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**DELIVERING WATER, SANITATION AND HYGIENE SERVICES
IN AN UNCERTAIN ENVIRONMENT**
**Sustainable WASH interventions as populations transition
from relief to development**
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A weakness exists in the transition from humanitarian assistance towards long-term sustainable development. Research carried out by WEDC in 2011-2012 considered a range of demand-led WASH interventions introduced by Tearfund, as part of their approach to improve the transition of support through relief to recovery and eventually towards development-related interventions.

The research developed a framework to help analyse and plan more sustainable outcomes from adopting demand-led approaches to WASH in transition. The process of its development and the framework are presented in this paper. The premise of the framework is that reduced dependency during the transition from humanitarian assistance to long-term sustainable development is achieved through interventions that are primarily demand-led and/or livelihoods-based. Conditions of the operating environment determine the extent to which such interventions are likely to be successful and the optimum time for their adoption.

From supply-driven to demand-led WASH approaches

During the recovery phase of an emergency response and when working with returnee populations, a number of NGOs, including Tearfund, have increasingly introduced demand-led approaches into their WASH interventions, in place of supply-driven interventions. This change in approach has enabled disaster-affected communities with poor access to WASH services to become empowered in the design and management of their own solutions, leading to increased ownership and community-managed operation and maintenance. In certain cases, the change in approach has also promoted economic revitalization through the development of sustainable livelihoods' opportunities. Tearfund has been applying such an approach in several conflict affected and post-emergency contexts, including Haiti and Sudan (Darfur region).

Demand-led approaches used in different types of emergency

A number of agencies have implemented demand-led approaches in different contexts and at various stages within the relief-to-development continuum. They have been applied in the context of a range of types of emergency – from rapid onset natural emergencies to chronic, complex emergencies.

Type of emergency	Demand-led approaches used: examples	Examples
Complex emergency - Internally Displaced Peoples (IDPs) living in host communities	Participatory Hygiene and Sanitation Transformation (PHAST) – to encourage sustained use of latrines, reuse of latrine slabs and safe hygiene behaviours Training WASH Committees to manage water points and/or payments for water	Darfur
Complex emergency - Settled communities, with significant arrival of returnees	Community-Led Total Sanitation (CLTS) to promote sanitation improvements (Greaves, 2012) Training artisans to build and market biosand filters*	Afghanistan South Sudan
Natural disaster - Affected population remaining in own community (villages or towns)	CLTS for promoting an end to open defecation Training masons to construct latrine slabs & biosand filters*	Haiti
Natural disaster - IDPs in camps, host or resettlement communities	Training water committees to manage water points CLTS to promote improved sanitation practices to protect health in flood-affected areas (Greaves, 2012)	Pakistan

Note: * indicates approaches with a focus on sustainable livelihoods.

Context: affecting the appropriateness of demand-led approaches

As conditions in the operating environment change, elements of it will help determine the extent to which demand-led approaches to WASH services can be effectively applied and are likely to achieve successful outcomes in the longer term (ODI, 2006). These elements (shown in Box 1 below) will not all change in equal measure, or in the same timeframe. Indeed some elements may take a ‘backward step’ (such as a breakdown in security, an unexpected environmental crisis or financial instability), potentially triggering a return to more supply-driven approaches in some areas. In general, as opportunities to transition towards recovery strategies present themselves, changes in approach should be identified and new, or adapted, interventions considered.

Box 1: Key elements of the operating environment influencing the approach taken

The following elements of the operating environment were found through the research to influence the approach that WASH interventions take through all stages of transition. They are proposed as the basis for assessing the extent to which demand-led approaches are demonstrating success in a given context.

- **Needs and demand** of the affected population
- **Participation** of local population
- **Capacity**: available from local to national level
- **Alliances and Partnerships**
- **Governance and Accountability**
- **Livelihoods** (linking to finance opportunities)
- **Financial resources**: Internal to the affected population
- **Economic and financial resources**: External to the affected population
- **Conflict, Insecurity and Vulnerability** (political, social, environmental)

Where agencies can respond to changes in the operating environment, introducing demand-led approaches becomes a more realistic choice. Considering the changed elements of the operating environment (as compared to those in which supply-driven approaches are more likely to be needed), certain characteristics indicate that external support can be replaced by locally-sourced capacities. Examples taken from a range of key literature can be summarised as:

- **Needs and demand**: needs can be met through local means, demands can be adequately expressed (CWGER, 2008),
- **Participation**: effective participation is sufficient to ensure health can be protected (CWGER, 2008),
- **Capacity**: skills and resources are available, or can be built, within the affected population or from local / national actors to ensure appropriate action is taken (House, 2007),
- **Alliances and partnerships**: connectivity between existing actors in-country are sufficient to ensure basic services are available (CWGER, 2008; House, 2007),
- **Governance and accountability**: governance and accountability mechanisms are present and able to ensure services will be sustained (financially and technically) (ODI, 2006; House, 2007),
- **Livelihoods**: livelihoods’ opportunities can be re-established, as sufficient trust or resilience is present for financial viability, security, access to resources, etc. (ODI, 2006),
- **Internal finances**: families have (access to) some money to pay for basic services or essential products,
- **External finances**: funds are available and can be allocated towards adopting demand-led approaches (including building capacity and establishing livelihoods) (ODI, 2006; CWGER, 2008; WaterAid, 2011),
- **Conflict, insecurity and vulnerability**: the political, social or environmental security context is sufficiently stable to enable longer-term planning and implementation (Stoddard and Harmer, 2005).

Measuring the success of demand-led interventions in transition

To understand how success of demand-led interventions may be measured in the context of transition, we first consider how success of different interventions depends on the basis by which success is measured.

If interventions are being measured within a humanitarian framework (typically based on supply-driven approaches and concepts), success may be measured in a project logframe on achieving input and output targets, such as: number of latrines constructed, or percentage increase in rates of handwashing.

A proposed framework for monitoring and measuring actions in transition is based on the proposition of reducing dependency through the introduction of the interventions. Measuring the success of these interventions is therefore more complex and requires the measurement of outcomes. For example:

- **Demand-led approaches** may include measuring indicators associated with an increase in knowledge, attitudes and practice of hygiene behaviours, records of Water Committees collecting user fees and carrying-out routine maintenance of water points, or the end to open defecation.
- **Livelihood-based interventions** may involve measuring the increase in skills and capacity of trained individuals, or sales achieved by local entrepreneurs selling WASH-related products.

The level of success will be influenced by the extent to which interventions reflect and overcome opportunities and constraints within the local context. Examples found during the research follow.

Opportunities towards successful introduction of demand-led approaches may include:

- Needs and demands have been allocated adequate time and facilitation skills to be expressed by villagers,
- Strong local leadership mechanisms enable villagers to express a willingness to participate in action,
- Local capacity is being addressed through various means: e.g. attention is given to capacity of community members to manage water supplies; villages are linked to local agents providing follow-up support to maintain household water treatment products,
- Communities are engaged in a process of taking responsibility for longer-term O&M needs of facilities – as external funds reduce and eventually end,
- Sanitation and water supply interventions adopted are based on generally low-cost solutions – lowering capital and O&M costs and requiring little external support for infrastructure,
- Accountability mechanisms are building from the grass-roots upwards, while the Government is adopting and implementing appropriate policy and strategies, and
- Key donors are adopting a recovery agenda.

Constraints influencing key elements of transition may include:

- Low willingness of communities to participate – exacerbated by years of supply-driven approaches,
- Inadequate coordination between approaches adopted by a multiplicity of agencies (INGOs, NGOs, CBOs, FBOs) often operating in the same community – affecting the range of strategies and interventions made and subsequent willingness of communities to pay for goods and basic services,
- Low capacity of government to fill the gap that will be left as INGOs withdraw support,
- Weak connectivity between communities and accountable systems of governance to provide longer-term support and recognition towards community-based management structures,
- Little consideration given to the existing capacity within the local private sector to initiate – or be central to – future support mechanisms as NGOs withdraw from direct support,
- On-going insecurity and uncertainty about the future, and
- Vulnerability of communities to the impact of future climate-change related natural disasters, exacerbated by extreme poverty affecting most of its citizens.

Whatever approach or intervention within a given approach is to be adopted, the way in which it is carried out needs to respond to the changing context. Approaches will need to respond to how demand is expressed by affected populations (Deverill et al, 2002) and how much that demand can be responded to, increasingly through national and local mechanisms as external support is withdrawn. Ideally, both the expression of demand and the means to respond to that demand will be sufficiently balanced to enable progress towards more successful outcomes.

Observable social indicators – informing a time for transition

The optimum time for transition from supply-driven to demand-led approaches is relatively unexplored territory. In this respect the research identified that the conditions of the operating environment determine the extent to which such implementation approaches are likely to be successful, and elaborated on the relevant elements of the operating environment and their sub-components

There is no set of clear indicators developed to help humanitarian agencies determine the right time to commence transition, or the extent to which a change in approach, in response to transition, is likely to be successful. Importantly, any such indicators need to “point towards” a set of outcomes that can be

effectively and efficiently measured. Such outcome-based indicators would provide the signal that it is time to change – from supply-driven to demand-led approaches. As yet, they do not exist. In the absence of such indicators, we return to the key elements that can be used to monitor changes in the operating environment.

Table 2 offers a first step in identifying examples of social indicators in relation to the different elements of the operating environment, drawing on the analysis of opportunities and constraints from the researched case studies. These clearly need development and refinement through further research and a process of wider consultation involving a range of agencies. In this way a greater body of evidence from the field and expertise within the WASH sector can be used to refine and enhance these indicators.

Table 2: Social indicators informing the time and process of transition	
Context	Social indicators relate to achieving an adequate “status” in...
Needs and demand	<ul style="list-style-type: none"> • Clear understanding and responsiveness by agencies to needs of the affected population • Demand for services being expressed – or if stimulated can be met by a capable supply service and effective levels of information • Social cohesion sufficiently (re-)established to enable expressed needs and demands to represent the widest possible user groups
Participation: local	<ul style="list-style-type: none"> • Confidence being expressed by the affected population in their ability to participate in approaches that move to the next stage of transition • Communities expressing or demonstrating adequate levels of willingness to pay towards / invest in improved WASH facilities or services
Capacity: local to national	<ul style="list-style-type: none"> • Identified level of capacity and skills adequate to take-on agreed responsibilities by the most appropriate stakeholder: community, local government, private sector or others. • Information available to identify who can provide which skills and to what extent
Alliances and Partnerships	<ul style="list-style-type: none"> • Operational space for humanitarian agencies and donors to engage with the government and/or private sector – free from interference: ‘no-strings-attached’ • Mapping of the range of possible partners available and willing to provide support
Governance and Accountability	<ul style="list-style-type: none"> • Governance mechanisms address significant concerns, such as: capacity gaps, decentralized accountability, decision-making and action. • Accountability mechanisms are established between actors
Livelihoods (links to finance resources)	<ul style="list-style-type: none"> • Evidence of (self-)mobilization of private, informal service providers • Supply services (materials, tools, etc.) can support anticipated livelihood-based activities
Financial resources: Internal	<ul style="list-style-type: none"> • Households have some level of trusted source of household finance – sufficient to enable payment or investment in improved WASH facilities or services • Demands placed on household finances will not jeopardize other essential items and services (food, shelter, medicine, etc.)
Economic and financial resources: External	<ul style="list-style-type: none"> • Funding arrangements by donors allow agencies sufficient flexibility to adapt approaches to respond to changes in context and plan for, or introduce, transition-related activities (such as support to capacity building) with explicit agreement.
Conflict, Insecurity and Vulnerability	<ul style="list-style-type: none"> • Broader indicators of security context, environmental degradation and social vulnerabilities are monitored and integral to decision-making processes

Factors to consider to achieve success in transition

Success in the transition process is going to be directly related to the way in which the design and application of an intervention responds to the context in which it is introduced. Each context will be specific to a given place, but also to a given time – given that the operating environment will be in a process of change. The factors to achieve success in transition can be drawn from the social indicators proposed earlier. Those given in Table 3 are illustrative examples, through which a response to the status assessment of the social indicators could be used to feed-back into the planning and implementation of future interventions – accounting for the local context.

To be in a better position to state how these factors influence the success of a transition process requires much more thorough assessment and critical review of each of the elements influencing the local context. Once these factors are developed and refined, they would need to be tested-out as agencies adapt their WASH response through transition, in a range of different contexts.

Table 3: Factors influencing success in transition	
Context	Factors to consider to achieve success in transition: proposed examples
Needs and demand	<ul style="list-style-type: none"> • Communities’ identified and expressed needs are within the scope of agency competency, resources and mandates to be responded to. • As communities express a demand for services, agencies help to identify capable providers of supply services, in consultation with the communities.
Participation: local	<ul style="list-style-type: none"> • Communities demonstrate confidence to engage in the next stage of the transition process (through demonstrated willingness and ability to contribute financially or through non-financial means).

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	<ul style="list-style-type: none"> • Communities receive sufficient information and advice from agencies to become aware of the (increasing) responsibilities that they will take on themselves to meet their own demands, as transition occurs.
Capacity: local to national	<ul style="list-style-type: none"> • Agencies prepare and communicate a roles / responsibilities matrix, adapted to changing contexts. The matrix would indicate: <ul style="list-style-type: none"> ○ level of capacity and skills available / required from a range of stakeholders, ○ responsibilities of appropriate stakeholders to appropriate tasks, and ○ how the changing context influences these (capacity and responsibilities).
Alliances and Partnerships	<ul style="list-style-type: none"> • Humanitarian agencies and donors identify mechanisms through which to engage with the government, local private sector providers and other stakeholders, while ensuring critical standards (neutrality, equity, transparency, etc.) can be maintained. • Agencies make available and communicate information on the extent to which a range of stakeholders provided services pre-disaster. • Agencies improve means to coordinate and share tools and operating procedures between relief and development agendas, within the same agency or between agencies.
Governance and Accountability	<ul style="list-style-type: none"> • Agencies align processes to hand-over responsibility to other providers, in response to improving governance structures and mechanisms of accountability. • Agencies engage in on-going dialogue (national and local) around governance and accountability, to ensure optimum use of pre-existing and emerging mechanisms.
Livelihoods (linking to finance opportunities)	<ul style="list-style-type: none"> • Communities demonstrate signs of, (self-) mobilization of private, informal service providers, to which agencies identify opportunities to align livelihood-based approaches. • Agencies incorporate means to enhance or mobilize supply of goods and services (skills, materials, equipment, tools, markets, etc.) required to support livelihood-based activities.
Financial resources: Internal	<ul style="list-style-type: none"> • Levels of available household finance – current and likely future levels – are matched by a change in agency response and approach. This must account for external “shocks” and other priorities that may affect allocation of finance for other priorities (food, shelter, etc.).
Economic and financial resources: External	<ul style="list-style-type: none"> • Agencies and donors negotiate and monitor changes in adequate and suitably flexible funding arrangements – that respond to changes in national and local context. • For implementing agencies to undertake transition-based initiatives effectively requires funding that is sufficient, flexible, and responsive to risk. Agencies and donors need to develop stronger working partnerships, based on experience, expertise and trust.
Conflict, Insecurity and Vulnerability	<ul style="list-style-type: none"> • Agencies (and donors) integrate and address elements of the local and national security context, environmental degradation and social vulnerabilities into decision-making processes. Elements of Disaster Risk Reduction should be built into responses to increase capacity, and decrease vulnerability and hazard.

Proposed framework

The framework for strategic analysis and planning can be introduced as an adapted logframe – one that addresses a project or programme in transition. Based on a standard logframe the “transition logframe” (outlined in Table 4) provides the structure through which to monitor how changes in the working environment are influencing the project and how the project is responding to those changes.

The opportunities and constraints of the working environment (in place of assumptions and risks in a standard logframe) become the significant force on which decisions are to be made. They will need to be monitored effectively against the agreed elements first, so that upward-aggregation of the monitoring indicators identifies – or signals – the necessary change in status (of the social indicators) that will trigger a change in implementation approach, either towards or away from demand-led WASH service delivery. Results from monitoring the opportunities and constraints (at output level) are then assessed against the agreed observable social indicators to give the outcomes. The extent to which these outcomes are being achieved signals the time for appropriate changes to processes and actions in the project.

Narrative summary	Observable social indicators	Opportunities	Constraints
Goal: Sustainable WASH service delivery	<i>Processes and actions enhancing sustainable outcomes</i>	<i>Extent to which adaptations may achieve wider impact</i>	
Purpose: WASH service delivery / implementation approach adapted, in response to transition status assessment (i.e. “signals of change”)	<i>Resulting transition in approaches, processes and actions of WASH interventions</i>	<i>Opportunities for adapting the approach</i>	<i>Constraints against adapting the approach</i>
Outputs: Status assessment of the working context, against each element (from Box 1)	<i>Assessment of change in the working context of the project</i>	<i>Opportunities affecting the project</i>	<i>Constraints affecting the project</i>
Inputs / Activities: Monitoring the working context	<i>Resources to monitor changes in the working context</i>	<i>Ability to monitor</i>	<i>Limitations & reactions to monitoring</i>

Next steps: agencies to develop the transition framework

It has become clear there is widely-held consensus that “things are not as they should be” in the extent to which transition-related WASH interventions could and are being effectively adopted. It is also clear that this area has not received much attention from humanitarian agencies, development agencies or the research community to build an evidence-base from which to create a more robust and widely-accepted framework, guidelines and tools in WASH transition.

This implies firstly that agencies need to invest time and resources to discuss, agree and establish a set of observable, outcome-focused indicators. Based on these indicators, measurable outcomes (or results) can be developed that are specific to a programme or intervention, to identify movement – or signalling – in the operating environment to show when it is appropriate to transition. Secondly, it implies that the programme approaches themselves need to be sufficiently flexible and responsive to permit on-going change during the actual implementation period – such that supply-driven and demand-led approaches can be applied simultaneously (with supply-driven approaches diminishing as demand-led approaches become more dominant) during the transition process.

A number of agencies are expressing interest in developing this understanding further. The process would need to explore in more detail the proposed elements of the operating environment and their influence on the likely success of demand-led WASH interventions through the transition process – in a range of contexts. By generating much more detail and understanding of a range of “community typologies” through the process of change, the characteristics most strongly influencing likely success of a range of interventions (from supply-driven to demand-led) could be investigated further. Central to this process will be the development and testing of agreed outcome-focused indicators and measurable outcomes for use when responding to a changing operating environment.

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