SAVING LIVES
CHANGING LIVES

WFP
World Food Programme

Supply Assessment of Goods and Services for Essential Needs

Interim guidance note

WFP VAM | Food Security Analysis

July 2018

SUPPLY ASSESSMENT OF GOODS AND SERVICES FOR ESSENTIAL NEEDS

The present guidance is intended to provide Country Office staff with the necessary methodological tools to perform a Supply Assessment. This particular piece of analysis should be used in conjunction with a broader set of analytical tools, which, taken together, provide a comprehensive basis for designing a programme using an Essential Needs approach.

To have all the elements necessary to conduct an Essential Needs Analysis, the Supply Assessment should ideally be complemented with an Essential Needs Assessment (ENA) and Minimum Expenditure Basket (MEB) calculation. Jointly, these three pieces of analysis, will provide the full picture of what constitutes an essential needs basket in a particular context; which portion of basket remains uncovered among the target group; and which of these essential needs could potentially be covered through existing markets.

When is an essential needs approach relevant?

Looking at food security through an Essential Needs lens enables WFP to analyse food security in conjunction with other basic needs, providing a more comprehensive analysis of the food insecurity situation and its linkages with other vulnerability factors. As such it is useful in the majority of contexts, but particularly in the following scenarios:

- *Where WFP seeks to align more closely with government strategies:*

Government analysis frameworks and response plans are usually framed around poverty rather than food insecurity. The Essential Needs approach provides a good basis for the poverty and food insecurity nexus.

- *Where strong emphasis is put on alignment and harmonized programme interventions in partnership with other humanitarian actors:*

Designing responses putting the whole range of needs of the targeted population at the centre of analysis will allow for quality programs tailored around a common understanding of these needs, rather than around the individual mandates of agencies.

- *Where WFP is requested to cover Essential Needs beyond the immediate food needs:*

Where for operational reasons the most pragmatic solution to meet the needs of the target group is for a single agency to cover the full range of essential needs, for example through a single cash transfer, the Essential Needs Analysis provides the appropriate analytical basis for quality program design

United Nations World Food Programme
Via Cesare Giulio Viola 68/70, Parco de' Medici 00148, Rome – Italy

Arif Husain
Chief Economist and Director - Analysis and Trends Service (OSZA)
Tel: + 39 06 6513 2014 - e-mail: arif.husain@wfp.org

Contents

List of Tables

List of Boxes

Acronyms

ENA	Essential Needs Assessment
CaLP	Cash Learning Partnership
CBT	Cash-Based Transfer
ECT	Emergency Communication Cluster
EMMA	Emergency Market Mapping and Analysis
FDG	Focus Group Discussions
IT	Information Technology
KIIs	Key Informant Interviews
MEB	Minimum Expenditure Basket
MPG	Multi-purpose grants
MSMA	Multi-Sector Market Assessment
NFIs	Non-food items
RMA	Rapid Market Assessment
SA	Supply Assessment
UNHCR	United Nations High Commission for Refugees
WASH	Water, Sanitation and Hygiene
WFP	World Food Programme
WHO	World Health Organisation

1 Introduction

When vulnerable populations find themselves in a hardship or are affected by a shock, they are confronted by several pressing needs, which have to be met to ensure survival and a minimum level of physical and mental well-being.

Historically, humanitarian institutions conceived their assistance around well-defined boundaries related to their mandate, normally designed within specific sectors, including food, shelter, health and education to mention a few. Stakeholders of such sectors used to determine the 'purpose' around which an intervention was designed.

The introduction of market-based assistance has progressively blurred these boundaries, since using cash as a transfer modality creates the opportunity for addressing bundles of needs, if related goods or services are available in the market or supplied as quasi-public goods. For this reason, the humanitarian assistance increasingly supports recipients with 'unrestricted cash'[1] that can serve 'multiple purposes' and thereby address a range of households' essential needs.

In many countries where WFP operates, even in the context of conflict, several goods and services are supplied by local markets. To support the design and eventual monitoring of humanitarian assistance, it is therefore paramount to undertake a market analysis or assessment. The objectives of such analysis are i) to understand how the supply would react to external interventions that aim to enhance the purchasing power of selected (more or less large) segments of the population, and ii) to evaluate the impact that such interventions may have on markets and livelihoods.

Consequently, the humanitarian sector has developed a plethora of market assessment guidelines and tools.[2] Each tool can be specific in terms of data collected, type of situation, depth of the analysis, etc.; however, they were usually conceived to investigate the food sector, and sometimes adapted to other non-food goods. Thus, it is not a surprise that the lack of multi-sectorial assessments is among the barriers to a more effective and extensive use of cash-based transfers in humanitarian interventions (CaLP, 2017). To overcome this limitation, UNHCR conceived a *Multi-Sector Market Assessment: Companion Guide and Toolkit* in January 2017, designed as a step-by-step guidance with ready-to use tools (e.g. checklists, questionnaires) and developed for staff with limited or no technical skills in market data collection. Yet, this guidance focusses mainly on the supply of food and non-food goods, while the limited attention to services remains a limitation.[3]

[1] 'Unrestricted' refers to the absence of conditionality tied to the assistance provided by humanitarian and development agencies. In this case, cash can be spent freely by recipients.

[2] For a review, see the Cash Learning Partnership (CaLP), Comparative Table of Humanitarian Market Analysis Tools, 2016 and (WFP, 2013).

[3] The report of the pilot in north-east Nigeria conducted in July 2017 states that "the water team modified the existing MSMA tools to make them appropriate to the market system" and "the rental market team developed, tested, reviewed and updated data collection tools on a daily basis using

Our guidance tries to fill this gap and to complement already existing guidance. It specifically addresses the challenges deriving from an assessment that looks at the market of goods and the supply of services. The objective is to shed some light on the use of market analysis in non-food sectors when we require a multi-sectorial approach. We provide general insights for the analysis in different humanitarian contexts (e.g. sudden onset crisis, protracted crisis, natural disaster, conflict, etc.). For the very same reason, the guidance is not meant to be a ready-to-use tool; rather it wants to raise awareness across sectors, and to allow the transition from a food market assessment to broader supply-side assessments that the essential needs approach embraces.

The role of market analysis has progressively changed[4] along with the growing consensus around cash-based transfers and the push to explore new solutions that take advantage of advanced financial services, mobile phone penetration worldwide, and new IT technologies. Currently, we expect a market analysis to present an understanding of the constraints for the effectiveness of market-based interventions and how to address those. Specifically, when the transfer modality is cash without use restrictions, the sectorial focus of market analysis becomes less relevant, provided recipients of humanitarian assistance spend the benefit as they wish.

Conceptually, humanitarian institutions need to devote a lot of effort in understanding what vulnerable people would do with the assistance and in making sure that no essential needs would go unmet because of supply failures. A Supply assessment (SA) of goods and services goes towards this direction. It implies – theoretically – to analyse the functionality of the economy as a whole. Thus, the general approach to SA should take some distance from the traditional tools used in sector-specific market assessments as a wide approach with in-depth market assessments of all sectors would *de facto* be unpractical. Our suggested workaround limits the assessment only to those goods and services that are deemed critical to fulfil essential needs and that constitute a substantial share to the overall household expenditures. If deemed necessary, more detailed and sector specific assessments can still be conducted at a later stage (see Box 1).

This piece of analysis should be used in conjunction with the *Essential Needs Assessment* (ENA) (WFP, 2018a) and the *Minimum Expenditure Baskets* (MEB) calculation (WFP, 2018b), which together provide a comprehensive basis for designing Essential Needs programs.

lessons learned from their application due to a lack of appropriate tools within the MSMA" (UNHCR; Save the Children, 2017).

[4] Originally, the analyst's scope was to determine the feasibility of a market-based intervention, particularly regarding specific sectors. For instance, when it comes to food, many studies aimed to understand the supply chain of specific commodities.

Box 1 - Lesson learned from the Philippines Haiyan Response

In July 2014, for the first time in the Philippines, Save the Children adopted an integrated approach of CBT by providing beneficiaries with a complete package of cash-based assistance for shelter, WASH and food.
Save the Children conducted two rapid food market assessments, a more detailed fresh food market assessment and a detailed assessment of the market for boat repair materials. A review report about the intervention defines this last one as "the most complete" of the "highest quality" and very timely. However, "it does beg the question as to why a comparative assessment was not prioritized for shelter and WASH commodity markets". The report underlines that a decision on which assessments to prioritize should be cross-sectorial.
The conclusion and recommendations suggest an optimal timeline starting with an assessment looking across sectors and answer a few key questions on market functionality (e.g. where the operating market places are, what goods are available, how many traders are in operation, etc.), rather than an exhaustive and in-depth sector-specific assessments (e.g. EMMA). In this way, if deemed appropriate, CBT response can begin as soon as possible. Later, staff would have time to complete more detailed market assessments.

Source: (Pelly, De Wild, & Inarra, 2015)

2 Navigating a supply assessment

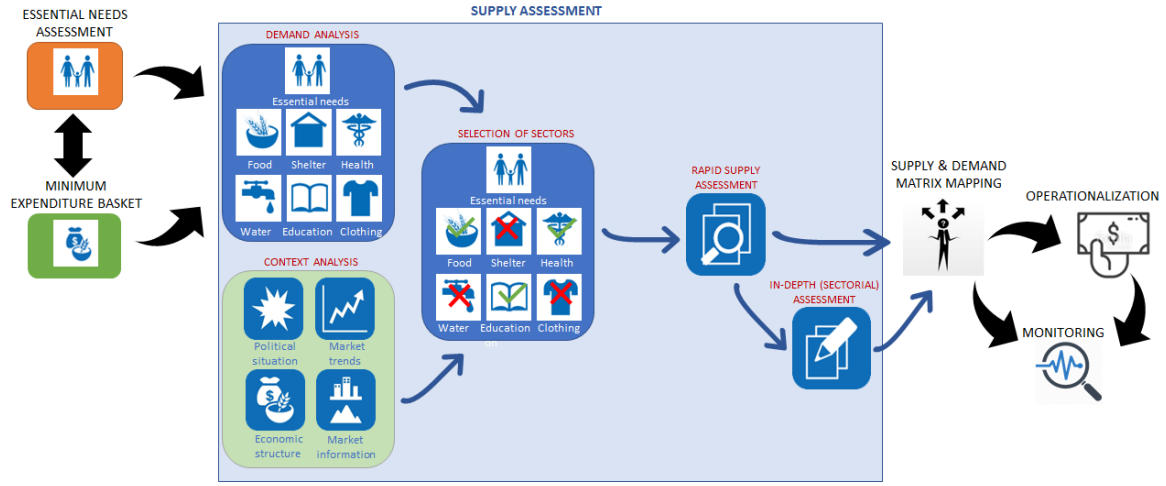
It is paramount to keep the scope of the SA manageable, since normally time and resources are major constraints for in-depth and comprehensive market assessments.[5] Instead of by-passing a market assessment, we articulate the SA in three distinct phases (Figure 1):

a) a context & demand analysis;
b) a rapid assessment mission with the aim of providing basic information around those sectors of the supply for which the demand for essential needs heavily relies on the market; and
c) an in-depth assessment only for those sectors which are identified as critical and where gathering detailed information is crucial to inform program design.

Steps a) and b) are always required and may be conducted even without a specific knowledge of the sectors, while step c) requires experts to be deployed in the field. For expert deployment, the best strategy is either seeking collaboration with other institutions with known expertise in the sector or acquiring in-house the missing capacities for the assessment. In general, the former is to be preferred to increase the efficiency and effectiveness of the humanitarian intervention, and to prevent duplication of work across agencies.

[5] In fact, the major criticism of conducting a fully-fledged market analysis is that the entire process normally takes too much time even for one sector only, so that quite often the timing of a market analysis does not fully match with the timing of an operation, particularly in sudden onset emergencies.

Figure 1 - Supply Assessment phases



2.1 Context & demand analysis

The nature of the envisaged process is sequential, provided that the foundation of the SA includes a general understanding of the macro-economic situation, the market environment, and a qualification of the essential needs for the vulnerable people. The goal of the context & demand analysis is to narrow the number of sectors of interest for the remainder of the SA.

In addition to a light analysis of the security situation, price and exchange rate stability, availability of financial service providers, sufficient (road) infrastructure, and mobile phone coverage, the context analysis may look at the overall country's economic condition and political context. Specifically, the infrastructure status (e.g. ports, roads, warehouses) can greatly affect the ability of traders to timely meet demand. Although transportation and logistics is considered a sector *per se*, it clearly plays a crucial role for the overall functioning of markets for both goods (food and non-food) and services (e.g. health and education). The context analysis may also gather information on (ongoing and past) humanitarian interventions[6] in the geographic area of interest as well as the nature of the crisis. The context analysis comes mainly from a desk review of secondary data and should be approached as a 'cross-sectional' analysis to identify those elements that are similar across sectors and those that are sector-specific (more on this topic is discussed in section 3). Ideally, a market analyst would be able to find information about these elements in existing assessments (e.g. 72-hour assessment (WFP, 2018c), logistic, telecommunication and financial assessments). If such information is missing or not up to date (for instance after a major shock), we recommend a light and rapid field assessment conducting interviews with key informants (KII) and focus group discussions.

[6] The analyst must understand who the other partners are (e.g. UN agencies, NGOs, governmental bodies, etc.) currently playing a role in the area or who are shortly plan an intervention.

Table 1 - Context analysis matrix

Geographical area	Is the security situation risk-free for the movement of people and goods?	Is price inflation relatively stable? (below 10-15 percent y/y)	Is the exchange rate relatively stable? (below 10-15 percent y/y)	Are there financial service providers	Are there roads passable all-year-round with all types of vehicles? (e.g. not only trucks and 4x4 cars)	Is the area of intervention reliably covered by mobile network?	Context concern requiring further analysis (at least one no)
Location 1	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	
Location 2	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	
Location 3	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	
Location 4	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	
…							

The key results gathered at this stage allow to answer to the questions below with a yes or no, sketching the matrix in Table 1. Whenever at least one answer to the questions is "no", then the context should be clarified with traders and service suppliers.

Most of the required information for the demand analysis comes from the ENA, which should reveal which needs are normally and currently satisfied by the market (where, when, how often) as well as people's willingness to pay to satisfy those.[7] Those needs can then be quantified in an economic perspective by defining and comparing against a Minimum Expenditure Basket (MEB).[8] An additional question is around supply related reasons from a household perspective for not meeting the essential demand. The matrix in Table 2 is intended to inform the choice of the sectors that could be considered in a CBT intervention and, thus, of goods and services that may be prioritized in the SA (CaLP, 2015), if at least one questions is answered with a 'no'.

Table 2 - Demand analysis matrix

Geographical area	Sector	Is it perceived as an essential need?	Is it provided at a cost?	Is the need normally unmet by households?	If the need goes unmet, is it because the supply is limited? (e.g. no or a few traders selling key goods or limited service provided	Supply assessment needed (at least one no)
Location 1	Food	Y/N	Y/N	Y/N	Y/N	
Location 1	WASH	Y/N	Y/N	Y/N	Y/N	
Location 1	Health	Y/N	Y/N	Y/N	Y/N	
Location 1	Shelter	Y/N	Y/N	Y/N	Y/N	
Location 1	Education	Y/N	Y/N	Y/N	Y/N	
	…					

The purpose is to understand "what demand is made up of, i.e. the type of products and services that people would buy if they could. Remember that need does not automatically translate into demand" (CaLP, 2015).

[7] An ENA aims at answering the following questions: What are the population's essential needs? Which ones of these needs are unmet and why? Where are the people that are unable to meet these essential needs? Who are the people in need of assistance to meet essential needs? How many are they? How is the situation evolving over time? Why is a population unable to meet essential needs? How can humanitarian actors assist people to meet these needs (ibidem).

[8] The basic steps for constructing a MEB are described in (WFP, 2018b).

The context & demand analysis can be a smooth consolidation should both the ENA and the MEB analysis be available and up-to-date. Otherwise, the demand analysis can be shaped using other existing household survey data or - if possible - by conducting a rapid ENA through FGD. Obviously, the latter case is not ideal, and should be pursued with parsimony only in case of an emergency with lack of previous data and no time to gather decent household expenditure data.

The analysis of the expenditure from household data (e.g. CFSVAs) or FGD is extremely important to understand the consumption patterns of the population of interest. High expenditure in a specific sector implies that the household heavily relies on the market to satisfy its needs; hence it is important to investigate the functionality of that market during the SA, yet with a note of caution. In fact, low expenditures do not necessarily hint to low market dependency. For example, households may not rely on the market to satisfy a need because the need is perhaps not a priority, but it could also reflect an economic access constraint because the sampled household is too poor; alternatively, it could also be the sign that public provision and assistance supports households. If these apply to many households in the sample, we do not recommend relying only on expenditures at this stage, but rather on a right-based approach (WFP, 2018b), as per Handbook of the Sphere project,[9] which can guide the analyst in identifying a set of minimum standards that must be achieved in any humanitarian response in four key sectors: water, sanitation and hygiene; food security and nutrition; shelter, settlement and non-food items; and health.[10] Those standards can be used as reference against which to measure the capacity of the market supply.

If a market around a specific sector does not exist, it can be excluded from the SA even if it is an essential need. Furthermore, if the SA's objective is to more specifically assess the feasibility of 'multi-purpose' cash (MPC), the goods and services which are not valued by the households can also be excluded from the SA, as there is no effective demand. Resource constraints will determine whether a complementary

Box 2 - Unchecking a sector - example from DRC

In the province of Mwetchi in Kasai Central (Democratic Republic of Congo), access to water and nutrition-related problems are linked, with people using water from the rivers for both drinking and cooking, but with no market for bottled water and purification tabs. In an emergency operation, this sector does not appear to be of highest priority for the local population and implementing partners. For that reason, we did not include it in the assessment.

[9] The Sphere Project was initiated in the late 1990s by a group of humanitarian non-governmental organizations, the International Red Cross and Red Crescent Movement to improve assistance for people affected by disasters. Trying to translate into practice Sphere's two core beliefs (1. people who are affected by disaster or conflict have a right to a life with dignity and, therefore, a right to assistance; and 2. related to these rights, all possible steps should be taken to alleviate human suffering arising out of disaster or conflict), the Handbook identified a set of minimum standards in key life-saving sectors that must be achieved in any humanitarian response (The Sphere Project, 2017).

[10] More on the use of the expenditure-based approach versus the right-based approach can be found in (WFP, 2018b).

intervention is a considerable option based on the needs assessed in the SA. In the absence of effective demand (i.e. no willingness to pay for goods/services), there is not too much space for a MPC intervention. However, it might still be necessary to provide goods or services (e.g. nutrition products). If the program designer intents to adopt an in-kind intervention and source the products and services locally (or a different CBT intervention), then a market assessment is nevertheless important. Box 2 summarizes in general terms the main criteria that may help in identifying the sectors.

Box 3 - How to identify the sectors for a SA

Three main criteria can be used to identify the goods and services the market assessment needs to focus on:

Pre-existing market system and commercial availability of the good or service in the market. For example, water purification tablets may not be commonly available in the market because running and safe drinking water was available inside the house before the crisis; or, micronutrient supplements were not supplied by the market because of no demand.

Importance of the good or service for the population and their willingness to pay for it. For example, beneficiaries may refuse to pay for some products or services though they are important to satisfy some basic needs. It could be the case of water purification tablets or private physician. Drinking water and access to a primary health care doctor may be list as priorities by the population, but households may not be willing to pay for them. It could also be the case that there is no demand for a good/service. If the population is on the "first rung of the sanitation ladder" (e.g. in parts of Asia and Africa open defecation is still common), a CBT intervention alone will not be successful as the sector still requires demand creation (UNHCR, 2016).

Good/service is in high demand in the immediate and medium term and has potentially problematic supply chains.

Source: (UNHCR, 2017)

2.2 Rapid supply assessment

For each of the sectors chosen in the previous step, we recommend a rapid market assessment to assess the supply. Key information to be collected with semi-structured interviews with government officials, traders, public and private service providers, and other agencies operational on the field are the number of actors, supply chains, availability of products, prices,[11] volumes, stocks, lead times, etc. The objective is to understand the main supply elements for goods and services, the key constraints if any, and the type of outlets, market places or service providers that operate in each location of interest.

[11] For a guidance on food price data collection, see (WFP, 2017a). Despite the fact that the guidance was designed for food prices, most of the tips apply also for general price data collection.

In this regard, for each sector included in the SA, the analyst needs to identify the market(s) of reference.[12] The UNHCR multi-sector market assessment in north-east Nigeria conducted in July 2017 (UNHCR; Save the Children, 2017) offers an example of the selection of markets for the SA based on the ENA's results and other secondary data analysis. The population of interest buys goods and services usually at those market places to fulfil its needs. For the service sectors, it means to understand if a market exists (e.g. are there public and/or private schools?) and how the population of interest interacts with it (e.g. are households using or willing to use private schools?). Often, the government provides many services (e.g. education, health care, sanitation, etc.) to satisfy the basic needs of a population either alone or in competition with the private sector. The nature of the service provider is not a discriminant for the inclusion/exclusion of the sector from the SA. In fact, even in the case of a public delivery system, households may face costs which should be accounted for to access that public good (e.g. fees, school uniform, transport to school), along with complementary private service providers.

Box 4 - Demand and supply analyses

Combining demand and supply analyses allows the analyst to understand if markets are properly functioning. For example, prices may increase significantly in the aftermath of a massive influx of IDPs. However, after some weeks, prices revert to the previous level. If that happens, retailers are likely to have limited storage capacity but rely on efficient supply-chains, good financial resources and can adjust their supply to the increased demand. The combination of demand and supply analysis can also highlight cases in which supply is unable to meet effective demand. For example, if a hazard damages the electrical grid, supply may be severely constrained; households will then not be able to satisfy their demand which is disguised by a low percentage of households facing electricity costs.

It is highly recommended to **group goods that have similar supply chains** - i.e. common geographic origin and wholesalers (UNHCR, 2017). Furthermore, the same market place may often satisfy different needs ranging from food to clothes, school materials, money transfer, credit charge for phone, etc. In this case, **general information on the main market places** can be collected only once. It is important to understand:

- ✓ how/when markets operate (daily/weekly/seasonally; retailer/wholesale; what they sell);
- ✓ catchment areas[13] and commuting time for the affected population;
- ✓ protection concerns:[14]

[12] A market of reference is the market place which usually serves the population of interest. In a SA, the term 'market' refers both to the physical place where people buy and sell goods or service and to the nominal place where services are exchange and prices are determined by the interaction of multiple, competing buyers and sellers.

[13] All locations that have a shorter travel time to one particular market than to any other are classified as one catchment area. The assumption is that people within this area naturally refer to the closer (in terms of time) market. The shortest travel time (accounting for distance) from each location on the map to the nearest market is determined, taking into account the different travel speeds influenced by terrain (land cover e.g. forest, grassland, rivers, mountains) or man-made road surfaces (e.g. tarmac road vs. track) or barriers encountered (e.g. national borders).

[14] (UNHCR, 2017).

- security concerns related to the market place itself or that affect access (e.g. during the journey)
- social or ethnic tensions that affect access to the market and/or trade fairness between ethnic groups
- gender concerns (e.g. it is not safe for women to access/reach the market; women are not allowed trading).[15]

Within this step of the SA, the analyst can collect some critical information once, thus avoiding that sector specific assessments create duplications. Nevertheless, each sector may have specificities of which analyst should be aware.

The final step of a SA will be to inform program designer about the appropriateness and feasibility of multipurpose cash-based interventions. The SA may also suggest complementary market-support activities to address some of the weakness identified in the market system. Finally, the SA may highlight the importance of conducting a more detailed and sector-specific market assessments for some commodities or services.

Box 5 - The essential check-list

The SA should provide the program designer with information on:

- ✓ **sectors suitable for cash assistance and goods and services that can be purchased in sufficient and reliable quality and quantity;**
- ✓ **market places functioning and main characteristics (e.g. are markets integrated? do market actors behave competitively? do traders at local level have the means/capacity and logistics infrastructure to meet an increase in demand?);**
- ✓ **existing or possible bottlenecks (e.g. infrastructure limitations due to quality of roads, ports capacity, storage facilities, etc.; administrative barriers; limited access to credit; etc.);**
- ✓ **how other factors (e.g. global economic conditions and trends, government policies and regulations, social and cultural issues) may influence the market's capacity to respond;**
- ✓ **possible complementary market-support activities that should have a positive impact on market recovery (e.g. infrastructure rehabilitation, financial support to market actors, retail engagement);**
- ✓ **expected market reaction to a significant injection of cash/goods/services;**
- ✓ **need for further assessments or follow-ups;**
- ✓ **capacity of the population of interest to access (physically and economically) the market;**
- ✓ **protection concerns.**

Furthermore, if the SA is performed during a conflict or after a disaster has occurred, it is crucial to understand:

- ✓ **partial/complete disruption of supply chains, including the disappearance of some market actors;**
- ✓ **changes in the supply chains (e.g. appearance of new actors/markets or new/different commercial relations);**
- ✓ **damages to key infrastructures**

2.3 In-depth sector-specific assessment

Providing a rigorous guidance for in-depth sector-specific assessments is beyond the scope of this document. The main difference from a rapid SA is the level of detail that can be achieved, the robustness and representativeness of the information, the time and cost

[15] More on gender analysis in market assessments can be found at https://resources.vam.wfp.org/node/106.

required for the analysis, and the capacity to inform strategic and policy discussions with governments on the supply of goods and services.

In fact, while a rapid SA may rely more on KIIs and FGD, in-depth assessment often relies on primary data collection through surveys (WFP, 2009), and other advanced analytical tools. The following areas of analysis can be tackled by an in-depth SA, while sector specific elements are described in section 3:

1. **Supply and value chains of key goods and services for essential needs.** Supply chain analysis ranges from the conception of a product or service, through the various phases of production, delivery to end customers, to final disposal after use. Value chain analysis traces product flows and shows value additions at different stages. Such analysis identifies key actors and their relationships within the chain, including their strategies and power dynamics (including gender concerns), as well as organizational and coordination issues. It identifies enterprises that contribute to production, services and required institutional support, as well as bottlenecks. Therefore, it provides a framework for sector-specific action and strategies to help local enterprises compete and improve earning potential. Such information is important to formulating policies and planning programmes. Identifying structural shortcomings within the supply and value chain and the market environment informs policy decisions.
2. **Historic and current availability of goods and services**, including potential recent changes and patterns of seasonality. Knowing the volume and when goods and services are available is crucial for policymakers and other actors to determine development policies to improve production and marketing, as well as to make timely decisions for humanitarian interventions.
3. **Market structure**, examining actors and institutions of relevant supply chains; barriers and constraints to enter trade or maintain and increase levels of supply; and market catchment areas. Actors and institutions that form the supply chain and demand base for a commodity are the most important elements. Also important are barriers to entry and exit and constraints to rapid turn-over of actors in a given activity. For example, high interest rates resulting in expensive capital may pose a barrier to entry for potential commodity processors, while anaemic wage labour markets might pose a barrier to exit for poor smallholder farmers who wish to stop producing low-margin staple crops but have few alternative income opportunities. Market catchments refer to informal boundaries where market forces naturally limit the movement of a commodity. They are often shaped by transaction costs, roads and infrastructure, international or sub-national borders and trade restrictions, trader networks, agricultural calendars, population density, language, etc.
4. **Market conduct analysis** investigates the behaviours and rules that regulate the relationships between actors or how they engage with one another. Understanding conduct builds upon market structure by showing the mechanisms by which structure ultimately yields market outcomes. Conduct analysis includes price setting behaviours, weights and standards, as well as the transparency of transactions, competition and potential corruptive behaviour. Considering how market actors' incentives translate into behaviour and response is critical to design interventions and choosing between transfer modalities.

5. **Identify market outcomes** such as seasonality and volatility patterns of prices, and market integration with supply sources. High price volatility can reflect unstable supply patterns; transmission of global price volatility; speculative trading behaviour; high risks for market actors; and erratic policies, such as sudden import/export bans. Sound market integration enhances security of supply; reduces price risks for producers, suppliers and consumers; decreases market entry barriers; and supports the effectiveness of macroeconomic policies. Understanding the seasonality of price patterns can inform contingency planning of government systems and responses, as it helps predict times of goods shortfalls, constrained market access, or optimal times for local purchases, without posing inflationary risks on markets. Inflation is measured through monthly or annual changes in the consumer price index, which is a composite index of weighted prices for different food and non-food groups including services.
6. **The collection and monitoring of price data**, which can also be used to develop price scenarios for different commodities and the MEB, so to inform the definition of transfer values for cash and vouchers, and cost efficiency/effectiveness of different transfer modalities. Governments play a key role in the design and implementation of price monitoring systems. Harmonised collection methodologies between different stakeholders under the leadership of the government is important.
7. The final step of a SA is to **formulate and map market related recommendations** on: i) suitable areas, ii) periods of the year, iii) scale conceivable to support either cash, voucher or in-kind based interventions, and iv) how to address identified bottlenecks to meet increased demand and strengthen supply chains. Recommendations can be incorporated into the design of government-led safety net programmes, public works programmes, and/or policies.

3 Sectors of potential interest for rapid supply assessment

While the above section describes how to select the sectors of interest and what cross-sectoral areas of interest would be, the subsections below provide some insights and general directions for the analysis of specific sectors, including food security, WASH, health, shelter, non-food items (NFIs) and utilities, education, communication, and transportation. This list reflects the constituent parts of the MEB, and the goods and services identified by the ENA.

3.1 Food security and nutrition

The importance and use of market assessment for the food security sector is well established among humanitarian actors, and especially for WFP. The resources available are already copious.[16] Here, it is worth stressing that in the context of multi-sector interventions, the market analyst should

[16] See WFP's Market Analysis Guidelines webpage as well as the various tools mentioned in the introduction.

not look at the market system of the main staple only. Rather, the assessment should aim at understanding functionality and constraints of the whole food market.

3.2 WASH

WASH stands for Water, Sanitation, Hygiene, and is one of the most important sectors of humanitarian operations together with food and health. The overall objective of a WASH intervention is to guarantee access to safe drinking water and basic sanitation to the population of interest.

Although in many contexts it is very unlikely that cash assistance alone will be sufficient to deliver effective WASH programs objectives (Global WASH Cluster Markets Technical Working Group, 2016),[17] CBT have already been extensively used for WASH programs to achieve outcomes in all three areas: water supply, sanitation and hygiene (for more details see (UNHCR, 2016)).

Some standards for water supply, access and quantity

- Average water uses for drinking, domestic and personal hygiene in any household is at least 15 liters per person per day - In a disaster, and until minimum standards for both water quantity and quality are met, the priority is to provide equitable access to an adequate quantity of water even if it is of intermediate quality.
- The maximum distance from any household to the nearest water point is 500 meters.
- The number of people per source depends on the yield and availability of water at each source. The approximate guidelines are: 250 persons per tap, 500 persons per hand pump, 400 persons per open hand well.

Some standards for basic hygiene items

- A basic minimum hygiene items pack consists of: 2 water containers per household (1 for collection, 1 for storage), bathing soap 250g/person/month, laundry soap 200g/person/month
- Access to acceptable menstrual hygiene materials (either absorbent cotton material (4 sqm/year) or disposable pads (12/month) or reusable sanitary pads (6 minimum); underwear (6/year); soap (250g/month)).
- Access to basic minimum incontinence materials (either absorbent soft cotton material (4 sqm/year) or disposable incontinence pads or reusable incontinence underwear (6 minimum); underwear (6/year); soap (250g/month) – in addition to the general soap distribution to all affected persons; two washable leak proof mattress protectors).

Some standards for sanitation

- All affected people always have adequate, appropriate and acceptable toilets, sufficiently close to their living spaces to allow rapid safe and secure access and use (for communal and

[17] Even if market analysis suggests that MPG is feasible for the WASH sector, other considerations – that go beyond the results of the MSMS, e.g. about standards and public health objective – will also inform the design of the humanitarian intervention and may advise otherwise. For example, WASH practitioners agree that CBT "are unlikely to be able to, nor should they, substitute for the 'software side' of WASH programming such as community mobilization, person to person interaction, hygiene promotion, training in the use of WASH hardware, and behaviour change communication" (UNHCR, 2016). Thus, a "combination of complementary activities including in-kind assistance, technical support and capacity building, infrastructure development, advocacy and community engagement will be required, in addition to market-based approaches, to achieve WASH outcomes" (Global WASH Cluster Markets , 2016).

shared toilets, a short term maximum ratio of 50 people per toilet and a medium to long term ratio of 20 people per toilet are recommended, keeping in mind that household facilities are the ideal)
- All excreta are safely contained on-site
- Household have access to designated neighborhood or communal collection points at an acceptable (preferably pre-defined) distance from their dwellings.

Source: (The Sphere Project, 2017)

The SA should aim at sketching the WASH sector which comprises both public and private actors.

For the **water sub-sector**, the SA should:

- ✓ understand what the main source for the population of interest is, and the main characteristics of the identified market system. In case potable water is provided by piped municipal networks, then the system of fees and possible bottlenecks of the network needs to be assessed. Alternatively, if water is supplied by private truckers or small vendors, then the assessment should investigate the supply chain, the level of competition, the distance from the water distribution point, etc.
- ✓ get an overall idea of the market's capacity to deliver adequate amounts of safe drinking and domestic water (see Box 6);
- ✓ check for any possible seasonality effect on demand and access;
- ✓ assess the risk that a strong market power of the private sector may undermine the development of more sustainable public solutions;
- ✓ understand what constraints people are facing in accessing water (availability, water collection point being too far, storage limitations, low purchasing power, etc.); and, what are the governance issues and regulations of the sector.

Box 6 - Assessing water supply (key questions)

If beneficiaries mainly access water though boreholes, some possible questions for KIIs (e.g. community leaders, government officials) are:

Q1. How many water well/hand pump/tap are currently functioning?
Q2. How many were damaged by the disaster?
Q3. What is the average productive yield (liter/second)?
Q4. How many hours per day are they functioning?
Q5. How much water is used for the livestock?
Q6. Is the water supply stable or does it change seasonally? How (quantity, quality)?
Q7. Are there alternative sources? Which one? How much water can they provide?

These questions allow estimating the water supply. To assess its adequacy, values may be compared with the Sphere Standards.

For the **sanitation sub-sector**, the SA will aim at understanding the sanitation infrastructure (containment emptying, treatment, and disposal) and the maintenance cost. The analyst should know if the latrines are public or private, if they require desludging or they are connected to a municipal network, if the solid waste management is public or private and the cost associated, and who the main actors are. Furthermore, in the aftermath of a crisis and if the sanitation infrastructure was damaged, the SA will need to investigate the market system of the latrine construction materials.

Finally, for the **hygiene sub-sector**, the SA would simply look at the market system of hygiene NFIs as hygiene promotion and behavioral change go beyond what could be the outcome of a CBT intervention. The market structure for hygiene items identified by the ENA (e.g. soap, toothpaste, buckets, basins, sanitary pads, diapers, toilet paper, etc.) is crucial to understand, including availability of products (quality and variety), number of traders and their volume trade capacity, competitiveness and supply chain's bottlenecks. The approach for the assessment of NFIs does not differ much from food commodities, except that local production is less likely to be relevant in many countries. Thus, the resources mentioned in section 3.1 can be easily adapted to assess the market for NFIs. Furthermore, valid guidance can be found in some of the tools developed by the humanitarian community (UNHCR, 2017).

Box 7 - Non-food items included in the MEB for Syrians refugee in Turkey

Product	**Quantities per HH (of 6 people)**
Toilet paper	24 rolls
Toothpaste	4 tubes/ 100ml
Toothbrush	6 toothbrushes
Laundry detergent	1.5kg
Liquid dish detergent	750ml
Sanitary napkins	6 packets of 10 pads per packet
Individual soap	12 pieces of 125g

Box 8 - Lesson learned on the importance of market assessments in the water sector

The Arid and Semi-Arid Lands (ASALs) of Kenya, Ethiopia and Somalia suffer often from water scarcity. In this context, existing private sector water trucks and vendors have played a crucial role in addressing basic water needs, and direct water trucking is a common emergency intervention in times of drought in the Horn of Africa. This was also the approach adopted by Oxfam during the severe 2011 drought.

Oxfam undertook several market assessments in the ASALs of Kenya and Ethiopia establishing – contrary to prior assumption - that "during extended dry seasons, water security is not limited by water availability (water is available in sufficient quantities in nearby areas). Rather, the primary obstacle is a lack of purchasing power". In fact, during severe droughts, truck owners, acting as retailers, have the capacity to meet water needs, but it is often expensive and only better-off households can pay. "Poorer and more distant communities find it difficult to access, and negotiate within this market, in part because of the attractive contractual conditions NGOs (the main customers) offer and because of lack of purchasing power to pay for a truckload."

The market analysis showed that water trucking is as common as it is also "expensive, unsustainable and difficult to manage, implement and monitor", thus it pointed to a range of different response options, including cash transfers to enable beneficiaries to buy water from these local vendors. Consequently, emergency activities implemented in the drought response in March 2012 were based on the provision of water vouchers rather than Oxfam directly trucking water.

Source: (Wildman, Brady, & Henderson, 2014)

3.3 Health

The health sector consists of two main components: health care service (e.g. doctors, consultations, hospitalization, etc.) and health commodities (e.g. medicines, bandages, baby kits, etc.). Both products and services can be either public goods (e.g. hospitals, vaccinations) or be supplied by the private sector (e.g. clinics, medical supplies).

Though WHO is the custodian of the International Health Regulations[18] - managing risks and emergencies due to all hazards, and with responsibilities to uphold global public health security - there are still ways in which CBT interventions can address some health needs in emergencies, like payment for visits to a primary care physician, purchase of common drugs, or even expenses for critical events, like deliveries and baby kits.

Some standards for health services

- There are an adequate number of health facilities to meet the essential health needs of all the disaster-affected population:
  - one community health unit per 1,000
  - one health facility/10,000 population
  - five health facilities with Basic Emergency Obstetric Care Centre and newborn care/500,000
  - one health facility with Comprehensive Emergency Obstetric Care Centre and newborn care/500,000 population
  - ten inpatients beds /10,000
- There are at least 23 qualified health workers (medical doctors, nurses and midwifes) / 10,000 population
- Provision of primary health care to the affected people is free of charge at all government and nongovernmental organization facilities for the duration of the humanitarian response.

Source: (The Sphere Project, 2017)

The existence of a universal health-care coverage does not necessary mean no need for a market assessment. If there is the programmatic intention to cover **health care services** and if neither secondary data nor ENA results have revealed it yet, it is essential for the SA to understand:

- ✓ if an adequate number[19] of health facilities and workers exist to meet the needs of the affected population;
- ✓ if the public sector can respond to an increase in demand or, alternatively, if limited public resources may result in entitlements being denied, provided that an increase in demand without availability of services might increase the cost of public and private services;
- ✓ if free healthcare at the point of delivery exists or if there are charges ("out-of-pocket" payments);[20]
- ✓ if costs are homogeneous for all beneficiaries (Box 9);
- ✓ if facilities are located sufficiently close to the beneficiaries;

[18] The International Health Regulations (IHR) are an international legal instrument that is binding on 196 countries across the globe, including all the Member States of WHO. Their aim is to help the international community prevent and respond to acute public health risks that have the potential to cross borders and threaten people worldwide.

[19] Sphere standard can be used as normative recommendations.

[20] Analyst should also keep in mind that in emergencies, global health actors advocates for free primary healthcare services. Even in this case, hidden costs such as transport often remain. SA should assess it and CBT could be disbursed to meet transport and other hidden costs.

- ✓ if there are discriminatory[21], gender-based[22] or legal[23] barriers to access public health care services; and
- ✓ if public health services have been disrupted or destroyed, so that CBT cannot improve access to services, hinting to a priority to restore the services themselves.

Although a public health sector exists, it is unlikely that it can secure all the health needs of the population. Thus, the SA may also need to glance at the private health sector (e.g. services available, coverage, costs) and traditional healers if deemed important.[24]

Box 9 – Assessing the cost of health care services (key questions)

It may be possible to assess the cost of health care services by analyzing secondary data, e.g. from household budget surveys, Ministry of Health, other assessments. If information is not available, some possible questions for KIIs or FGDs are:

Q1. Can beneficiaries access primary care service free of charge?
Q2. If not, what type of cost do they bear (e.g. based on service asked vs. insurance scheme fee)?
Q3. How much, on average, does a consultation with a general doctor cost?
Q4. How much does a diagnostic test (e.g. blood test, x-rays, ultrasounds) cost? Give a range.
Q5. How much does hospitalization different to Q3 and Q4 cost? Give a range.
Q6. Do fees vary across the population (e.g. based on age, disabilities, gender, ethnicity, income levels)? Specify.
Q7. Do fees vary across public facilities?
Q8. How are fees set?

If health care is provided by both public and private sector, ask the above questions separately for the two sectors.

Beyond the heath service, the SA will explore the market system of **health commodities**, i.e. medicines for the treatment of common illnesses. All in all, the SA aim is to understand:

- ✓ where beneficiaries access the medicines (e.g. retail shops vs. pharmacies) and how far the distribution points are, especially in rural areas and refugee camps;
- ✓ if distribution points can meet a significant increase in demand;
- ✓ if medicines are provided for free to the beneficiaries by the government or other donors;
- ✓ if prices are volatile and markets integrated; and
- ✓ what are the current or possible supply-chain bottlenecks.

The SA will not look at the market for essential[25] health commodities, such as vaccines or similar drugs, as the quality and dose of these products is essential to prevent epidemics, thus inappropriate to substitute with cash disbursement.

[21] Discrimination may be due gender, sexual orientation, age, nationality, ethnicity, religion, language, political affiliation, socio-economic background, etc.
[22] For example, lack of female doctors may limit the access to health services for women.
[23] Legal impediments may arise when populations are displaced to a new country.
[24] In Mali, cost for traditional healers was included in the MEB.
[25] Based on the Minimum Standards defined by the Sphere Project, "most countries have an established essential medicines list. This document should be reviewed, when necessary, in consultation with the lead health authority early in the disaster response to determine their appropriateness" (The Sphere Project, 2017). Essential medicines for the treatment of common

Finally, the analyst should glance at the possibility of market distortion due to CBT as, for example, it could incentivize service providers in maintaining or introducing user fees for primary health care services or create an inflationary environment.

Box 10 - Cash risks in Kasai emergency

The injection of cash in the Kasai central region determined an increase in medical treatments. This is a positive outcome of the project, even more so considering the high prevalence of malaria during the current rainy season. However, the risk is that potential customers may have resources to access healthcare while the hospitals and pharmacies run short of drugs. This paradox applies only to anti-malaria drugs since stocks of other medicines are widely available for both hospitals and health centers in the zone.

3.4 Shelter

Different international legal instruments recognize the right to adequate housing, including the Universal Declaration of Human Rights. Accordingly, The Humanitarian Charter promotes the right to receive adequate shelter, in particular to those affected by disasters or conflicts.

Some standards for shelter

- All affected individuals have an initial minimum covered floor area of 3.5m^2 per person in tropical or warm climates, excluding cooking facilities or kitchen and 4.5m^2 to 5.5 m^2 covered living space per person in cold climates or urban settings, including kitchen and bathing and/or sanitation facilities.
- In the immediate aftermath of a disaster, particularly in extreme climatic conditions where shelter materials are not readily available, a covered area smaller than the specified minimum requirements may be appropriate to save life and to provide adequate short-term shelter. In such instances, the minimum requirements should be achieved as quickly as is feasible. If the minimum requirement cannot be met - or is greater than the space typically used by the affected or neighboring population - consider the impact on dignity, health, and privacy of a reduced covered living space.
- All shelter solutions and materials meet agreed technical and performance standards and are culturally acceptable.

Source: (The Sphere Project, 2017)

Shelter needs may differ significantly in different scenarios. In case of massive displacement, certainly they greatly depend on the type and scale of the disaster as well as on the possibility and desire of the affected population to return to the site of its original dwelling. The geographic location will also drive the type of response: dense urban areas have specific characteristics and therefore the shelter solutions may differ from rural areas. Thus, it is crucial that shelter needs are identified prior to the SA, as well as the main constraints in accessing adequate housing, market access to shelter needs, post-disaster risks and vulnerabilities.

illnesses should be ensured and health facility should not be out of stock of selected essential medicines for more than one week.

3.4.1 Shelter needs in different scenarios

Displacement after a natural disaster. In the aftermath of a natural disaster (e.g. earthquake, tsunami), it is crucial to gather information on:

- ✓ the extent of the damage and the degree of destruction (e.g. the disaster may have partially or totally damaged houses);
- ✓ how many affected households can be assisted at the site of their original homes; and
- ✓ how many displaced households require shelter assistance with host families or within temporary communal settlements.[26]

In this scenario, the results of rapid assessments (e.g. WFP 72-hour assessment (WFP, 2018c), Emergency Food Security Assessment (EFSA) (WFP, 2009) or geospatial analysis) could be extremely beneficial. Furthermore, if houses have been only partially damaged or if the humanitarian intervention will support reconstruction (or construction of new dwellings), it would be also extremely helpful for a quick response implementation knowing how shelters are typically built, by whom, and where and how construction materials are obtained.

Considering legal and social constraints (e.g. land tenures, government plan for land use, willing of the host population to rent to IDPs, etc., see Box 11) and the extent of the humanitarian intervention,[27] the SA may investigate one or all of the following markets:

- ✓ shelter items (e.g. tents, plastic sheeting, temporary shelters, etc.), if most of the houses have been severely damaged and affected populations need temporary shelter in camps;
- ✓ labour and construction materials, if most of the houses have been partially damaged or if the program intents to support the (re)construction of permanent houses; or
- ✓ rental market, if affected populations need temporary shelters and host communities are willing to rent to IDPs.

In the case of slow-onset natural disasters (e.g. drought), there may not be a direct impact on shelter, but the disaster may trigger displacement or economic crisis with consequent new shelter needs.

[26] The continuation of the shock (e.g. ongoing flooding) may affect the population's return to their homes.

[27] Aid agency can decide to play just a supporting role or directly (re)build houses. Also, a short-term intervention would aim only at providing emergency shelter, while a long term and well-funded intervention may aim at supporting permanent house (re)construction. Although possible, the construction of new houses will unlikely be the objective of a humanitarian intervention, because of the high resource- and time-demanding intervention. Rather, it would be part of a development project. Thus, "if funds are limited, it may be that durable solutions (which are relatively expensive) can only be provided for a small percentage of the displaced population. In this case, it may be judged preferable to offer a less-expensive, shorter-term housing solution such as a Rental Support Cash Grant Programs to a larger number of beneficiaries" (Fitzgerald , Corsellis, Vivo, & Debomy, 2014)

Box 11 - Government regulations influence humanitarian response. Two examples from Sri Lanka and Lebanon

In the aftermath of 2004 tsunami, governments were reluctant to use or allow CBT for shelter reconstruction because they wanted to ensure that the rebuilding would take place in non-risky areas. In **Sri Lanka**, for example, people living in the government-designated 'buffer zones' (areas close to the Indian Ocean) were initially excluded from cash assistance.

The government of **Lebanon** prohibited the establishment of official camps to host Syrian refugees. As consequences, displaced populations were forced to seek shelter within Lebanese host communities across the country, especially within the poorest and most economically vulnerable communities.

Source: (Dwast, 2016)

Displacement because of conflict and violence. Destruction of dwellings would likely be addressed at a later stage. However, protracted conflicts and violence may trigger a significant increase in the number of people in need of safe and adequate shelter in camps, host communities or collective centres.[28]

- ✓ *Refugees/IDPs in camps.* If refugees/IDPs live in a camp, the analyst will exclude the shelter sector from the SA, unless there is the programmatic intention to support the construction of permanent houses in other sites. However, if the population has been just displaced and the only option is the establishment of camps, the SA will look at the market for shelter items.
- ✓ *Refugees/IDPs in host communities.* The affected population may prefer to stay with other family members or people with whom they share historical, religious or other ties. It could also be the case that there is no land available for establishing a camp or simply the host government prohibits to set up camps (Box 11). In those circumstances, and if the hosting population is willing to rent to refugees/IDPs, the SA should look at the rental market system. If other members of the community can host refugees and if the arrangements are sustainable both for the hosting and hosted families, the market of shelter items usable to extend the host accommodation should be assessed. Finally, the SA may also analyse the housing construction sector if the continuation of the shock affects the return of the population to their homes for long periods and aid agencies aim at a long term and well-funded intervention to support housing construction.

Post-conflict displacement. Based on the level of destruction assessed and the extent of the humanitarian intervention, the SA will investigate the following markets:

- ✓ labour and construction materials; and/or
- ✓ rental market.

However, in the case of housing reconstruction, an important distinction needs to be made between post-conflict and post-disaster situation. In fact, it is likely that the post-conflict environment will present specific challenges due to the collapse of local authorities, loss of legal records, difficulty in ascertaining land tenure and social tension as housing may have been destroyed as part of a strategy of ethnic cleansing (Barakat, 2003).

[28] In case collective centers are provided because of security threats or lack of essential services such as water, the SA will likely exclude the shelter sector.

Non-displacement context in case of economic crisis and/or political unrest. A looming economic crisis/political unrest as well as chronic poverty and insecurity may create the need for a humanitarian intervention in the shelter sector, though the crisis does not cause population displacement. This is particularly true in an urban context where access to land and housing is predominantly cash-based. The main trigger for an emergency intervention is a significant inflation in the housing market. In this context, the SA would only need to look at the rental market.

3.4.2 Market systems to be assessed

The assessment for **shelter items** and **construction materials** is not different than the assessment for NFIs (e.g. understand availability of commodities in markets, accessibility of the market, supply chain functionality and capacity, and prices before and after the crisis).

However, analysts should keep in mind their special features: some of the items are infrequent high value purchases, but after a shock their demand may significantly increase leading to market bubbles if supply is not sufficiently elastic. On the other hand, the rental market and labor markets in the construction sector are extremely complex and difficult to grasp with a rapid SA. Rather, the analyst should gather key information from housing institutions, government departments, chamber of commerce, academics and local stakeholders.[29]

Box 12 - Rental property payment and risk of inflation (key questions)

Q1. What's the average rent for a low-cost housing (LCU/m^2)?
Q2. Is rent constant across the year?
Q3. What services are normally included in the rental price?
Q4. Do renters must pay a fee/ down-payment to access the house? If yes, how much and to who?
Q5. How is usually rent paid (cash, mobile money, bank payment or in kind/services render etc.)?
Q6. How frequently is rent paid (weekly, monthly, annually)?
Q7. Do renters receive evidence of rent payment?
Q8. In the last 6 months, has the rent increased or decreased? If so, by how much and why? (reference period should be adequate to the context)
Q9. Do you think the rent will increase in the next 6 months? If so, by how much and why?

Furthermore, to assess the inflationary risk, analyst should look at the current relation between demand and supply, as well as a demand projection (supply is considered inelastic in the short-run). Other considerations should be based on government policies in the housing sector (planning of new construction, changes in tax system), gentrification, general increase in price.

[29] A more in-depth rental market assessment may include also interviews with affected populations and landlords. The methodology of an assessment conducted in Lebanon in 2014, "targeted at the poorest refugees in each area rather than the general population of refugees, in order to understand the dynamics facing those refugees most likely to be targeted by cash assistance for rent in the future" (Key Development Services, 2014).

For the **rental market**, KIIs should provide an overall idea of:

- ✓ the approximate number of low-cost housing for rent;
- ✓ the quality and standard of the available housing stock; [30]
- ✓ rental property payment;
- ✓ market distortion in the rental price due to abuse of dominant position of landlords and risk of inflation;
- ✓ type of rental agreement (verbal, written informal or formal agreements, either with landlord or rental agents) and security of the tenure.

Key information that should be collected on the **construction sector** concerns:

- ✓ the capacity of the construction industry in terms of skilled and unskilled labour, building materials, and technology;[31]
- ✓ average cost for repair and construction of housing units prior to the time of the disaster;
- ✓ the availability of land (either for new constructions or temporary houses) and security of tenure;
- ✓ legal and social constraints; and
- ✓ the possibility and ease to access mortgages and other housing finance mechanisms for the affected population.

3.4.3 Need for monitoring activities

The housing market rarely has the elasticity of consumable commodity markets, thus timing of the assessment as well as monitoring of market changes are crucial (Dwast, 2016). For example, in case of a large-scale displacement in an urban context, the number of households in need may be disproportionately higher than available housing, because of lead-time for construction and non-availability of land. The resulting increase in population density paired with a constant supply will likely change the characteristics of the sector prior to the crisis (e.g. by pushing prices up).[32] Consequently, an intervention aiming at subsidizing rent may become unfeasible.[33] In post disaster contexts where the

[30] The value should be used to determine the rental support given to the beneficiaries (Fitzgerald , Corsellis, Vivo, & Debomy, 2014). In Turkey, the cost of accommodation was set so to meet basic shelter needs and rights (i.e. a minimum of 3.5 m^2 per person, access to a toilet and running water).

[31] "An assessment of local building techniques needs to take into consideration the need for improving safety. Where labor is available, training can perhaps be provided in specialized construction techniques brought in from outside" (Barakat, 2003).

[32] For example, the relatively inelastic supply of housing in Lebanon leads to competition between Lebanese and Syrians, with a consequent upward price pressure. Furthermore, general lack of supply has pushed many of the poorest Syrian refugees into sub-standard quality shelter (e.g. unfinished spaces, converted commercial space), for which they reportedly pay higher-than-average market prices (Key Development Services, 2014).

[33] A survey of available rental stock is a useful tool to establish the feasibility of an CBT intervention for rent. An example is given by the Assessment of Rental and Potential Housing Market in Gaza Strip (Al Athar Global Consulting, Inc., 2014). "However, the most effective way of monitoring the availability of rental stock is to establish a pilot program and track the average price of rent paid to landlords by beneficiaries" (Fitzgerald , Corsellis, Vivo, & Debomy, 2014).

housing stock has been damaged or destroyed and the intended intervention is for sustaining reconstruction, people in need may face bottlenecks of the construction sector because of a shortage of either materials or labour force. The shortages of both building materials and people with building skills may lead to inflation (Box 13). In case of a cash-based responses, this will erode the value of CBT, and beneficiaries may be unable to continue house rebuilding. Also, in case of in-kind interventions, projects may suffer from inflation if procurement is done locally. Thus, monitoring of markets is essential to guarantee continued market functioning without extreme price fluctuations, and the SA may identify possible complementary market interventions, such as external procurement of items in short supply, address transport/infrastructure problems or support local manufacture businesses.

Box 13 - Reconstruction and inflation in Sri Lanka

In the aftermath of the 2004 tsunami in Sri Lanka, the government provided a cash grant to fund a self-build program ($2,500 for a new house, and $1,000 for reconstruction). However, due to the increased demand for construction materials, skilled labor and land, price in building costs experienced a three- or four-fold increase. Thus, the value set by the government proved to be inadequate and NGOs had to provide additional support, either through top-up payments or as in-kind assistance so that people could complete the construction.

Source: (Adams & Harvey, 2006)

3.5 Household items and utilities

Access to basic non-food items, such as clothing, bedding and household items allows households to meet some of the most personal human needs: preparing, storing and consuming food, providing thermal comfort, and ensuring dignity and well-being.[34]

Standards for household items

- Clothing and bedding
  - all affected people should have at least two full sets of clothing (particularly underclothes, to enable laundering) in the correct size that are appropriate to the culture, season and climate.
  - all beneficiaries should have sufficient and appropriate quality items for safe, healthy (bed nets) and private sleeping (minimum one blanket and bedding (floor mat, mattress) per person. Additional blankets/ground insulation required in cold climates.)
- Cooking and eating utensils
  - affected population should have access to sufficient and appropriate items to prepare, eat and store food.
- Stoves, fuel and lighting
  - beneficiaries should have access to sufficient, safe and affordable energy supply to maintain thermal comfort, food preparation, and lighting.
  - each household also has access to appropriate means of providing sustainable artificial lighting to ensure personal safety.

Source: (The Sphere Project, 2017)

[34] Needs of materials to build, maintain or repair shelters is addressed in the Shelter section (section 3.4). Assessment of hygiene items is covered in the WASH section (section 3.2).

Once necessary and appropriate individual and household NFIs are identified, the SA should understand which NFIs can be obtained by the beneficiaries themselves through the provision of CBT. The SA needs to unfold the following elements:

- ✓ availability of NFIs in local shops;
- ✓ supply adaptability to an increase in demand, which includes assessing retailers' storage and financial capacity;[35]
- ✓ markets integration;
- ✓ supply chain bottlenecks (competition between suppliers, logistic infrastructure conditions, and administrative barriers such as import ban for certain products, inefficiencies in customs clearance or quality control procedures);
- ✓ likelihood of market distortions because of cash injection (e.g. inflation);
- ✓ accessibility to markets by the population of interest.

As already mentioned for the hygiene NFIs and shelter/construction materials, tools developed for assessing food market (see section 3.1) can easily be adapted. Furthermore, the UNHCR's MSMA tools are valid starting points (UNHCR, 2017).

The assessment of the market system for **stove and fuel** may require a little bit more of attention, especially if the ENA did not clearly identify the needs of the beneficiaries. The *Decision Tree Diagram on Factors Affecting the Choice of Fuel Strategy in Humanitarian Settings*[36] can help determining which cooking fuel options are most appropriate and, thus, which market system should be assessed. More information can also be found in the *WFP Handbook on Safe Access to Firewood and alternative Energy (SAFE)* (WFP, 2012). Additional information would be[37]:

- ✓ sources and types of fuel sold in the market; and
- ✓ cost of the fuel in high and low season.

However, while "more than a third of the world's population relies on traditional fuels - wood, coal, animal dung, and agricultural waste - for their energy needs, including cooking their meals, heating their homes, and lighting their communities",[38] it may still be the case that the ENA reveals that the affected population has access to household energy through grids for electricity and gas. In this case, the SA will also investigate:

- ✓ reliability of electricity and gas grids before and after the disaster; and
- ✓ average cost per household.

[35] Do traders have a bank account? Do they have access to a loan? How do they normally pay their suppliers? What type of payment they accept from their clients?

[36] The Decision Tree was developed by the Inter-Agency Standing Committee Task Force on Safe Access to Firewood and alternative Energy in Humanitarian Settings.

[37] A recent example of a SAFE assessment is provided by WFP SAFE Rapid Assessment in Bangladesh (WFP, 2017b).

[38] www.safefuelandenergy.org.

3.6 Education

The overall objective of humanitarian intervention in the education sector is that all those affected by humanitarian crisis have equitable access to education in a safe and protective environment. Today, education is recognized as a necessary and critical response to emergencies (Inter-Agency Network for Education in Emergengy, 2010).

The role of the SA is to get an overall understanding of the functioning of the public or private school system, depending on which the main system used by the population of interest is. If the ENA or other sector specific assessment have not revealed it yet, the SA should check:

- ✓ if learning spaces and schools are sufficient in size, number and location to meet learning needs;
- ✓ if physical, discriminatory[39], gender-based[40] or legal[41] barriers to access to education exist;
- ✓ which groups of children are least likely to participate in education activities (e.g. orphans, disables, worker, minorities, etc.);
- ✓ if children received already any assistance (e.g. textbook, fee waiver, etc.) from other actors;
- ✓ which are the most essential types of support for education needed in the community (e.g. repairing damaged school buildings or facilities, establishing temporary spaces for learning, ensuring safety of learners and teachers, providing school materials, providing psychosocial support to teachers and students, school feeding, and recruiting teachers).[42]

Clearly, CBT assistance will not be sufficient to address all the needs of the education sector. However, it could cover school materials, fees, or other indirect costs (transportation, clothing, etc.), depending on what households must pay themselves and what is publicly available.

In this regard, the market analyst can look at the traders supplying **school materials** (e.g. where are they located? is there enough supply? will they be able to face an increase in

[39] Discrimination refers, but is not limited, to obstacles imposed because of poverty, gender, age, nationality, race, ethnicity, religion, language, culture, political affiliation, sexual orientation, socio-economic background, geographic location, disability or special education needs (Inter-Agency Network for Education in Emergengy, 2010)

[40] For example, distance to school and the practice of early marriage, increase drop-out rates among girls. (Global Education Cluster, 2010)

[41] Legal impediments often prevent access when populations are displaced to a new country or new region and documentation of past schooling (to determine level) or birth certificates are missing (*ibidem*).

[42] For more information on how to conduct an education needs assessment you can refer to The Joint Education Needs Assessment Toolkit and/or The Short Guide to Rapid Joint Education Needs Assessments produced by the Global Education Cluster in 2010.

demand? are prices stable?), and at the **school fee** structure (e.g. are fees equal for everyone and across schools/districts? does the fee includes also school materials or meal? what are the administrative consequences of different payment delays?). It is likely that school materials have a similar supply chain as other NFIs, so that it is worth grouping all NFIs in the SA and avoiding duplication of work. Another cross-sector element that could be analysed is **transport**. If kids are far from school and there are no security concerns or logistic constraints, the analyst will also investigate the transportation sector (is the supply able to meet the current demand and/or an increase in demand? Is it a monopolistic sector? How does the tariff structure work?). However, if children do not attend school because of legal or language barriers, or lack of facilities and teachers, then CBT assistance for education will not be provided and the analyst will exclude the sector from the assessment.[43]

3.7 Communication

The assessment of the communication sector plays multiple roles and is a clear cross-sector element of the SA. Communication is indeed a market service which cuts across different market systems and can play a role in determining market functionality. First, **communication is important for traders** who need to contact their suppliers, find out where to source products or transfer funds electronically. Second, **communication is essential for people**, especially during an emergency when they need information and means of communication to make informed decision or to receive humanitarian aid. Finally, during an emergency response **communication is vital for the humanitarian community** who need to establish radio communications, data connectivity and basic ICT support for its operations. However, given the specific needs, the SA does not address info requirements for the Emergency Telecommunication Cluster (ETC).

When an ENA or IT assessment have not revealed it yet, the SA should understand:

- ✓ availability, reliability and average cost of SMS and voice service;[44]
- ✓ availability, reliability and average cost of internet connectivity;
- ✓ availability, reliability and average cost of mobile money services;
- ✓ IT literacy levels of the population;
- ✓ population with mobile phones;
- ✓ typical use of mobile phones;
- ✓ average cost per person/household;

[43] Nevertheless, there is the possibility that households resort to in-house private schooling. This possibility should emerge from the needs assessment and program should advise about the willingness/possibility that cash assistance would cover this cost. In this case, the MSMA will cover also the education sector.

[44] To be compared with the average cost from the expenditure module in household surveys. It will inform the transfer value for communication in a CBT interventions. For example, in Turkey, value for one card for data/phone per household per month (TRY35) was included in the MEB calculation.

- ✓ population with access to grid power or alternative source of power supply (reliability, distance from the closest power point, cost); and
- ✓ average distance people should travel to have phone coverage or network connectivity.

Taking stock of this information, the SA will investigate to what extent communication services are important for traders and actors of other sectors of interest, to what extent they use technology to run their business (e.g. use of mobile devices, ATMs, point-of-sale (POS) terminals etc.), and to what extent disruption in communication services affects their business.

3.8 Transportation

Assessing the functionality of the transportation sector is also crucial for all the other sectors. The SA would benefit from the expenditure module in household surveys and the MEB calculation to investigate the costs of transportation, which is in fact considered the hidden cost of other sectors as people may need to travel to buy goods and have access to services to satisfy their basic needs.[45] Analysis of secondary data (e.g. from the logistic cluster) should reveal the conditions of the logistics infrastructure on the ground (i.e. roads, airports, seaports, rail), and if a logistics capacity assessment is not available or outdated, the SA should understand:

- ✓ Pricing, seasonality and challenges of transport services (e.g. seasonal constraints, security risks, and traffic congestion);
- ✓ fuel availability and price characteristics;
- ✓ commuting time for traders to reach a market;
- ✓ changes in individuals' transportation habits; and
- ✓ bottlenecks of transportation system for individuals (proximity to transport hubs, road safety, ease of access to all individual dwellings and communal facilities such as schools and health centres in all seasons).

Box 14 - Transport challenges in the Democratic Republic of Congo

In 2018, WFP implemented in the Kasai Central region a time-bound multi-purpose cash intervention in an area where road conditions are very challenging. In a vicious cycle of poor road maintenance and lack of motorized vehicles, for many the only viable means of transport are bicycles with the obvious implications of extremely long round trips to the district capital, as well as small volumes of goods reaching markets the farther one moves away from the district capital.

The analysis of the transport market is also important because available trucks or cars may be diverted away from other critical uses; e.g. the increased use of trucks for water transportation during a drought may divert trucks normally used to transport medicines from district to local health facility.

[45] The draft of the revision of Sphere handbook reports, for example, that interventions covering indirect costs such as transport have been found useful in humanitarian health interventions.

Bibliography

Adams, L., & Harvey, P. (2006). *Learning from cash responses to the tsunami.* HPG Working Paper.

Al Athar Global Consulting, Inc. (2014). *Assessment of Rental and Potential Housing Market in Gaza Strip.* Norwegian Refugee Council.

Barakat, S. (2003, December). Housing reconstruction after conflict and disaster. *HPN Network paper, ODI*(43).

CaLP. (2015). *Operational Guidance and Toolkit for Multipurpose Cash Grants.*

CaLP. (2017). *State of the World's Cash - Draft Report.* Retrieved November 24, 2017

Dwast, C. (2016). *Literature Review on the Use of Cash in Shelter.* Global Shelter Cluster.

Fitzgerald , E., Corsellis, T., Vivo, G., & Debomy, S. (2014). *Rental support cash grant programs : operational manual.* Washington: DC: World Bank Group.

Global Education Cluster. (2010). *Joint Needs Assessment Toolkit for Education in Emergencies.* Geneva: Global Education Cluster.

Global WASH Cluster Markets . (2016, December). *Cash and Markets In The WASH Sector. A Global WASH Cluster position paper.* Technical Working Group.

Inter-Agency Network for Education in Emergengy. (2010). *Minimum Standards for Education: Preparedness, Response, Recovery.* New York: INEE.

Key Development Services. (2014). *Development of a Framework for Multipurpose Cash Assistance to Improve Aid Effectiveness in Lebanon: Support to the Market Assessment and Monitoring Component.* Jal el Dib, Lebanon: KDS SAL.

Pelly, I., De Wild, D., & Inarra, C. (2015). *Philippines Haiyan Response - A multi-sectoral review of the use of market analysis and the design and implementation of CTPs.* Save the Children.

The Sphere Project. (2017). *The Sphere Handbook, Humanitarian Charter Minimum Standards in Humanitarian Response.*

UNHCR. (2016). *Cash Based Interventions for WASH Programmes in Refugee Settings.* Geneva: United Nations High Commissioner for Refugees.

UNHCR. (2017). *Multi-Sector Market Assessment: Companion Guide and Toolkit .*

UNHCR; Save the Children. (2017). *UNHCR Multi-Sector Market Assessment (MSMA): Charcoal, water, low-income rental housing and core-relief items in Maiduguri, Jere and Konduga, Borno State, Nigeria.*

WFP. (2009). *Emergency Food Security Assessment Handbook (EFSA)* (Second Edition ed.). Rome: World Food Programme.

WFP. (2009). *Market Analysis Tool - How to conduct a trader survey?* Rome: World Food Programme.

WFP. (2012). *WFP Handbook on Safe Access to Firewood and alternative Energy (SAFE) .* Rome: World Food Programme.

WFP. (2013). *Comparative Review of Market Assessment Methods, Tools, Apporaches and Findings.* Rome: World Food Programme.

WFP. (2017a). *Collecting Prices for Food Security Programming: the how and why of price data collection at WFP.* Rome: World Food Programme.

WFP. (2017b). *SAFE Rapid Assessment in Bangladesh.* World Food Programme.

WFP. (2018a). *Essential Needs Assessment Guidance.* Rome: World Food Programme.

WFP. (2018b). *Minimum Expenditure Baskets - Guidance Note.* Rome: World Food Programme.

WFP. (2018c). *The 72-hour Assessment Approach: A guide for vulnerability and spatial analysis in sudden-onset disasters.* Rome: World Food Programme.

Wildman, T., Brady, C., & Henderson, E. (2014, May). Rethinking emergency water provision: can we stop direct trucking water in the same places every year? *Humanitarian Exchange Magazine*, pp. 34-36.