The concept of Linking Relief, Rehabilitation and Development (LRRD) aims at improving integration and coordination between humanitarian actors and development actors in transitional contexts. Notwithstanding large popularity of the concept, its application in the field is challenged by many obstacles, especially in the WASH sector. This article describes HYDROCONSEIL experience in this area and lessons learnt in various countries. It provides examples of challenges faced in unstable settings and areas of recurrent or protracted crises, such as trade-offs between providing quick disposable infrastructure and more expensive long-lasting equipment, difficulties in involving stakeholders, and complex achievement of cost-recovery of services. Three main recommendations are provided to help aid practitioners face such challenges: The need to invest significant time and resources in the initial needs assessment, the need to choose water or sanitation infrastructure/equipment which is both ambitious and pragmatic, and the need to allow for flexibility in the project’s methodologies.

The LRRD concept applied to WASH

Linking Relief, Rehabilitation and Development (LRRD) in WASH

The concept of Linking Relief, Rehabilitation and Development (LRRD) has emerged in the 1980s as a tentative to improve what has been observed as a poor level of integration and coordination between humanitarian actors and development actors in contexts of transition from an acute crisis to a return to normality. This low integration results in reduced impact and sustainability of interventions. The LRRD approach aims at improving integration and ensuring a smooth transition between emergency (quick actions to save lives), rehabilitation (reconstruction efforts to restore the pre-crisis state) and development (actions to improve living conditions of populations with a medium-and long-term vision). The concept applies not only in the transitional phases but also in contexts where crises tend to be protracted (e.g. Palestine) or recurrent (e.g. Haiti). In fact, humanitarian interventions often tend to put in place temporary solutions that are not intended to last for long: a better consideration of the link between emergency, rehabilitation and development aims to shift from a traditional “emergency” approach to a more sustainable approach.

In the WASH sector, this approach would imply that “pure” humanitarian interventions such as distribution of potable water by tankers, delivery of basic hygiene kits or provision of temporary sanitation facilities and removable treatment stations, should gradually and smoothly be replaced or accompanied by more development-aimed interventions such as rehabilitation and construction of durable water and sanitation infrastructure, behaviour change promotion, capacity building and the establishment of management systems (cost-recovery, operation and maintenance, etc.). Creating mechanisms for prevention and planned response to future crises, such as putting in place early warning systems for droughts and floods, monitoring the level of the water table, or developing water safety plans, is also part of this approach.

A useful concept, but difficult to put into practice

The LRRD concept is useful to raise attention on the need to address these coordination and integration issues in emergency and transitional situations. Many articles have been written on this topic (Venro 2006, Steets, J. and D.S. Hamilton 2009, Voice-Concord 2012, etc.). Aid institutions and agencies have committed to LRRD, especially as part of the recent strong interest in resilience, and LRRD was adopted in 2003 as one of the 23 principles for Good Humanitarian Donorship (GHD). The European Commission has published various Communications over the years which encourage LRRD (EC, 1996, 2001, 2007), and in 2012 the European Parliament also published a policy briefing on LRRD (EP, 2012). Several donors, such as DFID and GIZ, have developed flexible aid mechanisms to address LRRD concerns. However, notwithstanding large popularity of the concept, there are almost no guidelines...
on how to apply it on the field, and very little examples of concrete interventions. Adoption of an LRRD approach is challenged by many obstacles, and discussions around the concept avoid addressing the fundamental problems that development aid is almost absent in fragile states and protracted crises, and that emergency aid seldom addresses the structural causes of crises and vulnerabilities (Mosel and Levine, 2014). Yet, nowadays, there are more and more areas where “crises” that have been going on for decades become an obligatory “normality” for the inhabitants that face them; and where problems of a conjunctural nature (variable insecurity, intermittent conflicts or disasters, fluctuating legitimacy of state authorities) sum up with structural problems (underdevelopment, poverty, insufficient infrastructure) to penalize access to basic services for the population.

In the WASH sector, applying the LRRD concept is even more challenging than in other sectors. In unstable settings and areas of recurrent or protracted crises, providing water and sanitation services is particularly challenging due to the “hardware”, investment-intensive and strongly technical nature of these services. Indeed, sustainable water and sanitation services usually require high initial investment costs, and qualified skills and complex institutional set-up to enable correct operation and maintenance. Water and sanitation services are usually meant to last for long, and are planned to satisfy present and future needs over a 15 years-period or more. To what extent is it relevant to invest in such expensive, long-lasting services in areas where “the future is uncertain”? Or on the contrary, to what extent low-cost, temporary water and sanitation services can guarantee sustainable access to services for people permanently living in such areas? People living in unstable settings have exactly the same right to access sustainable services as people living elsewhere: so how can these services be adapted technically and institutionally to better serve these specific contexts, in order to minimize risk and maximize benefits for users?

**Challenges of providing sustainable WASH services in unstable settings: examples from the field**

Hydroconseil is a French consulting company that has worked on numerous assignments in unstable settings, fragile states and refugee camps in various regions of the world. Examples from our field experience enable to highlight specific challenges or trade-offs often faced by aid actors in such settings.

**The dilemma of sanitation facilities in refugees’ camps**

Providing sustainable access to sanitation facilities in refugees’ camps has been identified as a main difficulty in many of our intervention areas. Some concrete examples of these difficulties follow.

In Myanmar, Hydroconseil made a KAP baseline survey in 7 IDP Camps in Kachin State where Plan is supporting WASH interventions. In these camps, the quantity of water per person, as well as the number of latrines available per person, are clearly insufficient. Initially, the number of latrines was adequate, but the camp was expected to be dismantled rapidly and therefore the latrines constructed were not supposed to last for long; today, the camp is still there and most of the temporary latrines are too deteriorated to be used: access to sanitation has become a real problem again. Should better-quality latrines have been constructed, despite the expectation of a short life-span of the camp?

In Jordan, Hydroconseil made a final evaluation of World Vision’s WASH interventions in Azraq camp of Syrian refugees. In this camp, WV and other NGOs had constructed good quality water and sanitation infrastructure with a long-term perspective, however, the camp is located in the middle of the desert, and limited on site opportunities for income-generating activities push people to move elsewhere. The number of toilets per person is enough, but toilet and bathing facilities design does not guarantee intimacy, so facilities are underused. Considering the decreasing camp population, together with a high per-capita cost of infrastructure and underuse of facilities, the project proved to be inefficient. Should less investment have been put into durable hardware construction and more into stakeholders’ consultation and adaptation of the facilities design?

In Iraq, Hydroconseil made a study on the sanitation and drainage systems in the Domiz (I) and (II) Refugee Camps where UNCHR and the French Red Cross have been providing water and sanitation facilities. The camps were expected to be dismantled over a short period of time, therefore, initial sanitation facilities were constructed with low-quality material and were dimensioned to last 6 to 12 months. The camps have now been existing for 5 years and currently have a population of 35 000 and 15 000 people respectively. Although several efforts have been undertaken over the years to rehabilitate and upgrade the initial latrines, the sanitation situation remains extremely challenging: 10 tanker-trucks operate full time to be able to evacuate the over-flowing septic tanks but are not succeeding. Sludge is poured untreated in the nature and ends up polluting a near-by lake which is a water source for many communities. Should a different type of sanitation system have been chosen instead of independent latrines to face the needs of such a densely-populated area?
Tensions between stakeholders’ conflicting interests

Local stakeholders in unstable settings are not only difficult to frame due to the disruption of official institutions, shifting power-relations and variable legitimacy, but also difficult to associate in the project’s implementation due to hidden interests and diverging priorities.

In Somalia, Hydroconseil made a final evaluation of UNICEF’s rural water supply programme in the north-eastern and north-western zones of the country. In these areas, access to WASH services is hindered by widespread insecurity, very weak public institutions, and the existence of clans which dominate community life. In this context, the traditional model of community management of water points has proved to fail due to attempts of appropriation of the water points by rival clans. What innovative management model could enable to guarantee sustainable operation and maintenance of rural water schemes in such specific context?

In Chad, Hydroconseil worked on a case study of UNICEF’s WASH programmes. As part of this programmes, UNICEF provides WASH services to IDP returnees coming back from conflict areas, by distributing hygiene kits and building water points at the border of Soudan, of Central African Republic and in the lake Chad zone. However, the local communities that are hosting the returnees are becoming increasingly frustrated because the population movements are disrupting the local socio-economic dynamics, and because UNICEF’s interventions have not sufficiently consulted them and taken into account their own needs. How should the needs of the local communities have been better “balanced” with the needs of the returnees?

In Northern Mali, UNICEF works on rehabilitating small water networks in communities living in conflict-affected areas in Gao and Timbuktu. Rehabilitation works are done by Malian companies procured nationally based on standard procurement procedures. However, these companies, as well as the works supervision companies, have difficulties accessing the areas due to security reasons; in addition, some local communities refuse to collaborate with these companies because they are seen as outsiders, and request that UNICEF hires “their own” local companies. However, such local companies have not been able to prove enough technical capacity to successfully conduct the works. Should UNICEF have “flexed” the procurement procedures and taken the risk of hiring sub-optimal, less cost-efficient companies, in order to gain consensus of local communities and therefore smoothen the implementation process and increase ownership?

Diverging approaches towards user’s contribution and cost-recovery

Fostering ownership over WASH facilities amongst beneficiary communities by requesting a financial contribution is generally acknowledged as a first step to guarantee correct operation and maintenance of these facilities. In unstable settings, this is particularly challenging:

In Nepal, one year after the earthquake, a Red Cross project launched in Gorkha has the objective to support people get equipped with durable WASH infrastructure through a typical development intervention based on community participation and ownership, alignment to national policies and strategies, capacity building, etc. The project social marketing approach aims at encouraging households to invest in their own facilities. However, targeted communities are still living in temporary shelters, and have an overall low willingness and capacity to pay. They don’t appear to be ready to auto-invest in WASH equipment, without achieving first of all a more durable dwelling, which is their priority. How should sound WASH project methodologies be adapted to face specific users’ concerns in transitional settings?

In Chad, in the IDP returnees’ areas of the above-mentioned example, UNICEF considers beneficiaries as being too vulnerable and impoverished to be able to provide for a financial contribution as counterpart for the construction of the waterpoints, so such a contribution is not requested. In addition, users’ payment for water services is not promoted. This typical “emergency” approach is carried out with the assent of the national authorities and local stakeholders, although it contradicts the national strategy, it creates inconsistencies with other donors’ interventions, and it results in little ownership of beneficiaries over the equipment and weak sustainability of services. Should UNICEF have taken the risk to create discontent by requesting a counterpart in order to foster ownership and sustainability? What mechanism could have been established to face equity concerns amongst a generally poor population?

In Northern Mali, Hydroconseil works on a study to increase water production in the 3 crises-affected towns of Gao, Timboktou and Mopti. In these towns, water networks are managed by the national utility SOMAGENT. The technical operation of the networks is not particularly affected by the crises, but 2 almost opposing mechanisms take place to complexify and alter the financial management. On one side, cost-recovery of tariffs becomes very difficult due to impoverished users refusing to pay and impossibility to “cut the service” to those users for equity (and security) concerns; on the other side, massive increase of “emergency” funds encourages the utility to invest in equipment rehabilitation or replacement, but creates a distorted incentive for less rigorous maintenance of existing equipment. How could donors’ funds be used more cost-effectively in such a context, to support the fragilized operating budget of the utility yet avoid creating too much dependency from external partners, in a sustainability perspective?
Lessons learned in terms of WASH LRRD implementation

The examples above show that in WASH, the expected “smooth” transition from emergency responses to development interventions is often not as straightforward as expected, and that many questions arise on how to implement the LRRD principle while facing concrete challenges on the ground. There is no clear-cut answer to these questions, but experiences from the field enable to draw some preliminary lessons learned.

Quality for sanitation facilities in refugees’ camps

How can sanitation infrastructure be at the same time sustainable and adapted to possible changing needs? What aid mechanisms can be mobilized to fund (relatively expensive) long-lasting sanitation equipment in a precarious setting such as a refugee camp?

Whether low-cost, on-site sanitation facilities guarantee access to sustainable sanitation is an ongoing debate in the sector that goes beyond the LRRD discussion. However, the general challenges of sustainable sanitation are even more challenging in unstable environments. The examples mentioned show that is it necessary to find a balance between the level of investment in the facility and the (possibly changing) needs of the user, which cannot be assumed beforehand: these needs have to be evaluated in depth before the intervention, and continually assessed over time. From the beginning, aid actors need to be a bit more realistic about the life-span of refugee camps, and don’t insist in building business-as-usual “emergency” latrines in camps which are probably going to last several years (e.g. Myanmar, Iraq…). These short-term solutions may in fact be only apparently cost-effective. Over time, technical and financial efforts to rehabilitate and improve initial low-quality latrines to face increasing needs sum up to constitute significant resources, which could have been more cost-effectively spent since the very beginning.

In addition, aid agencies should not give for granted that on-site sanitation is necessarily the best solution for refugee camps. The example of Domiz (I) and (II) Refugee Camps in Iraq is particularly significant: after 5 years of insufficient and inadequate on-site sanitation, with very bad social, environmental and financial impacts, the decision was finally taken to build a sewage network and treatment plant. The cost of the construction and operation of this network has been estimated as lower than the initial cost of constructing several thousands of (inefficient) “emergency” latrines. However, a donor which is ready to invest in this network has yet to be found:

existing aid mechanisms are in fact not really adapted to fund this type of “development” projects in an apparently “emergency” context...

Taking into account stakeholders’ differing interests or changing needs

How can aid actors help to establish sustainable services and relevant O&M mechanisms when local stakeholders are fragilized, or illegitimate, or divided into groups that have conflicting or hidden interests?

Stakeholders’ consultation is often neglected in emergency or post-emergency situations due to limited time available, but this dramatically hinders impacts of interventions as the WASH technical solution provided might be unsuitable to face the needs (e.g. Azraq camp in Jordan). Local institutions as technical services, municipalities or water committees may be unable to manage the services due to their capacities having being weakened by the crises or due to them being illegitimate in the eyes of the beneficiaries (e.g. Somalia). In addition, stakeholders, including local communities, may have hidden or rival interests in project interventions (e.g. Northern Mali or Chad).

In all cases, there is a need to acquire an in-depth knowledge of the socio-economic context and power-relations in the intervention area; however, it is often difficult to acquire such knowledge when the area is inaccessible for security reasons, and where local partners are not completely trustworthy. In transitional situations, it may be worth investing more time and more resources in the initial consultation process, including developing strategic partnerships with local organizations or NGOs that know the area well (as was done by UNICEF in Northern Mali). Since the situation may easily change as may the size and composition of target communities (e.g. IDP camps in Kachin State in Myanmar), the consultation process should be continuous throughout the intervention, and should enable for changes in direction.

UNICEF’s interventions in Somalia is a particularly illustrative example of a very good assessment of local context and consequent adaptation of project’s methodology. After having acknowledged the failure of traditional community management methods in this fragile State, and on the basis of an in-depth understanding of local culture, UNICEF decided to promote private management of water schemes. Indeed, private operators in Somali culture are much more respected and less questioned than associative organizations as it is recognized that private operators make investments and it is therefore accepted that they request payment for services. Local private companies were therefore set-up for managing these schemes, often owned by local wealthy notables or merchants who are legitimate because they have a big fortune or a strong clan backing them. These businessmen strive to make the company profitable and defend themselves against attempts at retrieval or eviction by others, therefore providing a service that is continuous and sustainable.
Ownership, user’s contribution and financial management of services

How can ownership over water and sanitation services be fostered amongst a target population that is particularly poor and vulnerable? What cost-recovery mechanisms can be established to enable for service sustainability?

In emergency and early recovery settings, aid interventions usually tend to consider beneficiaries as being extremely impoverished, “having lost everything” during the crises. As a consequence, no contribution is requested from beneficiaries as counter-part for participating in a project, and often, no tariffs are established as user payment for accessing the services. In opposition, development projects tend to ask for a counterpart since this has proved to increase participation and foster ownership, and try to establish cost-recovery mechanisms such as tariffs. Which of these approaches should be adopted in unstable settings or protracted crises?

Here again, an in-depth understanding of the socio-economic context of intervention is required to enable to adapt the methodologies. Either approach should not be adopted “blindly” and rigorously, but a flexibility should be allowed to change approach depending on the circumstances. Also, it must be beard in mind that initial for-free services will necessarily become cost-burdens over time as they become degraded and therefore require financial resources for operation, maintenance and repairing (e.g. latrines’ pit-emptying in Domiz camps in Iraq was very expensive), so the for-free intention is in fact an illusion. It is also important to keep an eye on the issue of land-ownership and precarious dwelling, as this significantly impacts people’s willingness to invest in WASH infrastructures (e.g. Nepal). In addition, aid actors need to take into account that adopting a sustainable approach may not always please all existing stakeholders as some may have interests in a short-term perspective (e.g. for political purposes); here again, mapping the interests of different existing beneficiary groups (e.g. autochthone communities vs. returnees in Chad) and finding a consensus is fundamental. Smart cross-subsidy mechanisms may need to be established in order to face equity concerns and avoid over-burdening poor users (e.g. Nepal) or making richer users (e.g. Chad) or inefficient operators (e.g. Mali) act as free-riders and benefit from the emergency “godsend” while fragilizing the service sustainability.

Recommendations

The various examples of challenges and trade-offs faced in the field with respect to providing sustainable WASH services in unstable environments and the lessons-learned from this examples allow to identify some recommendations addressed to aid actors intervening in this type of settings.

First of all, it is recommended to invest significant time and resources in the initial needs assessment, including an in-depth analysis of the socio-economic environment and institutional /stakeholder analyses. When access to the project site is difficult due to security reasons, partnering with a trustworthy local NGO to undertake these analyses and provide recommendations can be a good solution. This initial investment may seem costly but finally will enable to better tailor interventions and therefore save money on future steps of project implementation, and largely increase impacts. In addition, the needs must be re-assessed over time, as circumstances may change rapidly in these unstable areas; target groups may also undergo changes (in number and in nature), and needs may change accordingly.

Secondly, it is recommended to be both ambitious and pragmatic with respect to the chosen water or sanitation infrastructure/equipment. Ambitious in the sense that users deserve high-quality and long-lasting infrastructure even if they happen to live in very unfortunate environments; and pragmatic, in the sense that the quality ambition needs to be balanced by the feasibility of the operation and maintenance needs of these infrastructure. This will be depending on the local management capacities/skills and financial possibilities. Donors and aid actors need to consider the full costs of the service (not only the initial investment) and don’t neglect to undertake a rigorous assessment of such costs and capacities under the pretext of the “emergency”. They should also accept to “take the risk” and accept to make a significant initial invest in hardware notwithstanding the “uncertainty of the future”, as this usually pays-off over time. Donors should develop appropriate risk-taking funding mechanisms specifically targeting unstable settings, and allowing for longer-term interventions.

Thirdly, it is recommended to allow for flexibility in the project’s methodologies especially with respect to users’ participation, management models, users’ fee or cost-recovery issues, and mechanisms to guarantee ownership and sustainability. Project tools and instruments such as the logical framework should enable for such flexibility and possible change in approaches throughout the implementation period. Overall, if a totally-free-service approach can be justified in the immediate aftermaths of an acute crises, this approach should be avoided in protracted crises or fragile states contexts, where more financially sustainable models should be encouraged. However, project frameworks should be flexible enough to allow gradually shifting from one approach to the other on the basis of beneficiary’s reactions, and shifting forth and back on the basis of possibly changing external circumstances. Smart innovative cross-subsidy or solidarity mechanisms should also be considered to address equity concerns. If public institutions are weak, and it is difficult to secure investments, the traditional social mechanisms should be let free to step-in and choose the most appropriate service management models, including the private sector, taking into account local legitimacy and service sustainability.
Acknowledgements
The author/s would like to extend thanks to Cédric Estienne, Camille Salaun, Hoshyar Lahoorpoor and Bernard Collignon (HYDROCONSEIL) for sharing their experiences.

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Note/s
1 Endorsed in Stockholm, 17 June 2003 by Germany, Australia, Belgium, Canada, the European Commission, Denmark, the United States, Finland, France, Ireland, Japan, Luxemburg, Norway, the Netherlands, the United Kingdom, Sweden and Switzerland.
2 In recent years, several donors have tried to develop such more flexible aid mechanisms. We can mention for example : the European Instrument for Stability, Norway’s gap budget line, USAID’s Transition Initiatives and German’s BMZ Strategy on Transitional Development Assistance. (I. Mosel and S. Levine, 2014)

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