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FOR ALL IN A FAST CHANGING WORLD****Stimulating resilience for recovery: building adaptive
resilience in emergency WASH response in
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Recovery deficits are often witnessed within disaster-affected societies following post-disaster interventions. Humanitarian operations have struggled to find coherence between relief and recovery activities, which has resulted in a perceived operational 'gap' between relief, recovery and development. Building individual/household resilience within the humanitarian sphere has been theoretically posed to be fundamental for recovery; a programmatic consideration that could ensure former weak resilience would not hinder post-disaster recovery. Therefore, could a resilience building approach offer much needed solutions to the challenge of recovery within post-disaster contexts? This paper will present findings from recent doctoral research undertaken in the 2010 Haiti earthquake response, as well as presenting case study evidence from the 2013 post-disaster responses in the Philippines and the Syrian response in Lebanon. The paper will look specifically at the common barriers to recovery experienced by individuals/households in a crisis event, understanding how emergency response operations within the WASH sector affects recovery, individual/household resilience within the post-disaster environment will be detailed, gauging its relevance for stimulating recovery; giving case study examples of how in practice resilience at the individual/household level can be operationalised in emergency response programming.

The operational gap

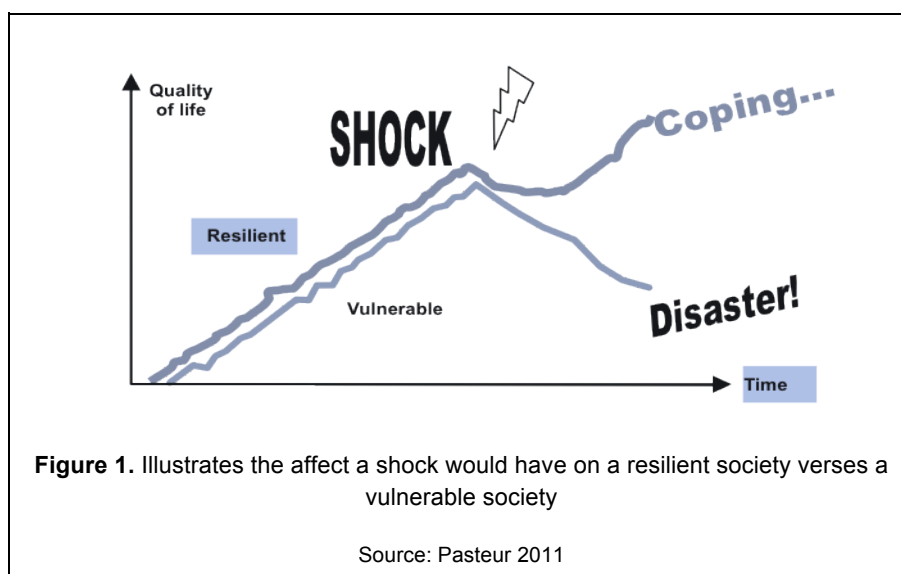
Within many post-disaster environments basic relief can be provisioned, but it is continuously noted that transitioning to a state of recovery is a constant problem (Oxfam 2006; Amin and Goldstein 2008; DEC 2011). This has hindered the success of emergency response operations and the ability of an affected population to regain a functioning, productive life. This issue can be termed the operational 'gap' between relief and recovery (Lloyd-Jones 2006).

It is generally accepted that there is a link between humanitarian action, recovery and development and that humanitarian action should establish a framework for recovery (ALNAP 2006). But the opportunities for building on international good practice as a foundation for long-term recovery and development in the early stages of the relief effort are often lost. Over the past two decades there has been considerable discussion and research concerning the link between relief and development, but it has been argued little progress has been made (Bailey *et al.* 2009). There has been an enhanced focus around the effect of relief interventions on recovery. ALNAP (2008) highlighted the need to avoid compromising recovery during relief interventions, pointing out that agencies should consider the likely impacts of an intervention on recovery, and whether a different and more effective approach is possible. The continual problems encountered in emergency response have had the sector re-evaluating its approach to operations (DFID 2011a; IFRC 2012). Many agencies are battling to provide the very real relief and recovery needs of affected communities their mandate aims to help; stiff funding frameworks, weak coordination and leadership has hindered the development of effective response programming, transition capacity and recovery (ALNAP 2011).

Resilience for recovery

In low resilience societies disaster impacts will be experienced at a greater scale and these societies will also have less tools for recovery. If an international humanitarian operation is launched within this affected

country ensuring that that society has the ability to survive and recover rapidly is fundamental. If resilience measures are not set in motion at crucial points in the 'relief phase' then recovery will be prolonged, leading to a fragile state that is prone to future impacts of disasters, costing many lives and a huge unnecessary financial burden (O'Donnell *et al.* 2009).



Resilience building in the post-disaster context focuses on the adaptive capacity of affected individual's/HouseHold's (HHs), where adaptive capacity is an individual's/ household's ability or capability to modify or change its characteristics or behaviour to cope better with actual or anticipated stresses (Brooks and Adger 2003). Building on this capacity through emergency response programmes to raise the level of resilience expressed by a HH to stimulate potential recovery. An approach that would ensure former weak resilience would not hinder post-disaster recovery. Adaptive resilience is the term given to an individual's/ HH level of resilience expressed in a crisis event (Cutter *et al.* 2008) and the modality that humanitarian response can support and develop. Many current models of humanitarian intervention unfortunately do not employ an approach that encompasses resilience building at this crucial time. Instead, they are set up institutionally to respond solely to basic survival needs, i.e. shelter, food and water. In some instances this one-dimensional approach has the adverse affect on 'potential recovery' and the building of resilience within an affected society, e.g. aid dependency, market disruption and weakened national entities (HPN 2001). The approach fundamental to the humanitarian intervention divides responsibility for survival and recovery. The current disaster management model that represents this continuum presupposes that relief needs, i.e. shelter, food, water etc., and recovery dynamics operate at distinct stages along a post-disaster timeline, not conceptualising the idea that relief and recovery needs both may begin simultaneously from day one. Understanding relief and recovery as a contiguum rather than a continuum would see response interventions conceptualising and strategically planning for relief and recovery activities in parallel and not within distinct, separated phases. The simplicity of the current response approach has evolved to ensure a rapid and manageable response by the international community, however, intrinsically this approach is unable to meet or respond to the natural complexities within often volatile post-disaster contexts, seeing an approach that is counter intuitive to the environment it operates in and consequently will be fraught with issues.

Findings from doctoral research

Doctoral research undertaken in post-disaster Haiti collected primary data over a 7 month period through 37 semi-structured interviews and 31 online questionnaires with donors, government, INGOs, LNGOs and the private sector that were operating within the Haiti response, 18 disaster affected community members within a community discussion forum and archival data. An in-depth case study was developed in order to offer an evidence base for the proposed theory that supporting adaptive resilience through emergency response programming has the ability to stimulate recovery. This research has been able to highlight the key barriers to recovery experienced by individuals/ HHs, understand how emergency response operations within the WASH sector played a part in the creation of one of the main barriers to recovery, i.e. the provision of basic

services, further expanding our understanding of individual/ HH resilience within the post-disaster environment, gauging its relevance for stimulating recovery, and how this can be achieved operationally.

Barriers to recovery

The data highlighted several key barriers to recovery experienced by individuals/ HHs in the post-earthquake environment. The barriers specified were the most commonly identified factors that had seriously hindered individuals/ HHs ability to recover over a 2 year period after the earthquake. These barriers were consistently noted throughout the 3 data sets: community discussion forum, semi-structured interviews and archival data. The common barriers to recovery for the affected individual/ HHs identified within this case study included:

- Lack of adequate shelter provision
- Lack of sustainable basic services, i.e. water and sanitation
- Limited or no livelihood opportunities
- Limited or no access to cash, loans or grants

Impact of emergency response operations on barriers to recovery in Haiti

The lack of strategic vision within the immediate response saw the classic adoption of a camp focused approach and limited consideration for developing transition and exit mechanisms. This saw the WASH response focused on delivering services to camps, utilising expensive and unsustainable interventions, such as water trucking on a large scale. This approach led to many missed opportunities, especially as this response was operating in a large urban environment, which often has the potential to offer a multitude of alternative options. This ultimately saw the dismissal of possible decentralisation strategies for WASH, such as utilising local private sector capacity, supporting host families, neighbourhood rehabilitation and investment in infrastructure. An outcome that was directly linked to the lack of contextual knowledge generated through either baseline, rapid needs or context assessments that are required to gauge true need, potential individual/ HH adaptive resilience, i.e. an individual's/household's capacity to cope and recover from impacts of a disaster, and local capacity, i.e. private sector and existing skills within affected communities; information necessary to support effective programme plans. There is a lack of consistency between agencies on the types of assessments carried out, along with the level of information produced and the timeliness of that information. This outcome is consistent with the literature as ACAPS (2012) highlighted the lack of commonly accepted methodology within the humanitarian system. Groupe Urgence Réhabilitation and Développement's (Groupe URD) RTE reports (2010) highlight the initial assessments, which preceded water and sanitation programmes in Haiti, did not account for pre-existing practices in terms of access to water and excreta management, particularly in the urban context. Not understanding and investing in viable options saw a lack of transitional and exit strategies made available. Recovery expertise and strategy was not seen at crucial times during the response, seeing initial emergency approaches and 'emergency minded experts' scrambling for options. This resulted in a protracted relief situation, producing few options for transition and exit. For the WASH sector a focused strategy was placed on the transfer of services to DINEPA (Haitian Water and Sanitation Ministry) and the limited development of private sector capacity and infrastructure. This created a response that was not able to offer the adequate basic services that affected communities needed to recover. Adaptive resilience at the individual/ HH level was not proactively supported and instead individual/ HH resilience was consequentially hindered due to the protracted relief environment that prevailed over the following 2 years. The emergency response in Haiti has presented key challenges the current humanitarian intervention faces, but has also highlighted some potential approaches the WASH response could utilise to develop adaptive resilience to stimulate recovery. The following 3 case studies present WASH approaches undertaken in the 2010 Haitian earthquake response, the 2013 Philippines Typhoon response and the 2013 Syrian Refugee Crisis in Lebanon that have been able to implement programmes that have actively built adaptive resilience in the post-disaster context.

Case study 1. Adaptive resilience building in WASH in Haiti 2010

Assessing humanitarian programming undertaken in the Haiti response saw that adaptive resilience was not adequately supported or encouraged. However, there were a number of small interventions that had the capacity to support the development of individual/ HH adaptive resilience. Key approaches that were carried out in the WASH sector in the Haitian response that had the ability to build adaptive resilience included:

Immediate household rehabilitation

Mercy Corps global emergency team arrived after a week after the earthquake. They began work in Tabarre rehabilitating HHs immediate needs through vouchers for food and NFI (Non-Food Items), rental support and basic services through rehabilitating local water vendors and providing latrines in the neighbourhood. Within 2 months of their operation water supply returned to normal, raising HH resilience early. Mercy Corps could exit after 3 months.

Capacity building of local water kiosks

Oxfam recognised the huge potential in the rehabilitation of local water vendors to sustainably meet water supply needs of HHs, this saw the agency undertake many rehabilitation projects of this nature. One such project was initiated in Corraile where 13 kiosks were built and connected to the water pipeline. Water meters and on/off taps were fitted, providing a water pumps with generator and fuel in order to ensure a regular flow. The management and operation of the systems were negotiated with DINEPA and the water committees were trained to manage the kiosks, paying DINEPA rather than Oxfam for water usage. This approach re-built local service infrastructure to supply affected HHs with sufficient water supplies.

Case study 2. Adaptive resilience building in WASH in the Philippines 2013

The most recent large scale response in the Philippines to Typhoon Haiyan saw 4 million people displaced and in need of WASH services (UNHCR 2014). It was seen that affected populations in the Philippines had a high level of adaptive capacity due to experiencing frequent perturbation through the occurrence of seasonal natural disasters. This saw communities actively repairing homes and restarting livelihoods. Save the Children’s WASH team wanted to capitalise on this adaptive capacity to support the development of adaptive resilience, therefore, a ‘Rapid Response Latrine’ building programme was initiated. This programme was undertaken in the North West region of Leyte Island to provide a fast action sanitation solution, that would build community sanitation knowledge and ownership, and a first step to the development of permanent latrines (Save the Children 2014). This was an important consideration in this rural region due to 60% of households not having previous access to sanitation facilities (Save the Children 2014). The programme grouped 4-5 HHs to a latrine in order to allow for greater coverage and to reduce the burden on individual families. Save the Children provided the groups of HHs with tarpaulin and a latrine slab and the HHs themselves provided seven bamboo posts. The local Captain and Health worker were employed to give a demonstration of how to construct the rapid response latrine, this saw a crowd gather and community members begin to talk about the event, utilising the word of mouth to promote interest in constructing a latrine. The programme saw the construction of many HH owned latrines in the region. Photo’s 1 and 2 demonstrate a group of HHs working together to construct a shared latrine, as well as the finished product.



Photo 1. Community construction of a Rapid Response latrine

Source: Save the Children 2014



Photo 2. A finished Rapid Response latrine

Source: Save the Children 2014

Case Study 3. Adaptive Resilience Building in WASH in Lebanon 2013

In reaction to the Syrian crisis over 1 million Syrian refugees have flooded over the border into Lebanon in the last few years. This influx has seen hundreds of ill-services informal settlements spring up and urban populations rapidly increase, putting pressure on already stressed infrastructure, forcing rental prices up

exponentially and tension form between the Lebanese and the Syrian refugees. In urban centers many refugee HHs are seeking refuge in disused buildings, often paying rent for sub-standard accommodation with access to little or no services. Save the Children's shelter team looking to offer a sustainable shelter solution to provide adequate accommodation for the medium to long-term for Syrian refugees living in sub-standard accommodation in urban areas implemented a cash rehabilitation programme at the HH level. The programme based in the El Koura Governate, South of Tripoli, offers a 3 part conditional cash payment to improve the rental accommodation they are based. This scheme is agreed with the landlord, who gains an investment into their property on the condition that the tenant gains a 12 month contract and the annual rent is reduced by the amount invested. On this basis SCI staff work in collaboration with HHs to establish core rehabilitation needs, i.e. wall and ceiling repair, room separation, windows, ventilation, electrification, connection to water and sewerage, toilets and bathrooms, as well as kitchens. The scheme is a 3-4 week process offering a maximum of \$1500 for shelter repair and \$450 for WASH improvements per HH. This cash rehabilitation programme has successfully improved the standard of living for 110 vulnerable HHs. Photo's 5 and 6 show the quality of sanitation facilities before the initiation of the cash rehabilitation programme and an example of the quality achieved after the finalisation of the programme. This emergency response approach has ensured Syrian refugees have access to adequate shelter and basic services, such as water and sanitation, which are 2 critical elements to achieving resilience and recovery.



Photo 3. An old latrine in a disused building

Source: Save the Children 2014

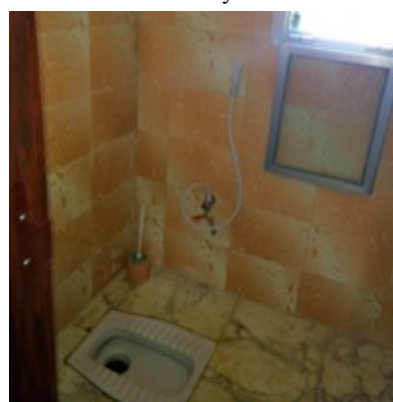


Photo 4. Finished latrine after cash rehabilitation

Source: Save the Children 2014

Conclusion

The reoccurring challenges faced by the humanitarian sector of the lack of recovery, exit and transition mechanisms in current emergency response operations have begun to highlighted key problems in operation approach that have a direct impact on or even the creation of these challenges. Research on the development of resilience in post-disaster contexts has presented the theory that adaptive resilience at the individual/ HH level can be built through emergency response operations to stimulate recovery and to provide necessary exit and transition mechanisms. Case studies from 3 post-disaster contexts including, the 2010 Haiti earthquake response, the 2013 Philippines Typhoon response, and the 2013 Syrian refugee crisis in Lebanon, have demonstrated that building adaptive resilience within the WASH sector is possible. These approaches, however, need to begin to exist at scale and be introduced into humanitarian strategy from the start of a response in order to see their full potential and to offer the solution to the operational gap so often witnessed in emergency response operations. A resilience building approach to emergency response could develop the coherence needed between relief, recovery and development.

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