

MARKET ANALYSIS APPLICATION IN WASH RESPONSE

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#### INTRODUCTION

Markets are important aspect of the livelihood where the majority of the world's population depend upon. During disaster, market recovery is critical where it indicates the recuperation of livelihood, jobs, and businesses rely upon. Humanitarian actors need to factor market analysis into their planning design. A failure to incorporate good understanding of market system may undermine livelihood rehabilitation, which can in turn prolong dependence on outside assistance.

Over the last several years, INGOs and donor increasingly recognized the importance of market analysis. This is reflected form various tools of market analysis that have been developed such as EMMA, MIFIRA, RAM and MAG<sup>1</sup>. By far, food security and livelihood sector is a key player in the application of market analysis in humanitarian intervention.

WASH intervention has been highlights humanitarian response at large. Direct distribution i.e. water trucking, hygiene kit distribution, and latrine constructions still dominate the pattern of WASH intervention. Although market analysis approach is a crucial yet it is commonly neglected in emergency WASH. This is indicated by the lack of market analysis examples in the WASH response plan.

What market analysis can offer to WASH - Market analysis in WASH will strengthen the response design through a combined analysis of market gaps, household economy and public health risks. A good understanding of market system in WASH - both product and services - will definitely improve the quality of response and preparedness.

<sup>1</sup> EMMA: Emergency Market Mapping and Analysis; MIFIRA: Market Information and Food Insecurity Response Analysis; RAM: Rapid Assessment for Market; MAG: Market Analysis Guidance



- provide an introduction to market analysis for WASH practitioners
- to induce understanding the necessity incorporating market in an emergency situation
- to increase the "market-aware' in the WASH sector especially in humanitarian intervention

## WHY MARKET NEEDS TO BE INCORPORATED IN THE RESPONSE ANALYSIS<sup>2</sup>

If markets are not adequately taken into consideration, the potential harmful impact of interventions generally implies one of three (or a combination of the three) major outcomes:

- · a significant change in the price of certain essential goods
- a significant fall in the demand for the goods of local market participants, or
- distortions in markets which weaken the future viability of local livelihoods, jobs or businesses

Therefore, in addition to representing an additional threat to the livelihoods of disaster-affected households, programmes that are detrimental to local markets may also have a negative impact on households that have not been affected by the emergency or disaster.

<sup>&</sup>lt;sup>2</sup> FMMA Toolkit

# HOW COULD WASH EMERGENCY RESPONSE HARM THE MARKET?

The WASH emergency responses practices in many instances might easily setting aside local market capacity in which "inadvertently" distorting the local market in the affected area. i.e.

- Hygiene kit distribution: The direct distribution of blanket hygiene kit that mobilised from outside the affected area or even imported from abroad may harm the local shops providing similar items. This reason is that there is limited scope for profit in selling the same items when the area is flooded with the hygiene kit supplies.
- Latrine constructions: Bulk constructions materials and labours
  that are mobilised from outside to construct latrine or even build-up
  structures may harm both local mason market and constructions
  market. This is due to the material suppliers such as latrine slab,
  wood, stone, and sand might be difficult to resume to their business
  and livelihood.
- Water provision: Setting up water treatment and direct water distribution through trucking may harm local water vendor and water supply companies which will not only harm their business but also prolong the emergency.

## WHAT IS THE DURPOSE OF THE MARKET ASSESSMENT<sup>3</sup>?

The key purpose of market assessments is considered to be three-fold:

- · to limit the risk of interventions doing harm
- to increase the effectiveness and efficiency of programme responses
- to strengthen interventions by identifying new avenues to support existing market structures

Market assessments and analysis should also be considered as an important element of contingency planning and preparedness.



Cash transfers requires a market analysis. Therefore, deciding suitable cash transfers modality i.e. cash vouchers, commodity vouchers, unconditional grants, conditional grants or cash for work requires markets understanding that includes goods available to people, access to market, supply chains and market reaction to cash injection. As cash transfers have increasingly accepted as an alternative way to assist people in emergencies, generating an understanding of markets has also become a more pressing priority for the humanitarian community.

<sup>&</sup>lt;sup>3</sup> Minimum Requirement for Market Analysis in Emergency

### MAIN TOOLS USED IN MARKET A ANALYSIS

Below are the main tools used in the market analysis, most of these tools are adapted from the EMMA toolkit.

- · Household income and expenditure profiles
- · Seasonal Calendar
- · Wealth Breakdown
- Critical Market Selection



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### HOUSEHOLD INCOME AND EXPENDITURE PROFILES

Household profiles are a simple way of collecting information on the income distribution of a typical target household. This is valuable in order to see:

- The relative importance of different types of income or expenditure where in WASH context particular interest related to expenses in health, water, sanitation, hygiene.
- Any major changes in income or expenditure caused by the emergency situation.

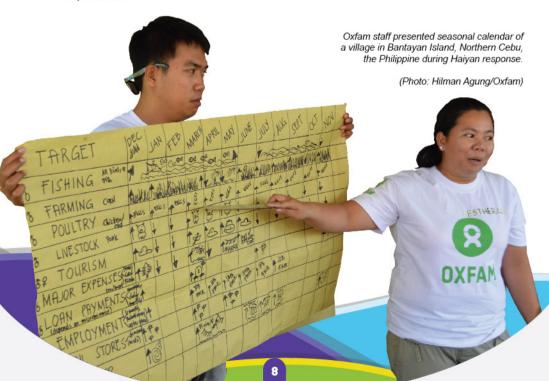
Generally the household expenses on WASH are quite minimum. There will be certain amount of household expenditure for water or hygiene kits i.e. water, soap, tooth paste, sanitary napkin etc. Below is the example where Oxfam conducted survey for poor household on water expenses in three different livelihood zones in Bantayan island, the Philippines during typhoon Haiyan in 2013. As it is shown in the below table that 44% poor household who live in island village spend considerable amount of money for water where even higher post disaster. This exercise pointed out priority area to be assisted.

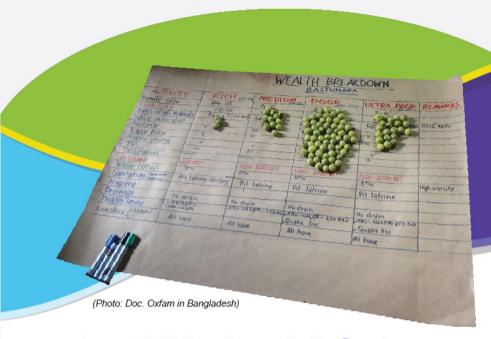
Island	Water Expenses after disaster		74%			
	Water Expenses before disaster		35%			
	Access %	£	44%	ŗ	26%	
	Water Expenses after disaster	%6	2.3%	2%		
Inland	Water Expenses before disaster	%2	1.8%	4%		
	Access %	18%	13%	21%	48%	
	Water Expenses after disaster	%6	2.3%	4.5%		
Coastal	Water Expenses before disaster	%2	1.8%	3.6%		
	Access %	12%	45%	21%	18%	
	No Type of drinking water	Buy Bottled water	Buy non-bottled water	Connected to pipe network – buy	cvOpen dug well and other free access	

#### **SEASONAL CALENDAR**

Seasonal calendars are a simple way to collect and present information about how geographical regions, market systems, and people's lives vary during the year. Information about seasonal factors is important in order to understand the following factors.

- How women and men's livelihoods, sources of income, and necessary expenditure change seasonally;
- How prices of critical goods, and their volumes of production/trade vary normally during a year.
- Vital changes in the local environment whether, rainfall, roadaccess – that are likely to affect the feasibility of different emergency responses.





#### **WEALTH BREAKDOWN**

People's wealth - what they have in terms of land, asset, capital and livestock, together with their educational status, and access to political and social networks - determines the ways in which they will be able to get food, cash water, sanitation, health/hygiene practices options. For example, poor households with little land may work for better-off households, don't have access to latrine, get water from public well, drink raw water; the better-off may use private pour flush latrine, connected to piped network, and purchase mineral water for drinking.

These differences also determine the effect that either sudden or long-term change will have on households, and the strategies households are able to employ to cope. Example below is wealth breakdown result from a village in the Philippine during Haiyan response. What's obvious is that different wealth status has also different access of its water and sanitation services. It is also shown that there are proportion (10%) of people categorized as better-off that might not needed response assistance. The market analysis allows better understanding who is the target beneficiaries.

	FACTOR	Nakakaangat (Better Off)	Katamtaman (Middle Income)	Mahirap (Low Income)	
****	Family Size 1 -2		5 -6	8 - 16	
M-W	Main Source of Income	Overseas Filipino Worker, Seaman Female: teachers	Fisherman, buy and sell fish (small scale) Female – selling fish, pig raising, working with other family (maid, labourer, housekeeper)	Farming, fisherman Female – farmers and laundry	
A	Housing Materials	Full concrete (tiles, marble)	Semi concrete + wood	Wood, bamboo	
	Land Ownership	Owned (with title); the govt give certificate of landownership award	Owned (with title) certificate of landownership award	Owned (inheritance) certificate of landownership award	
-	Vehicle Ownership (car, motorcycle, bicycle)	Motorcycle	Motorcycle	Motorcycle	
	Boat ownership	Boat – 5 Big boat (Fuso brand)	Boat – 1 Paddle	Paddle (non motorised) Caretaker of boats	
***	Electricity connection	With electricity TV, radio, DVD, electric fan	With electricity TV, radio, DVD	Without electricity Transistor radio	
	Mobile phone ownership	1 – 5 per family	1 – 2 per family	1 per family	
	Latrine ownership (Individual, Shared, Communal)	Individual (flush)	50% individual, 50% without latrine	No latrine	
4	Water source for drinking (pipe network Level 1,2,3, gallon water, well, rain water harvesting)	Drinking: Buying → 10 km from source: Female fetch water (20%)	Drinking: Buying → 10 km source	Drinking: Buying → 10 km from source (25 PHP/20 L)	
I	Water source for washing (pipe network Level 1,2,3, gallon water, well, rain water harvesting)	Washing: Well	Washing: Well	Washing: Well	
	Education Level attained by children	High school, college grad	High school, under grad	Elementary grad	
%	% of household in each wealth group (proportional piling)	10%	24%	66%	
åğå	Monthly Income	30,000 - 50,000 PHP/Month	6,000 - 10,000 PHP/Month	500 - 1,000 PHP/Month	

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#### **MARKET SELECTION**

Once target area has been defined, key critical item needs to be selected for a market system. This means that it is necessary to decide sensibly which market systems – i.e. water, soap, latrine slab, etc – are most critical for market analysis investigation.

Three categories of 'critical market' market system:

- For ensuring survival Supply: Market systems that provide essential household needs or services to meet basic needs.i.e. water, fuel, firewood, soap, tampon, shelter materials
- For protecting and promoting livelihood supply: Market systems that provide essential tools, replace livelihood assets, or deliver vital services. i.e. pumps, water trucks, boats, constructions tools
- For protecting and promoting livelihood income: Market systems that provide jobs, create demand for wage labour, or provide buyers for target groups. i.e. construction activities, water vendor market, latrine slabs manufacturer, etc



Several criteria set for market selection:

Market – system option	Water	Soap	Thatch
1. Relates to significant or urgent need	5	4	2
2. Market system affected by emergency	4	4	4
3. Fits agency mandate well	5	5	3
4. Seasonal factors, timing are OK	4	4	2
5. Consistent with government or donors plans	4	2	1
6. Response options look likely to be feasible	5	5	2
TOTAL	27	24	14

Note: score 1 - 5; being 1 lowest relevance and 5 is the highest relevance

#### **MARKET MAPS**

Market system mapping is crucial in emergencies. It is an analysis tool to closely examine the characteristics of the markets. This tool illustrates how the communication and sharing knowledge about market system among non-specialist are conducted. The objective is to present a quick and complete scheme of a market system in its entirety. Market maps can then be used for the following purposes<sup>4</sup>.

- To collect and present information about market systems during the study
- To assist comparison of pre emergency (baseline) and emergency – affected situations;
- To facilitate discussion, interpretation, and analysis of data
- To communicate findings about market stem to others

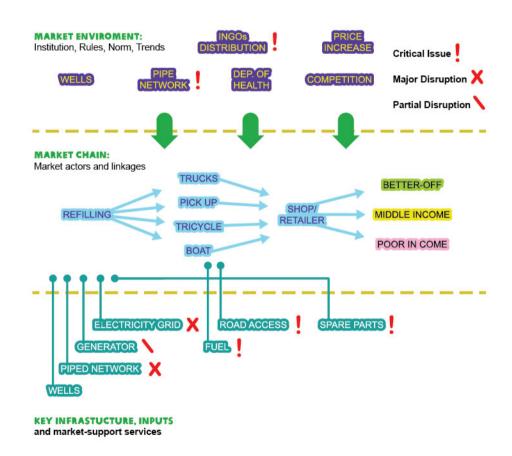
<sup>4</sup> EMMA Toolkit

#### A market map consists of 3 distinct layers:

- Market chain: a series of actors who exchange, buy, and sells goods from the primary producer to final consumer
- Key infrastructure: various forms of infrastructure, inputs, and services that support market system i.e. water/electricity utility, transport services, technical services, disinfection, spare parts, etc
- Market environment: relates to issues, trends, norms, policy that are significantly influence market actors. i.e. regulation, policy, social and business practices, and trends



Below is the example of market system of drinking water (gallon size) in Bantayan Island, Cebu, during Haiyan response 2014.



Example of the disaster impact towards the market may include the following<sup>5</sup>:

- The disappearance of some market actors
- Partial or complete disruption to some linkages or relationship in the chain;
- · Damage to infrastructure, and blockage of services
- New relationships or linkages formed as coping strategies by market actors;
- · Changes in the relative importance of different linkages
- · Introduction of new supply channels

#### **RESPONSE STRATEGIES**

The market analysis gives variety of response strategies based on market situation.

- 1. Responses that rely on local market system performing well
  - Encouraging the use of voucher for WASH item i.e. hygiene kit, water, shelter materials
  - Cash for work to minimize public health risk i.e. cleaning campaign, well cleaning, etc
- 2. Responses that aim to strengthen or support local market system
- Rehabilitation of public infrastructure i.e. restore roads, bridges, water tanks, pumps, pipe rehabilitation, etc
- Rehabilitation of market infrastructure i.e. grants or works to restore market stalls, water vendor, latrine slab manufacturer
- Financial support to market actors i.e. direct business grants/loans for transport water trucking, local water company for rehabilitation its system
- Business services and transport i.e. vouchers for fuel, help with leasing of vehicles to traders
- Advocacy i.e. linking target group to employment opportunities, lobbying government officials for tariff reduction, securing a safe passage for traders
- Responses that do not rely on local market system. This can be done through conventional direct relief response i.e. emergency water treatment, water distribution shelter, kit distribution, hygiene kit distribution, etc.
- Action leading to further investigation, analysis and monitoring;
   Market analysis in certain critical market may lead to the need assessment in another, usually interlinked system.

<sup>&</sup>lt;sup>5</sup> FMMA Toolkit

#### **USEFUL LINKS**

The booklet offers only a glimpse the application of market analysis in WASH. Further references below are recommended to enhance better understanding of market analysis especially in WASH. Cash Learning Program (CaLP):

http://www.cashlearning.org/markets/markets

#### **MARKET ANALYSIS TOOLS**

Minimum Requirement for Market Analysis in Emergencies:

http://www.cashlearning.org/resources/library/351-minimum-requirements-for-market-analysis-in-emergencies

Pre-Crises Market Mapping Analysis:

http://www.cashlearning.org/resources/library/545-pre-crisis-market-mapping-and-analysis---step-by-step-guidance-for-practitioners

Market Analysis Guidance:

http://www.cashlearning.org/resources/library/541-market-analysis-guidance

Emergency Market Mapping Analysis (EMMA):

http://emma-toolkit.org/

#### **MARKET ANALYSIS AND CTP CASE STUDY**

Water Access by Voucher:

http://www.cashlearning.org/resources/library/274-water-access-by-voucher? keywords=&region=all&country=all&year=all&organisation=all&sector=all&modality=all&language=english&payment\_method=all&document\_type=all&searched=1&p Section=resources&pTitle=library&currentpage=30

EMMA Study - Water Trucking Market System in Harshin

http://www.cashlearning.org/resources/library/574-water-trucking-market-system-in-harshin?keywords=&region=all&country=all&year=all&organisation=all&sector=all&modality=all&language=english&payment\_method=all&document\_type=all&searched=1&pSection=resources&pTitle=library&currentpage=1

Shop vouchers for hygiene kits in Port-au-Prince, Haiti (CaLP Case Study): http://www.cashlearning.org/resources/library/247-shop-vouchers-for-hygiene-kits-in-port-au-prince-haiti-calp-case-study

EMMA Study - Water Market System in Wajir - Kenya:

http://emma-toolkit.org/wp-content/uploads/34-Water-Market-System-in-Wajir-with-annexes.pdf

#### SCOPING STUDY - EMERGENCY CASH TRANSFER PROGRAMMING IN THE WASH AND SHELTER SECTORS -

http://www.cashlearning.org/resources/library/536-scoping-study---emergency-cash-transfer-programming-in-the-wash-and-shelter-sectors?keywords=&region=all&country=all&year=all&organisation=all&sector=all&modality=all&language=all&payment\_method=all&document\_type=all&searched=1&currentpage=3

#### **WASH AND MARKET TRAINING**

Step by step training materials to conduct market assessment http://www.cashlearning.org/resources/library/546-wash-and-market-training? keywords=&region=all&country=all&year=all&organisation=all&sector=all&modality= all&language=all&payment\_method=all&document\_type=all&searched=1&current page=3

#### REFERENCES

Albu, M (2010), Emergency Market Mapping and Analysis (EMMA) Toolkit, Practical Action Publishing Ltd.

Austin, L and Chessex, S, Minimum Requirement for Market Analysis in Emergencies, Cash Learning Program (CaLP).

Agung, H (2014), Emergency Market Mapping Report of Bantayan Island, Haiyan Response.