

Summary of RWSN E-discussion

Cost effective ways to leave no-one behind in rural water and sanitation



Summary report

27 May – 23 July 2019

Organised and moderated by Guy Hutton (UNICEF), Louisa Gosling (WaterAid), Marieke Adank (IRC), Julia Boulenouar (Aguaconsult), Sean Furey, Meleesa Naughton and Sandra Fürst (RWSN).



Contents

Main messages.....	3
Introduction.....	4
Week 1: What are the cost components of rural water supply and sanitation, and which ones tend to be forgotten?.....	5
Examples of neglected costs in rural water supply and sanitation.....	5
Participants agreed on the need to define “the ones behind”	6
So how much does it cost?.....	6
Week 2: How are these costs financed? What are the main current funding sources and which ones have greater potential in the future?.....	7
What are the sources of funding for covering the costs of leaving no-one behind?	7
Given the diversity of sources of funding, who makes the decisions on funding allocations? ...	8
The magnitude of the challenge at stake	8
Week 3: How can we ensure affordability and make maximum use of limited public subsidies to reach the most vulnerable populations?	9
How to ensure the hard to reach and poorer households have access to rural water supply?	10
Reaching everyone including the poor and hard to reach will require supporting self-supply	10
Where to take this discussion forward?	11
Join the discussion	11
Annex: E-discussion participants	12

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Main messages

Costs: Many costs related to water and sanitation provision remain ignored and threaten the sustainability and universality of WASH services. Evidence is already available on the order of magnitude costs required to “keep the water flowing” - between \$1 and \$3 per person per year depending on the country is needed – so spending less than \$1 per person per year is too little to be effective. However, the full cost of reaching everyone everywhere are unknown and some hidden costs (corruption, training etc.) are often neglected.

Financing: Should the 3Ts be revised to become 3Ts+S (for Self-supply)? We as a sector need to acknowledge the investments made by users themselves (in the case of Self-supply but also to improvements to existing water services), which is a major source of financing in the rural context, but often unsupported or neglected. As users are the greater contributors, it calls for rethinking the 3Ts framework and raises the question of affordable services for the users.

Affordable services: The economic costs of unpaid labour in making water available at the household level (usually borne by women and children, when water is not available on premises) are usually ignored. When one values the time costs of collecting water, the poor do 'pay' considerably more of their total expenditure than the non-poor – so current estimates of user cost considerably underestimate the true cost. This is a key challenge as the ones left behind are usually the poorest and as it costs a lot to provide services to all and forever. In this context, various areas can be investigated including measuring affordability and considering low cost options such as «supported Self-supply» if accompanied by the government.



Introduction

From 27 May – 23 July 2019, RWSN ran an e-discussion on Cost effective ways to leave no-one behind in rural water and sanitation services with Guy Hutton (UNICEF), Louisa Gosling (WaterAid), Marieke Adank (IRC), Julia Boulenouar (AguaConsult) and Sean Furey, Meleesa Naughton and Sandra Fürst (RWSN). The present document summarizes the contributions received during this e-discussion.

Why this topic?

Since the approval by UN Member States of SDG WASH targets 6.1 and 6.2 in 2015, we have been scratching our heads about how to finance access to safely managed WASH services for everyone, everywhere and forever. In rural areas this ambition level is even more challenging, given the lower coverage levels and the predominance of low-density, remote and traditional communities among the unserved.

Efforts to bring financing to the fore of the SDG debate have been spearheaded by many of those in the RWSN community. It is widely agreed now that national WASH targets should be set realistically rather than based on aspiration, and once an updated national policy and strategy have been approved to reflect the SDGs, a robust financing strategy is the next logical step in making the targets a reality. Preparing a financing strategy is not easy, however, especially when it requires the consultation and inclusion of the many different constituencies who have a stake in it. While conducting a costing and financial gap analysis might sound simple, the many different considerations make it complex and uncertain: what service levels to aim for, who to serve first, whether service efficiency can be increased, what the future holds in terms of population size and location, climate impacts, household income growth, public spending and the vagaries of foreign aid.

Hence, to keep it simple, this e-discussion planned to cover a few of the most critical topics in the financing challenge. As not all areas can be covered, we hope that this debate lays the groundwork for tackling other challenging issues in the future. The e-discussion was planned around the following questions:

1. Week 1: What are the cost components of rural water supply and sanitation, and which ones tend to be forgotten and thus threaten service quality or sustainability?
2. Week 2: How are these costs financed? What are the main current funding sources and which ones have greater potential in the future?
3. Week 3 (extended into Week 4): How can we ensure affordability and make maximum use of limited public subsidies to reach the most vulnerable populations?

Weekly summaries of the e-discussion were prepared by Julia Boulenouar (Aguaconsult) and form the basis of this paper.



Week 1: What are the cost components of rural water supply and sanitation, and which ones tend to be forgotten?

As Akah Henry Ndah rightly put it “every aspect that contributes to the availability of the expected WASH service has a cost”.

Costs vary from one context to the other and “rely on many factors, including the source of the water resource and the type of system put in place, the location of the community to be supplied, the income sources/ affordability of the water resource to be supplied and the community participation/involvement in the operation and maintenance” (Charles Muhigirwa).

These costs can be broadly grouped in six categories, as demonstrated by IRC. Resources can be found on the [IRC website on finance](#) and on this [link](#) which also provides a useful framework for identifying these categories (Capital expenditure, Operation and Maintenance, Capital Maintenance, Direct Support, Indirect Support and Cost of Capital) and tools to apply the analysis.

Examples of neglected costs in rural water supply and sanitation

Beyond these generic categories, this week’s discussion highlighted a number of neglected costs, that merit particular interest, including those emerging from a workshop in WaterAid’s Southern Africa Region that focused on life cycle costing and on how to embed equity and inclusion into WASH programmes. These are summarised below:

- The cost of collecting and analysing data, particularly at pre-construction stage to determine the current levels of access, population needs, demographic trends but also – and crucially – to characterise and understand the groundwater resource.
- The time (and cost) required to understand what people really want in terms of technology, level of service and siting. This involves facilitation skills to bring people together and make decisions. The [equality, non-discrimination and inclusion toolkit](#) gives some guidance on how to do this, and this [toolkit](#) provides examples of promising good practice approaches, which have the potential to reduce vulnerabilities to violence in the context of WASH.
- The cost of strengthening skills and stakeholder capacity to fulfil their mandate. This relates to local government, as well as service providers and focuses on specific skills such as overseeing quality of construction, ensuring preventive maintenance and carrying out professional repairs.
- The cost of embedding further, the conditions for universality of WASH access within policies and sector guidance at national and sub-national levels.
- The cost of corruption, which featured extensively in last year’s online course on the topic of borehole drilling professionalism and management (see report [here](#)).
- The cost of including people with disabilities in services is also usually neglected although it must be included to reach everyone. The example shared by Jane Wilbur of WaterAid highlighted the importance of inclusive planning and training to reach girls with intellectual impairments and their parents with messages about hygiene. Another example on [Menstrual Hygiene Management behaviour change campaign for people with intellectual impairments in Nepal](#) underlined the costs that arise for ensuring that no-one is left behind and at different stages of



the campaign: Campaign development, baseline research, delivery and monitoring, process and outcome evaluation, scaling up.

Once all costs are identified and related data collected, affordable solutions can be found to reduce the cost of service provision: an example was given from Yaya Karbo on the [EMAS technology](#). Rik Haanen also highlighted that several [SMART centres](#) exist in Africa where small-scale entrepreneurs are taught and guided to provide affordable locally made services and products.

Participants agreed on the need to define “the ones behind”

Kerstin Danert reminded us that the [UN General Assembly resolution](#) called for the WASH sector to find out who has been excluded from service provision and participating in decision-making, why this is so and proactively take steps to make sure people are included now and in the future.

This is not currently the case, since inequalities in access are still prevalent due to a number of inefficiencies in the delivery of services: policies restricting service provision to the marginalised under the pretext that each household must provide finance, lack of market development to enable more appropriate WASH technologies, high market prices, poor local supply systems to enable access.

Warren Simangolwa called for the need to define “cost effectiveness” and suggested this definition: “for an intervention to be cost effective, its WASH benefits must exceed its costs”. However, he also highlighted the importance for the sector to rethink the way interventions are measured: “We need to measure our interventions more appropriately and value WASH benefits in a more meaningful manner, considering for example, whether current water supply approaches to reach marginalised communities in an area are cost effective”.

So how much does it cost?

Harold Lockwood highlighted the fact that evidence is already available on the order of magnitude costs required to “keep the water flowing”- between \$1 and \$3 per person per year depending on the country is needed and spending less than \$1 per person per year is too little to be effective. These figures are indicative but important to inform policy debates about how much is needed and who can/should bear these costs.

This does not take all costs into account and does account for universal access, but it is a starting point.

Week 2 focussed on how to finance this ambition of leaving no-one behind. Initial reflexions were already been shared in week 1 in relation to this topic:

- How much should household be asked to contribute?



- How to take the issue of affordability forward, particularly in low-income areas?
- What are the mechanisms in place to ensure appropriate budget allocation and utilization, for example integrated budgeting (Partha S. Kuntal)?
- A [10-country study](#) was commissioned to investigate the progress and challenges in making finance available to local governments and therefore to marginalised groups (Henry Northover).

Week 2: How are these costs financed? What are the main current funding sources and which ones have greater potential in the future?

The weekly topic was introduced by Guy Hutton who asked us to think about the current funding sources for WASH services and the proportion of costs they cover, using the “3Ts” as a framework (taxes, transfers and tariffs) and also considering where private sector investment had/could have a role to play.

What are the sources of funding for covering the costs of leaving no-one behind?

A diversity of sources: Leaving no-one behind requires funding through a combination of sources, including government (taxes) development partners and charities (transfers) either on-budget or off-budget and users (tariffs). In some contexts, the private sector may have a role to play in investing in (rural) water services, and these investments are then recovered through user tariffs. As John Garrett rightly highlighted, the [GLAAS report 2017](#) shows a real diversity of approaches used by countries to combine these sources to fund the sector.

Users are the main contributors: However, results from countries that conducted [TrackFin](#) show that “the main contributors for the sector are by far the users (households and non-domestic users, through tariffs and through self-supply). For example, in 2014, users’ contributions to the total sector expenditures represented 63,2% in Ghana, 64,3% in Mali, and 66,8% in Senegal” (Didier Allély). This observation was echoed by several participants (Victor Dang, Warren Simangolwa, Abdoulaye Diop) who also raised the issue of leaving access to water supply to households where government is absent and creating inequitable conditions of access. In Nicaragua, as described by Fabiola Tellez, around 10% of the rural population could self-finance about 20% of the cost of their own water supply service, if they receive adequate technical support, raising the need for differentiated approaches in the country.

Given the importance of user contributions, Kerstin Danert raised the provocative question as to whether the sector should consider revising the 3 Ts (tariffs, transfers and taxes) to add S for [self-supply](#). The lack of data particularly related to NGO or private sector contributions is a bottleneck to mapping and identifying financial contributions.



Given the diversity of sources of funding, who makes the decisions on funding allocations?

As Chola Mbila nicely put it, “Governments should give policy direction which should include how resources should be mobilised coordinated and directed in order for the results to be achieved and sustained. Governments should also give policy direction on how these services once provided are to be sustained e.g. user tariffs, subsidies etc.”

This is particularly important in resource-constrained environments, where the lack of coordination and the duplication of off- budget transfers to provincial and district levels (i.e. outside of government’s budget) lead to inefficiencies and opportunity losses when governance is poor (Warren Simangolwa). National water funds can be a mechanism for pooling available funds and using them efficiently and equitably (Chad, Niger, Senegal).

At sub-national level, supporting provinces, municipalities/districts develop their water and sanitation plans is an important first step to strengthening governance and increasing coordination among all financial contributors (Cécile Laborderie).

The magnitude of the challenge at stake

As Chris Prottas described it, “the magnitude of the WASH financing gap in Uganda is striking and this manifests in both inadequate infrastructure as well as woefully inadequate human resources”.

This observation echoes the findings of [TrackFin](#), for countries that were able to compare actual expenditures and their National development plan. “One of the key results of their findings is that funding to reach national targets from national plans which integrated/adapted SDG targets must be considerably increased. For instance, in Burkina Faso it was estimated that the implementation of the national plan would require an average annual increase of 268% for the next five years compared to the average expenditure for the period 2013-2015”. (Didier Allély).

As highlighted by several participants, government should also play a role in mobilising existing resources for the WASH sector such as tax revenue from mining and should also make serious efforts to reduce the diversion of scarce resources- for example through corruption.

Several participants raised the issue of affordability (for governments and households) and the need to consider avoiding adding debt distress and creating conditions of inequitable access to services by increasing the financial burden. Strengthening domestic resource mobilisation (DRM) needs to be at the heart of approaches to ensuring no-one is left behind, addressing financing gaps and achieving sustainability (John Garrett).



Week 3: How can we ensure affordability and make maximum use of limited public subsidies to reach the most vulnerable populations?

Guy Hutton introduced the weekly topic: how can poor households be protected so that they have equal access to affordable WASH services in rural areas? Particularly, he asked us to think about examples of efforts to make sure rural water services are affordable to everyone and to reflect on the following aspects: How can affordability be measured? How can deserving households be identified? How can subsidies be effectively delivered to deserving households without disrupting the price mechanism? To what extent do social and cultural practices of solidarity protect access to WASH for the poorest? How to incentivise the private sector providers to include vulnerable households in their service areas? Which management models provide better access to vulnerable households?

The issue at stake: achieving SDG 6 will require providing universal access, not just to the easy to reach or those able to pay, but to everyone, everywhere. Previous weeks' discussions have shown that reaching everyone has a cost- higher than often anticipated- and that the larger portion of the costs are borne by the users themselves. In this context, how can these costs be covered to ensure access to all, including users who cannot afford to pay?

How can affordability be measured? As Guy Hutton shared, under the WHO/UNICEF JMP and UN-Water GLAAS, a global initiative is ongoing to determine how WASH affordability can be measured, given it is part of the Human Rights to Drinking Water and Sanitation, and explicitly stated in target 6.1. To date, the main measure of affordability has been "Spending on water as a proportion of household income". However, it is now recognized that this measure is inadequate for identifying those who are left behind, as the data usually excludes some key WASH spending categories it ignores time costs and it does not consider what populations need to spend to access the national minimum standards for WASH. Five indicator categories have been formulated for further examination in the country case studies: i) percentage of expenditure on WASH (threshold approach), ii) household behaviours in relation to prices and consumption of WASH services, iii) stated household preferences on WASH prices and consumption, iv) broader assessments of household poverty, and potential 'water poverty', v) Policy responses to protect households from unaffordable costs of accessing WASH services or reducing grounds for discrimination.

Affordability can be an obstacle to accessing piped water services: Naomi Carrard shared the key findings from a [study](#) on poor households' access to piped water services in rural Vietnam carried out by the University of Technology Sydney and Vietnam National University. The main findings were the following: i) in most cases poor households were less likely to be connected to piped water services (compared with non-poor households), ii) Connection fees were the primary barrier to poor households accessing piped water services. Connection fees (as described by households) included both fees to service providers and the costs of installing necessary onsite infrastructure (e.g. a storage tank), iii) No-one type of service provider (across government, community and private providers) was more successful in reaching poor households, iv) Connection rates were more equitable in sites where support was provided.



Affordability or willingness to pay for a given service: Mikael Dupuis shared his experience as a service operator in Burkina Faso, where he has observed that in some areas, the cost of drinking water corresponds to \$2 per person per year (only). This raises the question as to whether, in some particular contexts, the issue is more related to the affordability of service or to users' willingness to pay for a given service that meets their demand.

How to ensure the hard to reach and poorer households have access to rural water supply?

Various ideas on how to reach the poor households were shared and are summarised below:

- A national policy must be defined to focus resources on populations of extreme poverty that are totally excluded from service provision (Fabiola Tellez);
- Explore alternative solutions that can improve services to some level (rainwater harvesting), but also support people thinking about the next steps they can take to improve them (Kerstin Danert)
- Consider supporting faith-based organisations are generally present even in the smallest rural communities and can be trained to support the delivery of WASH services (Henk Holtslag)
- Explore technological options that provide services that last at a lower operational cost (rather than CapEx).

Reaching everyone including the poor and hard to reach will require supporting self-supply

Self-supply refers to a mechanism whereby people gradually improve their WASH services, mainly financed by the end-user. Although self-supply is widespread, very few countries have formally adopted "supported self-supply" as a strategy to try and encourage/facilitate investment in water supply and inject innovation (Harold Lockwood). In order to make self-supply an effective approach to service delivery, support should be accompanied with regulation, and the introduction of new technologies and standardisation and addressing some critical weaknesses in areas such as water quality.



Where to take this discussion forward?

Guy Hutton concluded the week by making a few important points and inviting us to reflect on how subsidies are currently used and where they end up. Better data might be needed to show how the majority of public budgets goes towards the connected and the better off rather than the unconnected who tend to be poor and marginalised.

When more data is available, we could initiate dialogues on user tariffs with public authorities and persuade them that the system will be stronger and fairer if it collects more from those who can pay and redirect subsidies to the most deserving and this will also need improved regulation and greater formalisation of informal services.

Join the discussion

The discussion will be continued on different platforms ([RWSN blog](#), [leave no-one behind community](#), [sustainable service community](#)) and several strands of the discussion are yet to be explored:

- How can soft skills needed for facilitation, training and support to self-supply better be recognised and financed?
- Creative cross-subsidies: What does really work in different contexts?
- What social mechanisms exist?
- Should we focus more on user tariffs and incentivising private sector to make tariffs affordable?



Annex: E-discussion participants

Name	Organisation (where known)	Organisation Type	Country (when known)
Dr A. Reid Harvey	TAM Ceramics	Private Sector	United States
Abdoulaye Diop	Veolia Eau	Private Sector	Senegal
Akah Henry Ndah	Integrated Engineering Associates	Private Sector	Cameroon
Bisi Agberemi	UNICEF	UN	Nigeria
Carmen Azucena Serrano	Water for People	iNGO	Honduras
Cécile Laborderie	Freelance WASH researcher	Private Sector	France/Egypt
Charles Muhigirwa	Damude Technical Services Ltd	Private Sector	Uganda
Chola Mbilima	National Water Supply and Sanitation Council	Government	Zambia
Chris Prottas	The Water Trust	iNGO	United States
Didier Allély	WASH Consultant	Private Sector	Kenya/Switzerland
Dieynaba Seydou Thiam-Ka	Water, Sanitation and Hygiene Finance (WASH-FIN)	Dev. Partner Programme	Senegal
Ellen Greggio	WaterAid	NGO	United Kingdom
Fabiola Tellez	Fondo de Inversión Social de Emergencia (FISE)	Government	Nicaragua
Guy Hutton	UNICEF	UN	United States
Harold Lockwood	Aguaconsult Ltd.	Private Sector	United Kingdom
Henk Holtslag	SMART Centre Group	iNGO	Netherlands
Henry Northover	WaterAid	iNGO	United Kingdom
Jane Wilbur	London School of Hygiene and Tropical Medicine	Academic	United Kingdom
John Garrett	WaterAid	iNGO	United Kingdom
Dr Kerstin Danert	Skat	iNGO/Private Sector	Switzerland
Kossiwa Tsipoaka	African Rural Water Pro (ARWP)	Private Sector	Togo
Lawrence Lwanji	Freelance consultant	Private Sector	Tanzania
Léon Cizungu	Synergie Des Organisations Caritatives Et Humanitaires En Rd.Congo	Network	DR Congo
Louisa Gosling	WaterAid	iNGO	United Kingdom
Lucien Blaise Kouna	African Network for Development Sustainable Education	Network	Cameroon
Mahiul KADIR	Hope for the Poorest	NGO	Bangladesh



Name	Organisation (where known)	Organisation Type	Country (when known)
Matthias Saladin	Skat	iNGO/Private Sector	Switzerland
Mikael Dupuis	Uduma	Private Sector	France
Naomi Carrard	Institute for Sustainable Futures	Academic	Australia
Partha S. Kuntal	DORP	NGO	Bangladesh
Paul Van Beers	FairWater Foundation	iNGO	The Netherlands
Ramisetty Murali	Freshwater Action Network South Asia (FANSA)	Network	India
Rik Haanen	Jacana SMART Centre SMART Centre Group	iNGO	Zambia
Sara Ahrari	Simavi	iNGO	Netherlands
Dr Simone Klawitter			Germany
Thea Bongertman	Simavi	iNGO	Tanzania
Timothy Kpeh	Youth and Disabled WASH Network	Network	Liberia
Victor Dang	University of Dschang	Academic	Cameroon
Warren Simangolwa	Freelance Health Economist	Private Sector	Zambia
Yahya Kargbo	Welthungerhilfe	iNGO	Sierra Leone
Yaya Inoua	Faculté des Sciences Exactes et Appliquées(Université de N'Djamena)	Academic	Chad
Yazon Boue	Commune de Houndé	Local government	Burkina Faso