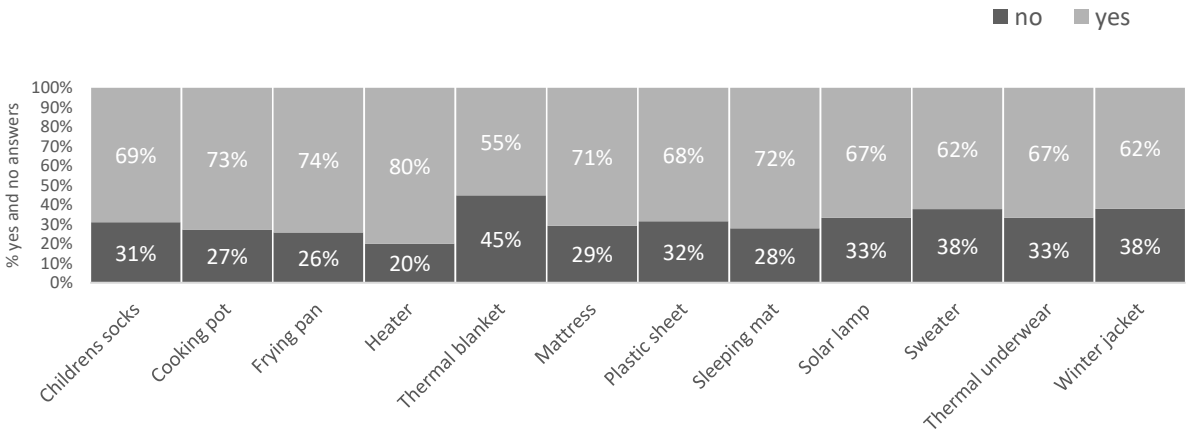
Enumerators conducting the vendor survey were asked to make a judgment, based on the cheat sheet provided by the NFI sector, on the quality of the items available in local markets. Similarly, FGD and KII respondents were also asked to comment on the acceptability of the quality of each NFI they prioritized in preceding questions that is available for purchase in local markets. Responses from the vendor survey enumerators, KIIs and FGDs generally expressed satisfaction with the quality of NFIs available in the market. The chart below provides percentages of satisfaction with quality, broken down by item. The sample data is from FGDs and shows that the only issue with quality was expressed regarding solar lamps, which were preferred when received by UNHCR. More detailed data from Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs) can be found in Annex 10.

Chart 8. Is quality acceptable? (by item category) for FGD Respondents



Similarly, the enumerators conducting the vendor survey generally believed that NFIs available with local vendors were of a quality that corresponded to the specifications of the NFI sector in Syria (at least 61% of vendors across all items were considered to sell NFIs of acceptable quality).

Chart 9. Do items the vendor is selling meet NFI cluster specifications



3.8 Price

The vendor survey aimed to identify seasonal price trends for different items in various locations. As anticipated, the majority of price increases were reported during winter (which is consistent with the perception that if there are shortages, this is more commonly experienced in winter months). The graph below illustrates the reported high and low seasonal price trends across different governorates. The steepness of the lines indicates the governorates in which winter spikes were most prominent compared to summer.

Chart 10. Seasonal price changes

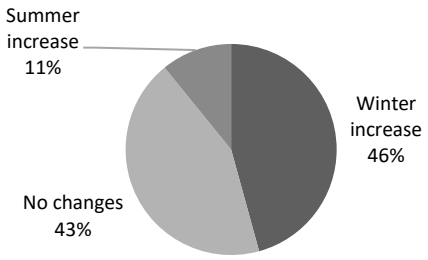


Chart 11. Seasonal price change

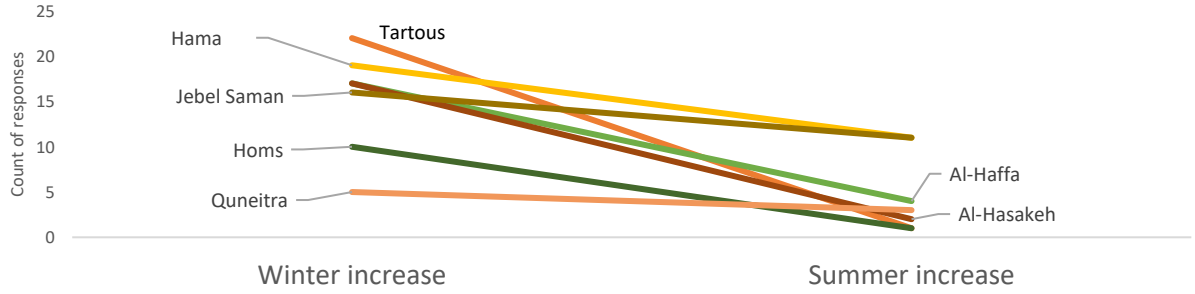
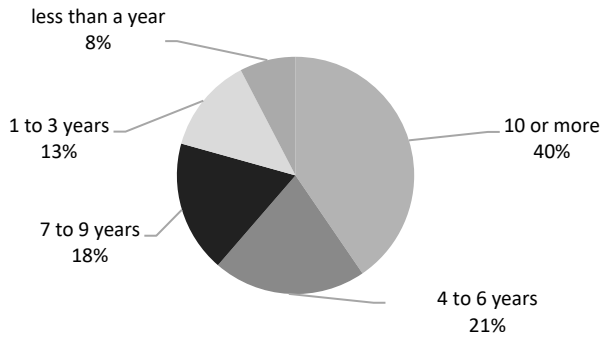


Chart 12. Years operating business



The vendor survey also gathered information on item prices. However, as prices are variable, the Syria NFI sector should consider a price survey, and regular price monitoring, to gather accurate prices to base any potential program design decisions on (e.g., setting transfer values for cash assistance). The prices are presented in Table 12 and are represented as median values to mitigate the impact of outliers.

Table 12: Median prices in Syrian Pounds (vendor survey data)

	Children's socks	Cooking pot	Frying pan	Heater	Thermal blanket	Mattress	Plastic sheet	Sleeping mat	Sweater	Thermal underwear	Winter jackets
Aleppo	4,500	210,500	5,000	330,000	57,000	275,000	225,000	16,500	26,000	4,000	150,000
Al-Hasakeh	6,250	82,500	5,000	450,000	5,000	150,000	5,200	5,000	80	75	100
Ar-Raqqa					400				15,000		
As-Sweida	5,000	103,500	70,000	650,000		250,000		110,000	45,000		150,000
Dar'a	5,000	8,000	9,500	825,000	250,000		55,000		60,000	3,000	250,000
Hama	2,500	300,000	150,000	450,000		210,000	175,000	90,000	150,000	10,000	
Homs	5,000	60,000	14,000	300,000	347,500	150,000	14,000	30,500	82,500	100,000	250,000
Lattakia	6,000	35,000	18,000	1,200,000	250,000	487,500	54,000	80	45,000	50	250,000
Quneitra	10,000	87,540	44,000	800,000			20,000	300,000			
Tartous	6,000	166,000	100,000	625,000	125,000	325,000	100,000	95,000	18,000	19,000	165,000
Total	5,000	61,000	25,000	587,000	64,000	210,000	140,000	37,000	33,500	3,500	150,000

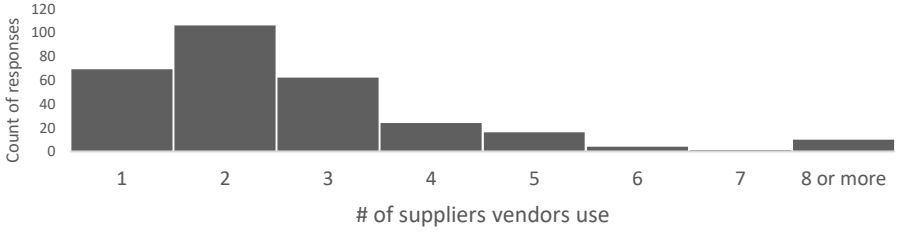
3.9 Market Capacity

Of the 448 vendors surveyed, 52% were retailers, while 45% had a mixed retail-wholesale model. The majority of them were experienced, with 79% having operated their businesses for more than 4 years.

69% of respondents reported selling items that meet NFI Cluster specifications.

The overwhelming majority of the vendors' suppliers are located in Syria (97%), mainly in large cities such as Damascus, Aleppo, Hama, and Lattakia. As a result, 97% of vendors bring

Chart 13. Vendors' reasons for reducing stock



their supplies using roads, while a few use air or sea transportation. Most vendors have at least 2 suppliers, with a smaller number using more or fewer sources. This demonstrates that vendors have multiple sources for accessing stocks.

Table 13: Sellers (competitors) operating in this market (median of the reported values at far right)

	Childrens socks	Cooking pot	Frying pan	Heater	Thermal blanket	Mattress	Plastic sheet	Sleeping mat	Solar lamp	Sweater	Thermal underwear	Winter jackets	**Location median**
Al-Haffa		2											2
Al-Hasakeh	7	20	20	5		9		7			40	40	17
Ar-Raqqa	10	2			2					2	10		3
As-Sweida	5	4	6	6				30	5	10		4	5
Dar'a	3	3	3	1	5					8	3	8	3
Hama	50	7	7	15			15	2	0		50		7
Homs	1	6	3	2	30	5		6		4	1	25	4
Izra'				9									9
Jebel Saman	12	3	4	9		7	40	8	10	6	8	13	8
Lattakia	3	2	2	2	1	1	1	2	3	9	3	15	2
Muhradah	6			6		5	5	6	5	7			5
Quneitra				10			4		7				5
Shahba	5			6					4	5		5	5
Tartous	3	6	5	4	1	1	0	1	10	4	2	2	2
Item median	5	4	4	5	1	5	5	4	5	7	3	5	5

45% of vendors reported looking for other suppliers when items are not available, while the remainder either wait or reported no issues with their current suppliers. 97% also feel confident that they can meet increased demand using their existing supplier network. However, among those who expressed uncertainty about their current suppliers, 67% believe they can find other suppliers if needed.

In the past year, 93% of vendors reported no shortages. When asked about their ability to meet a 50% and 100% increase in demand, only 5% and 9% respectively reported needing more than 2 weeks to meet the increased demand.

Chart 14. Restock speed at 50% demand spike

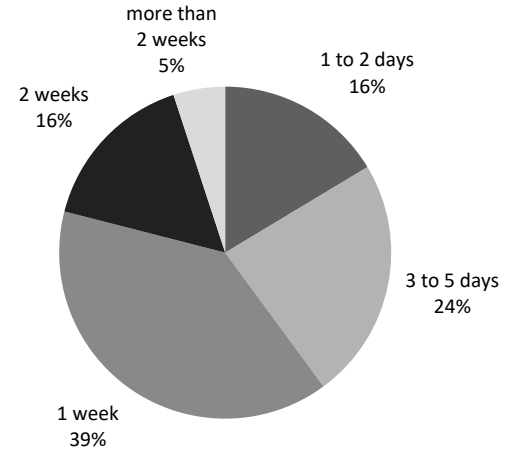
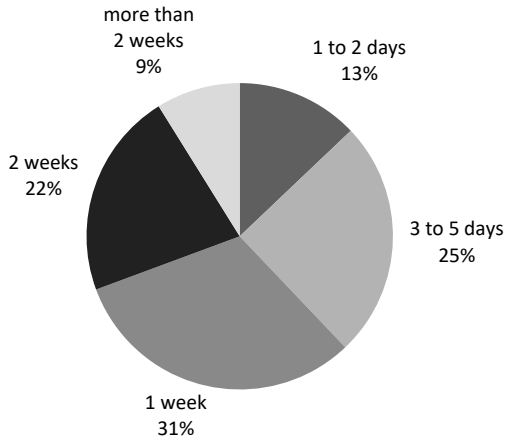


Chart 15. Restock speed at 100% demand spike



The majority of vendors store their stocks in warehouses, while 44% store stocks in the store or with the supplier. However, most vendors (82%) say they can increase storage capacity if needed to meet increased demand. 30% report repackaging items they sell to customers. Most are accustomed to frequent monthly or weekly restocking.

Chart 16. Do you currently purchase on credit from supplier

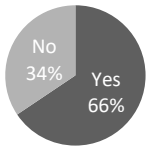
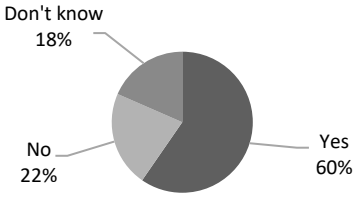
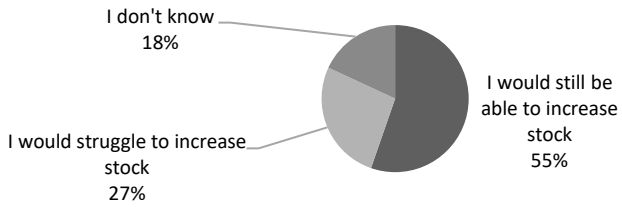


Chart 17. Could you increase credit if demand spikes?



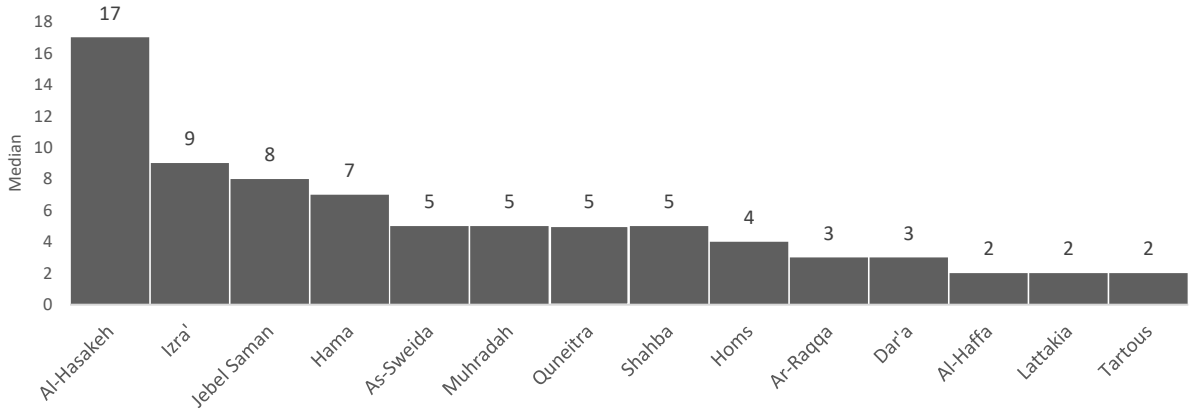
65% of vendors obtain credit from suppliers to facilitate purchases, and 59% believe they can increase this credit to meet increased demand. However, for those that could not increase credit if demand increased, 55% of respondents believe that this would not prevent them from increasing their supplies.

Chart 18. If supplier stopped selling on credit, would you still be able to increase your stock?



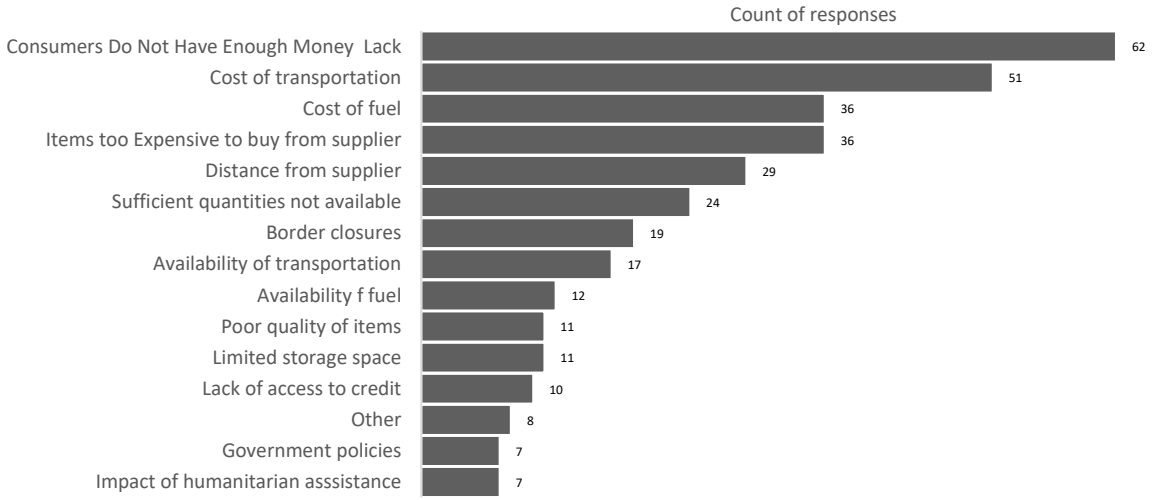
Vendors reported an average of 8 other competitors operating in their location, demonstrating reasonable competition. However, only 38% of respondents believe that customers have a large choice of vendors, with the rest citing limited choices.

Chart 19. How many other vendors are there at your location (median)



Vendors were asked about the main constraints faced in their operations, and the main challenges reported were related to consumers not having enough money to purchase items (i.e., limited demand), followed by the cost of transportation and fuel. Some reported border closures and distance from suppliers were also a challenge (though they reported this would largely not impact their ability to increase supplies as mentioned earlier). Some vendors mentioned the impact of humanitarian assistance on their business (i.e., suppressed demand due to in-kind distributions).

Chart 20. Main challenges for vendors



Finally, when asked about potential problems if they were to meet increased demand due to cash assistance from humanitarian actors, 57% did not foresee any issues, 13% were unsure, and 29% saw issues in the market's ability to supply the demanded items. The specific issues cited are presented in the Chart 4 (page 24), which appears in Market Access section above.

3.10 Assessment of Potential Environmental Impact of Selected NFI Items

3.10.1 NFI Items Selected for Scorecard Analysis

In the initial stages of the project, the following NFI Items were selected to be considered for scorecard analysis, based on NFI priority items at the time:

- Blanket
- Mattress
- Plastic sheet
- Heater
- Sleeping mat
- Sleeping bag
- Female winter jacket
- Winter clothing kit (male sweater, male thermal underwear and children socks were selected out of 15 items in the kit)

Questions related to environmental factors in the scorecard analysis were integrated into the FGD and vendor survey for these NFIs. Based on the responses, only four items have sufficient quality data to support the scorecard analysis – blanket, mattress, plastic sheet, and heater. The remaining items were not considered for these reasons:

- Very few responses (zero to three) came back from the FGD for sleeping mat, sleeping bag and winter jacket, as they are not considered as the top 3 priorities by most FGDs (and the environmental questions were only asked of the top 3 priorities to reduce the burden of data collection and time from participants).
- For winter clothing items, the FGD responses are for "winter clothes" and not identified as individual clothing items. Lifespan for children's socks may be very different from that of sweaters. It is difficult to make assumptions for the scoring of each clothing item based on these responses.

The vendor survey data was analyzed for the four selected items. For each item, there are many different types of alternatives available in the market in respect of material composition, country of origin, etc. Two to three alternative items are selected for the scorecard analysis of each NFI, based on the quantity and quality of information received. The items finally selected for the scorecard analysis are as follows:

1. Blanket
   - UNHCR In-kind: Made in Pakistan, 100% Polyester, 0.75kg
   - Market sourced Type 1: Made in Syria, 100% Cotton, 3kg
   - Market sourced Type 2: Made in Syria, 50% Polyester 50% Cotton, 3kg
2. Mattress
   - UNHCR In-kind: Made in Syria, 100% Polyurethane foam, 4kg
   - Market sourced Type 1: Made in Syria, 100% Polyurethane foam, 6kg
   - Market sourced Type 2: Made in China, 100% Polyurethane foam, 6kg
   - Market sourced Type 3: Made in Syria, 100% wool, 2.67kg
3. Plastic sheet
   - UNHCR In-kind: Made in Pakistan, 100% Polyethylene, 4kg
   - Market sourced Type 1: Made in Syria, 100% Polyethylene, 4kg

- Market sourced Type 2: Made in China, 100% Polyester, 6kg

4. Heater
   - UNHCR In-kind: Made in Syria, 80% Steel, 20% Aluminium, Porcelain Paint, 17kg
   - Market sourced Type 1: Made in Syria, 100% Cast Iron, 16.3kg
   - Market sourced Type 2: Made in Syria, 70% Steel, 30% Burnt Brick Tiles, 11.7kg

For more information refer to Annex 6 – Analysis of Market Assessment Data from Environmental Related Questions.

3.10.2 Carbon Assessment of Selected UNHCR In-Kind Items

While preparation for the market assessment was ongoing, carbon assessment was conducted for all the 10 selected UNHCR in-kind items. The purpose was to assess the key contributing factors of carbon footprint for each item. The findings are summarized in the table 14 below:

Table 14: Factors contributing to carbon footprint

UNHCR NFI Item	Component Materials	Packaging	Transport	End of Life	Country of Origin
Blanket	81.17%	0.53%	6.48%	11.82%	Pakistan
Mattress	77.03%	7.58%	6.74%	8.64%	Syria
Plastic Sheet	68.37%	0.03%	22.00%	9.60%	Pakistan
Heater	99.23%	0.00%	0.74%	0.03%	Syria
Sleeping Mat	81.27%	0.44%	6.46%	11.83%	Pakistan
Sleeping Bag	91.50%	0.31%	4.87%	3.32%	China
Winter jacket	81.57%	0.85%	2.27%	15.31%	Syria
Sweater	83.75%	0.81%	2.00%	13.44%	Syria
Thermal Underwear	82.48%	1.68%	2.09%	13.75%	Syria
Children socks	84.32%	0.44%	1.98%	13.26%	Syria

As indicated in the above summary, component materials have the biggest impact on carbon footprint. Transport contributes to a relatively small proportion, regardless of whether it is imported or produced locally. (Note: None of the NFI items in this study uses air freight.)

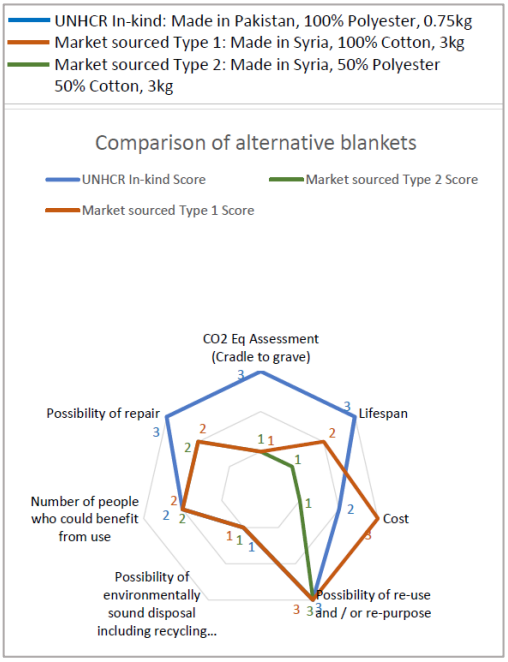
For more information refer to Annex 7 – Carbon Assessment of UNHCR In-Kind NFI Items.

3.10.3 Scorecard Analysis Findings

Due to the context of the conflict situation in Syria, it was not practical to form a panel of 3 to 5 stakeholders for the scorecard rating process. The scorecard rating was conducted by the GSC consultant alone and remotely, based on the data received from questionnaire replies from UNHCR and partners, Phase 1 FGD and Phase 2 vendor survey results. The findings are summarized as follows:

Blanket

The UNHCR in-kind polyester blanket has the largest spider chart area and therefore potentially has the least negative environmental impact. The main reasons are firstly that it is much lighter than the other two alternatives and therefore consuming less material, hence has much less carbon footprint. And secondly it has a longer lifespan. For the other two items, Type 1 100% cotton blanket potentially has less negative environmental impact than the Type 2 50% polyester 50% cotton blanket, the reasons being it has a longer lifespan, and it is cheaper.

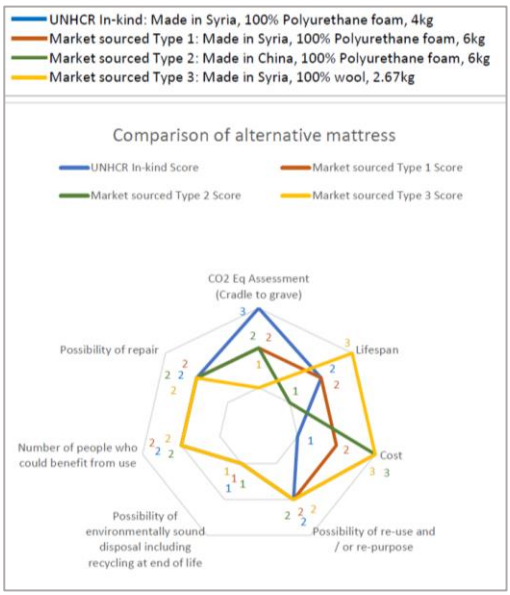


NFI Environmental Scorecard for Blanket

For both types of market sourced blankets, the factor of environmental impact that can be managed is to promote environmentally sound disposal including recycling of the blankets, as both types of blankets have cotton content. Note that from the vendor survey there are 32 types of blankets of different material compositions available in the market. If beneficiaries are given cash support, they may buy any type of blanket and the results of the environmental assessment and impact mitigation suggestions may not be the same.

Mattress

The market sourced Type 3 wool mattress has the largest spider chart area and therefore potentially has the least negative environmental impact. The main reasons are it has a longer lifespan and is cheaper than two other alternatives and about the same price as one alternative. However, it should be noted that the wool mattress has a much higher carbon footprint than the other three alternatives because wool has a much higher carbon footprint than polyurethane. For the other three items, two have the same score – UNHCR in-kind and market sourced type 1, both made in Syria and of 100% polyurethane. The mattress made in China potentially has the highest environmental impact, the reasons being it has the shortest lifespan (less than 6 months) and the second highest carbon footprint because of shipping from China and is heavier than the UNHCR in-kind mattress.



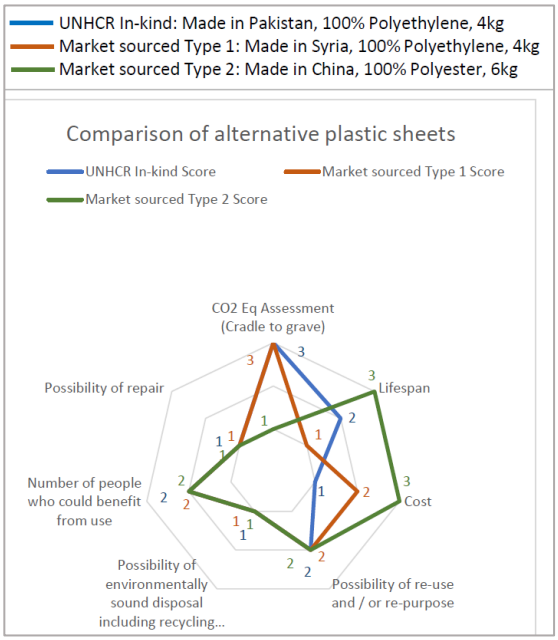
NFI Environmental Scorecard for Mattress

For the UNHCR mattress, one factor of environmental impact that can be managed is to change the specification to improve the lifespan. From the vendor survey about 40% of mattresses available in the market have a lifespan more than 3 years while for UNHCR mattress it is 2.9 years (average lifespan based on responses from FGD and UNHCR). For all mattresses (in-kind or market sourced), the environmental impacts that can be managed are to bring in tools and skills to promote repair of the mattresses, and to promote environmentally sound disposal including recycling especially for the mattresses that have wool

content. Note that from the vendor survey there are 14 types of mattresses of different material compositions available in the market. If beneficiaries are given cash support, they may buy any type of mattress and the results of the environmental assessment and impact mitigation suggestions may not be the same.

Plastic sheet

The market sourced Type 2 polyester sheet made in China has the largest spider chart area and therefore potentially has the least negative environmental impact. The main reasons are it has a longer lifespan and is cheaper than two other alternatives. However, it should be noted that the polyester sheet has a much higher carbon footprint than the other two alternatives because polyester has higher carbon footprint than polyurethane. For the other two items, the UNHCR in-kind plastic sheet has potentially less negative environmental impact than Type 1, mainly because it has a longer lifespan.

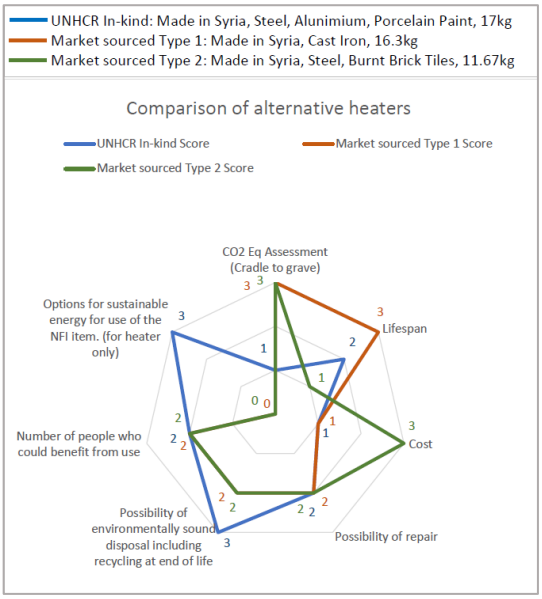


NFI Environmental Scorecard for plastic sheets

For all plastic sheets (in-kind or market sourced), the environmental impacts that can be managed is to bring in tools and skills to promote repair of the plastic sheets, and to promote environmentally sound disposal including recycling. Note that from the vendor survey there are 14 types of plastic sheets of different material compositions available in the market. If beneficiaries are given cash support, they may buy any type of plastic sheet and the results of the environmental assessment and impact mitigation suggestions may not be the same.

Heater

The UNHCR in-kind heater has the largest spider chart area and therefore potentially has least negative environmental impact. The main reason is that there is no data available on the type of fuel used in the two market sourced alternatives and therefore a zero score was given for the factor of sustainable energy source. It should be noted that the UNHCR in-kind heater has a much higher carbon footprint than the other two alternatives because it uses 20% aluminum which has a much higher carbon footprint than steel, cast iron and burnt brick. It is also heavier than the other 2 alternatives therefore consuming more materials and having a higher carbon footprint.



NFI Environmental Scorecard for heaters

For the market sourced heaters, the environmental impact that can be managed is to promote environmentally sound disposal including recycling. The environmental impact of the fuel type is to be assessed when information becomes available. For all heaters (in-kind or market sourced) the

environmental impact that can be managed is to bring in tools and skills to promote repair of the heaters. Note that from the vendor survey there are at least 30 types of heaters of different material compositions available in the market. If beneficiaries are given cash support, they may buy any type of heater and the results of the environmental assessment and impact mitigation suggestions may not be the same.

For more details of the scorecards, refer to Annex 2: NFI Potential Environmental Impact Scorecard for Syria.

3.10.4 Observations and Recommendations

1. Due to the conflict situation in Syria, it was not possible for the consultants working on this project to visit the field and the market. All the work was done remotely, with field work done through UNHCR colleagues and partners. It was not possible to form a panel with stakeholders that have technical knowledge and familiarity with how the NFI items are used by the beneficiaries, to discuss and review the data received, before agreeing on the score of each factor. For example, in the case of the lifespan of plastic sheet, the panel could decide that since the vendors responses were all based on plastic sheets to be used in an urban context, the estimate of lifespan for UNHCR plastic sheet could be adjusted to the same context and the overall scoring would be different.

2. The scorecard is designed to be a simple tool that identifies all the important factors for environmental considerations and highlights the differences between alternative NFI items. The overall score is not meant to be an absolute score that concludes item A is "better" than item B. Instead, it compares the strength and weakness of each item, and the information can be considered in the decision-making process while selecting the NFI items and / or modality of the project. The end users need to be informed and understand how to use the results from the scorecard. Despite the fact that only 4 items could be scored with the environmental scorecard, the team in Syria could replicate the scorecard analysis for other items (but consider limiting the data collected to inform this based on what is reasonable and feasible).

3. At country level or field level, it may not always be possible to control the supply of the NFI items, but it may be possible to manage the impact. With information from the scorecard, it is possible to identify where the impacts can be managed. For example, if the repair or re-use of a particular type of plastic sheet can be promoted through bringing in tools and skills, the scoring of that item can be improved. The end users should understand how to use the results from the scorecard to manage environmental impacts.

4. In trying to maintain the simplicity and user-friendliness of the scorecard, the scoring may not reflect the true picture of the data. For example, for the mattress, the $kgCO_2eq$ of the wool mattress is 3 times that of the UNHCR one, and about twice of the other two types. The scoring for the $kgCO_2eq$ factor is 1 for the wool mattress, 3 for UNHCR and 2 for the other 2 types. If the $kgCO_2eq$ for the wool mattress is only marginally higher than the other 3 types, the scoring may still be the same i.e., 1 for the wool mattress, 3 for UNHCR and 2 for the other 2 types. One possible method to remedy this problem is to have a larger range of scoring, for example using 0 to 5 instead of 0 to 3. However, this will make the spider chart area calculation more complicated. The current spider chart area calculation tool has 6 types of triangle area to choose from, if scoring range of 0 to 5 is used, there will be 15 types. The adaptation of the tool to be used in other context / country will be harder.

5. Not all factors have the same level of importance, for example carbon assessment may be more important in environmental considerations than cost. One possible method to remedy this problem is to have a weighting system for each environmental factor in the scoring. However, this will add to the complexity of the scorecard. The scoring range will be much larger if weighting is added, and spider chart calculation much more complicated. Finding a way to agree the weights may also be challenging. The weighting used in one context may not be applicable to another and hence making adaptation of the tool more difficult.

6. It is a fine balance between having a simple and user-friendly tool and the level of "accuracy" of the results. As described in item 2 above, the tool is not meant to give an "accurate" scoring of each item to identify the "best" item and making the tool more complicated to increase the "accuracy" may not add too much value considering how the results should be used.

7. A large number of information needs to be collected for each NFI item in order to complete the carbon assessment and the scorecard. A balance needs to be struck between the length of the questionnaires and interviews with the accuracy and relevance of the data collected. For example, in the FGD the beneficiaries were asked what the 8 priority items were and then the environmental related questions were asked for the top 3 items, making the process quite long and cumbersome. As the top 3 items may not be the same in different areas and focus groups, the results came back with many items having the sample size too small to be useful and hence discarded. For future projects, there should be a less ambitious scope and the number of NFI items to be studied for scorecard analysis should be limited to a few (for this project there were 10 items, 3 of which were winter clothing items). This will reduce the length of the interviews and help to ensure the questions are more targeted and specific (for example be specific about size of blanket or sweater when asking for weight information so as to ensure we can compare apple to apple while doing the analysis, and questions for heater should be different as information on fuel need to be gathered), and hence better quality data will be collected.

8. Although environmental factors are an important component of program design and modality decision making, they are not the only factor to be considered. In addition, providing cash, by nature, gives targeted household the freedom of choice to purchase based on their priorities. Given the number of possible alternatives and different quality types of each item available in local markets, it is questionable whether this level of detailed environmental analysis on items equivalent in specification (or as close to) the NFI Sector's catalogue is worthwhile. Instead, it might be more valuable to take a broader look at target households purchasing patterns and which items they are likely to purchase, to then analyze potential environmental considerations and look for potential mitigating measures. Alternatively, the type of environmental analysis conducted during the assessment in Syria could be conducted in order to inform early procurement decisions as part of preparedness efforts (but is not necessarily appropriate in rapid or ongoing emergency responses).

9. There should be follow up actions on dissemination and training (if necessary) on the developed tools to enable them to be adapted for other contexts.

4. Conclusions and Recommendations

The tables in Annex 9 summarize the main results of the assessment from the available data by item type and governorate, related to priority, modality preference, quality, and market capacity.

This study contributed to an already existing body of evidence on the preferences of the affected population and the capacity of the supply-side market actors to maintain functioning markets for NFIs.

The data collected from the population has shown that there are no significant barriers to market access in terms of availability or physical access, but rather issues of affordability related to income and prices.

The evidence also shows that future expectations play a significant role in how people form preferences, especially about preference for in-kind modality. The uncertainty related to the conflict and sanctions is causing concerns about the stability of prices, supply chains, the ability to earn income, and other related issues. This was repeated in many responses, where people expressed concern about cash assistance not keeping up with price changes, or additional costs such as travel or transportation of bulkier items.

These results are consistent with other previous assessments and studies. Preferences for types of items were as expected, related to many of the items provided by the cluster, but also included requests for hygiene items, rechargeable fans, as was the case in "Syria-Shelter and Non-Food Item Needs Assessment", "Multi-Sector Needs Analysis" and several of the SNFI Cluster's Factsheets.

Similarly, on market functionality, the findings of this report align with the earlier ones, starting with "Syria-Shelter and Non-Food Item Needs Assessment" stating that "most of the interviewed displaced and host population (70%) strongly agreed that basic non-food items are always available in the market." The "Multi-Sector Needs Analysis," finds that, "Access to NFIs is limited by affordability, not availability."

These results on functioning markets are further reinforced by the vendor survey conducted for this study. The findings show that vendors have the ability for the most part to provide items aligned with the cluster specifications, have not experienced any major supply shocks or constraints recently, and are confident in their ability to scale up if needed using their current network of suppliers.

The data is further broken down by different items and locations (tables below), but due to slicing of the dataset first by location, then item, they suffer from low sample to be able to provide basis for strong inferences for specific localities. However, with this caveat in mind, they do now show any specific concerns or red flags related to any location or item.

In summary, the study reveals two opposing elements. The first is a preference for in-kind modality, perceived as less dependent on the uncertainty and volatility of Syria and its local markets. The second is the existence of functioning markets that can meet the needs of the affected population but are simultaneously negatively impacted by in-kind intervention. This intervention could potentially harm and distort the markets, reduce resilience and sustainability, and even negatively affect productive economic activity of local industry and commerce.

Given these, the study recommends:

NFI actors in Syria should consider using cash assistance to address priority NFI needs of households, either for seasonal needs, or for immediate emergency needs.

- Markets are functioning and are sufficiently developed to respond to increased demand from potential NFI cash-interventions. Moreover, continued in-kind intervention inevitably impeded the development of local market capacity and resilience.

    - Considering the observed diversity of needs across various demographics (e.g., people in camps, living in tents, urban, rural, different climates, etc.) and the observed tendency to repurpose NFIs for different uses, using a standardized package to addresses these varied needs and preferences is challenging. A cash-based intervention could remedy this.
    - Cash assistance would fuel growth and strengthening of market capacities, thus contributing to long-term sustainability and resilience.
- The existing NFI Cluster specifications are well-designed to maximize utility for in-kind program recipients (e.g., they benefit most people most of the time). However, they should not serve as a rigid reference point when considering a move to market-based approaches. The NFI Cluster's objectives[5] would be better served if market mechanisms are allowed to mold to more individualized household-level needs. To ensure this, a switch to a cash-based intervention should be accompanied by a robust monitoring system adept at measuring outcome-level results.
- Transfer value for any cash assistance for NFIs should be based on up-to-date market prices and include coverage of transportation costs to overcome the barriers faced by households in transporting bulkier items. The NFI sector should continue to monitor markets and provide updated transfer values to inform partner's cash-based assistance packages.
- NFI partners providing cash assistance for NFIs should undertake market monitoring to understand any potential impact of cash assistance in local markets. This is particularly important in markets outside of main urban areas, and especially in camps where the number of vendors, and competition, is low.
- As with any modality of assistance, any NFI cash assistance should include post-distribution monitoring. Where cash is provided for NFIs, NFI sector partners should pay particular attention to understand safety and security risks faced in accessing cash assistance and in utilizing cash assistance to purchase priority needs in local markets.
- Given that this assessment did not cover all target locations in Syria, NFI partners in Syria are encouraged to conduct localized rapid market assessments to confirm availability of priority NFIs in their target areas prior to making any modality decisions.

[5] Enhancing ground insulation, enhancing personal warmth, support domestic activity, support domestic energy, and enhancing shelter insulation.