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Markets for WASH: from preparedness to response against typhoid and cholera outbreaks in Zimbabwe

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This paper presents the process and findings of a Pre-Crisis Market Analysis (PCMA) conducted in Harare, Zimbabwe in 2016 which aimed at informing preparedness and response actions for WASH interventions relating to typhoid and cholera disease outbreaks in high density suburbs in the city. It also outlines some of the risk reduction and response work initiated based on the findings of the PCMA in the subsequent year in response to a typhoid outbreak. This paper aims to share the learnings from the project informing how Water, Sanitation and Hygiene (WASH) practitioners can utilise markets for both preparedness and response interventions in WASH programmes.

Background

In 2016, Oxfam conducted a Pre-Crisis Market analysis (PCMA) in Harare, Zimbabwe aimed at mapping the WASH market system and its reaction to the exacerbating factors that result in increased risk of typhoid and cholera outbreaks. This was part of a global programme funded by the Office of the United States for Foreign Disaster Assistance (OFDA) to help understand how pre- crisis market analysis could be better applied to the Water, Sanitation and Hygiene (WASH) sector and how the results of such analysis could be utilized. While the programme was implemented in three countries; Bangladesh, Indonesia, and Zimbabwe; this paper focuses on the Zimbabwe work.
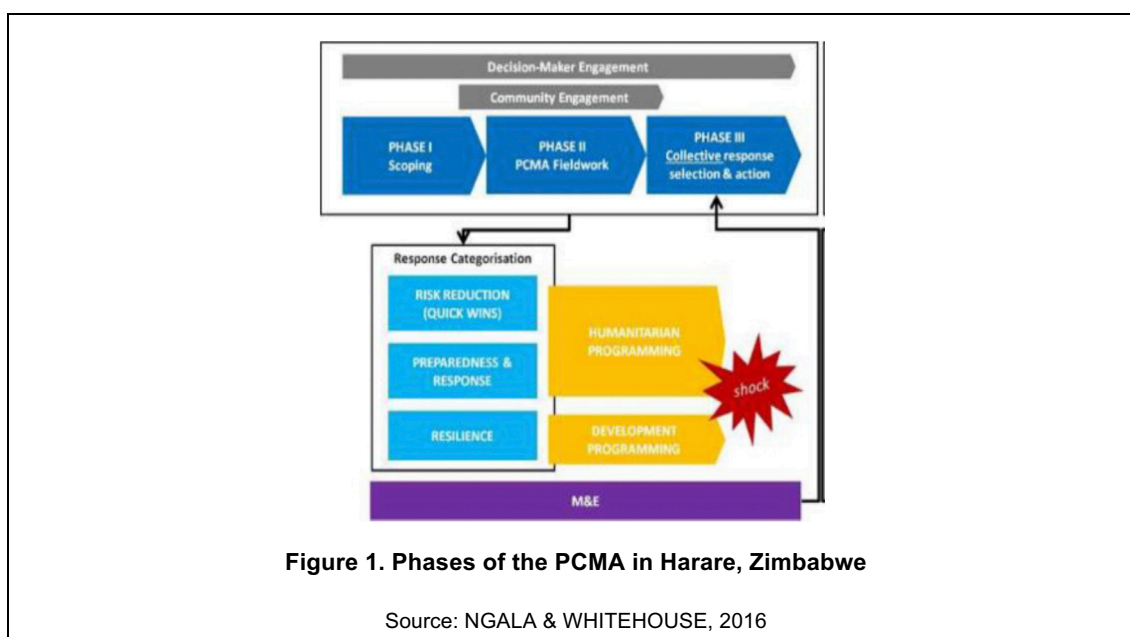
The PCMA approach borrows from the more commonly known Emergency Mapping and Market Analysis (EMMA) which is conducted during a crisis to help in the design of the emergency response and decision making around appropriate market-based modalities to be utilized. Emergency Market Mapping and Analysis have been the backbone of decisions around utilization of cash transfer and other modalities such as conditional and unconditional voucher programmes to provide access to goods/ material needed by crisis affected populations.. The Pre-Crisis Market Analysis is designed to help agencies to improve their preparedness, feed into future planning efforts and contribute to the design of disaster risk reduction programmes by identifying certain parts of the market systems which are not functioning well or maybe vulnerable to shocks. The main advantage of the PCMA is the fact that it is intended to be conducted during non-crisis periods, learning from experiences during previous crisis and can as such contribute to informing both risk reduction and preparedness considerations in addition to response planning.

The need to strengthen utilization of cash and market-based programming for WASH sector emergency interventions is in line with the commitments made in the World Humanitarian Summit (WHS) Grand Bargain advocating for the increased use and coordination of cash-based programming to strengthen the ability of the local market systems to meet the multi-sectoral needs of crisis affected populations.

Zimbabwe pre-crisis market analysis

In Zimbabwe the PCMA was conducted in six high density suburbs in Harare which are prone to nearly annual outbreaks of typhoid and cholera especially during the rainy season. While there were other crisis that could have been considered for the market analysis, disease outbreaks were prioritized from a consultative process undertaken with various stakeholders in the WASH sector. The key phases of the Pre-Crisis Market Analysis;

scoping, field work and response selection and action are outlined in figure 1 below: The figure below outlines the key phases of the PCMA as was conducted in Harare.

Figure 1. Phases of the PCMA in Harare, Zimbabwe

Source: NGALA & WHITEHOUSE, 2016

The scoping phase sought to answer the question, "what are the critical market needs currently underserved in crisis within the vulnerable populations?" It involved looking at the existing WASH infrastructure, WASH services value chains, the sector coordination system and structure; existing regulation and how all these impact WASH service delivery to the population especially during crisis. The methods used to collect information included a desk review, key informant interviews and a reflection workshop that brought together key WASH actors from line ministries and implementing agencies in the country. The scoping served to validate the target areas, reference crisis and vulnerable populations for the market analysis as well as providing baseline WASH datasets to validate during fieldwork.

During the field work, exercises were developed to gather a broad view of the WASH systems and user knowledge, attitudes and preferences with regards to WASH and their reactions and needs in a waterborne disease outbreak. A total of 30 focus group discussions were conducted and 572 households interviewed. The table below presents the key analytical areas and the approaches used to garner related information:

Table 1. Key Analytical Questions for the PCMA		
Analytical Area	**Sources of Information**	**Approaches**
Household knowledge, attitudes and practices on key WASH issues	Households, Community groups	Household interviews, focus group discussions
Constraints on access, affordability and quality of WASH goods and services	Households, Community groups	Household interviews, focus group discussions
Capacity of market systems to meet population needs of WASH goods and services	Service Providers	Key Informant Interviews
Enabling market systems	Local authorities, Service providers	Key Informant Interviews
Market response opportunities	Community groups, Service providers	Focus group discussions, Key Informant interviews

Oxfam also partnered with MSF-Belgium to map WASH infrastructure and WASH goods and service providers in the target areas. This was in response to a gap noted in terms of there being no up to date systematic views of the existing water, sanitation and hygiene infrastructure making it difficult for WASH actors to plan and coordinate for improving existing infrastructure or preparing to mitigate the risks of crisis relating to WASH.

Key findings

The Zimbabwe Pre-Crisis Market Analysis 2016 found that during crisis and non-crisis periods, the water and sanitation infrastructure andservices were inadequate and unable to meet the needs of the population. This went against the original concept of PCMAs which is based on reflecting and identifying how specific crisis affect service delivery and access to goods and as such inform areas needing improvement for future emergency responses including exploring the potential role that market actors could play in improving emergency preparedness and response. It is based on the precipice that the baseline situation is at best, adequate in meeting the needs of the population and that service delivery is critically affected during crisis. The following findings detail the chronic WASH issues which instead form the crisis itself by perpetuating the spread of waterborne diseases:

- Unplanned settlements and evictions have led to areas being underserved by the municipality which serve as hotspots for waterborne disease outbreaks
- Without viable alternatives for supplementing the lack of adequate WASH infrastructure in underserved communities, enforcement of safety standards for water wells and toilets is likely to be overlooked
- Boreholes drilled by the UN and NGOs have been blamed for creating an unwillingness to pay for the already inadequate municipal water and a deterioration of the water supply systems because of reduced revenues required to maintain them creating a stalemate between humanitarian entities and utilities
- Economic instability not only lowers household purchasing power but also erodes the purchasing power and functionality of most WASH actors in supplying vital WASH goods and services leading to a total collapse of WASH system
- Where the municipality cannot provide adequate toilet or sewer services to residents, households have opted to build their own toilets often with sub-standard storage facilities and many near water sources
- Despite the continuous risk of waterborne disease outbreak, there is little or no demand for water treatment products locally which is reflected in a lack of supply in local areas. While affordability is a contributing factor to purchase of hygiene products, this assessment found that it was not the determining factor and that indeed, most of the households are able to afford soap and water treatment chemicals if they felt that it was a priority issue.

Considerations for risk reduction and response action

The Pre-Crisis Market Analysis 2016 as such recommended the exploration of programmes that could support and strengthen local market capacity to support prevention, preparedness and response activities. Based on the scenarios reviewed the critical commodity established from the market analysis was clean water and it was deemed that strengthening or supplementing the groundwater sources through a multi-barrier approach was the way to ensure access to clean water supply. The figure below outlines some of the considerations that were put forward in reviewing options for improving access to safe water:
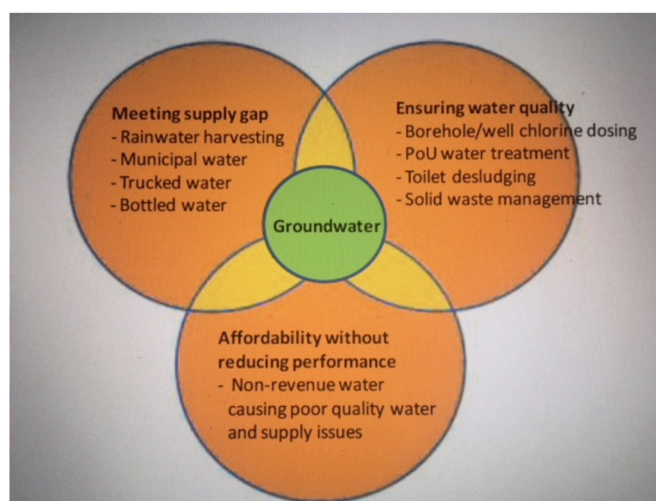
Figure 2. Design considerations for access to safe water

Source: NGALA & WHITEHOUSE, 2016

Water treatment demand mobilisation and supply side improvement

One of the recommendations that was then taken forward was to develop an educational and incentive programme to increase awareness on the need for water treatment and adoption of better hygiene practices using a two-pronged approach that mobilizes both demand and supports supply strengthening of the local markets for availing of the needed hygiene products.

This was based on the hypothesis developed from the PCMA 2016 findings that '***Providing free distributions of HHWT products during waterborne disease outbreaks in areas suffering from chronic WASH issues while ignoring consumer preferences and purchasing power, negatively impacts upon markets and the adoption of good hygiene behaviours relating to water treatment***'.

Two market based programmes were then piloted in Harare (Ngala & Whitehouse, 2017), aiming to both address local supply and demand issues for household water treatment. These were deployed at different stages of risk of outbreak that the respective locations were facing:

1. Voucher programme for outbreak response: in response to a typhoid outbreak in December 2016, Oxfam worked with manufacturers of Waterguard to stock some shops in the disease epicentre location and using vouchers, had communities get water treatment chemicals from them. This undertaking was preceded by trader assessments and agreements between respective parties. This was building on the PCMA findings on the need for increased awareness on the need for water treatment, need to create linkages between the manufacturers and retail shops in high density suburbs; the disease hotspots, for supply of these chemicals and indeed on the promotion of water treatment options that are available locally. Voucher programme for risk reduction and resilience building: in 2 high risk locations, Oxfam worked with the manufacturers of Waterguard to conduct a "Buy One Get One Free" campaign with Oxfam subsidizing the cost of the water treatment. The campaign, in addition to connecting customers and retailers in terms of price, location and use of the product also aimed to support the potentially lower household purchasing power in the rainy season due to less work accessibility in those areas.

Both programmes included massive social marketing campaigns to support hygiene promotion, awareness on the importance of water treatment and connection with local retailers where the water treatment chemicals were on sale. The decision to promote Waterguards was based on several factors. Previous disease outbreak interventions had promoted multiple liquid chlorine based water treatment options including Jik, Waterguard, PUR and this had resulted in some confusion around the dosing. Indeed, it had now been agreed to focus on one chlorine based product in future responses. The other product that was usually distributed during disease outbreaks was Aquatabs, often supplied through UNICEF who have an international frame agreement with the manufacturers and as such import and store contingency stock. The fact that Aquatab was not locally available was an impediment to the continued adoption and practice of household level water treatment and in view of the fact that the company Nelspot were able to locally manufacture and supply the Waterguard to

local retailers was deemed to be a market strengthening option. Ideally, the programme would have wanted to consider a non-chlorine based water treatment options such as filters, as part of promoting diverse options for water treatment that take into consideration varied preferences. However, funding was not available to include other options on the campaign. The intervention was successful in various ways:

- Community reduced risk to waterborne diseases
- Building of livelihoods
- Building of partnerships
- Improving Oxfam's preparedness and response capacity to future disease outbreaks
  - Contingency planning
  - Tools and guidelines for response
- Raising awareness amongst stakeholders both on the potential role that markets can play in disease mitigation in addition to demonstrating through the various interventions how this can be applied.

Key learning

The following are key learnings that Oxfam has taken from this programme, based on the work done in Zimbabwe and the other countries where the PCMA approach was piloted for WASH intervention preparedness:

2. Need for increased emphasis on market assessments to inform WASH preparedness and interventions
3. Re-evaluating our interventions in terms of the impact they have on community resilience against crisis
4. Need for improving monitoring and learning systems so as to provide an adequate evidence base and case for utilisation of markets for WASH responses
5. Need to build the capacity of WASH practitioners to be able to effectively consider options and utilise market-based approaches in implementing WASH interventions
6. Need for emphasis and investment in preparedness actions in humanitarian work.

References

NGALA, P. and WHITEHOUSE, K. 2016. Pre-Crisis Market Analysis: City Level View-Domestic water supply, sanitation and hygiene products in six poor suburbs of Harare, Zimbabwe. Oxfam International.

NGALA, P. and WHITEHOUSE, K. 2017. Conditional Voucher Programming for Household Water Treatment in Harare. Preliminary Learning: From PCMA to programme Change. Oxfam International

Note

The full PCMA report is available at: http://www.emma-toolkit.org/reports. Other case studies continue to be developed and further enquiries can be made at enquiries@oxfam.org.uk

Contact details

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