

STEP 8

Market-system analysis



Photo credit: Jane Beesley/Oxfam

A local water seller in Myanmar.

Step 8 completes the market-analysis strand, using the maps and calendars from Step 6 and the gap analysis from Step 7. This is one of the most crucial steps in EMMA. It involves a final assessment of the capacity of the critical market system, through increased production and trade, to fill the gaps facing the target population. This result forms a key input to the final response analysis in Step 9.

Before starting Step 8, you will have...

- o explored how the crisis has affected actors in the system, and how they are responding;
- o consulted market actors and key informants on possible market-support actions;
- o completed the baseline and emergency-affected market maps;
- o drawn up a seasonal calendar for the market system;
- o completed the gap-analysis strand.

8.1 Overview of Step 8

Objectives

- Analyse *availability* and the principal supply and/or demand problems in the market system.
- Analyse and estimate the market system's existing or potential capacity to contribute to the required emergency response calculated in Step 7.
- Identify plausible options for indirect market-system support for consideration in Step 9.
- Answer, and draw conclusions about, the key analytical questions defined in Step 3.

Activities

Section 8.3: Baseline analysis

- Assessment of the market system's prior capacity and performance
- Analysis of data on volumes of production and trade, market integration, competition, and conduct

Section 8.4: Impact analysis

- Exploration of the impact of the emergency
- Comparisons of baseline and emergency situations in terms of trade volumes, prices, integration, and conduct

Sections 8.5–8.6: Future forecast

- Estimates of the market system's capacity to contribute to emergency response
- Identification of market-support options

Key outputs

- *How it was before*: an assessment of the market system's baseline capacity and performance
- *What has happened*: findings about the impact of the emergency on the market system; and in particular an analysis of supply-and-demand problems in the emergency-affected situation
- *How it is likely to perform in future*: an appraisal of the system's capacity and potential to contribute to the emergency response
- *Market-support options*: a list of possible emergency market-support options (to reinforce local capacity to contribute to humanitarian response), for consideration in Step 9

8.2 Outline of the analysis process

The essential aim of Step 8 is to assess whether the market system could contribute usefully and reliably to the emergency response. (See Box 8.1 for a definition.) If the answer is Yes, then Step 8 also aims to do the following:

- estimate its capacity to contribute to meeting the gap, and
- identify any support opportunities that could restore or increase this capacity.

Box 8.1 'Contributing to humanitarian response' – a definition

A market system is capable of contributing to the emergency response if, without causing harmful changes in prices or availability for others, it can provide:

- a sufficient and reasonably priced supply of the critical food, items, or services directly to the target population – assuming that the latter has access and purchasing power (e.g. cash, vouchers);
- a reliable and reasonably priced source of the critical food, items, or services for local procurement by humanitarian agencies; or
- a reliable outlet (i.e. employers, buyers) and fair price for target populations' labour or produce – and thus a critical source of income.

In order to make this assessment, EMMA teams need to progress through a series of analytical stages, which are best represented by these four simple questions:

1. *Baseline*: what was the market system's capacity and performance before the emergency?
2. *Impacts*: what has happened to the market system in the emergency situation?
3. *Forecast*: how well is the system likely to contribute to emergency response in future?
4. *Support*: what options exist for restoring or strengthening the market system's capabilities?

Evidence

Step 8 brings together and uses the evidence – information and data – collected through background research and fieldwork, and the production of maps and seasonal calendars.

Box 8.2 Types of data and information used in market-system analysis	
Field observations	Observed disruptions to producers and businesses Reported disruptions to market linkages, transactions Reported disruptions to infrastructure and supporting services
Availability	Volumes of production and trade in different parts of system Current stocks and lead-times for supplies
Market integration	Strength of trade linkages with other, unaffected markets
Price information	Changes in prices compared with baseline situation Price trends (direction and volatility of price movements) Analysis of margins along the chain
Conduct of market actors	Actor numbers (and implications for market power) Uncompetitive behaviour or rules, cartels and barriers to entry

8.3 Baseline analysis

This element of the market analysis consists of three main questions:

- How did the baseline capacity compare with the challenge estimated by the gap analysis?
- How well integrated was the market system before the emergency?
- How much competition was there in the market system before the emergency?

Market-system capacity

With luck, enough data were collected (in Step 6) to make approximate numerical estimates of baseline economic activity (i.e. volumes of production and trade).

- In supply market systems, these data relate to the availability of items and capacity of market actors to respond to the procurement needs of humanitarian agencies or target population.
- In income market systems, they indicate the capacity of the market system to create earnings for the affected population by purchasing their produce or their labour.

It is important that these baseline estimates are seasonally relevant: i.e. they should offer a good basis for comparisons with the emergency-response requirements at this time of year.

These estimates should also be made, if possible at two or three different economic scales (see Box 8.3):

- within the local emergency-affected area (e.g. disaster zone);

- in the wider provincial / regional market (e.g. districts around a major trade hub);
- in the national market.

This enables EMMA to estimate the underlying ‘normal’ capacity of the market actors. By comparing this information with gap-analysis results, you will get an immediate feel for the scale of the emergency-response challenge facing the market system.

Box 8.3 Baseline production and trade volumes – example			
<i>Volumes of production and trade (MT per month)</i>	<i>National market</i>	<i>Provincial market</i>	<i>Local affected area</i>
Baseline activity	5,000	1,200	200
Gap facing the target population in the affected area = 350 (from Step 7)			

Market integration

Market integration is a measure of the degree to which market systems in different geographical areas are connected to each other. When markets are integrated, critical items or food stuffs will flow more easily from surplus areas to deficit areas; from producers to consumers; from ports and border crossings into more remote areas. When markets are fragmented, in contrast, it is difficult or expensive to move goods, and prices vary widely between locations and seasons.

The degree of market integration is a vital consideration for EMMA’s analysis of appropriate responses.

- A local market system which was well integrated with wider markets in the baseline situation is much more likely to be able to expand trade to meet emergency needs.
- Where local markets are well integrated with larger markets, critical items, services, or food are more easily available and prices are more stable.
- Local procurement and cash-based interventions are highly dependent on market integration, which will enable critical items or food to flow from other surplus regions.
- Where local markets are fragmented – i.e. poorly integrated with larger markets – prices tend to be more volatile. Target groups will experience higher prices (lower income) more often.

How to assess market integration

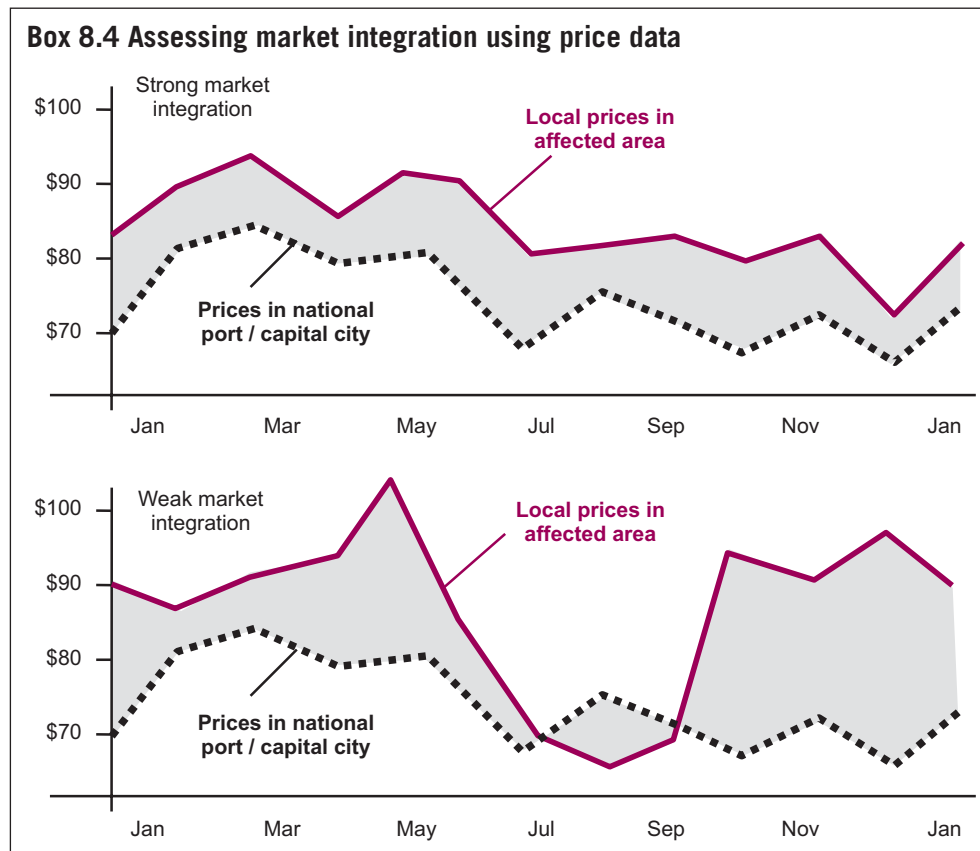
If data are available, detailed price patterns over time usually indicate how well integrated markets are. See Box 8.4.

In *strongly integrated markets*, high prices in deficit areas give traders an incentive to bring goods from surplus areas. Therefore

- prices tend to follow similar seasonal patterns, rising and falling in unison; and
- the price difference between markets stays relatively constant (represented by grey shading in the box).

In *weakly integrated (or fragmented) markets*, high prices in deficit areas do not create sufficient incentives for traders to move goods, due to high transaction costs (e.g. insecurity, washed-out roads). Therefore

- prices tend to follow dissimilar patterns; and
- big seasonal variations occur in the price difference between markets (grey shading in the box).



For more detailed guidance on market integration, consult the EMMA reference manual.

In the absence of detailed price-series data, it is usually possible to get a well-informed view of market integration from local and regional traders (Step 5). Interviews should reveal the following:

- where the main trade flows normally come from, or go to;
- what proportion of local production and trade is imported (or exported);

- whether local price peaks and troughs normally coincide with national ones;
- whether there are certain times of year when transport is restricted/difficult;
- whether there are other reasons why trade is restricted or markets segmented.

Box 8.5 Weak market integration – example from Haiti

EMMA analysis of the beans market system in Haiti in 2008 found that rural markets in different provinces were highly segmented (not integrated well).

This, it emerged, was because producers' access to their corresponding commodity markets in the capital Port au Prince was tightly controlled by regionally based trading clans, or cartels. After the hurricanes struck, these cartels had the effect of restricting the flow of food between different parts of the island.

Baseline competition and market power

EMMA teams must also try to assess conduct in the baseline market system, establishing how market actors did business with each other, and especially who set the prices in transactions. A market system that suffered from abuse of market power before a crisis is unlikely to perform better in an emergency.

Box 8.6 Competition and market power

Competition is about rivalry in the market place. Competition exists where buyers or sellers have a real choice between alternative market actors, based on who provides the cheapest or best goods, the highest wages, etc. The opposite of competition is market power, especially 'monopoly'. Market power arises when a single market actor – or a small cartel working in collusion – is able to dictate or strongly influence prices in their own favour, thus earning excess profits. As well as monopoly over trade, market power can stem from monopolistic control over resources, services, or knowledge.

Competition and market power form one dimension of conduct, but there are others (both positive and negative). EMMA teams need to note any significant forms of conduct in the baseline system which may undermine or support the performance of the market system in the emergency context. For further reading, see the FEWS NET market guide (FEWS NET, 2008).

Positive aspects of conduct may include the following:

- competition: households have a good choice of alternative suppliers (retailers, traders);
- embedded services: wholesalers and retailers offer credit or other services to their customers;

- risk management: businesses guarantee sales or advance loans to their suppliers (e.g. farmers);
- collective market power: small-scale farmers market their produce collectively.

Negative aspects of conduct could include:

- monopolistic behaviour: collusion by groups of traders (cartels) to influence prices in their favour;
- market distortion: prices are set by government in ways which disadvantage the vulnerable or depress economic activity;
- exclusion / barriers to entry: restrictions on where and when certain actors can trade.

8.4 Impacts of the emergency

This element of the analysis can be reduced to five main questions:

1. What impacts on the market system have been observed in the emergency situation?
2. How does the market system's current level of trade and availability compare with the baseline?
3. Is the market system's performance essentially limited by supply problems, demand problems, or both?
4. How has market integration been affected?
5. How have competition and market power been affected?

Observations and mapping of emergency impacts

The major impacts of the emergency will have been observed by EMMA teams in the field; reported by market actors in their interviews (Step 5); and included in the market map of the emergency-affected situation (Step 6). Many different kinds of impact may have been reported, and it is important to focus attention on the parts of the system (and the impacts) that matter most to the target population. See Box 8.7.

The market maps can help with this focus, in two ways:

- by illustrating how different target groups interact or engage with the market system; and
- by conveying a sense of the relative economic scale of different actors, linkages, or pathways.

Box 8.7 Focus on the impacts that matter – an example of market segmentation

During EMMA fieldwork, wholesalers of rice, interviewed in a trading town, report that the major emergency impact (for them) has been the large-scale destruction of warehouse stocks.

However, market mapping shows that the wholesalers' produce mainly goes to export buyers, and is of a higher grade than the rice generally consumed by vulnerable target groups, who rely mostly on rice grown relatively locally by small-holder farmers; in other words, the market for rice is segmented.

The EMMA team therefore decide to concentrate attention on response options that address the production constraints faced by these small-scale farmers.

With this focus in mind, EMMA teams must do all of the following.

1. Review the market maps, interview findings, and field notes.
2. Identify the specific 'impacts' on the market system that are most significant for the target population, and relevant to their emergency needs (the gap), for example:
 - reduced production or loss of previous stocks (e.g. food crops);
 - loss of key actors in the supply chain/value chain that target groups use;
 - damage to vital infrastructure, or disruption to key services;
 - bottlenecks in transportation (e.g. roads, insecurity).
3. List any market-support ideas relating to these impacts that emerged during the EMMA process, e.g. solutions and support proposed by producers and traders (see section 8.6). These preliminary response options will form an input to Step 9.

Market-system capacity in an emergency situation

What changes have taken place in the volume of production and trade at different geographical scales, as a result of the emergency? Alongside price data, these changes are key indicators of the impact of the crisis on the market system. Comparing them with the baseline estimates above provides further insight into the magnitude of the impact on the market system. See Boxes 8.8 and 8.9.

It is important not to get stuck on detail with these estimates. EMMA needs a 'feel' for how economic activity has been affected. Even very rough estimates of quantities can be useful.

Box 8.8 Comparing baseline and emergency trade volumes – example

The area worst affected by current flooding normally exports pulses (lentils) to the capital at this time of year. Flooding has severely damaged production. The export trade has stopped, and instead some pulses are now being imported into the district.

Baseline estimate

Consumption within district = 350 MT/month (national household survey)

Trade going out of district = 60 MT/month (reported by traders)

Therefore total production and trade = 410 MT/month

Emergency-affected estimate

Production within district = 200 MT/month (farm-damage reports)

Trade coming into district = 20 MT/month (interviews with traders)

Therefore total production and trade = 220 MT/month

Finding: total production and trade are down by approximately 50%.

With luck, enough data were collected (in Step 6) to make approximate estimates of emergency economic activity (production and trade volumes) at the local, provincial, and national scales.

Box 8.9 Analysis of baseline and emergency volumes – example

<i>Volumes of production and trade (measured in MT per month)</i>	<i>National market</i>	<i>Provincial market</i>	<i>Local affected area</i>
Baseline activity	5,000	1,200	200
Emergency-affected situation	5,000	1,100	50
Impact on production and trade	n/a	-10 %	-75 %

Interpretation: Production and trade in the disaster zone have been very severely affected by the emergency (down 75%). EMMA teams will need to understand the causes of this in detail, in order to assess prospects for a contribution by the local system to the emergency response. However, at the provincial market level, the change in activity has been fairly marginal (down only 10%), suggesting relatively minor impact on the system's capacity at that geographical level.

Supply problems and demand problems

Market systems work through the interaction between *demand* – people’s ability to pay for goods or services that they need – and *supply* – other people’s capacity to deliver those goods or services. It is therefore vital to understand how the emergency situation has affected this supply–demand dynamic.

In particular, it is vital to understand whether the changes in production and trade observed are essentially symptoms of demand problems, or supply problems, or a combination of both.

Demand-side and supply-side *problems* have very different impacts on target groups, depending on whether they are affected as consuming households, producers, or workers: hence there are different implications for humanitarian action.

Box 8.10 Demand-side and supply-side problems compared	
<i>Demand-side problems</i>	<i>Supply-side problems</i>
<p>In emergencies, effective demand (the level of spending by final consumers) is often affected. Most often, effective demand falls, because – whatever their urgent needs might be – final consumers have less money to spend.</p> <p>Also, demand may fall because people receive sufficient relief distributions of that particular item, so they have less need to buy.</p> <p>Occasionally demand may briefly increase: e.g. through a surge in purchases of food or shelter materials after a hurricane.</p>	<p>Emergencies very often disrupt market systems’ capacity to produce and deliver food, items, or services in response to demand. This may be due to problems at the production end of the chain; or it may be due to transaction blockages elsewhere in the market system.</p> <p>For example, a crisis may be linked to destruction of crops, or loss of warehouse stocks, or insecurity, or disruption of transport.</p> <p>Occasionally, emergencies can also cause a problematic surge in supply (e.g. livestock sales during a drought).</p>

How to do it qualitatively

The basic character of an emergency-affected market system’s problems is usually assessed relatively easily from qualitative information collected in interviews with target groups and market actors.

The characterization of problems as supply- or demand-related depends on whether the market system is a supply system or an income system:

In supply market systems, demand depends on the ability and desire of the target population to purchase what they need. This assessment will come from the gap analysis (Step 7). Supplying food, items, or services to meet this demand is the role of the rest of the market system. Typical problems are presented in Box 8.11.

Box 8.11 Indicators of problems in 'supply' systems	
<i>Demand-side problems</i> (i.e. affecting target population)	<i>Supply-side problems</i> (i.e. affecting suppliers)
<ul style="list-style-type: none"> • Target households have less cash (or credit) than normal to spend. • Target households have restricted access to market actors or locations where critical food or items are available. 	<ul style="list-style-type: none"> • Availability of the critical food, item, or service is significantly reduced. • Key market actors are badly affected. • Disruptions have occurred to transport links or other key infrastructure along the supply chain.

In income market systems, demand depends on the volume of purchases made by buyers and final consumers, or the amount of labour sought by employers, both of which generate income for the target population. Supply depends on the capacity of the target population to produce goods or labour for sale. Typical problems are listed in Box 8.12.

Box 8.12 Indicators of problems in 'income' systems	
<i>Demand-side problems</i> (i.e. affecting buyers)	<i>Supply-side problems</i> (i.e. affecting target population)
<ul style="list-style-type: none"> • Final consumers or other buyers are spending less on the critical product. • Employers are seeking less labour in the market system. • Key market-actors in the income value chain are badly affected. • Transport, storage, or key infrastructure along the value chain has been badly affected. 	<ul style="list-style-type: none"> • Target households' production (e.g. cash crops) is significantly reduced, or they have less capacity to work (e.g. due to ill health, trauma). • Target households have more restricted access to output markets (e.g. transport constraints), or less access to employment markets (e.g. displacement). • There is an excessive supply of produce (e.g. livestock) or labour for sale.

How to do it quantitatively

EMMA can also use data about price changes and volumes of production and trade volume as indicators of what is happening to supply and demand in a market system *as compared with the baseline*. This can reinforce the assessment made qualitatively above.

It is also useful to look at the direction and pace of prices changes. Whether prices are generally rising, falling, or remaining stable can be as important as a direct comparison with the baseline situation. The table in Box 8.13 provides a key to this method.

The implications of supply-and-demand problems for emergency response are discussed further in Step 9. For a more economically rigorous but time-consuming approach to this topic, see the MIFIRA decision-tree tool (Barrett *et al.*, 2009), developed for CARE.

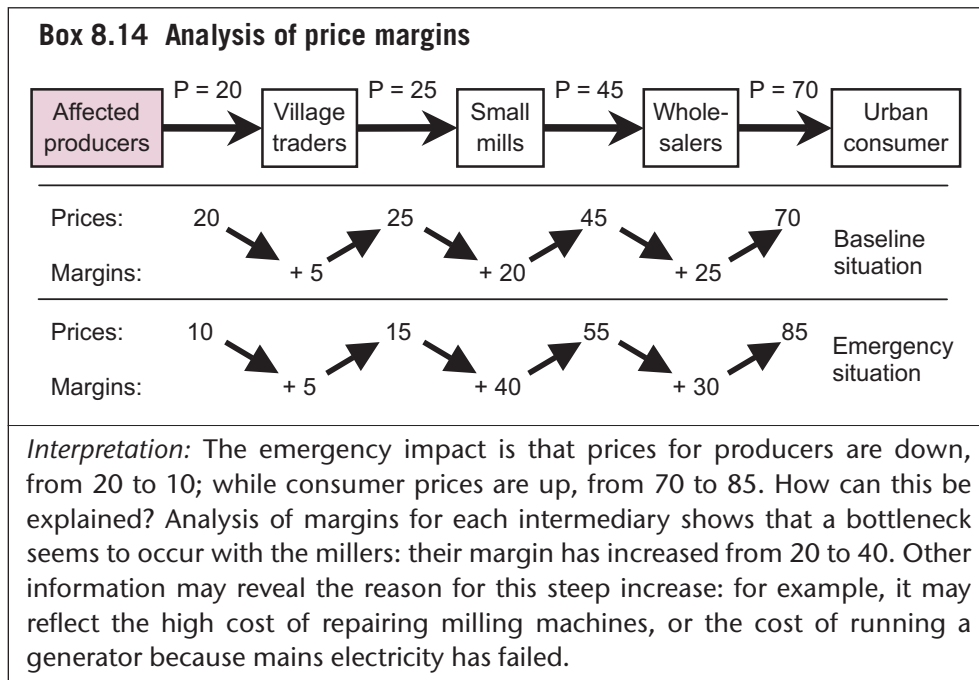
Box 8.13 Using data to diagnose supply-and-demand problems			
	<i>Prices rising or much higher than baseline</i>	<i>Prices stable and similar to baseline</i>	<i>Prices falling or much lower than baseline</i>
<i>Volumes higher than baseline</i>	<i>Demand is very strong. Supply response is good.</i> Indicates market system is performing well. However, high prices suggest that suppliers are still unable to satisfy surge in demand, or there are bottlenecks that raise costs for traders.	<i>Demand is strong. Supply response is good.</i> Indicates market system is performing well, compared with baseline: meeting increased needs, without creating price distortions.	<i>Demand is normal. Supply is excessive.</i> Indicates system is being saturated by over-supply. This is most likely where desperation forces people to sell labour, livestock, or assets on poor terms.
<i>Volumes similar to baseline</i>	<i>Demand is strong. Supply response is constrained.</i> Indicates trade levels are normal, but insufficient to satisfy increased demand. Alternatively, bottlenecks are raising costs for traders.	<i>Demand is normal. Supply is normal.</i> Indicates that market system is little affected, compared with the baseline situation.	<i>Demand is relatively weak. Supply is normal.</i> Indicates (income) market system is being saturated due to weak demand.
<i>Volumes lower than baseline</i>	<i>Demand normal (or strong). Supply response weak.</i> Indicates supply problems are very severe. Despite high prices, supply is insufficient to satisfy either normal or increased demand.	<i>Demand is weak. Supply response is uncertain.</i> Indicates that demand is constrained: buyers probably lack spending capacity.	<i>Demand very weak. Supply response is uncertain.</i> Indicates that demand is highly constrained: buyers lack spending capacity.

Bottlenecks in supply chains or value chains

If EMMA has reliable prices at different points along the supply chain or value chain, you can also use these to identify where bottlenecks are having an impact, by comparing changes in each actor's margin. A 'margin' is the difference between buying price and selling-on price.

In Box 8.14, the baseline margin of village traders = 5; the millers' margin = 20, and wholesalers' = 25.

Price margins normally reflect costs and risks borne by each different market actor (e.g. labour, transport, fuel, storage, credit). A dramatic change in the margin in the emergency situation can be a good indicator of a problem, constraint, or bottleneck in the supply chain or value chain at that point.



It is interesting to note that a 'demand constraint' (the millers' problems in Box 8.14) causes reduced income for producers. At the same time, the same problem creates a 'supply constraint' for the urban consumers, who face higher prices as a result. Either or both groups might be target groups for humanitarian assistance.

Reduced market integration

A market system that was well integrated in the baseline situation is more likely to be able to expand trade to meet emergency needs. However, market integration is often disrupted in an emergency. Identifying the causes and rectifying them can be an option to consider for emergency response.

EMMA teams will almost certainly not possess current price-series data to assess integration in the emergency situation (unless price monitoring began immediately). However, interviews with wholesalers, traders, and retailers will usually identify likely factors such as the following:

- damage to transport infrastructure (roads, bridges, waterways) affecting trade;
- elimination of key market actors who provided trade links with other markets;
- lack of finance for trading activities (break-down of credit arrangements);
- constraints on trade created by insecurity and conflict.

Protracted conflict often causes market fragmentation and the emergence of parallel or shadow markets in a war-distorted economy.

Changes in competition and market power

Abuse of market power presents a major risk for some emergency-response options.

- In supply systems, collusion between traders could cause prices to rise (or stay high), even though supplies are available and the market system is in other respects performing well.
- In income systems, lack of choice among buyers for producers and employers for workers can keep prices and wages down, even though healthy end-markets and work opportunities exist.

EMMA needs to assess how the emergency has affected competition and other positive and negative aspects of conduct. A crisis may knock out some businesses in the system and so reduce competitiveness among those remaining. It may destroy traders' capacity to offer usual services, loans, or credit. Alternatively, if social cohesion is strong, an emergency may temporarily improve people's conduct, as a sense of solidarity with the affected population takes hold.

Factors to look out for may include the following.

- *Reduced competition:* affected households have a restricted choice of suppliers (retailers, traders). Look at information on reduced numbers of market actors in the market map.
- *Increased monopolistic behaviour:* signs of collusion by groups of traders (cartels) to influence prices in their favour.
- *Damage to embedded services,* such as credit or other services that wholesalers, traders, or retailers offer to their customers, or employers to their employees.
- *Increased business risks* from loss of guaranteed sales or loan advances.
- *Greater exclusion:* worse restrictions on where and when certain market actors can trade.
- *Greater market distortion:* actions by governments (or humanitarian agencies) which temporarily disadvantage vulnerable producers or depress economic activity.

8.5 Prospects for contributing to the emergency response

By this stage, EMMA teams should be fairly confident they understand

- *how it was before*: the market system's baseline capacity and performance;
- *what has happened*: the impact of the emergency on the market system; and in particular an analysis of supply-and-demand problems in the emergency-affected situation.

The next step in market-system analysis is to use the knowledge and insights discussed above to predict how well the system is likely to perform in future: its potential to contribute to the emergency response at local, provincial, or national levels.

This is also where EMMA teams answer many of the key analytical questions first posed in section 2.4. There is no blue-print for making this kind of prediction or prognosis: this is a matter of judgement.

In addition, in supply systems EMMA will need to draw on information about

- *availability*: what stocks of the critical food or item exist, where they are located, and how quickly they can be mobilized by the market system.

Initial qualitative assessment

Without analysis of data, EMMA teams may be able to use market maps (and the information from interviews which they represent) to sketch conclusions about a critical market system's prospects for contributing to the emergency response. The essential character of emergency-affected market systems (i.e. supply-constrained or demand-constrained) will be an important aspect of this initial assessment.

- Example 1: A supply system serving a target population has suffered severe disruption, with damage to businesses or trade links that cannot be quickly repaired; and there are no obvious alternative market linkages. The system is characterized as supply-constrained: it is not likely that it will be able to fill the emergency gap. Therefore, in-kind distributions are needed.
- Example 2: A supply chain is relatively unscathed – any damage could be easily repaired – and market actors have stocks available. The emergency gap has emerged because the target population have lost their savings or normal sources of income. The local market system is characterized as demand-constrained: it could respond to the emergency gap if the target population, or humanitarian agency, had cash to spend. Therefore cash-based intervention or local procurement looks promising.

Comparison of gap analysis with production and trade volumes

Comparison of economic activity levels (both previously and in the emergency situation) with the gap analysis can be very revealing. In the example in Box 8.15, assume that the reduction in local trade is mainly due to households' lack of purchasing power (e.g. loss of income). Would the market system be capable of responding to demand if the target population had cash to buy what they need?

Box 8.15 Comparing 'gaps' with baseline volumes			
<i>Volumes of production and trade</i>	<i>Local affected area</i>	<i>Provincial market</i>	<i>National market</i>
Emergency-affected situation (A)	50	1,100	5,000
Emergency gap identified (B)	350	350	350
Required response, A + B = (C)	400	1,450	5,350
Baseline activity (D)	200	1,200	5,000
Required increase over baseline = (C / D - 1) x 100 %	+ 100 %	+ 25 %	+ 8 %
<p><i>Analysis of data in Box 8.15</i></p> <p>The emergency response required to meet the gap (400 MT per month) is double the estimate of baseline production and trade in the affected area. The same gap is less challenging when put in the context of provincial markets (a 25% increase) and national markets (+ 8%).</p>			

Various implications can be drawn from this simple analysis in Box 8.15, including the following.

- It could be a significant challenge for local market actors to fill the emergency gap: even starting from the baseline situation, they would need to double their economic activity.
- Therefore unless there is evidence of strong integration between local and provincial markets, cash help for the target population would probably cause shortages and price rises in the local area.
- The provincial market system looks likely to have the necessary capacity to respond. Therefore procurement at this level is a more feasible option to consider. Availability and lead-times need to be checked.
- The national-level market seems unaffected, and procurement at this level also looks feasible. This could be the best option if the provincial market is supply-constrained.

Availability (stocks and lead-times)

Comparison of past or present trade volumes can lead EMMA teams to decide that market systems are NOT capable of responding to the emergency gap – thereby eliminating some response options. But in order to confirm that they *are* capable, EMMA also needs information about current availability (stocks) of the critical food or item. These essential data include the following factors:

- the stocks held by different types of market actor, including producers, along a supply chain;
- the lead-times (between order and delivery) expected at each link in the supply chain.

This information will come from the interviews with market actors (traders, retailers, etc.).

When investigating lead-time', treat people's responses with caution. Traders may exaggerate how quickly they can obtain supplies, in order to impress you, or they may be unaware of bottlenecks elsewhere. Always cross-check (triangulate) information with other market actors in the chain.

Information about availability can be usefully summarized and analysed in a table like Box 8.16. The information and data can be used to assess the availability at each of the economic scales of the market system – starting with the local affected area.

Box 8.16 Analysis of availability – example					
<i>Required from Box 8.15</i>	National market 5,500 MT/month + 8%	Provincial market 1,500 MT/month + 25%		Local affected area 400 MT/month + 100%	
Actors	Farmers in other regions	Wholesalers and traders	Grain millers	Village retailers	Target households
Stock	Crops in fields	In warehouses	Storage at mill	In shop stocks	Household stores
Quantity	> 30,000 tonnes	2,500 tonnes	600 tonnes	200 tonnes	150 tonnes
Lead-times	6 weeks (harvest June)	1 week (transport)	2 weeks (milling bagging)	1 week (shop)	

Local-market interpretation: Stocks in the local affected area (350 MT in homes and shops) could be expected to last only about one month in a cash programme or local procurement operation. This gives little time for retailers to receive extra stocks from millers, and in turn from wholesalers in the provincial market (the minimum lead-time is about three weeks). Therefore it would be essential to inform traders and millers about the local procurement or cash programme in advance. Since availability at the most local level is inadequate, the analysis must be taken to the provincial / regional level.

Provincial-market interpretation: The provincial stocks (approx 3,100 MT) are sufficient to meet the total required market response, including the gap for the target population in the affected area, for about two months. However, the total lead-time until the next national crop harvest is about nine weeks (refer to seasonal calendar). The provincial market may therefore need to bring in stocks from other areas before the normal harvest trade begins. If this still casts doubt on the system's capability, EMMA needs to look at the national situation.

National-market interpretation: The national production and trade system ought to manage an estimated 8% increase in demand relatively easily. However, the emergency response depends on the provincial traders being well integrated with the national market – so that they can procure supplies from other regions if necessary.

Analysis of national balance sheets

In major emergencies, the gaps may be so large that the national availability of stocks is a concern. National availability, rather than the market systems' capability to move critical stocks of food or items between unaffected and affected areas within the country, becomes the key issue.

For most staple food crops, national food balance sheets can be found through the FAOSTAT website <http://faostat.fao.org>. These provide national availability data against which emergency gaps can be assessed.

Conclusions: prospects for contributing to emergency response

Finally, the EMMA team must reach a conclusion about the capability of the market system to contribute to the emergency response. As noted earlier, this is essentially a question about where the most appropriate point of contact between humanitarian intervention and market system lies: at local, provincial, national, or international level.

This decision will be based on weighing up all the evidence and interpretations reached in Step 8 about the following factors:

- the characterization of the market systems' problems – whether supply-based or demand-based;
- past performance (baseline) and current activity;
- availability of stocks;
- degree of market integration at different levels;
- likely conduct of market actors (risks of abuse of market power).

In addition, the EMMA team should be able to answer many of the key analytical questions initially posed in section 2.4.

8.6 Market-support options

One of the distinctive features of the EMMA toolkit is that, beside enabling early decisions about direct response options (e.g. cash vs in-kind distributions), it explores opportunities for alternative forms of *indirect market support* that could rehabilitate or assist recovery of critical market systems. See Box 8.17.

Box 8.17 Direct and indirect responses defined	
<i>Direct responses</i>	<i>Indirect responses (market-system support)</i>
<p>Actions that make direct contact with emergency-affected households</p> <ul style="list-style-type: none"> • Distributions of food or goods • Cash or voucher distributions • Cash-for-Work, Food-for-Work programmes • Provision of shelter, water, or sanitation • Nutrition programmes 	<p>Actions with others – e.g. traders, officials – to indirectly benefit affected households</p> <ul style="list-style-type: none"> • Rehabilitation of key infrastructure, transport links, bridges • Grants (or loans) for local businesses to restore stocks, rehabilitate premises or vehicles • Provision of technical expertise to local businesses, employers, or service providers.

The final component of Step 8 is to compile a long-list of all the indirect-response options which have emerged during the EMMA process. Consider all the ideas, proposals, and requests for assistance reported by target households, by market actors interviewed in the fieldwork, and by key informants; as well as the insights of the EMMA team.

These ideas are material for Step 9. Every proposal / option for market support should

- have obvious relevance to the target population (see Box 8.7);
- be identifiable with a clearly identified constraint or bottleneck in the market system;
- be consistent with the conclusions reached above (section 8.5) about market-system capability at different levels.

There is no benefit in trying to fix constraints at (for example) the village level, if the system still has more important, binding constraints at (for example) the regional level which prevent it contributing to response.

The results of this review of ideas can be collated in a table like Box 8.18.

Box 8.18 List of market-support options – examples	
<i>Market-system constraint</i>	<i>Proposed market-support options</i>
Target groups have limited access to livestock market places, due to insecurity.	<ul style="list-style-type: none"> • Arrange safe conduct to market places. • Provide temporary livestock shelters and fodder.
Roads between the main rural trading hub and the provincial city are blocked by landslides.	<ul style="list-style-type: none"> • Organize public-works projects to clear debris, using cash-for-work mechanism.
Pre-season credit for agricultural inputs from wholesalers and retailers is not available.	<ul style="list-style-type: none"> • Distribute seed and fertilizers to farmers. • Guarantee business loans for traders. • Set up a voucher system to give wide access.
Traders cannot rent trucks for transporting goods, due to competition from aid agencies.	<ul style="list-style-type: none"> • Negotiate better logistics arrangements among agencies. • Bring in more vehicles to the area.
Vendors have been banned from the displaced people's camps by officials, or must pay high bribes.	<ul style="list-style-type: none"> • Advocate for changes to camp rules and official practices.

Checklist for Step 8

- o Baseline analysis: assessment of the market system's prior capacity and performance
- o Impact analysis: exploration of the impact of the emergency
- o Assessment of the market system's demand-and-supply problems
- o Future forecast: interpretations leading to estimates of market system's capacity to contribute to emergency response
- o Initial identification of market-support options