

Rural Water Supply Network

29th November - 2st December, 2016

Radisson Blu Abidjan Airport

Abidjan, Côte d'Ivoire

ENGLISH



 7^{th} International Rural Water Supply $\,$ Network Forum 2016 , Abidjan, Ivory Coast

Water for everyone L'eau pour tous



Table of contents

Welcome	3
Synthesis	4
Planning the Forum	5
7th RWSN Forum Programme	6
Opening ceremony	7
RWSN Forum contributions	8
Communications	9
Theme: Equity, Non Discrimination and Inclusion	10
Theme: Sustainable Groundwater Development	12
Theme: Sustainable Services	14
Theme: Accelerating Self-Supply	16
Theme: Mapping and Monitoring Theme	18
Rainwater Harvesting and Sand Dams	20
Water Quality and Water Treatment	21
Sponsored Seminars and Training Course	22
RWSN Forum Exhibition, Field Trips and Networking Events	24
RWSN Forum Survey	26
RWSN Forum Finances	28
About RWSN	29

HOSTED BY



SUPPORTED BY

































Welcome



Forum Organisers

Forum Management Team

Kerstin Danert and Sean Furey (Skat Foundation), Meleesa Naughton (Consultant, financed by World Bank, UNICEF and Swiss Agency for Development and Cooperation SDC) and Victor Bas Martinez (African Development Bank/ Government of Spain through the Foreign Trade Institute -ICEX)

International Task Force

David Akana and Jochen Rudolph (African Development Bank), Stef Smits (IRC), Kerstin Danert and Sean Furey (Skat Foundation), Erik Harvey and Louisa Gosling (WaterAid), Lilian Pena Pereira Weiss, Miguel Vargas-Ramirez, Susanna Smets and Almud Weitz (World Bank); Jose Gesti-Canuto (UNICEF), Manfred Kaufmann (SDC)

Côte d'Ivoire Steering Committee

ACHI Patrick (President) EKPINI Gilbert (Permanent Secretary); BERTE Ibrahiman KONE Mahamadou; EBAH Basile; HARDING Joseph; KOUASSI Kobenan Abouo Norbert; DJAA Koffi Antoine IDO Adama

Côte d'Ivoire Task Force

EKPINI Gilbert (President)
DJAA Koffi Antoine (VicePresident)
IDO Adama (Permanent Secretary)
ACKO Sopi Madeleine
KACOU Mossoun Alcide
ABE-KOFFI Thérèse
SISSOKO Coralie epse TAILLYDIABY Almamy
DA CRUZ Dominique
GBAGUIDI Suzanne
NDIR Cheik

The 2016 Rural Water Supply Network Forum in Abidjan was the first global gathering to consider the practical challenge of how everyone worldwide can get access to safe, affordable water by 2030. It was also the first RWSN Forum to take place in a francophone country, in the 25 years since the creation of the network.

The Forum gathered 467 rural water sector practitioners from over 300 organisations from 64 countries in Africa, Asia, Americas, and Europe, in a bilingual (English/French) four day event. It was opened by the Prime Minister of Côte d'Ivoire, Mr Daniel Kaplan Duncan. We were joined by HE State Minster James Dengchol Tot, Minister of Water, Irrigation and Electricity of Ethiopia, as well as a delegation from AMCOW.

So what did we learn? A lot, but we did not reinvent the wheel. Ensuring sustainability of water supplies in rural areas is still challenging, but we are finding new, sophisticated ways of managing and monitoring water services; self-supply, a term which was only barely existed a decade ago, was one of the big discussion points of the week; presentations on topics related to equity, non-discrimination and inclusion, as well as financial sustainability, emphasized that subsidies are no longer a dirty word in the rural water sector and that we need them to reach the most disadvantaged segments of the population. And while many professionals in the sector are keen to see more funding go to rural water services, we also found out that few of us actually know how much is being spent in his or her country on WASH.

We would like to think that aside from the learning experience, many of us also had a chance to make meaningful connections with other participants, be it at the Rock café, the ICT Marketplace, the exhibition, during the coffee breaks or the cocktail party. Perhaps some of you even met some of the RWSN members whose contributions you read regularly. This is the strength of the RWSN Forum —access to a collective of 4000 person-years of delegate experience to make water for everyone a reality.

The report is written to reflect the spirit of sharing knowledge and experience. We would like to thank all of the delegates who shared moments of the Forum on social media, be it on blogs, Twitter, Facebook, or YouTube, using #RWSN7. The Forum website (rwsn7.net) remains an archive for all the papers, presentations, posters, films and media coverage received during the Forum, in English and in French.

SYNTHESIS: WE CANNOT DO IT ALONE

These are the key points from the synthesis speech given by Stef Smits (IRC) on behalf of the session managers during the Forum closing ceremony. For more details, please go to http://www.ircwash.org/blog/progress-going-abidjan-abidjan

Exactly thirty years ago the All-African Seminar on Low-Cost Rural and Urban-Fringe Water Supply resulted in the Abidjan Statement. From 9 Nov-2 Dec 2016, the 7th Rural Water Supply Network (RWSN) Forum was held, again in Abidjan. While some of the issues discussed at the Forum such a community management or local government echoed the topics of the 1986 seminar, the Forum showed that much progress has been made in rural water supply the thirty years between the two Abidjans:

- Reaching everyone: In 1986 70% of the rural population in Africa did not have access to improved water supply. Now 54% of the rural population in Africa does have access, and globally it is even 84% of the rural population. Also progress has been made in ensuring the marginalised are included and have a voice. But the work is clearly not done yet, as we need to ensure that nobody is left behind. Inclusiveness is critical, and marginalised groups need to influence design, implementation, and monitoring.
- Improve service levels to meet the standards people aspire to, beyond what is required of the SDGs or the Human Rights criteria. This means often bringing water closer to home, and improving the quality of water supply, thereby enabling multiple uses of water.
- Sustainability of water supplies now goes beyond community management and supports the professionalization of rural water supplies through a wider range of service delivery models, and emphasizing the role of government in being accountable and providing support to communities. The sector has moved from from 'full cost recovery', which was implied that all costs would come from tariffs', to 'recovering the different life-cycle costs through a combination of tariffs and taxes'.
- Adequate water resources management, which was not mentioned 30 years ago, is key to reaching everyone everywhere—particularly through understanding and protecting groundwater resources.
- Better processes for monitoring, but we need capacity-building: At the Forum there was an ICT market place, showing great advances in the ICTs that can provide us with better data. But, what above all we need are the processes and the culture to use the quality-ensured data for decision-making, national monitoring systems that go from data collection, to processing, to analysis and use. A key point of the Forum is that monitoring only makes sense if we have the capacity to act upon it, if the institutions are there to respond and provide post-construction support.

We, rural water sector professionals, cannot do it alone. We need political support and continued advocacy; we need to link with other sectors, such as health, governance or gender; we need to work closely with civil society to hold governments accountable. The power of peer-to-peer learning examplified by the Forum and RWSN can support members to learn, build capacity and make the linkages necessary so that in 2030, there will be no need for an Abidjan statement on rural water supply.

Your impressions from the 7th RWSN Forum:

"What really struck me [at the Forum] is the diversity of topics we discussed, from technical aspects to equity and inclusion; there is also a diversity in perspectives. I have been in sessions on specific projects which go into a lot of details but also multi-country studies, which can bring out different perspectives. Finally, there is a diversity of experiences, with people approaching the same problem from different backgrounds."

Shahruck Mirza, WaterAid Bangladesh

"Sand Dams Technology and the water points mapping were very interesting approaches which I immediately shared with colleagues in my organisation to pursue"

Jeremiah Sakala, World Vision Malawi

"I established new partnerships with companies that specialise in pump equipment such as Vergnet and India Mark II , and innovative technologies such as solar pumps"

Jean-Claude GUEDE, Croix Rouge de Côte d'Ivoire

PLANNING THE FORUM

RWSN Forum philosophy

The Forum emphasises learning and sharing rather than showcasing, and has a practical rather than a political focus. Political leaders who participate are encouraged to engage in the sessions and exhibition as equals with others.

The Forum philosophy is:

- Inclusive of different perspectives
- Strengthen capacity by raising submission quality
- Sharing of knowledge and experience among equals
- Shedding light on field realities
- Vibrant South-South exchange and networking
- Accessible to all French and English speakers

The preparations the 7th RWSN Forum witnessed the engagement and collaboration of over 200 individuals, including the organisers, sponsors, reviewers, seminars hosts and those who responded to the open call.

Planning and preparing the Forum

The planning of the RWSN Forum began in 2014 when the RWSN Executive Committee agreed to running a 7th RWSN Forum. During much of 2015, planning focused on identifying and approaching potential host countries so that by the end of the year the network was ready to commit to Abidjan, Cote d'Ivoire. An exciting opportunity to bring Francophones and Anglophones together, as we had done in Uganda in 2011, but even more so.

A major challenge of hosting an international conference in West Africa was security as there had been well-publicised attacks on hotels in nearby Grand Bassam and on international hotels in Burkina Faso, Mali and Niger. Therefore, security was of utmost importance and a dedicated team helped ensure the safety of all our guests.

A lesson learned from the 6th RWSN Forum was to have an early-bird rate to encourage early registration and payment. This, combined with strong sponsorship commitments from the Executive Steering Committee partners ensured that the event covered its cost (see

page 29 for details).

Finally, the engagement with the government of Cote d'Ivoire through the local committee was critical and we were delighted that the outcome was the opening by the then Prime Minister (now Vice-President) Daniel Kablan Duncan.



Funders:

We could not have done it without them! Thank you to our Gold Sponsors
min. (€ 50,000):

- African
 Development Bank,
- Conrad N. Hilton Foundation,
- Swiss Agency for Development and Cooperation (SDC)
- UNICEF
- WaterAid
- World Bank Group

our Silver Sponsors: min. (€ 25,000)

- Skat Consulting,
- ICEX
- USAID/ WALIS program;
- and our Bronze
 Sponsors
 (min. € 10,000):
- Ajay Industrial Corporation Ltd,
- Agua for All
- Caritas Switzerland
- HELVETAS Swiss Intercooperation
- IRC
- UPGro
- Water4

Plus all the participants, exhibitors and sponsored session convenors.

7th FORUM PROGRAMME

Day 1: Tuesday, November 29th, 2016						
00:00						
10:45	1A: Opening Plenary					
10:45 – 11:15 11:15 – 13:00	BREAK					
11:15 - 15:00	(convened	Models for Rural Water S d by Oxford University &	UNICEF)	2B : Drilling & Hand- dug wells	2C : What do rural people want?	
13:00 – 14:30			LUNCH			
14:30 – 15:45	3A : Progress inENDI & empowering communities	3C. Delivering Safe 3D. Scall		3D : Scaling-up technology & services (1)	3E : Groundwater Resources: finding common ground	
15:45 – 16:15			BREAK			
16:15 – 17:30	4A : Progress in Sustainable Rural Water Services	4B : Entrepreneurs & Small Business – profession-alising self-supply	4C : Marginalised people	4D : Scaling-up technology & services (2)	4E : Local experiences of service monitoring	
		Day 2: Wednesda	y, November 30th	, 2016		
09:00 – 10:45	5A : Progress in Sustainable Groundwater Development	5B : Private sector service providers: the new norm or a niche?	5C : Remote & challenging environments	5D : Working with Community-Based Organisations	5E : Post-construction support	
10:45 – 11:15			BREAK			
11:15 – 13:00	6A : Progress in Accelerating Self-supply (ACCESS)	6B : NGOs, Consultants & Researchers - taking innovation to scale	6C : Future of ICTs in rural water – chat show	6D : Handpump Innovation	6E : Sand Dams & Drylands	
13:00 – 14:30			LUNCH			
14:30 – 15:45	7A : Poster Session		7B : ICT Marketplace	7D : Behaviour Change	7F : Press Room	
15:45 – 16:15	BREAK					
16:15 – 17:30	7A : Poster Session		7C : Rock Café	7E : Rural Water Supply, Human Rights &	7F : Press Room	
Day 3: Thursday, December 1st, 2016						
09:00 – 10:45	8A : Progress in Mapping & Monitor- ing	8B : Unlocking the potential of Government (1)	8C : Resilience & Climate Change	8D : Small-towns and peri-urban areas	8E : Solar Pumping	
10:45 – 11:15			BREAK			
11:15 – 13:00	9A : Progress in rural water supply in Côte d'Ivoire	9B : Unlocking the potential of Government (2)	9C : Regional & National Monitoring	9D : Financing & recurrent costs	9E : Ways to reduce inequalities in WASH	
13:00 – 14:30	LUNCH					
14:30 – 16:00			Closing Plenary			

Session Streams

Progress in...the RWSN Themes

SDG6: "Water for everyone"

Reaching everyone

Organisations collaborating

Specialist sessions

Poster and Networking Sessions

Sessions Manager: Léo Giordano

Session managers: Matthias Saladin, Louisa Gosling, Jane Wilbur, Stef Smits, Susanna Smets, Ellen Greggio, Marieke Adank, Joseph Pearce, Nick Dickinson, Jose Gesti-Canuto, Meleesa Naughton, Rob Hope, Susanna Goodall, Julian Harbrecht, Sylvain Adokpo, Miguel Vargas-Ramirez, Lilian Pena Pereira Weiss, John Buttenworth

Session chairs: Mariam Coulibaly, Rob Hope, Manfred Kauffman, Yédê Adama Sanogo, Nelson Gomonda, Fiorella Polo, Tom Slaymaker, Vida Duti, Akino Kitazume, Lemessa Mekonta, Fiorella Pollo, James Racicot, Stef Smits, Jane Nabunnya Mulumba, Peter Harvey, Valérie Cavin, Adrian Healy, Marieke Adank, Kalim Hanna, Adèle N'Diore, Angie Saleh.

Rapporteurs: Stef Smits, Rob Hope, Reinier Veldman, Jane Nabunnya Mulumba, Antonio Rodriguez Serrano, Michael Forson, Marlies Batterink, Richard Carter, Annemarieke Maltha, Kimberly Lemme, Abera Endeshaw, Turmon Kamboo, Vida Duti, Fabio Fussi, Nick Dickinson, Jose Gesti, Valérie Cavin, James Racicot, Romain Villiers, Richmond Kangha, Therese Abe, Goula Bi.

OPENING CEREMONY

Focus on rural water

How do we get water to everyone, everywhere by 2030? The weight falls on the shoulders of rural water professionals, considering that 80% of the 660 million men, women and children who do not have access to an improved drinking water water source today live in rural areas. And even for those who do have access to a water source, service levels are often inadequate.

Over the last 25 years, global rural water access has increased from 62% to 84%, i.e. over half a billion people gained access. The challenge is to do the same again, in half the time, and to ensure services last not just one year or two, but a lifetime.

Enabling everyone to have a safe drinking water supply and thus reach the Sustainable Development Goals (SDG) target, rests on four achievements:

1) Achieving universal access

- 500 million people residing in rural areas need services.
 Many live in remote areas or fragile contexts, including protracted crises.
- 2) Ensuring service standard improve rural and small town dwellers areas only have a basic service. Water quality and needs to improve alongside affordability.
- 3) Sustaining services ensuring that water supply services last is essential the pumps, pipes and management all need to function well.
- 4) Linking water supplies and environmental management

– universal access can only be met if water resources, including groundwater are effectively managed. After an official welcome by the Mayor of Port Bouet, Dr Kerstin Danert, Director of the RWSN Forum, greeted all the delegates and stressed the importance of working collectively to reach the objective of sustainable water supplies to everyone, everywhere by



2030. The delegates together represented a collective 4000 person-years of experience in the rural water supply sector. How can this collective knowledge be harnessed to reach the Sustainable Development Goals? This call was also made by Sean Furey, who emphasized that the term "rural" hides a myriad of situations and challenges, both within countries and between countries. The RWSN Forum is the only global event which allows countries to draw parallels between their sector and that of other countries, and find innovative solutions from users, NGOs, the private sector, donors and others.

Mr Dengachew. State Minister of Water Supply of Ethiopia, emphasized that Ethiopia is very proud of having achieved the MDG, mainly through progress in rural water supply. Ethiopia's targets for the next five years are very ambitious and aims to bring the countries closer to SDG through the OneWASH program. Mr Dengachew also made a call for 'getting rid of carrying water in jerrycans' and bringing water closer to the home.

The Prime Minister of Côte d'Ivoire, Daniel Kablan Duncan, underlined the importance of hosting the first francophone RWSN Forum in Côte d'Ivoire. In the 1990's, Côte d'Ivoire had a relatively high coverage rate of 80% nationwide and a good level of services, However, the 2000-2011 internal conflict period had a disastrous effect on the sector. Since the end of the crisis in 2011, the government of Côte d'Ivoire has committed close to USD 350 million to the water sector, mostly on urban supply. In rural areas, the Presidential Emergency Program undertook the rehabilitation of 17,000 handpumps. The objective of Côte d'Ivoire is to reach pre-civil war levels of coverage by 2022, with an estimated coverage rate of 60% in rural areas and 85% in urban areas; this includes also a target on handpump deficiency which should be below 10%. The Government of Côte d'Ivoire is currently drafting a Water Sector Strategy as well as its National Strategy for Rural Water Supplies based on professionalization of the sector. The Prime Minister of Côte d'Ivoire then declared the RWSN Forum open.

The opening ceremony continued with a panel gathering senior representatives from the African Development Bank, WaterAid, and the World Bank. The World Bank stated that to reach the poorest and most vulnerable, the current pattern of financing needs to be reversed to target rural water users over the urban sector.; the challenge is often that rural water users do not have an institutional home the way the urban sector does, with utilities. WaterAid emphasized that it is not just about financing: civil society and communities in rural areas need to be able to make their voices heard to ensure governments are accountable for the realisation of the human right to water. The African Development Bank concurred that government buy-in and leadership in investing in rural water supply is key.

About RWSN

RWSN is a global network of rural water supply practitioners and organisations committed to improving their knowledge, competence and professionalism, to fulfil RWSN's vision of sustainable rural water services for all. Both individuals and organisations participate in the network. RWSN has a membership of over 9,000 individuals and 40 organisations emphasising innovation, documentation, research and capacity development. The map below shows the geographical location of individual RWSN members.



RWSN themes & topics

- Equality, nondiscrimination and inclusion
- Sustainable Groundwater Development
- Sustainable Rural Water and Small Town Water Supplies,
- Accelerating Self Supply
- Mapping and Monitoring

RWSN Vision

RWSN's vision is of a world in which all rural people have access to a sustainable and reliable water supply which can be effectively managed to provide sufficient, affordable and safe water within a reasonable distance of the home.

RWSN FORUM CONTRIBUTIONS

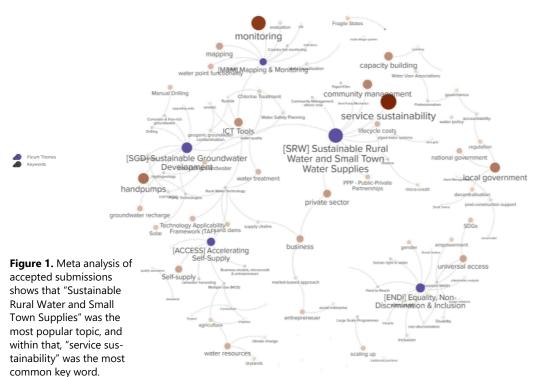
RWSN Forum objectives

The 7th RWSN Forum provides a platform to improve rural water supplies by learning from one another. We recognise that nothing can replace face-to-face communication. The RWSN Forum, held every five years, is a key event in bringing rural water supply professionals and practitioners together to share their knowledge.

The objectives of the 7th RWSN Forum are to enable delegates—political leaders, government staff, NGOs, donors, academics, think tanks, private enterprises and civil society— to share, learn, and ultimately improve water supplies in the areas that they work in. The Forum emphasises learning and sharing rather than showcasing, and has a practical rather than a political focus. Political leaders who participate are encouraged to engage in the sessions and exhibition as equals with others.

Open Call & Peer Review

For RWSN it is essential that this conference is a Forum that is open to anyone with experiences to share on rural water supplies. We also see the Forum as opportunity to strengthen the documentation of what is happening across the sector, because too often, good work goes under-recorded, and quality of evidence is not challenged. Therefore, from January 2016 onwards we promoted an open call for submissions, either as short or long papers, posters, films or even illustrations and photos. In total we receive 255 submissions from all over the world, from all different types of individual and organisations—though more from water users and community organisations would have been welcomed and more emphasis in reaching out to this important demographic will be considered next time. 192 submissions were accepted through peer-review, though not all authors were able to attend, and some failed to submit a final version. However, the result is a rich knowledge resource that was presented at the Forum and is available online for future reference.



Peer Reviewers

We are grateful to all the experts that made time to review submissions and write constructive feedback for authors:

Adank, Ms Marieke (IRC) Adekile, Mr Adedotun (Water Surveys and Resources Development Limited)

Annis, Mr Jonathan (Tetra Tech) Armstrong, Mr Andrew (Water Mission)

Brocklehurst, Ms Clarissa (Consultant)

Butterworth, Dr John (IRC)

Carpenter, Mr Jacob (Independent WASH Consultant)

Carter, Prof. Richard (Richard Carter and Associates Ltd)

Cavill, Dr Sue (Waterlines)

Cronk, Dr Ryan (The Water Institute at UNC)

Danert, Dr Kerstin (Skat Foundation)

Daw, Mr Raj Kumar

Fonseca, Dr Catarina (IRC)

Foppen, Dr Jan Willem (UNESCO-IHE)

Furey, Mr Sean (Skat Foundation) Gesti Canuto, Mr Jose (UNICEF)

Gomme, Mr Joe (ESI Ltd) Gosling, Ms Louisa (WaterAid) Jimenez, Dr Alejandro (Stockholm

Water Institute)

Jordan, Dr Elizabeth (USAID)

Jordan, Dr Elizabeth (USAID) Johnston, Dr Richard (WHO)

Kome, Ms Antoinette (SNV)

Kone, Dr Brama (Centre Suisse de Recherches Scientifiques en Côte d'Ivoire & Université Péléforo Gon Coulibaly of Korhogo (Côte d'Ivoire))

Leclert, Ms Lucie (Caritas Switzerland)

MacCarthy, Dr Michael (Mercer University)

Marks, Dr Sara (Eawag)

Meerman, Ms Robert (RAIN)

Montangero, Dr Agnes (Helvetas/ Swiss Intercorporation)

Müller, Mr Kim (Caritas Switzerland) Nabunnya Mulumba, Ms Jane (IRC)

Normand, Mr Olivier (International Secretariat for Water)

Olschewski, Mr André (Skat Foundation) Parker, Dr Alison (Cranfield

University)

Pearce, Mr Joseph (IRC)

Rainey, Dr Rochelle (USAID)

Robertson, Ms Amanda (USAID)

Roaf, Ms Virginia (Consultant)

Saladin, Mr Matthias (Skat Foundation)

Schweitzer, Dr Ryan (Aguaconsult)

Smits, Mr Stef (IRC)

Smets, Ms Susanna (World Bank)

Tajuddin, Dr Nor Azlin (International Islamic University Malaysia)

Tindimugaya, Dr Callist (Directorate of Water Resources Management, Ministry of Water and Environment, Uganda)

Wilbur, Ms Jane (WaterAid)

Willetts, Dr Juliet (Institute for Sustainable Futures, University of Technology Sydney (ISF-UTS))

Woldearegay, Dr Kifle (Mekelle University)

COMMUNICATIONS

Many of our participants were active on social media during the 2016 RWSN Forum, and live-shared many sessions, discussions and their impressions from the event. You can find them by looking for #RWSN7 on Twitter, Facebook, YouTube, and even Instagram and Periscope. Thanks to RWSN Forum participants @Lola_Hierro and @bhmann for breaking new social media ground!

We have put together a Storify of our top picks from our participants on social media , which sums up their impressions and reactions to the content presented at the RWSN Forum: http://bit.ly/2mknSia

Blogs also played an important role in getting more nuanced messages across to sector professionals and the public at large. You can find some of the blogs from RWSN Forum participants and partner institutions on the Forum website.

Media outreach

To enhance the impact of the Forum, it was important to reach other professionals in the rural water sector, but also the wider public to raise awareness of rural water supply progress and challenges. For this, we relied not only on social media (see above) but also on traditional media. Katherine Purvis from the Guardian Global develop-ment professionals network attended as our official media partner; we were also joined by Lola Hierro Serrano from Ll Pais.

We used the communications potential of participating institutions through a Communications Task Force, which included WaterAid, the World Bank, the African Development Bank and UNICEF. We also ran a journalists' competition for accredited journalists from sub-Saharan Africa to attend the Forum and document the sessions for further publication and dissemination in their home countries. Alain Tossounon from Benin and Isaiah Esipisu from Kenya, the two winners, worked tirelessly during the Forum to produce a daily brief, *Le journal du Forum*, which captured some of the content from the Forum as well as interviews and highlights in English and in French. This was also shared in the West Africa WASH network.

Beyond the RWSN Forum

You can find some of the articles resulting from interactions at the RWSN Forum and published in El Pais, the Guardian, and other Ivorian and international news outlets on the Forum <u>website</u>.

In an effort to continue the dissemination of the content from the Forum, RWSN has launched a series of bilingual **webinars** based on the papers, posters, films, sponsored seminars and presentations made during the RWSN Forum. This series of

webinars will start in the spring of 2017 and will be recorded and made available online. For more information, please visit the RWSN website.











Equality, Non-Discrimination & Inclusion

Key Points & Recommendations:

Human rights to water and sanitation

A human rights based approach focuses on those who are left behind and provides opportunities for a everybody to participate in development and decision making processes. It requires building the capacity of service authorities to improve supply and the capacities of the communities to improve the demand side. The government has responsibilities to ensure services are available to all, and should create policies and laws that enable service providers and communities to participate in decision making processes.

Communities must recognise that with rights come responsibilities; rights brings a sense of ownership for the project (including infrastructure); holding each other to account as well as responsible bodies such as government and school management committees. This applies whatever the management model – community, private, government.

Roles and responsibilities of all stakeholders have to be defined and explained clearly. Investment is needed to develop knowledge and capacity at all levels (government AND communities) as well as in infrastructure.

Rights to water and sanitation do not mean that water and sanitation facilities are free but they should be affordable to everybody. As a participant said: "God provides water for free in the rain and the rivers, but he doesn't deliver it to your house. You have to pay for the service". It is the duty of government to establish mechanisms to control the tariff so that water is not too expensive for the communities. Consumers have responsibility to pay for water services.

Water users associations are key stakeholders. Sustainable services depend on their capacity and clarity about the roles of volunteers and paid members of management committees in relation to other community members.

Advocacy is needed to inform people and governments about human rights for water and sanitation and there are different points to influence government policies and laws to apply human rights principles even if a national constitution does not enshrine those rights.

Local government officials are key stakeholders. The materials designed for them about their role in water and sanitation services as human rights can be a useful point of engagement between CSOs, communities, local and national government.

Civil society / communities have a role to play in holding local government to account, but may need capacity development and facilitation. NGOs like WaterAid have a role as facilitators rather than implementers.

Reaching the most marginalised

Marginalised groups comprise of different stake-holders with different needs. Persons with disabilities, women, children, and girls have different needs which should be addressed and prioritised differently. A lot of work has been done to reach different groups, but still many of them cannot access or use safe water and acceptable sanitation facilities. The rights of many marginalized groups, such as people incarcerated in prison, are often ignored.

Members of marginalised groups should be involved in all the stages of a project from conception, implementation and monitoring of the project. They can identify the gaps, access relevant information and take collective action. There is limited information about marginalised groups and individuals. Often official surveys are relied on to understand social dynamics, but discussions with communities and small groups are often much more informative. Addressing stigma and discrimination brings change.

Different communication channels are needed to enable marginalised people to speak for themselves and make sure their needs are addressed. These can include direct interaction such as meetings with authorities, use of media (e.g. local radios) and traditional communicator to exert pressure on the service authorities.

Persons with disabilities often face multiple challenges including access to work and health care, dependency on their family, lack of education. Water sector stakeholders can be supported to overcome barriers by developing standards of accessible design, affordable technologies, capacity development modules, providing information that can be accessed and understood by everyone, sharing inspirational examples from success stories, and challenging stigma and focusing on what they CAN DO, rather than on a person's impairment.

Indigenous populations (IP) are often highly marginalised. National Strategies must include voice of IP organizations and participatory approaches are essential to make sure services are acceptable and relevant.

Gender roles in many rural societies mean that women take main responsibility for unpaid water related tasks. Experience of working with women and men have increased mutual understanding about the gender division of labour, increased women's awareness of their rights related to WASH, and helped to increase active participation and sense of ownership. It is important to focus on the quality of participation of women in managing water supplies.

The objective of the theme: Targeting of service provision at all levels is inclusive of the needs and rights of all, with special attention being given to those who are frequently excluded from access to services.

Highlights

- "If we are to reach SDG 6, we need to not leave anyone behind.
 Inclusiveness in our programming is critical"
- "It does not cost more to include the perspective of inequalities in projects, it costs less than the social cost if it's NOT included"

Persistent challenges

- People have got used to expecting water to be given to them by donors or NGOs. As a result they have not taken responsibility and do not expect authorities to be accountable.
- The reality in many countries is that government policy is for community management of rural water. We need to recognise this and how to move towards greater government responsibility.
- Affordability is a persistent challenge: what combination of propoor cost recovery mechanisms cross subsidies and social protection for the poorest can work? What is the incentive for the private sector to ensure pro-poor services?
- We are learning how to identify marginalised people, understand how to overcome the challenges they face and monitor that approaches taken to be inclusive are truly effective. Good pilots exist but the difficult is in scaling up.



Papers

- Allen, J. and A. Lane [174] Sustainable WASH Services for Complex Emergency Countries: Approaches from the Central African Republic — Paper / Video
- Bhalla A. [82] Bollywood Power: Using films and celebrities to talk water — Paper / Presentation
- Briemberg J. [272] Supporting sustainable WASH services in difficult operating environments – A case study from Nicaraqua — Paper
- Gosling. L. [191] Achieving universal and equitable access to water, sanitation and hygiene (WASH) for all – practitioner perspectives and perceptions —Presentation / Paper
- Koehler J. [183] Implementing the right to water water policy choices with decentralised politics in Kenya — Presentation / Paper
- McNicholl. D. [170] Stakeholder Network Dynamics Supporting Improved Community Management of Arsenic Filters in West Bengal. —Paper
- Mihretu N. [169] Capacity building to couples for community and women empowerment and effective and efficient implementation of WASH approaches Paper / Presentation
- Mirza S. [180] Driving Change: Piloting a Human Rights-Based WASH project in Bangladesh — Presentation / Paper
- Nabembezi D. [014] Closing the Equity and Inclusion Gap for Water and Sanitation: A case of the Elderly and PWDs: Lessons from Wakiso Health Improvement Project, Namayumba Sub-county, Wakiso District —. Presentation / Paper
- Ouedraogo I. [154] Achieving systemic change in WASH through the Human Rights Based Approach — Presentation / Paper
- Pereira Weiss L. and M. Vargas Ramirez. [253] Toolkit for implementation of rural water projects in indigenous areas
 —Presentation / Paper
- Sorokovsky V. [116] Social cases: Reaching Universal Access to Water Supply at Community Level — Paper / Presentation
- Suominen. A. [207] Subject positions and power relations in community managed operations and maintenance: taking a discursive view on rural water schemes in Ethiopia — Presentation / Paper.
- Traore M. [158] Agir pour une réalisation des droits à l'eau —Presentation / Paper
- Veromamimiaina E. [256] Les droits à l'eau et à l'assainissement pour les personnes handicapées à Madagascar —
 Paper / Presentation
- Wilbur J. [242] RWSN Equality, Non-discrimination and Inclusion Group: A synthesis of experiences and lessons discussed in 2015 —Presentation / Paper

Posters

- Leclert L. The Integrity Management Toolbox for Small Water Supply Systems — <u>Poster</u>.
- Ndoume, F. <u>The Integrity Wall: How to strengthen integrity in the water sector</u> Poster
- Ngonian D. [149] Lutte en faveur de l'accès à l'eau des femmes ivoiriennes, dans la zone rurale du village de BLOKODOLOU — . Presentation / Poster
- Pokhrel B. A Journey to Ensure Right to Water and Sanitation in the New Constitution — Poster

Note: Only presenter or first author is named. For access to paper and related material with full author list, please refer to Forum website.

Below: Presentation from E. Veromamimiaina [256] on the rights to water and sanitation for disabled persons. Credit: L. Gosling



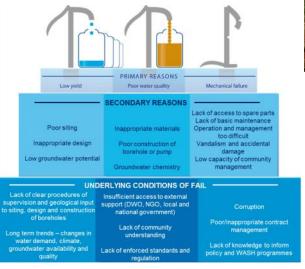
What has changed since the 6th RWSN Forum?

- The number of ENDI contributions rose from 4 to 21
- The Human Right to Water is now widely recognised and the conversation has moved on from the debate on whether it means water should be free.
- SDG6 has changed the discussion because of the focus on universal access, which takes many forms:
 - Engaging indigenous and remote people
 - Reaching poorest members within a settlement or district.
 - Disabled access
 - Gender and power relations
 - Reaching those in conflict areas
 - Integrity and tackling corruption

Equality, Non-Discrimination & Inclusion



Sustainable Groundwater Development



Above: Manual drilling training at the SHIPO SMART Centre, Tanzania (H. Holtslag) [098]

Left: Analysis of groundwater source failure (Intro to Session 5A)

The objective of theme:

Groundwater resources are properly considered and sustainably used for developing drinking water supply sources in rural areas.

Highlights

- Major new groundwater map for Chad [105]
- Promising new handpump design tested in lab and field [128]

Persistent challenges

- → High failure rate (15-20%) of water points within first 1-2 years of construction.
- → Handpump corrosion is still widespread, but more systematic research on extent of the problem [271, 132]
- → Lack of regulation, skills and capacity.

What has changed since the 6th RWSN Forum (2011)?

- Sharing of hydrological information has improved, through resources like the Africa Groundwater Atlas and the Groundwater Assessment Platform [233].
- Interest in improving the professionalism drilling is becoming more widespread.
- Interest in sand dams has grown, and became its own topic (page XX).
- Solar pumping has become a mainstream technology [227].
- Rope pumps and manual drilling still popular.

Key Points & Recommendations:

- The percentage of non-functional boreholes is still high, manifested in low yield, poor quality water and mechanical failure of the pump.
- Many large diameter wells have been constructed in the past, many are now found to be contaminated.
- Manual drilling can be complementary to the mechanized wells, especially in smaller communities.
- Feedback on usage of manual drilling maps from Mali indicated 100% success rate of drilling in the areas identified as suitable.
 Niger also indicated a high success rate [221].
- Data derived from local geophysical surveys and test pumping, monitoring of water resources by communities and specialist agencies, and data turned into databases and maps, are essential for undertaking groundwater development.
- Groundwater irrigation in Africa south of the Sahara is likely to grow in importance, with potential benefits and adverse impacts (including pollution from agrochemicals).
 [061]
- In Uganda, the requirement and criteria for consultant registration have been set up and classified into four cadres: Junior, Hydrogeologist, Senior and Expert Hydrogeologist

This should lead to better quality of drilling supervision, monitoring and performance of the boreholes [189].

SOURCE: BONSOR ET AL

(2015)

- Supervision is essential to success of drilled wells. Sometimes the right capacity is not available. Capacity building is very much needed in order to ensure quality.
- Solar pumping is increasing but this doesn't herald the demise of the handpump.
- While solar powered systems perform similarly to other energy sources in terms of overall management, technical failures are linked primarily conventional components, such as borehole or pump, rather than the panel.
- Need for a more balanced approach to handpump innovation – technical and social. Value for money must be about longterm service costs.
- Pump corrosion is an old problem. It has not been addressed because: (1) the issue is not taken seriously, (2) supervision of drilling contractors is poor (3) pH of the water is not taken into consideration (4) weak feedback from the communities
- For programme planners, Governments and donors: recognise the importance of, and provide adequate resources for, detailed and high quality hydrogeological investigations as a foundation for sustainable groundwater development.



Papers

- ◆ Bixler G. [128] Piloting of an Innovative Deep-Reaching and Reliable Hand Pump in Africa for Rural Water Access: The LifePump — Presentation / Paper
- ◆ Boukerrou. L. [217] Low Cost Water Technologies: An effective way to improve access to drinking water in rural areas
 Presentation / Paper
- ◆ Choksey. J. [239] Improving Service Sustainability of Electric Pump Systems in Rural Timor Leste — <u>Presentation</u> / <u>Paper</u>.
- Forson. M. [227] Solar pump technology: programming insights for sustainable rural water supply Presentation / Paper
- ◆ Foster. T. [142] Preliminary results from an evaluation of the Blue Pump in Turkana, Kenya Presentation / Paper
- ◆ Fussi F. [221] Mapping of suitable zones for manual drilling. An overview of the method and the application as decision tools. — Paper
- ◆ Haeberlin Y. [105] Conception et élaboration de cartes hydrogéologiques au 1:500 000 et 1:200 000 des régions nord et est du Tchad et gestion des ressources hydriques — <u>Short paper</u> / <u>Long paper</u>.
- ◆ Holtslag H. [098] The SHIPO and MZUZU drill method. Two low cost and locally produced hand drilling technologies to 50 metres deep — Presentation / Paper
- ◆ Kwizera C. [139] Inexpensive Resistivity Instruments for Groundwater Exploration: Experiences of African National Geophysical Teams — Paper
- ◆ Louvat J. [031] Poste d'Eau Autonome Solaire versus Pompe à Motricité Humaine Un pas décisif vers le robinet à la maison? — Presentation / Paper.
- MacCarthy. M. [099] Low-Cost Household Groundwater Supply Systems: Pitcher Pump Systems and EMAS Technologies — Paper
- ◆ MacDonald C. [238] Handpump Spare Parts Distribution Through The Private Sector Using Mobile Phone Technology — Presentation / Paper.
- ◆ Mudzingwa. A. [142] Replacing type "B" bush pumps with solar power pumps for rural water supply. Paper
- ◆ Nekesa. J. [271] It is time for the problem of pump corrosion and consequent failure to be eliminated Paper
- ◆ Prematilaka. K. M. [103] Enrichment of iron in the Gannoruwa well field: Causes and pathways Paper
- ◆ Reade A. [132] What Price a forgotten History? Implications of Groundwater Quality on Hand Pump Standardisation in Uganda — . Presentation / Paper.
- ◆ Simboro A. [243] Gestion quantitative et qualitative des ressources en eau dans la plaine alluviale de Karfiguéla à l'aide d'un SIG : Étude de la recharge induite de la nappe et sa vulnérabilité à la pollution Presentation / Paper
- ◆ Tindimugaya C. [189] Registration of groundwater consultants in Uganda: rationale and status — Presentation / Paper
- Walker. D. [061] Properties of shallow thin regolith aquifers in sub-Saharan Africa: a case study from northwest Ethiopia — <u>Presentation</u> / <u>Paper</u>

Posters

- ◆ Ankidawa. B. Assessing the Suitability of Hand Drilling Techniques for Abstracting Shallow Alluvial Aquifers Along River Benue Floodplain, Yola North Eastern Nigeria Poster
- ◆ Burrows G. [258] The Pocket Dipper A new groundwater level monitoring tool . <u>Poster</u>
- ◆ Furey S.[100] Professional water well drilling & rehabilitation so that boreholes can last for a lifetime . Poster
- ◆ Haanen R. [177] 130,000 rope pumps worldwide: 25 years experiences from Nicaragua, Ethiopia, Tanzania and six other countries — Poster
- ◆ Hangen M. [141] Virtual Interfacing towards the creation of a Multi-National Manual Drilling Collaborative Poster
- ◆ Kanyeto A. [168] Pump for Life: a subscription based water point maintenance and repair service — Presentation / Poster.
- ◆ Makumbe M. [176] *Pumping Technologies : Solar powered submersible pumps* <u>Poster</u>
- Nederstigt J. [096] Handpump Payment Systems Accelerating sustainable rural water supply through innovative handpump management systems and water payment models — Poster
- ◆ Podgorski J. [233] Regional-scale application of global geogenic contamination hazard models as presented on the Groundwater Assessment Platform (GAP) Poster
- ◆ Savadogo N. [277] Champs captants sur mégafractures du socle et généralisation des réseaux d'adduction d'eau potable en milieu rural : concept et faisabilité Poster
- ◆ Vidoni A.: [210] La Coopération décentralisée, une nouvelle alternative pour le développement et l'eau en milieu rural: les forages manuels pastoraux à Dori (Burkina Faso) — Poster

Films

- ◆ Casey V. [146] Water Well Design and Construction Quality — Film
- ◆ Chabi Guiya A. [50] Transformation des puits à grand diamètre au Bénin — Film
- ◆ Danert K. [122] A borehole that lasts for a lifetime <u>Film</u>
- Danert K. [123] Drilling: the importance of borehole siting <u>Film / Presentation</u>
- ◆ Danert K. [124] Four Steps to Better Drilling Contracts —
- ◆ Gbaguidi M. [273] *Mini-Réseaux Solaires Une eau de proximité, Bénin —* Film / Presentation

Note: Only presenter or first author is named. For access to paper and related material with full author list, please refer to Forum website.

Sustainable Groundwater Development



Trends:

Recognition by governments and development partners for the need to go beyond supporting infrastructural development only, but to focus on service delivery and to address capacity and institutional development to make investments more efficient.

The emergence and co-existence of a variety of management models, including supported self-supply, community management, and, increasingly, various forms of public-private partnerships, as well as public utilities expanding to rural and peri-urban areas. Models are increasingly better defined, with clearer defined roles and responsibilities, clearer contractual arrangements and higher levels of professionalization.

Private sector involvement in different aspects of rural water supply is on the rise, including in handpump maintenance, spare part supply, and management, operation and co-investment in piped schemes. In most contexts, these models are not intended to replace community management models, but to strengthen and complement them. In context, where a larger scale shift to private provision is happening (e.g. countries in West Africa), the role of government as contracting agents for such services is recognized as critical

The use of mobile phone technology within broader M&E systems to strengthen the link between monitoring of functionality and service levels and maintenance and other support services

Increased recognition that tariffs are not sufficient to cover all life-cycle costs and that public financing has a role to play in financing not only capex for expansion, but also capital maintenance expenditure and direct support to service providers.

Going forward:

Government remains ultimately responsible for ensuring adequate rural water services. They need to provide (post-construction) support to service providers and create an enabling environment with clear legislative and regulatory frameworks.

Local government leadership is key. However, local government often lack the capacity, financial and logistical resources, and support they need in order to fulfil their roles and responsibilities related to rural water supply. There is a continuous need for

strengthening local government capacity and defining mechanisms to secure financial resources in view of political economy aspects. In addition, the capacity of civil society and communities needs to be strengthened in order to hold (local) government to account

Partnerships among NGOs/associations, private sector, (local) government, and utilities can play a role in ensuring post construction support.

Financial literacy needs to be increased in the rural water sector. We need to know better how much providing water services costs and who pays for what. This includes:

Clarity on who is responsible for minor, but especially for major maintenance and rehabilitation, how much this costs and how this will be paid;

Transparent tariff setting and tariff regulation, Sustainable mechanisms for financing post construction support.

Performance monitoring and regulation are needed to enhance transparency, accountability, and performance of rural water service providers, especially, but not uniquely, related to models involving the private sector. Better regulatory mechanism can help to reduce local political influence and low willingness to charge, undermining sustainability of rural service providers.

We need more evidence on performance of different models in different countries and insights and examples on how these models are best supported and financed. Governments and development partners thus need to invest more in sector-wide M&E systems that capture functionality, service levels and critical factors for sustainability.

Persistent challenges

- Diversifying and supporting various management models for rural water supply, ranging from supported-self-supply, community management, private sector and public utility provision.
- Strengthening local government as service authorities, especially in their functions beyond planning
- → Understanding the financing for sustainable rural water services, specifically defining responsibilities and financial requirements for different elements of life-cycle costs

The objective of theme:
Rural water supply
services are adequately
financed, meet country
norms and standards
and are managed by
defined service
providers with adequate
support.

Highlights

- Clearly defined models and approaches for maintenance of handpumps from countries like Kenya [224], Uganda [131 and 194], and Ghana [238] and for sustainable piped water services from countries like Haiti [250], Niger [261], and Madagascar [229].
- Better understanding of local political economy factors that shape service delivery outcome and initiatives to strengthen accountability mechanisms through involvement of local government councils in the stewardship of services, such as in Senegal [220], Kenya [164]
- Identification of best practices across multiple countries, including Asian and Latin American examples, to enhance sustainability of rural services [259], [91]

What has changed since the 6th RWSN Forum (2011)?

- Greater diversity of service delivery models: ICT tools are enabling new business models.
- Fewer contributions on "classical" community management water projects.

Papers

- ◆ Agognon F. [156] De la théorie à l'opérationalisation de la réforme de la gestion des services d'eau en milieu rural — — Presentation / Paper
- Ahmad T. [062] Addressing vulnerability and breakdown of water points for achieving SDGs: Experiences from Rural WASH Project Zimbabwe — Paper / Presentation.
- Akah H. [241] Sustainable Services through Quality Design & Construction and effective Operation & Maintenance Management — Paper.
- ◆ Alubbe P. [257] Financing WaterCredit to enhance access to water and sanitation for attainment of SDGs. Paper / Presentation.
- ◆ Bachand D. [90] Le renforcement des capacités et de la gouvernance locales au service de la durabilité des services d'eau en région rurale- étude de cas du projet Burkina Faso de One Drop —Presentation / Paper
- ◆ Casey V. [043] Supporting service delivery and business innovation through TAF application Presentation / Paper
- Choksey J. [239] Improving service sustainability of Electric Pump Systems in rural Timor Leste. — <u>Paper</u> / <u>Presentation</u>.
- ◆ Eduvie M. [117] The need for capacity building to enhance rural water supply and sanitation service delivery: The RWSSC/JICA Approach in Nigeria — Paper / Presentation
- ◆ Esterhuizen M. [153] Regional water supply to ensure basic services in rural areas of South Africa: what is requiredm, what works, what are the challenges? — Paper
- ◆ Foster T. Cross-country evidence of rural water sustainability in Africa <u>Presentation</u>
- Jones S. [182] Lessons from using the life-cycle cost approach for rural water supply in DRC through the DRC WASH Consortium. Paper/Presentation
- ◆ Koehler J. [183] Implementing the right to water water policy choices with decentralised politics in Kenya Presentation / Paper
- Lemme K. [219] A suite of tools to support a systems-based approach to sustainable management of water service. — Paper / Presentation.
- Lockwood H. [091] Global Assessment of Sustainable Service Delivery Models for Rural Water: findings from 16 case study countries — <u>Presentation</u> / <u>Paper</u>.
- Malik M. [88] Assessment of Sustainability of Rural Water, Sanitation and Hygiene Interventions in Rwanda — Paper / Presentation
- Marks S. [97] Measuring the impact of multiple-use water services in Tanzania and Burkina Faso: water service quality, nutrition, and health — Paper / Presentation
- Merisier P. [250] Professionalizing Drinking Water Service Delivery in Small Towns of Haiti — <u>Presentation</u> / <u>Paper</u>
- Misra S. [260] Uttarakhand Rural WSS Project (India): A Trend Setter of the Decentralization Program in the Rural Water Supply & Sanitation Sector — <u>Presentation / Paper</u>
- Nhlema M. [185] Bigger Data: Water For People's Lessons, Doubts and Experience of Mapping Rural Water Supply Systems In Malawi. — Paper
- Osterwalder L. [184] Carbon-financed safe drinking water project in Uganda. — <u>Paper / Presentation</u>.
- Rakotomalala H. [182] Investisseur gestionnaire: Une alternative pour le financement d'un service durable? <u>Paper</u> / <u>Presentation</u>
- ◆ Sanogo V. [081] Elicitation of Determinants of Rural Households' Water Supply in Côte d'Ivoire: A Case Study — Paper / Presentation
- Sanon D. [206] Implication des élus dans le suivi de la gestion du service public d'eau potable au Sénégal —<u>Presentation</u> / Paper
- ◆ Seppälä R. [033] Customers in focus: Strengthening social and financial sustainability of small town water supply in Northern Vietnam Presentation / Paper

- ◆ Smets S. [259] Searching for sustainability of rural wa ter supply: a snapshot of perspectives of 14 countries across Asia — Presentation / Paper / Film
- Sorokovsky V. [116] Social cases: Reaching universal access to water supply at community level. —<u>Paper</u> / Presentation.
- Sutton S. [040] Trends in rural water supply and their implications for sub Saharan Africa towards 2030 — Paper
- Teo N. [119] Water user committees using village savings and loans association for sustainable O&M of their water facility.
- Vargas-Ramirez M. [248] Participatory building of a national tariff methodology for rural water and small operators in Colombia. — <u>Paper / Presentation</u>.
- Zubieta J. [076] Experiencias locales en la gestión del agua. Gobernanza del agua y gestión integrada de los recursos hídricos promovida por mancomunidades de municipios de Bolivia — Presentation / Paper

Posters

- Aubriot J. Post-certification: approche innovante pour garantir la durabilité des services d'eau, d'assainissement et d'hygiène en milieu rural et péri-urbain. — Poster
- ◆ Bassono R. Propositions pour la professionnalisation de la maintenance des forages equipés de pompes à motricité humaine au Burkina Faso. — Poster.
- ◆ Byrns S. A sector for service delivery: a multitude of challenges & tactics that helped in supporting the development of Malawi's WASH sector. —. Poster
- ◆ Danert K. Effective Joint Sector Reviews for Water, Sanitation and Hygiene (WASH) —Poster
- ◆ Fernando G. Threats for Sustainability: Lessons Learnt from Sri Lanka. — Poster
- Hangen M. Virtual interfacing towards the creation of a Multi-National Manual Drilling Cooperative. — <u>Poster</u>
- ◆ Kokola V. [267] Étude De Cas: Gestion transparente des points d'eau en milieu rural —Presentation / Poster.
- MacDonald L. Practical Methodology to Evaluate WASH Education and Training Programs for Improved Outcomes — Poster.
- Mwale U. Sustaining WASH Services through Savings and Loans: A Case of Langa Community, Malawi — Poster
- Nederstigt J. [142] Handpump Payment Systems Accelerating sustainable rural water supply through innovative handpump management systems and water payment models Poster
- Nilsson K. How EWB is a supporting actor in Malawi's WASH sector. — <u>Poster</u>
- ◆ Opong E. Evaluation of Full Water Coverage in Zambia. Poster.
- ◆ Zwahlen J. Share, learn, scale up how working as a Consortium makes a difference. — Poster

Films

- ◆ Danert K. [124] Four Steps to Better Drilling Contracts
 Film
- ◆ Sorokovskyi V. [214] Ukraine: Way Towards Good Governance in Rural Water Supply. Film

Note: Only presenter or first author is named. For access to paper and related material with full author list, please refer to Forum website.

Sustainable Services



Accelerating Self-supply

Trends

At the Forum in Abidjan, Self-supply made quite a splash, with 7 sessions featuring presentations related to the concept.
Furthermore, it also was notable how often the term came up in discussions and in plenary speeches, including the panel of the closing ceremony. This prominence of the concept is remarkable in itself, especially considering that the term was created only 12 years ago (at the RWSN Forum in 2004). In the following paragraphs, we provide a short overview of some of the highlights of the Forum from the point of view of Self-supply.

Policies and standards

Several countries are including Self-supply in their national standards and policies, for example in Ethiopia.

Self-supply is seldom included in monitoring frameworks, partly because it is conceptually difficult (because it does not refer to a specific technology or service level) and partly because it requires a different approach to monitoring (simplified: counting people served, rather than holes put in the ground).

Whereas several key actors start embracing the concept of Self-supply as part of the solution, with others it creates almost allergic reactions.

What works well / implementation

Self-supply is much more common than commonly perceived, also in industrialized countries (e.g., 44 million people in the USA) and in Eastern Europe and Central Asia.

Self-supply fits well into projects and programs focusing on employment and income, market development, and capacity building.

Bottom-Up Action: Signing a "Call to Action"

More than 150 people signed an informal "Call to action", which suggests that Self-supply deserves more attention on behalf of governments, donors, civil society organizations, researchers, and other key players. The undersigned expressed a "strong interest in developing support for Self-supply within our own spheres of activity and urge all development partners to explore this approach and reach its considerable potential". This is another encouraging signal that we are entering a phase where Self-supply comes out of its niche and enters mainstream, at least among water professionals.

Theme objective:

Self-supply is a recognised option for drinking water supply in rural areas by government, development partners and water users themselves.

Highlights

- Increasing recognition that Selfsupply has a key role to play to reach full coverage
- Awareness that it is not a replacement of other approaches

Persistent challenges

- There is need for more and better evidence of the varied benefits of supported Self-supply projects, including personal security, income generation, privacy, and convenience.
- → There is need to continue efforts to bring Self-supply into mainstream, particularly with UN agencies and donors.
- There is a need to clarify common misconceptions related to Self-supply, like the one that government has no role to play

What has changed since the 6th RWSN Forum?

- Self-supply initiatives in Ethiopia and with the SMART centres have lead the way since 2011.
- The Technology
 Applicability
 Framework (TAF)
 emerged from the
 WASHTech project
 (2013-2015) and
 proved a useful tool

The idea behind Self-supply



Papers

- Abdou A. [063] Les technologies eau à faible coût dans le nord du Mali: des leçons apprises dans un contexte complexe (2006 – 2015) — <u>Paper / Presentation</u>
- Akah, H. [241] Sustainable Services through Quality Design & Construction and effective Operation & Maintenance Management Paper
- ◆ Alubbe P. [257] Financing WaterCredit to enhance access to water and sanitation for attainment of SDGs — <u>Paper</u> / <u>Presentation</u>
- ◆ Boukerrou, L. [217] Low Cost Water Technologies: An effective way to improve access to drinking water in rural areas — Paper / Presentation
- Breimberg, J. [178] Using the Technology Applicability Framework (TAF) to improve sustainability of rural WASH supplies in Nicaragua — <u>Paper / Presentation</u>
- Casey, V. [043] Supporting service delivery and business innovation through TAF application — <u>Paper / Presenta-</u> tion
- Foster, T. [142] Preliminary results from an evaluation of the Blue Pump in Turkana, Kenya — <u>Paper</u> / <u>Presentation</u>
- ◆ Holtslag, H. [98] The SHIPO and MZUZU drill method. Two low cost and locally produced hand drilling technologies to 50 metres deep — Paper / Presentation
- ◆ Kimera, P. [057] Technology Applicability Framework: Cases from Uganda for WASH Technology validation and uptake — Paper / Presentation
- ◆ Koslengar M. [226] Action research on service delivery models through private sector in low density rural areas —Presentation
- ◆ Kyesa S. [079] Strategy for Up-Scaling Rainwater Harvesting using a Revolving Fund Approach in Uganda — <u>Paper</u>
- MacCarthy, M. [099] Low-Cost Household Groundwater Supply Systems: Pitcher Pump Systems and EMAS Technologies — <u>Paper</u>
- Maltha, A. [054] Accelerating Self-supply with the SMART Centre approach. An example from Tanzania — <u>Paper</u> / <u>Presentation</u>
- Mekonta L. [205] Establishing a baseline for Self-supply acceleration in seven Ethiopian woredas — <u>Paper</u>
- ◆ Saladin M. [044] Supported Self-supply what it is and how it supports achieving SDGs — <u>Paper</u>.
- ◆ Saladin, M. [137] The difficulties of replicating success stories: The case of Domestic Rainwater Harvesting — Paper / Presentation
- Sutton S. [040] Trends in rural water supply and their implications for sub Saharan Africa towards 2030 — Paper
- ◆ Van Donk, M. [059] The SMART Centre Approach: training the private sector and scaling-up Self-supply via a sustainable business model — <u>Paper</u> / <u>Presentation</u>
- ◆ Verma, K. [192] Scale-up potential evaluation of a chlorine based product for household water treatment Paper/ Presentation
- Waterkeyn A. [042] A business case for supported Selfsupply as service delivery approach to achieve SDGs — <u>Presentation</u> / <u>Paper</u>

Note: Only presenter or first author is named. For access to paper and related material with full author list, please refer to Forum website.

Posters

- ◆ Haanen, R. 130,000 rope pumps worldwide 25 years experiences from Nicaragua, Ethiopia, Tanzania and six other countries Poster
- Hangen, M. Virtual Interfacing towards the creation of a Multi-National Manual Drilling Collaborative — <u>Poster</u>
- ◆ Holtslag, H. Six simplified ideas to reach SDG6 in Rural areas Poster
- MacDonald, L. Quality Assurance in the Decentralized Production of Biosand Filters: A Pilot Program in Zambia — Poster
- Vidoni A. La Coopération décentralisée, une nouvelle alternative pour le développement et l'eau en milieu rural: les forages manuels pastoraux à Dori (Burkina Faso) — Poster

Film

◆ Haanen R. [244] Entrepreneurs for Water & Water for Entrepreneurs (E4W & W4E) — <u>Film</u>

Illustration

 ◆ Maltha, A. Accelerating Self-supply in Tanzania with the SMART Centre approach – an illustration — <u>Illustration</u> (pictured below)



Accelerating Self-supply



Mapping & Monitoring

Policies and standards

Monitoring should be considered as a key building block for sustainable service provision and its delivery models: adoption and transparent monitoring of performance-based indicators supports success of different service delivery models (private, public service models). Indicators should inform policy, planning, budgeting and maintenance required for the realisation of sustainable services

Key emphasis and shift of the sector discussion on:

Strengthening of government –led rural water services monitoring processes and systems (example is the DGIS and Unicef funded projects in West Africa which include reviews of current M&E frameworks according to 12 components – resources, capacities, policies etc - and identifies key areas for strengthening)

Address fragmentation supporting processes and stakeholders' coordination (including indicators, tools, processes, data consolidation and use etc)

Regional and international monitoring processes can drive and steer rural water services monitoring processes shift at country level:

AMCOW Monitoring Platform, SIASAR are examples of regional processes which are supporting country level monitoring developments and harmonization

SDG monitoring – Joint Monitoring Programme and adoption of new definition of improved water service level

What works well / implementation

Some of the on-going donor-led processes reviewing National M&E frameworks (I.e. West Africa by DGIS) are supporting in highlighting weaknesses and identifying priorities for support and strengthening of monitoring processes. These analysis processes should be the base of any work aiming at supporting country-led monitoring.

Successful monitoring processes are developed and sustained when all stakeholders are involved, process leadership lies in national institutions and when there is a clear definition of final data use – example linking it to O&M activities and response.

Challenges

Diverse systems, data collection processes are being tested and introduced in countries – these need to be harmonized, adapted to end use of data and processes and tools are adapted to local context and users. In particular, there is a tendency for people to become fascinated by the technology rather than the overall process, leading to low data use.

Risks associated with underlying hidden political interests around data collection, availability, transparency and use. More consideration and awareness of this is needed

The potential of citizens' involvement in rural water services reporting and data collection is starting to be explored, however citizens and government relationship and accountability dynamics need further considerations.

Outcomes and Actions

Need to further support government ownership of monitoring processes and rural water services indicators and process harmonisations in countries

Monitoring should not be considered as a stand-alone process but rather be embedded within service delivery models to inform planning, budgeting and overall decision making for the realization of sustainable services.

There is a need to instill a culture of data and information use - "a decision-based evidence making". This should then inform the processes and tools based on the evidence required.

A call to donors and NGOs to move beyond project monitoring to support for district and national inventory systems, use datasets from existing national MIS rather than introducing new M&E processes to avoid duplication of efforts and fragmentation of monitoring processes in countries.

Topic objective: Decisionmaking on resource allocation and support for rural water supplies considers information generated by robust data

Highlights

- Strengthening of government –led rural water services monitoring processes and systems
- Regional and international monitoring processes can drive and steer rural water services monitoring processes shift at country level

Persistent challenges

- → lack or limited funding for regular monitoring,
- → fragmented and non coordinated processes and a lack of use of data for decision making
- → lack of clear roles and responsibilities

What has changed since the 6th RWSN Forum?

- ICT-based water point mapping has gone from pilot use to mainstream monitoring tool, now that it's strengths and limitations are better understood.
- The Water Point Data Exchange (WPDx) has emerged as a way of capturing and standardising the new data to make it more available and more useful.
- Real-time monitoring of water points is emerging as the next step in the evolution.

Papers



- ◆ Greggio, E. [228] WaterAid's approach to support national WASH service monitoring processes: lessons learned to inform future work — <u>Paper</u>
- ◆ Hailu, T. [208] Introducing ICTs for WASH monitoring in Ethiopia — <u>Paper</u>
- Mandara, C. [230] Assessing water service coverage by Community Water Service Mapping: A case of Kidoka village in Tanzania — <u>Paper</u>
- McNicholl, D. [170] Stakeholder Network Dynamics Supporting Improved Community Management of Arsenic Filters in West Bengal — <u>Paper</u>
- Nhlema, M. [185] Bigger Data: Water For People's Lessons, Doubts and Experience of Mapping Rural Water Supply Systems In Malawi Paper
- ◆ Rodriguez, A. [252] The "Rural Water Supply and Sanitation Information System" (SIASAR) Addressing sustainability gaps through visual data in Latin America Paper
- ◆ Sanon, D. [206] Implication des élus dans le suivi de la gestion du service public d'eau potable au Sénégal Paper / Presentation
- ◆ Verplanke, J. [052] Water Point Mapping in Tanzania: Making the voices of data collectors audible — <u>Paper</u>

Posters

- Banks B. [150] What's Working Where, and for How Long:
 A 2016 Water Point Update Poster / Presentation
- ◆ Shrestha R. [268] Mobile-based Monitoring System Poster
- Stewart, E. WaterAid's Post Implementation Monitoring Surveys — <u>Poster</u>

Right: Picture from the Rural Water Supply and Sanitation Information System" (SIASAR) (A. Rodriguez)

Note: Only presenter or first author is named. For access to paper and related material with full author list, please refer to Forum website.



Mapping & Monitoring

RAINWATER HARVESTING & SAND DAMS

Sand dams can be a sustainable source for multiple uses of water and a catalyst in greening drylands. Similarly, rainwater harvesting has been a traditional source of water supply in varied contexts, from water-scarce to tropical environments and can also bring about multiple benefits. These include water security (for domestic needs, as well as drought adaptation and flood mitigation), water for agriculture and livestock, and environmental benefits. Below are some of the key points from the presentations.

Policies and standards

- Need to ensure government buy-in and multisector coordination between sand dam and rainwater harvesting initiatives on the one hand, and WASH/ agricultural initiatives on the other. This is particularly so as to avoid contamination of water: programmes of sanitation and hygiene promotion need to be promoted along with investment in sand dams so that water contamination can be managed.
- Communities need to be involved from the outset to ensure cultural beliefs and values are respected in the siting sand dams.

What works well/implementation

Social factors play a key role in the success of domestic rainwater harvesting uptake. In Thailand for instance, domestic rainwater harvesting was successfully scaled up while Nepal struggled to go to scale. This is in part due to cultural factors on the perception of rainwater, which are completely different. The use of media and film (as the Bollywood power film showcased) can be effective in promote and enhancing the perception of rainwater harvesting.

 Affordability varies a lot between and within countries is (by a factor of 6 between rainwater harvesting in Thailand and Nepal). Rainwater harvesting initiatives should ensure that investments in the technology is profitable for the consumer and for the local market.

Papers, Films and Posters

Note: Only presenter or first author is named. For access to paper and related material with full author list, please refer to Forum website.

- Berochan, G.[269] Mainstreaming Water Security Through RainWater Harvesting-Sand Dams Technology — <u>Paper/</u> <u>Presentation</u>
- De Trincheria, J. [201] Practical recommendations to prevent, restore and rehabilitate silted-up sand dams in arid and semi-arid areas — <u>Paper / Presentation</u>
- Karulinda, E. [190] Transformation with technology- The story of a pilot rainwaterharvesting and Community – Based Climate Change Adaptation project in Rwanda — Paper/ Presentation
- Kyesa, S. [079] Strategy for Up-Scaling Rainwater Harvesting using a Revolving Fund Approach in Uganda — <u>Paper</u>
- Maddrell, S. [276] The potential for sand dams to increase the adaptive capacity of East African drylands to climate change — Paper / Presentation
- Maddrell, S. [277] A Microbial Analysis of Water in Sand Dams and Associated Abstraction Methods — Paper
- Maddrell, S. [073] The power and potential impact of sand dams — <u>Film</u> / <u>Presentation</u>
- Mulinda R. [21] Water Catchment management through a 3R approach- Case of RWAMBU Catchment-Western Uganda — Paper
- Saladin, M. [137] The difficulties of replicating success stories: The case of Domestic Rainwater Harvesting — <u>Paper/</u> Presentation
- Mueller, K. Rock Catchments for Community Water Supply in Eastern Equatoria State, South Sudan — <u>Poster</u>

Highlights

 Rainwater harvesting and sand dams increasingly recognised as tools for increasing resilience and providing multiple benefits through MUS.

Persistent challenges

Siltation: up to 40% of sand dams in Kenya are silted up, which is estimated to cost between 8-16 Million Euro in lost water resources use. Remediation actions are possible but need to build capacity. These include the reuse of previously accumulated sediments for agricultural use, as well as riverbank agricultural reclamation.

What has changed since the 6th RWSN Forum?

- Sand Dams have become an increasingly mainstream option and are being used throughout Kenya and beyond.
- Rainwater harvesting has become an core knowledge exchange topic.

WATER QUALITY & WATER TREATMENT

At the Forum in Abidjan, the topic of water safety emerged in many different sessions and also during side-events and informal gatherings. This may be related to the fact that SDG 6 mentions "safely managed water" – and that in most places, not only in least developed countries, we are a long way away from reaching this goal for everyone. The good news is that at the Forum people did not only talk about the goal and the problem of lack of water safety, but also about practical solutions and emerging technologies and approaches (including approaches to financing), which are key elements of a pathway to improve water quality and water safety.

Policies and standards

- Universal access to safely managed drinking water is part of the SDGs.
- Water safety plans, complemented with tools to measure water quality and activities to enhance local capacities for implementing them, were confirmed as key elements of a strategy to improve water safety.

What works well / implementation

- Chlorination was a frequently mentioned technology for water treatment, and innovative ways of making people actually use this technology were presented.
- Examples of successfully implementing Point
 -of-Collection and Point-of-Use water
 treatment initiatives at scale were presented.
- Ever more data are available on water quality, and they are becoming easier to access for people across the globe.
- Pilot projects are underway to develop and test strategies to improve water safety.

Papers, Films and Posters

Note: Only presenter or first author is named. For access to paper and related material with full author list, please refer to Forum website.

- Abourached, C. Economic Feasibility of Using Innovative Water Treatment
 Technology for Water Chlorination – <u>Poster</u>
- Abourached, C. Innovative Water
 Chlorination Method for Rural and Remote
 Areas Poster

- Diener, A. [80] Evaluating water safety for supply schemes in remote areas. Novel approaches to comply with SDG 6.1. in rural Nepal – Film
- Duvernay, P.G. [113,110] Traitement et bonne conservation d'eau à domicile en Guinée – Paper / Presentation / Film/ Poster
- Heierli, U. [175] Springhealth and the Paisa Economics: The challenge to make the last mile delivery of safe water profitable – Paper / Presentation
- Maddrell, S. [227] A Microbial Analysis of Water in Sand Dams and Associated Abstraction Methods – Paper
- Marks, S. Evaluating water quality from taps to consumption for piped schemes in Mid-Western Nepal – <u>Poster</u>
- McNicholl, D. [170] Stakeholder Network
 Dynamics Supporting Improved Community
 Management of Arsenic Filters in West
 Bengal Paper
- Narracott, A. [274] Access is not enough: ensuring water stays safe in the home with Dispensers for Safe Water – <u>Paper</u>
- Nekesa, J. [271] It is time for the problem of pump corrosion and consequent failure to be eliminated – <u>Paper</u>
- Osterwalder, L. [184] Carbon-financed safe drinking water project in Uganda – <u>Paper</u> / <u>Presentation</u>
- Podgorski, J. Regional-scale application of global geogenic contamination hazard models as presented on the Groundwater Assessment Platform (GAP) – <u>Poster</u>
- Prematilaka K. M. [103] Enrichment of iron in the Gannoruwa well field: Causes and pathways – <u>Paper</u>
- Reade, A. [132] What Price a forgotten
 History? Implications of Groundwater
 Quality on Hand Pump Standardization in
 Uganda Paper / Presentation.
- Veldman, R. Household Water Filters for Emergencies: an experience with Siphon filters after the floods in Malawi – <u>Poster</u>.
- Wuethrich, B. [192] Scale-up potential evaluation of a chlorine-based product for household water treatment – Paper / Presentation

Persistent challenges

- Overall, water safety and water quality are huge and complex challenges which will require continued efforts and additional resources (not only financially) to be addressed properly probably tailor-made approaches in each context.
- In many boreholes installed across Africa, the problem of corrosion is hampering progress and continues to pose a serious problem.

What has changed since the 6th RWSN Forum?

- SDG6 has put water quality on the agenda in a way that it was with the Millennium Development Goals.
- Water quality protection of the source and water treatment at point of use is likely to be one the greatest challenges facing the sector in the years ahead.

SPONSORED SEMINARS

On the last day of the RWSN Forum, participants could attend any of the 9 Sponsored Seminars presented below. The content was entirely up to the conveners of each Sponsored Seminar, while the RWSN Forum provided the facilities, interpretation and refreshments.

A call for Sponsored Seminars was issued in March 2016 in order for participating organisations to express interest on convening a Sponsored

Seminar. Where possible, the RWSN Forum organisers played a role in linking organisations interested in similar topics for them to convene seminars together.

An additional Sponsored Seminar, convened by the University of Oxford and UNICEF on *Business Models for Rural Water Supply*, could not be held that day because of a scheduling conflict and took place on Tuesday, November 29th.

09:00 – 10:45	SDG Monitoring WHO-UNICEF Joint Monitoring Programme	An Understand- able Approach to the Development and Use of Groundwater UPGro / Water Mis- sion / NGWREF		Making WASH Consortia Work Concern Worldwide	Making Rights Real: What difference does it make if water and sanitation are human rights? WaterAid, WASH United, UNICEF, ISF, End Water Poverty, RWSN
10:45 – 11:15			BREAK		
11:15 – 13:00	SDG Monitoring WHO-UNICEF Joint Monitoring Programme	An Understand- able Approach to the Development and Use of Groundwater UPGro / Water Mis- sion / NGWREF	RWSSI Strategy Consultation African Develop- ment Bank	Joint Sector Reviews USAID WALIS	Making Rights Real: What difference does it make if water and sanitation are human rights? WaterAid, WASH United, UNICEF, ISF, End Water Poverty, RWSN
13:00 – 14:30			LUNCH		
14:30 – 17:30	Public-Private Partnerships USAID WALIS	An Understand- able Approach to the Development and Use of Groundwater UPGro / Water Mis- sion / NGWREF	Developing Na- tional Rural Water Supply Programs The World Bank		Water integrity: A new pathway to fulfilling human rights to water & sanitation WIN, Caritas, Helvetas

Making WASH Consortia work Sponsored Seminar. Credit: Stephen Jones



SPONSORED SEMINARS

The RWSN Forum organisers also offered to host the material presented during the Sponsored Seminars on the Forum website. Presentations and blogs related to several of the Sponsored Seminars are available below:

- ◆ <u>Business Models for rural water sustainability</u> (University of Oxford / UNICEF)
- ◆ Making rights real: what difference does it makes of water and sanitation are human rights? (WaterAid, WASH United, UNICEF, ISF, End Water Poverty, RWSN)

- ◆ <u>Rural water Public-Private Partnerships</u> and their role in extending, improving and <u>sustaining access</u> (USAID / the WALIS Program).
- ◆ Monitoring safety managed drinking water services in the 2030 Agenda of Sustainable Development (WHO/ UNICEF Joint Monitoring Programme).

Training course: Gestion des eaux souterraines pour les organismes nationaux et de bassin

As part of the RWSN Forum, a groundwater training day for over 30 Francophone African water professionals and government staff was hosted on 28th November by Professor Moustapha Diene of the Africa Groundwater Network (AGWNet) and Mr Julian Harbrecht and Mr Ramon Brentführer of BGR (the German Federal Institute for Geoscience and Natural Resources) – with support from BGS (the British Geological Survey).

A wide range of African groundwater topics were presented and discussed, including the new Africa Groundwater Atlas and Literature Archive, which is part of the UP-Gro programme and a presentation by Mr Charles Ngangoue of the AMCOW Africa Groundwater Commission. The presentations are available on the RWSN Forum website.



RWSN FORUM EXHIBITION

There were 22 RWSN Forum exhibitors, representing civil society and NGOs, private sector, international organisations, think tanks and government organisations active in the rural water sector. Gold Sponsors UNICEF, WaterAid, the African Development Bank, and the World Bank Group benefited from a booth as part of their sponsorship package.

- UNICEF
- WaterAid
- The African Development Bank
- World Bank Group
- Ajay Industrial Corporation Ltd.
- SWELIA
- Entreprise Génie Mécanique et Hydraulique pour le Développement Rural (GMHDR)
- World Vision / Design Outreach
- Excellent Development
- GWE pumpenboese GmbH
- Aquatabs / Aquatabs Flo
- UPGro African Groundwater Research
- IRC
- SMART Centre Group (MetaMeta, Aqua for All, Skat)
- Helen Keller International/CHANGE Project
- Fondation Antenna
- AKVO
- INCLAM
- RWSN
- Projet PHAM
- ONEP
- Swiss Agency for Development and Cooperation SDC / Swiss Water & Sanitation Consortium



FIELD TRIP

last day of the RWSN Forum, participants could choose between attending one of the Sponsored Seminars or going on a field trip. For security reasons, the number of participants to the field trip was capped at 30. Participants were welcomed in the

village of Soumie, located an hour away from Abidjan, and given a demonstration of manual drilling. The field trip was organised in partnership with the *Office National de l'Eau Potable* (ONEP) of Cote d'Ivoire and UNICEF.





NETWORKING EVENTS

Beside formal presentations, the RWSN Forum allowed space for more informal interaction between participants through a Rock Café (dedicated to groundwater); an Information and Communication Technolo-

gy (ICT) Marketplace; two interactive sessions dedicated to Behaviour Change, and Rural Water Supply, Human Rights & SDG6; and a poster session.







QUOTES FROM RWSN FORUM PARTICIPANTS

I have learnt a lot about self-supply services and experiences from different countries about sustainable services (Haiti, Benin, Madagascar, ...)

> Mialy Raveloarison KfW

The highlight for me was the high level of representatives that participate in plenary session and speakers in general. The Forum recap was great.

> Antonio Rodriguez, World Bank

The highlight is the level of research material that was presented on various themes. For me every session I attended was very informative e.g. presentations on PPPs and decision tools by IRC just to mention a few.

Felix Malachamela, Department of Rural Water Supply, Lesotho New data is now available on WPDx from Ethiopia, for the first time ever. This is a direct result of discussions at RWSN.

Brian Banks, Global Water Challenge

I have shared the value of participating with my company, to really understand our potential costumers and their environment, as well as potential competition.

Anne Sofie Hansen, GRUNDFOS

I have been able to develop contacts with companies that specialise in water treatment technologies and solar pumping. These could be interesting for my country. The monitoring system implemented in Dakar is a really good experience that I would like to share.

Julienne Tiendrebeogo, Ministry of Water and Sanitation, Burkina Faso The highlights were the breadth of experience of the participants and being able to come together to exchange all those views. The guidance of the RWSN committee and closing remarks were very inspiring. The buzz was amazing - and created by a very open atmosphere where everyone could feel like they could participate in the discussions.

Lisa Rudge, DfID

Great and rich program and so many competent participants - what a chance to meet and discuss various issues with them!

Daya Moser, HELVETAS

After the Forum, I am Inspired to resurrect an old project for the sake of improving dissemination on key issues.

Sara Marks, EAWAG

This experience has given me a solid basis to continue going forward in my role as a social intermediary in rural water.

Olivia Regina, Association Munyu des Femmes There were many interesting ideas and initiatives, which I will share with my partners in Latin America.

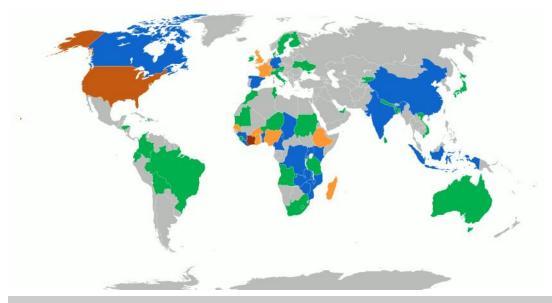
Rolando Marin, Confederación Latinoamericana de Organizaciones Comunitarias de Servicios de Agua y Saneamiento,

The business model plenary on the 1st day was a major highlight for me. The deliberations tackled some glaring truths about Bottom of the Pyramid business modelling which the water sector has to come to terms with in full if lasting coverage is to be achieved. The candor and honesty was refreshing.

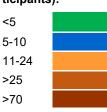
Muthi Nhlema, Water for People Malawi

WHO WAS AT THE 7TH RWSN FORUM?

The map below shows the country of residence of the participants of the 7th RWSN Forum. Cote d'Ivoire, the US, Madagascae, France, Kenya, Nigeria, Ghana, Burkina Faso, Senegal, the UK and the Netherlands were the countries best represented.



Key (No of participants):



RWSN FORUM PARTICIPANTS' SURVEY: SUMMARY

Around half of the Forum participants (203 respondents) replied to the Forum survey, which allowed the team to take stock of some of the feedback on the Forum organisation, content and organisation.

Below is some of the lessons learnt:

Early communications about the event is key, as is the timing of the call for papers: more than 2/3 of the participants had heard about the RWSN Forum before registration opened in March, and yet close to 85% of participants registered much later, under the regular or lastminute fee. While reduced early-bird fees did encourage some participants to sign up earlier, others could not— mainly due to internal processes for participants to get authorization to attend, or terms of sponsorship, or awaiting the final decision on whether they would be presenting at the Forum. This explains perhaps to some extent the lower rating on Value for Money (see below).

The field trip and the poster session scored the lowest in terms of participant satisfaction. Security measures meant that we were not able this time to offer a field trip experience to all participants, as had been the case in Uganda during the 6th RWSN Forum. We would like to understand the lower scores for the poster sessions better — please get in touch if you have suggestions for improvement.

Representation from community organisations, service providers and local government: Participants made clear that community voices and local government were missing from this event. The Forum organisers had limited funding which could be earmarked to sponsorship; many organisations stepped in to sponsor participants to attend the Forum. It will take a collective effort to bring these participants to the next Forum.

Coffee & emails: Coffee is abundant in Cote d'Ivoire, but water people are a thirsty bunch and your feedback shows that you would have liked to have more. Another suggestion was to provide participants' emails. As we cannot do this retroactively out of privacy concerns, we have instead opted to put everyone in touch by inviting all Forum participants to join a dedicated DGroup. If you have not received your DGroup invitation by email, please get in touch with us!

Forum	ın N	lumi	bers

467 participants

represented from more than

300

Based in

organisations

64 countries

Angola,

Bolivia and

China through to

Zimbabwe

Around

1/3

of participants were French speakers. Most of the others spoke English, and a few spoke Spanish.

Around

2/3

of the participants were already RWSN members.

Ratings from 157 completed forms Except for Fieldtrip (n=28)	Excellent				Poor
	5	4	3	2	1
Communications before event	50%	34%	12%	3%	0%
Event Organisation	64%	29%	6%	1%	0%
Quality of content presented	34%	48%	15%	3%	1%
Plenary Sessions	31%	42%	18%	4%	3%
Parallel Sessions	30%	49%	16%	3%	1%
Poster Display & Session	14%	39%	32%	6%	1%
Wednesday afternoon networking sessions	24%	45%	19%	5%	1%
Exhibition	32%	36%	16%	2%	1%
Friday Sponsored Seminars	31%	37%	10%	3%	0%
Fieldtrip	32%	21%	32%	11%	4%
Opportunities for discussion and networking	53%	34%	12%	0%	1%
Venue	55%	31%	8%	1%	2%
Catering	38%	35%	18%	6%	1%
Accommodation	30%	30%	19%	3%	2%
English-French translation	40%	37%	11%	2%	0%
Transport to and from the venue	24%	25%	13%	3%	1%
Delegate fee: value for money	20%	36%	24%	9%	5%

RWSN FORUM FINANCES

The RWSN Executive Steering Committee and Secretariat would like to thank all the organisations and individuals who contributed to the success of the event. The aim was to cover the costs, and this was achieved

The Swiss financial year follows the calendar year (Jan-Dec) so an an independent audit was commissioned in August 2017 to examine the income and expenses before, during and after the Forum. Figure 1 is a copy of the audit report of the income and expenditure that passed through Skat Foundation. A further CHF 97,495 in expenses were paid directly by:

UNICEF (Cote D'Ivoire) CHF 13,514*
AfDB CHF 53,534
World Bank CHF 30,448*

*Payments also made through Skat Foundation to bring total UNICEF and World Bank contributions up to USD/CHF 50,000 for Gold Sponsorship level

A further contribution not included in these figures was from ICEX/Government of Spain who paid for the time of Victor Bas-Martinez, who was based at AfDB and was a member of the core event management team. This was estimated at as qualifying for Silver Sponsorship (€ 25.000)

Figure 2 shows the breakdown of cost for the event. A major cost factor that influenced many decisions and expenditure items was security planning and implementation at the venue and for participants during their stay. This was in response to recent terrorist attacks on hotels in Cote d'Ivoire and the wider West Africa region.

Total Income through Skat CHF672,7231

Total Income direct CHF 97,495

Overall Income CHF 770,226

Overall Expenditure CHF 749,561

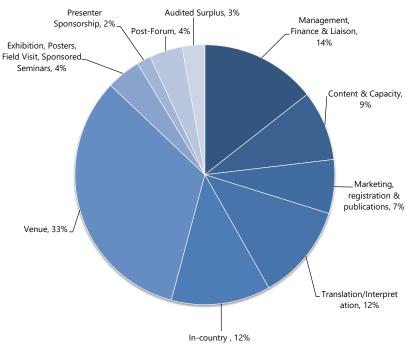
Surplus/Deficit + CHF 20,665

The RWSN Executive Steering Committee will decide how the surplus shall be used to further mission of the network.

Figure 1: Audit report summary for RWSN Forum income and expenses



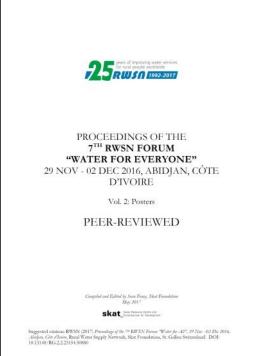
Figure 2: Breakdown of expenditure



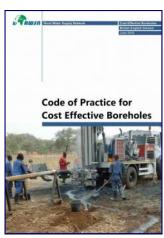
х

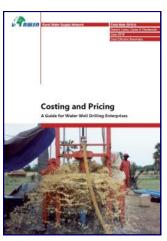
RWSN PUBLICATIONS

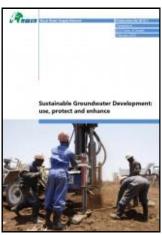


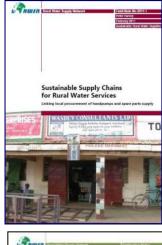


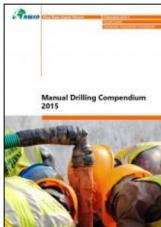
Download the Proceedings of the 7th RWSN Forum from rural-water-supply.net/en/resources/details/784



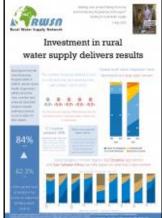
















JOIN RWSN

The Rural Water Supply Network (RWSN) is a community of practitioners interested in knowledge and experience exchange to improve rural water services. Membership is free and open to all, and communications can be in French and English.

You can join RWSN here: https://dgroups.org/rwsn and choose the subgroups that you may be interested in. These include the RWSN themes (Equality, Non Discrimination and Inclusion; Sustainable Groundwater Development; Sustainable Services; Mapping and Monitoring; and Self-Supply), as well as a range of other topics of interest to our members (such as rainwater harvesting or water services in specific regions or countries).

The RWSN Forum does not end with the event itself. The materials and ideas from the Forum are documented and will be shared through a series of RWSN webinars in 2017 presenting select forum content to a wider audience. To find out more, join the general RWSN DGroup (https://dgroups.org/rwsn).

The forum website including all papers, posters, presentations, films, images and presentations will remain in English https://rwsn7.net/ and in French https://rwsn7-fr.net/

Benefits of membership

RWSN comprises over 9,500 members from over 150 countries around the world.

RWSN produces a quarterly e-newsletter and has online discussions, webinars and knowledge-sharing tools.

We publish member experience through a series of publications and organise an International RWSN Forum every 5 years.

Membership is free and open to all.

Join now at

https://dgroups.org/rwsn
or email:
ruralwater@skat.ch

RWSN Secretariat Skat Foundation Vadianstrasse 42 St Gallen Switzerland

Tel: +41 (0)71 228 54 54 Fax: +41 (0)71 228 54 55 web: www.rwsn.ch