PART ONE

INTRODUCTION
0.1 Introduction

In recent years, international humanitarian agencies have been adapting their responses to emergencies. Many have begun using cash-based initiatives, alongside or in place of conventional relief distributions of food and non-food items. Local procurement is also being encouraged, and opportunities for other innovative responses explored (Harvey 2005, 2007).

These changes in practice draw attention to the need for better analysis of markets. There is a growing realization that the best opportunities for assisting women and men may be missed unless emergency responses are designed with a good understanding of critical market systems. Moreover, lack of this market analysis in humanitarian programmes may be damaging the livelihoods, jobs, and businesses upon which people’s long-term security depends.

*Markets are a crucial component of how people survive. So understanding how they are functioning and disrupted is critical to any analysis of hunger, and vulnerability to food and livelihood insecurity or poverty.*

*Paul Harvey, Humanitarian Policy Group, ODI*
Market systems matter in emergencies

Market systems play a vital role in supplying critical goods or services to ensure survival and protect livelihoods, both in the immediate aftermath of a disaster and in the longer term. Before, during, and beyond any crisis, emergency-affected women and men also depend on market systems as sources of income and remuneration.

The rationale for EMMA is that a better understanding of the most critical market systems in an emergency situation enables humanitarian agencies to consider a broader range of responses.

As well as conventional in-kind distributions and cash-based interventions, these response options can include local procurement and other innovative forms of market-system support that enable humanitarian programmes to make better use of existing market actors’ capabilities, while understanding the risks.

The results of using EMMA therefore are:
- more efficient use of humanitarian resources;
- less risk of prolonged dependency on outside assistance;
- encouragement for the transition to economic recovery.

Gender and market systems

People’s relationships with other actors in market systems (i.e. traders, employers, buyers) are shaped by issues of power – which often have gender, class, or ethnic dimensions. We cannot assume that the roles and responsibilities of women and men, and hence their market needs, are the same. EMMA explicitly deals with these differences in its selection of target groups (section 1.6), and deals with power as a component of the market environment in market-system mapping (section 0.11).
0.2 EMMA: what, why, who, and when?

**WHAT is the EMMA toolkit?**

EMMA is a set of tools (this toolkit) and guidance notes (the reference manual on CD-ROM). It encourages and assists front-line humanitarian staff in sudden-onset emergencies to better understand, accommodate, and make use of market systems. It does not offer a simplistic blue-print for action. However, EMMA does provide accessible, relevant guidance to staff who are not already specialists in market analysis.

**WHY use EMMA?**

EMMA’s aim is to improve the effectiveness and efficiency of early humanitarian actions taken to ensure people’s survival; to protect their food security and their livelihoods; and to help agencies to avoid doing harm. EMMA helps front-line staff to both understand the important market aspects of an emergency situation that may not otherwise be considered adequately or early enough; and communicate this knowledge promptly and effectively into programme decision-making processes.

Six reasons why EMMA is valuable:

1. *To make early decisions about the wisdom of different direct-response options.*
   EMMA compares the likely outcomes and risks of different types of direct intervention (see Box 0.5) to decide which forms (or combinations) are most appropriate in meeting people’s priority needs.

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**Box 0.3 The essential scope of EMMA**

| **Sudden-onset emergencies** | where fast-moving events mean that agencies have little advance knowledge of markets and limited resources to investigate them |
| **A broad range of needs** | any market system that may be critical in addressing priority needs, including food, non-food items, and other services |
| **Rapid decision-making** | supporting humanitarian teams to take urgent-response decisions faced in the first few weeks of a crisis |
2. To assess opportunities for complementary ‘indirect’ actions. EMMA explores opportunities for alternative indirect forms of market support (see Box 0.5) that can rehabilitate or assist recovery of critical market systems.

3. To reduce the risk of doing harm. EMMA increases awareness of the potential to harm businesses and households in critical market systems. Hence it can reduce aid dependency, promote long-term recovery, and increase the stability of local markets that provide people with goods, services, and sources of income.

4. To assist in monitoring the performance and accessibility of market systems. EMMA profiles can help agencies to track both the continuing impact of a crisis, and the outcomes of humanitarian actions, on critical market systems. Up-to-date information about market access and performance can alert managers to any adverse effects of humanitarian actions, and enable them to make appropriate decisions about when and how to phase out assistance.

5. To improve the quality of disaster preparedness. Through better knowledge of how critical market systems work, their potentials and vulnerabilities, EMMA market maps and profiles can improve the quality of disaster-preparedness planning.

6. To define the requirements for more detailed market analysis. Where information is poor, time is short, and skills to interpret market data are weak, EMMA can still help managers to define detailed terms of reference for more thorough research of particularly critical market systems.

**Box 0.4 Risks of doing harm via markets**
Emergencies often cause damage to market functions and trade networks. This can be made worse by inappropriate humanitarian responses. For example:

- prolonged in-kind relief may aggravate the natural depression of a local economy caused by people's loss of income in an emergency;
- ill-considered cash-transfers may intensify the natural inflationary price rises caused by local shortages of essential goods in an emergency.

**Box 0.5 What are ‘direct’ and ‘indirect’ responses?**

<table>
<thead>
<tr>
<th>Direct responses</th>
<th>Indirect responses ('market-system support')</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actions that directly assist emergency-affected</td>
<td>Actions with others – e.g. traders, officials, policy makers – to benefit affected populations indirectly</td>
</tr>
<tr>
<td>populations</td>
<td>• Rehabilitation of key infrastructure, transport links, bridges, etc.</td>
</tr>
<tr>
<td>• Distributions of food or goods</td>
<td>• Grants (or loans) for local businesses to restore stocks, rehabilitate premises, or repair vehicles</td>
</tr>
<tr>
<td>• Cash or voucher distributions</td>
<td>• Provision of technical expertise to local businesses, employers, or service providers</td>
</tr>
<tr>
<td>• Cash-for-Work, Food-for-Work programmes</td>
<td></td>
</tr>
<tr>
<td>• Provision of shelter, water, or sanitation</td>
<td></td>
</tr>
<tr>
<td>• Nutrition programmes</td>
<td></td>
</tr>
</tbody>
</table>
THE EMMA TOOLKIT: INTRODUCTION AND OVERVIEW

Introduction

Box 0.6 Examples of the value added by EMMA

Comparing different direct-response options: cash vs. in-kind distributions
- A major flood event destroys the standing crops and food stocks of half a million people in a region that is not accustomed to such disasters. Immediately, humanitarian agencies begin household-level distribution of standard food rations e.g. rice, lentils, oil, sugar. Local traders appear to be quite resilient, however, and staple foods, including some local produce, are soon on sale. It is not clear to what extent this market-based supply can meet the target population’s needs. EMMA can help agencies to decide whether and when it is safe to switch to cash-based assistance.
- A severe earthquake damages the homes and possessions of two million residents in a mountainous region. Winter is approaching, and many lack adequate clothing and blankets. Donated garments are easily available from some donors, but most are culturally inappropriate. Meanwhile, on the plains below, clothing factories, part of a well-functioning garments market system, are undamaged. EMMA can explore the relative advantages of local procurement, or cash, to meet people’s needs.

Exploring opportunities for complementary ‘indirect’ actions: market-system support
- Coastal paddy-fields have been wrecked by salt-water intrusion following a cyclone. Rehabilitation will require extensive, deep ploughing of the soil – at a time when the local population is struggling to reconstruct homes and infrastructure. An agency considers buying and distributing power tillers to farmers but is concerned about the cost, sustainability, and social impact of this action. EMMA can investigate the sector and reveal any opportunities for strengthening the local rental market for agri-machines instead – for example, by using vouchers for farmers, and loans to rental-service providers.

Avoiding doing harm
- After the 2004 Asian tsunami, humanitarian agencies got involved in purchasing and distributing fishing boats on a huge scale. Unfortunately, in many locations there was inadequate analysis of the complex social relations linking fishing households, boat ownership, and the fish market system. As a result, in many places too many boats, or the wrong types of boat, were distributed. This led to over-fishing when the demand for fish was still low, to fishing yields that could not be ecologically sustained, and to worsening social tensions that affected vulnerable groups. In such situations, EMMA can provide insight into the risks and help agencies to avoid the worst mistakes.
WHO is EMMA for?

EMMA is for members of staff leading early assessments on the front line during sudden-onset emergencies, and during the transition to early recovery programming. By extension, EMMA is also for their managers and for decision makers responsible for planning initial and early responses to crisis.

EMMA is designed for generalists, as well as staff specializing in food-security, shelter, water, and sanitation sectors. This includes both front-line international support personnel drafted into a major emergency situation, and experienced local or national staff who may have good knowledge of livelihoods and economy in the affected area.

EMMA assumes limited previous experience of economic or market analysis. For this reason, EMMA tries to avoid technical language, or tools which require refined quantitative skills. However, those who conduct and lead EMMA processes – alone or with a small team – will greatly benefit from a pragmatic capacity to organize assessments flexibly, to reflect on information, and to think analytically.

EMMA is, in effect, an emergency stop-gap process: a pragmatic response to the typical human-resource limitations and shortages of information that constrain efforts to address market-related issues in sudden-onset emergency situations. By implication, it is less relevant for professional economists or market specialists who aim to conduct more thorough analysis of market systems, food security, or economic rehabilitation needs – for example in recovery phases of emergencies.

WHEN to use EMMA?

EMMA aims to encourage speedy, rough-and-ready market-system analysis during the first few weeks of an emergency situation. It is designed for use in rapid-onset emergency situations...

- when background information is limited;
- when time and capacity to analyse existing markets are limited;
- when expert market-analysis capabilities are not yet available.

EMMA is not relevant to rapid assessments and initial concept notes in the first few days of a crisis. It can be used, however, as soon as an emergency situation has begun to stabilize. This is so that the findings are not in danger of becoming immediately out of date due to further changes as the situation evolves.

Typically, this means that EMMA is used:

- once absolute priority needs (survival) are already being addressed;
- once displaced people have settled, at least temporarily;
- once market actors (e.g. producers, retailers, traders) have had a chance to assess their own situation and begin devising coping strategies.

This means that if suitable personnel are available, EMMA can potentially be used within two weeks of the onset of an emergency. However, it will often take rather longer.
EMMA may continue to be useful for many weeks (or even months) into a crisis, if humanitarian agencies’ understanding of key market systems that relate to emergency needs remains sketchy, or if changing market conditions need to be monitored. It may be valuable for early-recovery programming if more rigorous market analysis is not feasible.

In practice, the timing of EMMA will depend on reconciling the information and decision-making needs of the organization that is using the toolkit with the availability of staff to conduct these exercises.

0.3 EMMA and market systems

The ‘market system’ is a fundamental concept in EMMA. A market system is the entire web of people, businesses, structures, and rules that are involved in producing, trading, and consuming any product or service. The market system determines how a product or service is accessed, produced, exchanged, and made available to different people. This concept is best explained and revealed by using an example of a market-system map (see Box 0.7).
Box 0.7 Baseline market map – ‘beans’ example from Haiti

The market environment: institutions, rules, norms & trends

- High import tariffs
- Rising fuel costs
- Obstructive trade licence rules
- Corruption of market officials
- Growing unreliability of rainfall
- Obstacles to food trading
- Seasonal employment patterns
- Restrictions on women's access to markets

The market chain: market actors & their linkages

- Imports from USA
- Imports from Dominican Rep.
- Importer / wholesaler
- Provincial traders
- District traders
- Village traders
- Urban retailers
- Urban households
- Landless rural households
- Households consuming own produce
- Rural households with land
- Commercial farmers
- WAREHOUSING STORAGE
- FARM INPUTS
- CASUAL LABOURERS
- BUSINESS LOANS
- RURAL ROADS AND BRIDGES
- INFORMAL CREDIT
- LEASING OF TRUCKS
- WOMEN'S GARDENS

Key infrastructure, inputs and market-support services

- Colour key
  - Target groups
  - Bean producers
Mapping is one of the main tools in EMMA. Market-system maps, and other tools such as seasonal calendars, are at the heart of EMMA. Research and interviews with all sorts of different market actors and other informants are used to rapidly draw up comprehensive pictures of the system. These maps capture the most relevant available information and enable comparisons to be made between pre-crisis and emergency-affected situations. They are also vital tools for communicating EMMA findings and recommendations to busy decision makers.

**EMMA and market-system selection**

*EMMA investigates market systems for different items separately.* As the example in Box 0.7 illustrates, every crop, non-food item, or service has its own particular market system. This means that it is necessary to decide early in the EMMA process (Step 2) which market systems – i.e. which items, crops, products – are critical from the humanitarian perspective.

The need to focus on particular market systems is not a huge obstacle to using EMMA in practice. Although EMMA analyses every market system independently of every other system, it is perfectly feasible to conduct fieldwork for two or more EMMA studies simultaneously. Also, some commodities may have such similar market systems that it is feasible to use one as a proxy for others. For example, essential household items that are imported from outside the disaster area may come along very similar supply chains.

**0.4 Overview of EMMA - the three strands**

The EMMA process has three basic strands, represented by the strap-line ‘*People, Markets, Emergency Response*’.

Initially, the strands are relatively separate, like parallel lines of enquiry in an investigation. However, as EMMA proceeds, these strands should knit together like a rope, providing a strong, coherent analysis to support the weight of your final recommendations (see Box 0.8).
A. Gap analysis (‘people’) strand
This strand is about understanding the emergency situation, priority needs, and preferences of those most affected by the emergency: our target population. It also puts these households’ needs (the gaps in their resources) in the context of their economic profile and livelihood strategies.

B. Market-analysis strand
This strand is about understanding each critical market system in terms of its constraints and capabilities to play a role in the emergency response. It develops a map and profile of the pre-crisis baseline situation and explores the impact of the emergency on it.

C. Response-analysis strand
This strand is about exploring different options and opportunities for humanitarian agencies. It looks at each option’s respective feasibility, likely outcomes, benefits, and risks, before leading to recommendations for action.

The three strands run throughout the EMMA process, supporting each other, as follows.

The results of the gap analysis inform the market-system analysis by defining what the market system has to achieve if it is to meet people’s needs. These results also contribute to the response analysis, for example by describing women’s and men’s preferred forms of assistance (see Box 0.9).

Box 0.9 Results of gap analysis - example
25,000 households in a disaster area are normally food-secure in terms of locally grown rice at this time of year. Due to 60 per cent flood destruction of the current crop, they face a total collective shortfall (gap) of 1200 MT / month until the next harvest in nine months. Both women and men in the target population have a strong preference for cash-based assistance. For women this is mainly because they are concerned about the probable type and quality of food aid; whereas men favour cash because it is flexible.

The results of the market-system analysis inform the response analysis by assessing what the market system is capable of delivering, and by identifying the main constraints that it faces (see Box 0.10). Early market-analysis findings may
also support the gap-analysis process by highlighting issues that require field investigation, for example market-access constraints of which the target population are unaware.

**Box 0.10 Results of market-system analysis - example**

Traders in the disaster area will struggle to supply an extra 1200 MT rice / month from local stocks, and are not accustomed to ‘importing’ more than 300 MT / month (baseline). The main obstacles to efforts to increase supplies are lack of finance (trading capital), and damage to the local fleet of trucks. In addition, many rural feeder roads to remoter villages are blocked. However, rice traders in the nearest large city have ample supplies (baseline 4000 MT / month).

The response-analysis results inform the final conclusions and recommendations of EMMA, by evaluating feasibility, risks, advantages, and disadvantages of the response options or combinations of options identified during the EMMA process (see Box 0.11).

**Box 0.11 Results of response analysis - example**

<table>
<thead>
<tr>
<th>Response option</th>
<th>Timing</th>
<th>Benefits</th>
<th>Risks</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local procurement, with agency distribution</td>
<td>Start in 2–3 weeks</td>
<td>Rapid, operationally feasible response.</td>
<td>May drive away local rice traders. Increased long-term dependency.</td>
<td>Prices. Level of trade activity</td>
</tr>
<tr>
<td>Cash for Work, clearing rural feeder roads</td>
<td>Start in 1–2 weeks</td>
<td>Reduced transport costs and prices. Boost for local economy</td>
<td>May divert labour from key agricultural activities. May exclude extremely vulnerable individuals.</td>
<td>Labour rates. Social exclusion.</td>
</tr>
</tbody>
</table>

Early response-analysis findings also contribute to the gap analysis and market-system analysis processes, by indicating a variety of feasible options and narrowing the scope of EMMA fieldwork so that interviews can focus on gathering the most useful information.
0.5 The EMMA process - ten steps

The EMMA process can be divided into ten steps, covering the general sequence of activities. However, EMMA is also an iterative process. In practice, activities in different steps will overlap, and we may return to particular steps repeatedly, as our analysis of each market system is revised. This continues until a ‘good-enough’ final picture is achieved.

<table>
<thead>
<tr>
<th>Box 0.12 Ten steps in EMMA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Essential preparation</strong></td>
</tr>
<tr>
<td><strong>2. Market selection</strong></td>
</tr>
<tr>
<td><strong>3. Preliminary analysis</strong></td>
</tr>
<tr>
<td><strong>4. Fieldwork preparation</strong></td>
</tr>
<tr>
<td><strong>5. Fieldwork activities</strong></td>
</tr>
<tr>
<td><strong>6. Mapping the market</strong></td>
</tr>
<tr>
<td><strong>7. Gap analysis</strong></td>
</tr>
<tr>
<td><strong>8. Market analysis</strong></td>
</tr>
<tr>
<td><strong>9. Response analysis</strong></td>
</tr>
<tr>
<td><strong>10. Communicate results</strong></td>
</tr>
</tbody>
</table>
The way in which these three parallel strands and the ten consecutive steps are interrelated is represented in the flow-chart in Box 0.13.

**Box 0.13 EMMA process flow-chart**

<table>
<thead>
<tr>
<th>Steps:</th>
<th>Gap Analysis</th>
<th>Market-System Analysis</th>
<th>Response Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Essential preparation</td>
<td>Background research</td>
<td>Background research on the local economy</td>
<td>Understand agency mandate. Confirm TOR</td>
</tr>
<tr>
<td>2. Select critical market-systems</td>
<td>Select market-systems, key analytical questions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Preliminary analysis</td>
<td>Confirm priority needs</td>
<td>Review market profiles</td>
<td>Consider plans of other agencies</td>
</tr>
<tr>
<td>4. Fieldwork preparation</td>
<td>Prepare household interview tools</td>
<td>Prepare interview agendas for different market actors</td>
<td>Prepare interview agenda for key informants</td>
</tr>
<tr>
<td>5. Fieldwork activities</td>
<td>Interview Households priority needs and economic profiles, access constraints; assistance prefs.</td>
<td>Interview Market Actors: structure, prices, volumes; impacts, bottlenecks and constraints, coping strategies and conduct</td>
<td>Revise EMMA’s key questions. Identify response options and market-support actions</td>
</tr>
<tr>
<td>6. Mapping the market</td>
<td>Final versions of baseline and emergency market maps, seasonal calendars</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Gap analysis</td>
<td>Analyse needs vis-à-vis economic profiles</td>
<td>Summarise impact of crisis, critical bottlenecks</td>
<td>Evaluate response options incl. market-support actions</td>
</tr>
<tr>
<td>8. Market-system analysis</td>
<td></td>
<td>Assess market capability to respond to gaps.</td>
<td>Assess feasibility of cash / other options Recommendations</td>
</tr>
<tr>
<td>9. Response analysis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Communicate results</td>
<td>Consult colleagues on findings and proposals.</td>
<td>Present conclusions to various audiences</td>
<td></td>
</tr>
</tbody>
</table>
0.6 EMMA’s principles

**EMMA builds on what humanitarian agencies already do.**
- EMMA is a flexible process, with a few clearly defined tools, which is intended to be adapted to each situation and each agency’s ways of working.

**EMMA is not just business-as-usual: it asks humanitarian staff to think differently.**
- EMMA draws attention to the importance of market systems that are critical to meeting affected populations’ priority needs, both now and in the longer term.
- EMMA may lead agencies to consider unconventional kinds of response, including ‘indirect’ actions to rehabilitate or support damaged market systems.

**EMMA is for non-specialists to enable them to make urgent decisions that are ‘adequate for purpose’:**
- EMMA is mostly qualitative rather than quantitative.
- EMMA is intended to assist early decision making in the first weeks of a crisis, looking forward up to one year ahead. It does not provide the detailed analysis ideally required for long-term programming.

**EMMA does not put markets before people.**
- EMMA is about making markets work for women and men in emergencies. Most crisis-affected households were involved in market systems before the crisis occurred: perhaps for acquiring food, essential items, and services, or for selling products (e.g. crops) and labour.
- In the EMMA process, understanding the market system for an item like rice therefore includes not just the retailers and millers who trade in rice, but also farmers and agricultural labourers (who may be men), suppliers of seeds and inputs, and of course rice consumers (who may be women).

**EMMA has a livelihoods perspective.**
- EMMA differentiates between different livelihoods and social groups, recognising that men’s and women’s normal livelihood strategies shape their relationships with market systems, their coping strategies, and their different needs in an emergency.
- Gender roles, ethnicity, wealth rank, health status, disability, etc. may all be important factors affecting people’s access to and engagement with market systems, their coping strategies, and needs.

**EMMA allows you to integrate existing and relevant information from different sources:**
- household surveys, trader interviews, official statistics, market profiles, and other literature.

**EMMA encourages optimal ignorance and appropriate imprecision.**
- EMMA is about rapid, rough and ready, good-enough analysis. Both the amount of information and the details required to produce useful findings
in a limited period of time are kept to a minimum. EMMA encourages users to disregard non-essential or unnecessary detail (‘optimal ignorance’) and be satisfied with approximations and rough estimates (‘appropriate imprecision’).

**EMMA is an iterative process.**
- EMMA starts with rough approximate ideas about the market system and then, by gradually incorporating new information gathered from interviews and fieldwork, repeatedly revises and refines the picture until a ‘good-enough’ analysis is achieved.

**EMMA’s relationship with other assessments.**
- Much of the Gap Analysis strand is similar to emergency needs assessments, especially rapid integrated appraisals. However, EMMA looks more specifically at target households’ interactions with markets – in order to understand which market systems are critical to different livelihood groups, and how access to them has been affected by the emergency.

### 0.7 Timetable for EMMA in practice

EMMA can take between two and four weeks to implement. Variables include the context and the scale of the emergency. It also depends on resources: the number of market systems to be studied and the number of staff used. Other factors include how well members of staff already know the context; and the amount of secondary information that has already been collected.

We envisage two extremes of EMMA in practice:

- **The small single-handed EMMA process**
  EMMA is conducted by an experienced lone EMMA practitioner, with assistance from one or two colleagues with good local knowledge of the crisis-affected area. This takes less time – as little as ten days – but the territory that can be covered is limited.

- **The large team-based EMMA process**
  EMMA is conducted by a team, led by an experienced EMMA leader who is responsible for training a small team of local interviewers / assessors. This takes longer – four weeks is realistic – but potentially can cover a lot more territory (depending on the size of the team).

The chart in Box 0.14 presents an indicative timetable for these two processes.
0.8 Main tools used in EMMA

This section provides a quick introduction (with examples) to the four main tools used in EMMA.

- *Household income and expenditure profiles* – charts illustrating the main sources of income and expenditure
- *Seasonal calendars* – summarizing important seasonal changes in markets and people’s lives
- *Market maps* – graphical representations of market systems (before and after emergency onset)
- *Response frameworks* – tables for summarizing emergency-response options and characteristics.

These four tools are used repeatedly throughout EMMA in different steps. The findings from each tool develop in an iterative way: we start with only the roughest approximations, and then revise and refine findings with new information until a ‘good-enough’ result is achieved (see Box 0.15).
0.9 Household income and expenditure profiles

Household profiles are a simple way of charting the income and outgoings of a typical target household. This is valuable in order to see:

- the relative importance of different types of income or expenditure (consumption) (including the food that they produce for themselves);
- any major changes in income or expenditure caused by the emergency situation.

The profile can be presented as a simple table, or better as a diagram, for example a pie-chart (Box 0.16). Note the approximate percentage figures. An accuracy of plus or minus 5 per cent is good enough for EMMA. Even this is often not possible, or necessary: see ‘appropriate imprecision’, in section 0.6 above.
Household income and expenditure profiles are mainly used in the gap-analysis strand in EMMA, as follows:

- In Step 1 (essential preparation), profiles may help you to decide if and how the target population can be usefully divided into livelihood groups – with different priority needs or income strategies.
- In Step 2 (market-system selection), profiles help to determine which market systems are critical.
- In Step 5 (fieldwork activities), profiles can be used to collate and summarize information from household interviews, and so verify or challenge your earlier assumptions.
In Step 7 (complete gap analysis), final comparisons of profiles (baseline, emergency-affected) provide a convenient way to present findings about the impact of the emergency on people’s lives.

Box 0.17 shows an example of a comparison of the baseline and emergency-affected expenditure profiles for a group of rural households. Faced with lower income and a drastic reduction in food from their own gardens, they are increasing their food purchases and cutting back on inputs for the next season’s food crop, as well as medical and household costs. It is vital to consider the gender dimension to these impacts: who provides the income or work, whose consumption or expenditure is being cut?

<table>
<thead>
<tr>
<th>Typical household expenditure</th>
<th>Baseline situation</th>
<th>Emergency-affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of own-grown food consumed</td>
<td>$100 35%</td>
<td>$13 10%</td>
</tr>
<tr>
<td>Food purchased</td>
<td>$12 5%</td>
<td>$44 40%</td>
</tr>
<tr>
<td>Fuel (cooking, heat, light)</td>
<td>$27 10%</td>
<td>$21 20%</td>
</tr>
<tr>
<td>Other household items</td>
<td>$18 5%</td>
<td>$2 0%</td>
</tr>
<tr>
<td>Health / medical</td>
<td>$31 10%</td>
<td>$2 0%</td>
</tr>
<tr>
<td>Farm / livestock inputs</td>
<td>$54 20%</td>
<td>$10 10%</td>
</tr>
<tr>
<td>Travel / transport</td>
<td>$17 5%</td>
<td>$0 0%</td>
</tr>
<tr>
<td>Housing (rent, maintenance)</td>
<td>$26 10%</td>
<td>$22 20%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$285 100%</strong></td>
<td><strong>$114 100%</strong></td>
</tr>
</tbody>
</table>
Household profiles and gender

It is important that household profiles such as these distinguish, where possible, between the respective economic roles and responsibilities of women and men within households. Do not assume that their relationships with markets or the crisis impact are the same. Where there are strong differences, it may be necessary to draw up separate profiles, instead of treating ‘the household’ as a single economic entity.

0.10 Seasonal calendars

Seasonal calendars are a simple way to collate and present information about how geographical regions, market systems, and people’s lives vary during the year. EMMA users may be familiar with this tool from Household Economy Analysis methods. Information about seasonal factors is essential in order to understand the following factors:

- how women and men’s livelihoods, sources of income, and necessary expenditures change seasonally;
- how prices of critical goods, and their volumes of production / trade vary normally during a year;
- vital changes in the local environment – weather, rainfall, road-access – that are likely to affect the feasibility of different emergency responses.

Seasonal factors are obviously strong in agricultural market systems. We find major seasonal shifts in demand for labour; in weather-related risks such as pests and diseases; and in the supply of produce after harvesting. However, seasonality is not confined to rural livelihoods: for example, the timing of reconstruction work and employment in some industrial sectors and tourism are often seasonally determined.

Seasonal calendars are used in all three EMMA strands: people, markets, and emergency response. In all cases it is best that calendars start from the current date (e.g. September in the examples).

Calendar for emergency-affected economic area

This general calendar for an area can help to indicate which market systems are likely to be most critical at this point in the year (see Box 0.18). This is useful in Steps 1 and 2 (for targeting and market-system selection).
**Introducing the Emma Toolkit: Introduction and Overview**

**Introduction**

Household-level calendar for target group

This type of calendar shown in Box 0.19 can be used to collate and summarize information about seasonal factors from household interviews. This helps to identify priority activities and risk factors. This is valuable in Steps 5 and 7 (for fieldwork activities and gap analysis).

**Box 0.18 Seasonal calendar for an economic area**

<table>
<thead>
<tr>
<th>Disaster-affected economic area</th>
<th>S</th>
<th>O</th>
<th>N</th>
<th>D</th>
<th>J</th>
<th>F</th>
<th>M</th>
<th>A</th>
<th>M</th>
<th>J</th>
<th>J</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperatures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Cool</td>
<td></td>
<td></td>
<td></td>
<td>Hot</td>
<td>Flood</td>
</tr>
<tr>
<td>Rainfall / flooding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maize crop cycle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Planting</td>
<td></td>
<td></td>
<td>Harv.</td>
<td>Harvest</td>
<td></td>
</tr>
<tr>
<td>Beans crop cycle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Planting</td>
<td></td>
<td>Harv. Plt.</td>
<td>Harvest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vaccinations campaign</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Vets</td>
<td></td>
<td>Tourism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tourism season</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Peak</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labour migration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hungry season</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Hunger</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Interpretation:** This example illustrates the importance of the approaching planting season for the main staple crops in this region, and the impending ‘hungry season’, when food security is a concern.

**Household-level calendar for target group**

This type of calendar shown in Box 0.19 can be used to collate and summarize information about seasonal factors from household interviews. This helps to identify priority activities and risk factors. This is valuable in Steps 5 and 7 (for fieldwork activities and gap analysis).

**Box 0.19 Seasonal calendar for a target group**

<table>
<thead>
<tr>
<th>Target group</th>
<th>S</th>
<th>O</th>
<th>N</th>
<th>D</th>
<th>J</th>
<th>F</th>
<th>M</th>
<th>A</th>
<th>M</th>
<th>J</th>
<th>J</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income levels</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Low</td>
<td></td>
<td>High</td>
<td></td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Loan repayments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
<td>$</td>
<td></td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Holiday / festivities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
<td></td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>School terms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Term A</td>
<td></td>
<td>Term B</td>
<td></td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Fodder availability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Thatch</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Livestock moves</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Low ground</td>
<td></td>
<td>High ground</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Casual employment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Shelter activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Brick making</td>
<td></td>
<td>Thatch</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Interpretation:** This example highlights opportunities for casual employment that target households normally exploit in October / November in order to prepare for the hungry season, when income levels are low.
Market-system calendar

The type of calendar shown in Box 0.20 provides a convenient way to present findings about seasonal factors in each critical market system. This is useful in Steps 3, 6, and 8 (for preliminary analysis, market mapping, and final analysis).

<table>
<thead>
<tr>
<th>Box 0.20 Seasonal calendar for a market system</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Market-system (e.g. beans)</strong></td>
</tr>
<tr>
<td>Volume of trade</td>
</tr>
<tr>
<td>Prices at market</td>
</tr>
<tr>
<td>Input purchases</td>
</tr>
<tr>
<td>Road conditions</td>
</tr>
<tr>
<td>Risk of crop pests</td>
</tr>
</tbody>
</table>

Interpretation: This example shows how trade volumes (for beans) are normally expected to drop off during October–December, leading to higher prices around New Year. It also illustrates the importance of making inputs available for next season’s crops during this period.

0.11 Market-system maps

EMMA revolves around the core concept of the ‘market system’. This means the complex web of people, businesses, structures, trends, norms, and rules that determine how any product or service is accessed, produced, exchanged, and made available to different people.

The market-map tool in EMMA is derived from a participatory approach to pro-poor market development in non-emergency contexts, designed by the international NGO Practical Action (Albu and Griffith, 2005). It emphasizes simple and visually engaging methods of communicating and sharing knowledge about complex systems among non-specialists.

Market maps are a powerful way to
• collate and represent information about market systems;
• facilitate discussion, interpretation, and analysis of data within the EMMA team;
• communicate findings about market systems to others.

They are used throughout the market-system analysis strand. EMMA starts with rough, approximate sketches of the market system in Step 3. Then gradually, with more information from interviews and informants in Step 5, EMMA builds on and revises these maps until a final ‘good-enough’ version is achieved in Step 6.

There are three sections to the market map – as illustrated by the examples in Boxes 0.7 and 0.21.
1. **The market chain**

   The centre portion of the map shows the supply chain (also known as the value chain) of different market actors who buy and sell the product as it moves from primary producers / suppliers to the final consumers / buyers. These actors include, for example, small-holder farmers, larger-scale producers, traders, processors, transporters, wholesalers, retailers, and of course consumers.

2. **Key infrastructure and support services**

   Below the market chain, the map shows various types of critical infrastructure, inputs, and services that are provided by other service enterprises, organizations, and governments. These actors and services are those which support the market system’s overall functioning or performance, even though they do not directly buy or sell the item.

3. **The market environment**

   Above the market chain, the map shows other factors that strongly influence how producers, traders, consumers, and other market actors operate in the emergency situation. These factors include formal policies, regulations, and rules; informal social norms – such as gender roles, official and business practices; trends and current affairs – including patterns of social and political conflict, and economic and environmental trends.

   Market maps are used in EMMA – in particular – to show the changes (impact) created in the market system by the emergency situation. This is illustrated by the second map of Haitian Beans market: Box 0.21. In this example, the map of the emergency-affected situation is used to highlight critical issues, and areas of partial or complete disruption to market actors, linkages, or services in the market system. For example:

   - Obstruction of rural roads and bridges by landslides has severely impacted on district-level traders.
   - Women garden producers have lost their crops, so their households are dependent on purchased food at a time when they would normally be selling small food surpluses to village traders.
   - Food aid is reaching some landless rural households, by-passing the normal supply chain.

   Market maps can also be used (in Step 8) to capture and analyse market information. In Box 0.22, information about the number of market actors and the total estimated volumes of trade has been over-laid on to the earlier market map.

   This type of data mapping can reveal bottlenecks in supply chains, tell EMMA about the market system’s capacity to meet priority needs, indicate where local procurement is possible, or even highlight opportunities for other non-conventional emergency responses (see Step 8 and 9).
Box 0.21 Emergency-affected market map – ‘beans’ example from Haiti

The market environment: institutions, rules, norms & trends

- High import tariffs
- Rising fuel costs
- Policy obstacles to food trading
- Obstructive trade licence rules
- Weak farmer organization
- Corruption of market officials
- Seasonal employment patterns
- Growing unreliability of rainfall
- Restrictions on women's access to markets

The market chain: market actors & their linkages

- Imports from USA
- Imports from Dominican Rep.
- Importer / wholesaler
- District traders
- Provincial traders
- Commercial farmers
- Village traders
- Urban retailers
- Urban households
- Landless rural households
- Households consuming own produce
- Rural households with land

Key infrastructure, inputs and market-support services

- Warehousing storage
- Casual labourers
- Rural roads and bridges
- Informal credit
- Business loans
- Leasing of trucks
- Farm inputs

Restricions on women's access to markets

Key issue or partial disruption

Major disruption

Target groups

Bean producers

Colour key

Target groups

Bean producers
Box 0.22 Market-system map overlaid with trade-volume data

The market chain: market actors & their linkages

**Capital**

Port au Prince

**Gonaives and Jacmel regions**

**Hurricane-affected communes**

**Imports from USA**

V: 4,000

**Importer / Wholesaler**

N = 3

**Regional Traders**

N = 8

**Urban Retailers**

N > 50

V: 500

**Urban Households**

N = 50,000

V: 1,500

**Imports from Dom. Repb.**

V: 1,500 – 2,000?

**Commercial Farmers**

N = 2,000?

V: 1,000 – 2,000

**District Traders**

V: 2,000

**Village Traders**

N ~ 200

V: 1,600

**Landless Rural Households**

N = 200,000

V: 1,500

**Women’s Gardens**

V: 700

**Households consuming own produce**

**Rural Households with Land**

N = 70,000

V: 6,000 – 7,000

**Other Regions**

V: 6,000 – 7,000

**International Food Aid**

V: 900

**N = Number of actors / households**

**V = Volume in metric tonnes per month**

The market chain: market actors & their linkages

**Introduction**

Rural Households with Land

N = 70,000

V: 900

Imports from USA

V: 4,000

Importer / Wholesaler

N = 3

Regional Traders

N = 8

Urban Retailers

N > 50

V: 500

Urban Households

N = 50,000

V: 1,500

Imports from Dom. Repb.

V: 1,500 – 2,000?

Commercial Farmers

N = 2,000?

V: 1,000 – 2,000

District Traders

V: 2,000

Village Traders

N ~ 200

V: 1,600

Landless Rural Households

N = 200,000

V: 1,500

Women’s Gardens

V: 700

Households consuming own produce

Rural Households with Land

N = 70,000

V: 6,000 – 7,000

Other Regions

V: 6,000 – 7,000

International Food Aid

V: 900

N = Number of actors / households

V = Volume in metric tonnes per month
0.12 Emergency-response frameworks

EMMA employs two forms of response framework:

- **Response Options Framework** (Step 9) to summarize information about the full range of plausible response options emerging from the EMMA fieldwork and analysis;

- **Response Recommendations Framework** (Step 10) to present to decision makers a small number of the most feasible response recommendations.

These frameworks tools are useful (like LogFrames) for systematically thinking through and rationalizing recommendations; and presenting results concisely and logically to EMMA’s decision-making audience.

The illustrative examples in Boxes 0.23 and 0.24 are a partial extract from an EMMA study of the wood-fuel market system in and around large camps for displaced people in Pakistan.

The first framework (Box 0.23) provides decision makers with an essential summary of the EMMA findings. This enables clear explanation of the rationale for the recommended responses. These can then be presented in a second table (Box 0.24), which summarizes the key risks and assumptions and timing issues related to each proposal.

It can also be used to summarize the likely effect on target groups and market systems which EMMA envisages; along with indicators of change that should be monitored.
### Box 0.23 Response-options framework – example

<table>
<thead>
<tr>
<th>Response option</th>
<th>Feasibility</th>
<th>Advantages</th>
<th>Disadvantages</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Distribution of spare (confiscated) supplies from Forest Dept.</td>
<td>Low</td>
<td>Would have immediate economic and environmental impacts. Would utilize existing/ useless stocks; in the short term, would slow deforestation; simple distribution programme.</td>
<td>Requires warehouses, distribution staff. Limits integration with market in town and camp. Wood may be sold on, as people are now coping by scavenging. Legal obstacles in transporting wood through district borders? Need to determine market rate for purchase and quantity.</td>
<td>2–3 weeks</td>
</tr>
<tr>
<td>2. Distribution involving camp-based retailers and vouchers</td>
<td>Medium</td>
<td>Inject cash into camp economy, thus creating many secondary beneficiaries; would create more local vendors.</td>
<td>Very few camp retailers with any capacity; no storage or infrastructure inside camps; open to fraud. Start-up slow – with procurement and beneficiary identification process.</td>
<td>2 months to implement</td>
</tr>
<tr>
<td>3. Promotion of fuel-saving (efficiency) techniques</td>
<td>High</td>
<td>Transferrable skills, creating savings for women at household level. Addresses child protection. Good for environment. Clear exit strategy. Easily integrated with other programmes e.g. pressure cookers</td>
<td>Requires intense inputs from community development/mobilizers. Requires lots of training and materials. Time of women. Risky because it requires behaviour change over a long time. Hard to monitor impact.</td>
<td>Behavioural change, the longer the better</td>
</tr>
<tr>
<td>4. Refilling of gas canisters; conditional on school attendance</td>
<td>High</td>
<td>Less firewood usage, time-saving. Incentives for sending children to school. Reduces protection issues. Clear exit strategy: reduces distributions.</td>
<td>Gas is twice the price of firewood; risky using inside tents; IDPs cannot afford refilling on own. May increase dependency on aid; makes school attendance linked to reward, instead of intrinsic worth; not sustainable.</td>
<td>Can be started soon</td>
</tr>
<tr>
<td>5. Cash distribution</td>
<td>Low</td>
<td>Injects money into the camp economy. Positive effect on household economies but no effect on firewood market; gives households choices.</td>
<td>Potential for inflation; corruption; no exit strategy; no way to ensure that cash is used for firewood; people might continue to send children for firewood collection instead of buying it.</td>
<td>Quick response</td>
</tr>
<tr>
<td>Response activities or combinations</td>
<td>Key risks and assumptions</td>
<td>Timing issues</td>
<td>Likely effect on market system and target groups</td>
<td>Indicators</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>---------------------------</td>
<td>--------------</td>
<td>-----------------------------------------------</td>
<td>------------</td>
</tr>
</tbody>
</table>
| **Fuel-efficient stoves and cooking techniques**  
- Stove distribution  
- Cooking techniques  
- Sensitization on fuel efficiency, forestation, child-protection issues | We have access to camps. Women have time, are willing to learn and use stoves properly. We can find trained staff. | 1–2 months to make an impact |  
- Reduce household firewood expenses.  
- Increase fuel efficiency at household level.  
- Small – but important – positive effect on environment.  
- Improved protection (fewer kids collecting wood). | # of stoves distributed and used by IDPs. Comparison of wood-fuel consumption old vs new. |
| **Fuel for school attendance**  
- Combination of gas-canister refilling and incentives for school attendance.  
- Sensitization on fuel efficiency, forestation, child-protection issues. | IDPs are willing to send children to school. IDPs practise safe cooking techniques. | 2–3 weeks |  
- Reduce amount of household income spent on fuel.  
- Students’ attendance increases. | % increase in complete attendance. % decrease in amount of household income spent on fuel |