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LOCAL ACTION WITH INTERNATIONAL COOPERATION TO IMPROVE AND SUSTAIN WATER, SANITATION AND HYGIENE SERVICES

# Making WASH monitoring and evaluation work for everyone: the experience of the DRC WASH consortium

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The DRC WASH Consortium, comprised of five international NGOs led by Concern Worldwide, has been active in DRC since 2013 with a rural WASH programme reaching nearly 750,000 people. One of the Consortium's key goals is complementarity with DRC's national rural WASH programme, therefore harmonising the Consortium's monitoring & evaluation framework with the national programme's standards has been a strategic requirement. In addition, the Consortium needs to comply with its donor's global WASH indicators (UKaid) and to measure the success of its own programme approach according to key indicators. The process of defining those multiple sets of requirements and of integrating them in a consistent whole has resulted in a multidimensional monitoring & evaluation framework. This paper describes this process and highlights the challenges and potential of monitoring WASH in similar contexts.

#### Introduction and context

#### The Democratic Republic of the Congo

The Democratic Republic of the Congo (DRC) is a vast country in Central Africa, with an estimated population between 70 and 80 million. Nearly 60% of the population live in rural areas. Despite recent years of relative stability, various provinces are still heavily affected by local conflicts. DRC ranks at 176 out of 188 in the Human Development Index, with a gross domestic product per capita of 480US\$ in 2014 (UNDP 2015 and UNDATA no date).

Access to water and sanitation remains a challenge both in urban and in rural settings. Only 30% of rural dwellers have access to improved water and sanitation according to the Joint Monitoring Programme (JMP), and other sources report even lower water and sanitation coverage (JMP 2015). DRC did not achieve the Millennium Development Goal on water and sanitation and will need to advance at a much faster pace to get on track for the Sustainable Development Goal of universal and equitable access (UN no date).

# The DRC WASH Consortium and its programme approach

In order to increase access to rural WASH, a national rural programme is in place called Healthy Schools and Villages (*Programme National Écoles et Villages Assainis*, PNEVA). The programme is run through the Ministry of Health and the Ministry of Education, with UNICEF as the key implementation partner. The national programme is funded by the Government of the DRC, UKaid, USAID and UNICEF. The programme has completed its first phase in 2012 (2,500 villages), is now in its second phase 2013-2017 (6,000 villages) and is preparing a third phase (PNEVA no date).

The DRC WASH Consortium (henceforth the Consortium) was established in 2013 as a complementary initiative to the national programme. The Consortium is composed of five international NGOs: the lead agency Concern Worldwide; ACF; ACTED; CRS; and Solidarités International. The Consortium aims to assist nearly 750,000 people in around 700 rural villages in the achievement of sustainable water, sanitation and hygiene by 2019. The Consortium is funded by UKaid, who is also the national programme's main financial contributor.<sup>1</sup>

The Consortium has the same overall goal as the national programme of working with communities to become 'Healthy Villages' but develops alternative modalities in order to improve sustainability, including the use of the Life-Cycle Costs Approach. In this sense, the Consortium applies an 'economic approach' whereby users of water services are considered not beneficiaries but customers who pay for certain levels of services in the short, medium and long term. The Consortium supports communities to develop the needed capacities to raise and manage funds, through guidance on income generating activities and water management (Jones 2016).

There is also a focus on sanitation and hygiene community engagement. As the Consortium does not subsidise household toilets or handwashing stations, communities are rather accompanied in 'small doable actions' to achieve adequate access to hygiene and sanitation in a CLTS-inspired methodology.

# Global trends in monitoring and evaluation

Monitoring and Evaluation (M&E) represents an increasingly central component in humanitarian and development aid. M&E can be overall defined as a framework allowing systematic and objective measuring of the results of a given project or programme. Most donor agencies, UN agencies, NGOs and governmental departments tend to define specific M&E frameworks, generally aiming to improve performance and to foster accountability. In this sense, it is not uncommon for agencies to invest in stand-alone M&E departments making use of information and communication technology tools such as digital data gathering (DDG). At the global level, the JMP is a notable example of WASH M&E framework for the Millennium Development Goals and Sustainable Development Goals. The JMP framework shows the strengths and limitations of measuring WASH worldwide by drawing on national monitoring systems (Bartram 2014).

The M&E approach of the DRC WASH Consortium reflects such global trends as well as the specifics of the DRC context.

# M&E in the DRC WASH Consortium: meeting different needs

#### **UKaid and the Logical Framework**

As mentioned above, the Consortium is funded by UKaid. As such, the Consortium is contractually bound to a defined set of seven outputs, one outcome and one impact, each subdivided into several quantitative indicators (40 in total), which are fully detailed in the project's logical framework or logframe. Each indicator has its own final target and bi-yearly milestones defined in absolute values and in percentage values. In turn several of those logframe indicators feed into UKaid's global WASH results framework, therefore their definitions and their target percentages have to be in line with it (DFID 2015).

# The Seven Norms of the National Programme

A further dimension of the Consortium's M&E framework is the link to the National Programme, which accompanies rural villages in the attainment of "seven norms" of access to water, access to sanitation and hygiene knowledge and practices. Local healthcare authorities certify villages as "Healthy Villages" when they achieve all the seven norms, allowing them to enter into a national database for longer term follow-up. The national programme has established over time a definition and measurement method for each of the seven norms. As one of the strategic goals of the Consortium is to be complementary to the national programme, the Consortium needs to ensure that the villages it assists work towards the same "Healthy Village" status too. In order to consistently do so, the Consortium has to measure the seven norms at the village level by using the exact same metrics as the national programme. That is done partly by phrasing certain logframe indicators to meet the national programme definitions, partly by analysing M&E data in specific ways for the sole purpose of measuring the national programme norms.

# The Consortium's own programme requirements

Besides the requirements of UKaid global WASH indicators and of the national programme's seven norms, the Consortium needs to monitor its own core programme components in order to understand their effectiveness and to gauge the success of field activities. Key examples are the 'economic approach' (e.g. the financial and managerial performance of water management committees) and the 'small doable actions', i.e. all sanitation- and hygiene-related community-led initiatives. Other Consortium-specific elements refer to coordination and learning but such elements are not directly measured through M&E processes.

#### A multidimensional M&E framework

Overall, the Consortium's M&E needs to coherently integrate all the macro-components above in a consistent framework - from data collection to data analysis to reporting. Furthermore, as the Consortium comprises five agencies each one collecting M&E data, M&E frameworks are standardised and replicated across all agencies. In this sense the Consortium carries out multidimensional M&E.

# **Evolution of the Consortium's M&E framework**

The macro-components described above (UKaid requirements; the national programme requirements; Consortium's own needs) have evolved over time since the Consortium's inception in 2013. Therefore, their integration in a comprehensive M&E framework has been a process rather than a one-off action and has had the contribution of various stakeholders. However, the current setup is not expected to significantly change until the end of the project in early 2019.

# Getting started: developing the Consortium's initial M&E framework in line with the key elements of the programme's approach, 2013-2015

The Consortium's initial M&E framework was developed during the inception phase in 2013, with some modifications once the programme was up and running in 2014-15. The logframe and indicators were based on discussions with the donor, but also tried to take into account the requirements of the national programme. However, when the Consortium started in 2013, the national programme was in an interim period between its first two phases and some of the indicators were undergoing revision. Therefore, it was not possible to confirm at this stage whether definitions and measurement approaches were completely compatible or not. Some adjustments were made to the indicators in 2015 to try to address this in discussion with DFID, but as discussed below, further more detailed changes were still required after this.

#### Trying to measure life-cycle costs and "Small doable actions"

In the early stages of the Consortium programme there were two other key elements considered in relation to M&E. The first was the Consortium's emphasis on putting into practice an 'economic approach' to sustainability, by trying to estimate and then monitor the life-cycle costs of water services. This led to the inclusion of detailed questions in the surveys for water management committees about costs, financing and expenditure. However, this made the tool quite complex as an ongoing monitoring tool. This issue might have been addressed better by targeted surveys on smaller samples of villages, rather than used in all communities.

A second key area of the Consortium's approach from the start was the promotion of "Small Doable Actions" for hygiene and sanitation, without external subsidy. Early on in the programme, the member agencies realised that they needed more rapid feedback on the progress made by each village than the standard M&E tools permitted. Therefore, each agency developed specific tools for monitoring the Small Doable Actions implemented by each community. This was a 'bottom-up' initiative which the Consortium then tried to harmonise by compiling the different tools into a single version. However, given that the tools were most important for field teams and local partners, the data from these was not integrated into the overall M&E framework.

# 'Traditional' data management: paper questionnaires entered into spreadsheets

In terms of overall data management, the Consortium adopted a system of paper-based questionnaires with data entered by each agency into Microsoft Excel sheets for cleaning, and then stored, consolidated and analysed by the Consortium coordination unit. This approach was used because at the start of the programme the members were only just starting to use DDG within their own agencies (on some other projects) and it was not thought to be possible to set-up one harmonised system at that stage. Besides, establishing a definitive data management system would have been challenging as external requirements kept evolving.

# Setting definitive indicators and upgrading data management, 2016-present

# The final logframe sets the details of all indicators

The final logframe revision was done through exchanges with UKaid's representatives and with the national programme and UNICEF. The process resulted in the removal from the Consortium's logframe of about five

indicators which were deemed redundant; in the careful rewording of most indicators making their definitions as precise as possible; in the adjustment of target percentages of various indicators making them more realistically achievable; and in the realignment of bi-yearly milestones with the actual results achieved thus far.

# A streamlined M&E framework

Due to the gradual project onset, until the end of 2015 only a limited quantity of M&E data was collected by the Consortium agencies and consolidated/analysed by the Consortium coordination unit. Larger amounts of data started coming in after the 10<sup>th</sup> quarter of the project, i.e. in January 2016. At that point in time, data analysis showed the limits of the existing framework: several M&E survey questionnaires did not accurately respond to the logframe indicators or to the seven norms and conversely included questions that seemed of limited relevance. Datasets were often incomplete or inconsistent, data analysis modalities weren't fully defined, and manual handling of large Excel spreadsheets was time-consuming and error-prone.

# Why details matter: the example of measuring rural sanitation in DRC

In order to count household toilets as "hygienic" (one of the 7 norms of the national programme) or unhygienic, the Consortium utilised criteria including distance from the house, use by all household members, absence of faecal matter on the slab, absence of flies and odours and presence of a lid on the defecation hole. This was initially based on the national programme's official definition and agreement with UKaid. However, detailed analysis showed in early 2016 that in fact the national programme was using less stringent criteria in their M&E routine in practice. By slightly adjusting the relative weight of the criteria above, the incidence of households with access to hygienic toilets in the Consortium villages jumped from 31% to 59% as of December 2015. More recent data from late 2016 showed a rate of 67%. Such fine-tuning now informs the Consortium M&E, allowing better comparability with the national programme and representing a probably more realistic benchmark for rural sanitation in DRC.

Therefore the Consortium, through an ad-hoc Technical Working Group with all the Consortium agencies, carried out an in-depth analysis of the UKaid requirements, the national programme requirements and Consortium's own needs. The outcome -which was finalised and tested in July 2016- was a renewed and streamlined set of M&E surveys and respective questionnaires that met all requirements.

# A fully digitalised data management system

To improve data management, the Consortium decided to migrate to a fully digitalised M&E data management system whereby data collection is executed through DDG across all the agencies, and the logframe and 'seven norms' reports are automatically generated by an online platform. This kind of system generally offers the benefits of enhancing data collection standardisation; reducing the margin of human error; cutting the time of manual data handling; allowing more powerful data analysis; and reducing the risk of data losses (Melloni 2016).

The Consortium opted for two integrated software platforms. DDG is done through iFormBuilder, which was chosen because it represents the default standard for the lead agency Concern Worldwide. Raw data collected via iFormBuilder are automatically pushed into Zoho Reports, an online platform that generates the logframe reports and seven norms reports from the raw data. Both iFormBuilder and Zoho Reports are customisable software, i.e. they allow admin users to build tailored requirements into the system. The IT work has been predominantly outsourced to the IT firm Zerion and is expected to be completed in February 2017. The endpoint benefits of fully digitalised data management systems are known (efficiency, performance and accountability). However, in the process, the Consortium has faced challenges linked to limited pre-existing capacities within the Consortium; coordination, replication and HR turnover across the Consortium agencies; transition from the old to the new system; the need to avoid delay to ongoing M&E surveys; and remote collaboration with an IT firm based abroad.

# The Consortium's M&E in figures

The following figures help understand the scope of M&E in the Consortium:

- Three monitoring stages: baseline, endline and post-endline (6 months later).
- Six types of surveys with households, water committees, community health workers, schools and Health Zones.
- · 40 indicators in the final logframe version.
- 60 mobile devices for digital data gathering.
- 100 enumerators and M&E staff across the Consortium.
- 692 villages in which to measure the 'seven norms'.
- 60,000 individual questionnaires.
- 4,000,000 data points.

# **Conclusions and recommendations**

This paper described the multiple requirements with which the Consortium's M&E complies and the process through which they were incorporated in a coherent multidimensional framework. The following conclusions can be drawn:

- Such integration demands extensive and time-consuming coordination with external stakeholders and
  within the Consortium, especially if requirements change over time and the number of indicators to track
  is vast;
- In contexts where different actors measure the same type of results (e.g. the seven norms of the national programme), setting definitions and measurement methods in full detail is essential broad intents may not be sufficient to achieve actual alignment;
- Standardisation and replication of M&E frameworks and data management systems in a consortium of several agencies presents challenges that single-agency projects typically do not to face;
- Based on the above, it is recommended that implementers (NGOs and NGO consortia) keep their M&E frameworks as streamlined as possible at the start, knowing that changes are likely to be needed over time anyway retrofitting a complex M&E framework will be more challenging than building on a simple one. They should also carefully asses the implications of incorporating new requirements at advanced stages of project implementation, as the efforts of updating M&E frameworks may outweigh the intended benefits. NGO consortia in particular should be aware that the process of creating standardisation and replication across several agencies entails considerable time and resources and generates extra potential for errors. Consortia should factor in such variables in their plans;
- On their side, donors could contribute to more effective M&E by establishing a limited number of high-level and strategic indicators for which definitions are not expected to change over time and which are to be monitored accurately and systematically. Donors should allow case-by-case approaches for any new emerging requirements or for micro-level programme components. They may ask implementers to monitor them via targeted ad-hoc surveys rather than via their full-scale M&E routine, ensuring relevant data are available when needed;
- To make harmonisation with governmental M&E frameworks work in practice, national programmes need to be aware of the demands that such processes pose on other stakeholders. As those demands frequently revolve around very specific elements, such specifics should be up to the government to clarify as early as possible. Where national databases exist, national programmes should develop realistic and adaptable plans for integrating the essential data from other actors in the short-term, before attempting full integration in the long-term if feasible and desirable.

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#### References

BARTRAM, J. et al 2014 Global Monitoring of Water Supply and Sanitation: History, Methods and Future Challenges. Int. J. Environ. Res. Public Health 2014, 11(8), 8137-8165. Available at <a href="http://www.mdpi.com/1660-4601/11/8/8137/htm">http://www.mdpi.com/1660-4601/11/8/8137/htm</a>

DFID 2015 Annual Report and Accounts 2014-15 Results: Water, sanitation and hygiene sector. Available at <a href="https://www.gov.uk/government/publications/dfid-annual-report-and-accounts-2014-15-results-achieved-by-sector-water-sanitation-and-hygiene/dfid-annual-report-and-accounts-2014-15-results-water-sanitation-and-hygiene-sector">https://www.gov.uk/government/publications/dfid-annual-report-and-accounts-2014-15-results-water-sanitation-and-hygiene-sector</a>

JMP 2015 Country Files. Available at

https://www.wssinfo.org/documents/?tx displaycontroller[type]=country files

JONES, S. & MELLONI, G. 2016 Lessons from using the life-cycle cost approach for rural water supply in DRC through the DRC WASH Consortium. 7<sup>th</sup> RWSN Forum. Available at https://rwsnforum7.files.wordpress.com/2016/11/full paper 0182 submitter 0263 jones stephen.pdf

MELLONI, G., PARPALEIX L.A. & PAJĄK, J. 2016 Sanitation management and information technology in Za'atari refugee camp, Jordan. 39<sup>th</sup> WEDC international conference. Available at https://wedc-knowledge.lboro.ac.uk/details.html?id=22482

PNEVA no date Notre Programme. Available at <a href="http://www.ecole-village-assainis.cd/">http://www.ecole-village-assainis.cd/</a>

UN [no date] Sustainable Development Goals. Goal 6: Ensure access to water and sanitation for all. Available at <a href="http://www.un.org/sustainabledevelopment/water-and-sanitation/">http://www.un.org/sustainabledevelopment/water-and-sanitation/</a>

UNDATA [no date] Democratic Republic of the Congo. Available at

http://data.un.org/CountryProfile.aspx?crName=democratic%20republic%20of%20the%20congo

UNDP 2015 Briefing note for countries on the 2015 Human Development Report – Congo (democratic Republic of the). Available at http://hdr.undp.org/sites/all/themes/hdr theme/country-notes/COD.pdf

#### Note/s

<sup>1</sup> The views expressed by the authors do not necessarily reflect the views of Concern Worldwide or of the other agencies mentioned in the paper.

<sup>2</sup> The seven national norms are: the village has an active committee for water, sanitation and hygiene; at least 80% of the population has access to clean water; at least 80% of households use hygienic latrines; at least 80% of households dispose of their waste hygienically; at least 60% of the population washes their hands before meals and after latrine use; at least 70% of the population understands the fecal-oral route of disease and ways of preventing transmission; and the village is cleaned at least once per month.

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